

Chapter 2

Performance Audit

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Chapter 2 Performance Audit

This chapter contains the findings of Performance Audit on Disaster Management in the State.

REVENUE AND DISASTER MANAGEMENT DEPARTMENT

Disaster Management in the State

Executive Summary

Performance Audit of Disaster Management in the State covering the period 2007-13 revealed several areas of improvement required by the State Government to implement disaster prevention, mitigation, preparedness, relief and reconstruction as envisaged in the National Disaster Management Framework and the Disaster Management Act. Prior to the enactment of the Act, the State Government established (December 1999) Odisha State Disaster Management Authority (OSDMA), an autonomous body headed by the Chief Secretary for disaster preparedness, mitigation and management. The State Disaster Management Authority (SDMA) constituted in October 2010 after a delay of five years of enactment of Disaster Management Act 2005 under the Chairmanship of the Chief Minister for overseeing activities relating to disaster prevention, mitigation, preparedness, relief and reconstruction, did not meet till July 2013. The State Government failed to incorporate disaster management into the development planning process due to non-preparation of State Disaster Management Plan (SDMP) till July 2013 as envisaged in the Disaster Management Act 2005. SDMP was, however, prepared in August 2013.

Though early warning mechanism and communication systems for disaster preparedness were in place, the system was not effective due to inadequate staff and non-functioning of machinery. Relief, rehabilitation and reconstruction measures had gaps as payments of ₹ 49.59 lakh were made for rice without actual distribution, relief materials valuing ₹ 10.26 crore were issued without acquittance roll and beneficiary lists, rice got damaged due to improper storing etc. There was delay of six to nine months in providing relief to affected people and dal being basic food, was not distributed in relief operation.

During Phailin (Cyclone in October 2013), though, the State Government could save human life through early warning system and administration of evacuation to safer place, more could have been done to save the livestock which is main livelihood of the affected population. Further, the post disaster relief measure and restoration/ reconstruction measures undertaken by the Government were not comprehensive. There were cases of inequitable distribution of relief and short distribution of relief material. Restoration was not adequate due to delay in restoration of power infrastructure, piped water

supply system, roads, irrigation canals and Lift Irrigation Projects affecting rabi crops/ agriculture in the affected districts. Besides, input subsidy for loss of crop was not paid and artisans were not adequately compensated for loss of livelihood.

There was improper financial management as ₹ 29.46 crore was sanctioned from Calamity Relief Fund (CRF)/ State Disaster Response Fund (SDRF) towards disaster preparedness in violation of GoI norms. Utilisation Certificates for ₹ 1456.42 crore were pending from executing agencies and Collectors against the release of fund of ₹ 3455.80 crore during 2007-13. Despite retaining the SDRF in interest bearing public accounts during 2011-13, interest thereon was not paid by the State Government.

Monitoring of preparedness, rescue and relief operations by the State Executive Committee (SEC) was largely absent as its meetings were limited to approval of projects of various departments and sanction of fund out of SDRF.

2.1 Introduction

Disaster is a catastrophe, mishap, calamity or grave occurrence in any area which results in substantial loss of life or human sufferings or damage to and destruction of properties or degradation of environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area. So, for effective disaster management, Government of India (GoI) enacted “The Disaster Management (DM) Act” in December 2005. Disaster Management (DM) is a continuous and integrated process of

- planning, organizing, coordinating and implementing measures which are necessary or expedient for prevention of danger or threat of any disaster;
- mitigation or reduction of risk of any disaster or its severity or consequences;
- capacity building to deal with any disaster;
- prompt response to any threatening disaster situation or disaster;
- assessing the severity or magnitude of effects of any disaster;
- evacuation, rescue, relief, rehabilitation and reconstruction.

2.1.1 State’s vulnerability to various disasters

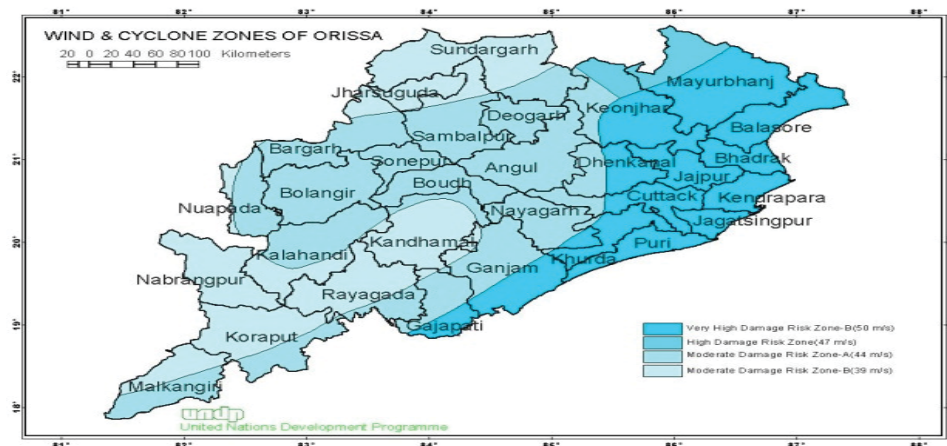
Odisha is situated on the East Coast of India between 17⁰ 49’ N to 22⁰ 36’ N Latitude and 81⁰ 36’ E to 87⁰ 18’ E Longitude. The State comprising 1.56 lakh sq km area is divided into 30 districts, 58 sub divisions, 314 blocks, 103 urban local bodies and 51,349 villages under 6234 Gram Panchayats (GPs). It has a total population of 4.19 crore as per 2011 census.

Geographically, the State has a 482 km long coastline along the Bay of Bengal and is intercepted by seven peninsular flood prone river systems like

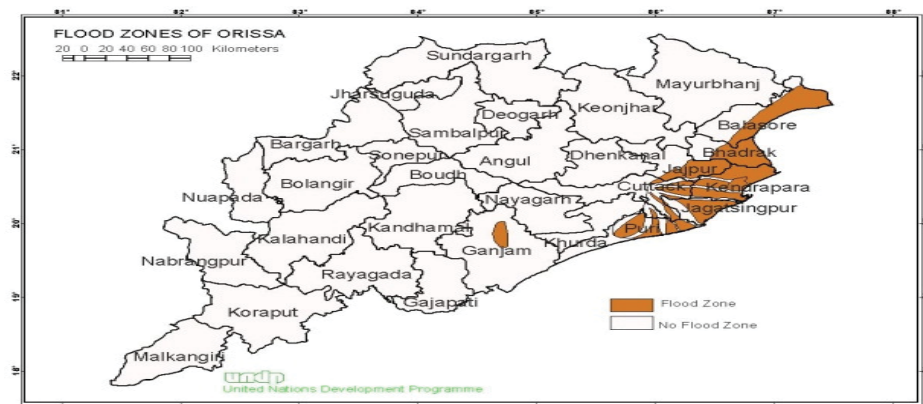
Baitarani, Brahmani, Budhabalang, Mahanadi, Rushikulya, Subarnarekha and Vansadhara with 129 tributaries.

Odisha is vulnerable to multiple disasters. Due to its sub-tropical littoral location, the State is prone to tropical cyclones, storm surges and tsunamis. The rivers in these areas with heavy load of silt have very little carrying capacity, resulting in frequent floods. Besides, 266 villages of different districts of the State are vulnerable to tsunami and 43 out of 103 Urban Local Bodies (ULBs) with a population of about 27 lakh come under earthquake risk zone II and III (Low and Medium damage risk zone), as assessed by OSDMA. Such vulnerability is indicated in the maps below:

Map 1: Vulnerability profile for cyclone zone



Map 2: Vulnerability profile for flood zone



2.1.2 Impact of disasters in State

During the last decade, the State has faced one or other forms of disasters like flood, cyclone, tornado or drought every year. The impact of major disasters was as under:

- The State was struck by a super cyclone in October 1999 in which 1.26 crore people were affected in 12 districts causing loss of 8962 human lives and damage to 20 lakh houses and crops over 18.40 lakh Ha of land.

- During 2007-13, the State encountered 15 major disasters like flood/heavy rains, drought including *Phailin* cyclone in which 2.97 crore people were affected, 405 people died and property worth approximately ₹ 16430.71 crore was damaged as detailed in **Appendix 2.1.1**.

2.1.3 Organisational set up

After super cyclone of 1999, the State Government established (December 1999) OSDMA, an autonomous body headed by the Chief Secretary for disaster preparedness, mitigation and management. But, with enactment of DM Act 2005 by the GoI, the State constituted SDMA in October 2010 with the Chief Minister as the Chairperson for laying down policies and plans for DM in the State. To assist SDMA, the State Executive Committee (SEC) under the Chairmanship of Chief Secretary with four other Secretaries as determined by the Government, was constituted in December 2010, who was responsible for implementing National and State Disaster Management Plan and to co-ordinate and monitor disaster management in the State.

At the district level, District Disaster Management Authorities (DDMAs) were constituted in November 2010 under the Chairmanship by the Collectors of the Districts to act as the district planning, coordinating and implementing bodies and to take measures for the purpose of disaster management in the district.

The office of the Special Relief Commissioner (SRC) functions as Secretariat to SDMA. The SRC-cum-Special Secretary, Revenue and Disaster Management (RDM) Department, being additional Chief Executive Officer (CEO) to SDMA is the functional head of disaster management activities in the State.

2.1.4 Scope of Audit

Performance Audit was conducted during May-October 2012 and April- May 2013 covering the period 2007-13. Eight² sample districts were selected on the basis of Stratified Random Sampling without Replacement. Besides, as the State was hit by '*Phailin*' in October 2013 followed by heavy flood, the records relating to pre and post disaster management was examined during December 2013 and May 2014 in six³ *Phailin* hit districts including four districts covered earlier, thus covering 10 districts in all during audit.

2.1.5 Audit objectives

The Performance Audit was conducted with the objective to assess whether:

- a robust institutional framework existed to address issues of disaster management;

² Angul, Balasore, Bhadrak, Dhenkanal, Jagatsinghpur, Jajpur, Keonjhar and Subarnapur

³ Ganjam and Puri and earlier four districts: Balasore, Bhadrak, Jagatsinghpur and Jajpur

- measures for preparedness, prevention and mitigation to reduce impact of disasters were adequate, efficient and effective;
- response, relief, rehabilitation and reconstruction activities were undertaken in an efficient and effective manner;
- funds were available timely and were utilised economically, efficiently and effectively for the intended purpose; and
- monitoring mechanism functioned efficiently and effectively to address the issues of disaster management.

2.1.6 Audit criteria

Criteria for Performance Audit were drawn from the following documents:

- Disaster Management Act 2005;
- National Policy on Disaster Management 2009;
- National/ State Disaster Plan, guidelines and other instructions issued by GoI, State Government and National Disaster Management Authority;
- Orissa Relief Code (ORC);
- Orissa Treasury Code (OTC) and Orissa General Financial Rules (OGFR).

2.1.7 Audit methodology

Performance Audit commenced with an Entry Conference held on 21 May 2012 with the SRC-cum-Special Secretary, RDM Department and Managing Director, OSDMA wherein the audit objectives, criteria, scope and methodology were discussed and agreed to. Audit was conducted through test check of records in RDM Department, OSDMA, SRC, six⁴ Departments of State Government, Directorate of Town Planning, Engineer-in-Chief (Water Resources) and DDMA of 10 sample districts. Besides, records of 95⁵ executing agencies in sample districts were also test checked. Joint physical inspection of assets created was also conducted in presence of representatives of audited entities and response of 112 persons of five districts affected by flood in 2011 and 815 persons of six *Phailin* affected districts were recorded by Audit. Photographs were taken, wherever considered necessary. Replies of the Government, wherever received have been incorporated at appropriate places (June 2014). Exit Conference could not be held despite repeated requests made to State Government (June 2014).

⁴ Finance, Agriculture, Health & Family Welfare, Labour & Employees' State Insurance, Water Resources and Housing & Urban Development

⁵ Tahsildars: 14, Urban Local Bodies: 6, Block Development Officers: 13, Deputy Directors of Agriculture: 6 and Executive Engineers: 37, Chief District Veterinary Officers: 5, Chief District Medical Officers: 5, Additional Director of Fisheries/ District Fisheries Officers: 4, Deputy Directors of Horticulture: 3, Assistant Director of Textiles: 1 and General Manager District Industries Centre: 1

AUDIT FINDINGS

2.2 Institutional Framework and Planning

The Act provides for formulation of rules to carry out its provisions, constitution of SDMA at State level and DDMA at district level for overall disaster management, formation of SEC and State Advisory Committee to assist the SDMA, preparation of SDMP including measures to be taken for prevention, mitigation and response to any disaster. However, Institutional Framework to address the issues of disaster management was deficient in many ways as discussed in paragraphs below:

2.2.1 Delay in formulation of State Rule

Section 78 of Disaster Management (DM) Act empowers the State Government to make rules to carry out provisions of said Act. Such rules were to provide for composition and number of members of the State and District Authorities, term of their office and conditions of service, powers and functions to be exercised by them including the Chairperson of the SEC and any other matter in respect of which provisions are to be made in the Rules.

Audit noticed that before enactment of the DM Act 2005 by the GoI, the State Government had formulated the State Disaster Management Policy in March 2005. However, Odisha Disaster Management (ODM) Rules were framed only in July 2010, after five years of enactment of the Act. This resulted in delay in constitution of SDMA, DDMA's and SEC as these were constituted during October and December 2010 *i.e.*, only after formulation of State Rule.

Government stated (August 2012) that delay was due to certain issues concerning implementation of DM Act for which the GoI had constituted a task force to review the provisions of the Act. State Government further stated (June 2014) that prior to formulation of State Rules, disaster management issues were addressed as per the Calamity Relief Fund (CRF) scheme.

But implementation of disaster management, being a continuous process, rules and procedures as stipulated under DM Act were required to have been framed in time. CRF scheme, however, basically dealt with post disaster relief and administration of funds.

2.2.2 Preparation of State Disaster Management Plan

Section 23 of DM Act requires preparation of SDMP including vulnerability of different parts of the State to different forms of disasters, measures to be adopted for prevention and mitigation of disaster, the manner in which mitigation measures would be integrated with developmental plans and projects, capacity building and preparedness measures to be taken, defining the roles and responsibilities of different departments to different disasters. Appropriate provisions shall be made by the State Government for financing measures to be carried under the State Plan. Besides, Section 30 and 31 of the Act stipulate that developmental plans should include the areas in the districts

vulnerable to disasters, forms of disasters and the measures to be taken for prevention and mitigation of disaster by the Government at the district level and local authorities in the district.

Audit noticed that SDMP was not prepared, even after seven years of enactment of DM Act as a result of which the departments could not integrate SDMP in their respective Development Plans. Further, there was no scope for the State Government to make provisions for financing the measures to be taken for disaster management.

Government stated (June 2014) that SDMP was prepared in August 2013 and all departments were instructed to include disaster management component in their plan sector.

2.2.3 Constitution of SDMA

As per Section 18(1) and (3) of DM Act, SDMA would have the responsibility of laying down the State Disaster Management Policy, guidelines for different departments for integration of measures for prevention of disasters and mitigation in their development plans and projects and provide necessary technical assistance, coordinate implementation of the State Plan, approve the SDMP in accordance with the guidelines laid down by the National Authority and review the measures being taken for mitigation, capacity building and preparedness etc. Further, in terms of Section 15(1) of DM Act, the SDMA may meet as and when necessary and at such time and place as the Chairperson may think fit.

Audit noticed that though the State encountered major disasters during 2007-10, SDMA was constituted only in October 2010 and remained non-functional as it did not meet after its constitution till July 2013 to discuss different issues of disaster management. Thus, departments and field functionaries were deprived of leadership and direction from SDMA.

Government stated (June 2014) that during 2007-12, disaster related issues were taken care of in meetings held under the Chairmanship of Chief Minister where representatives of different departments met though these meetings were not given statutory status of SDMA.

However, the meetings were merely need based interactions and the fact remains that regular formal meetings would have gone a long way in institutionalising responses to disaster related issues.

2.2.4 Instituting DDMA

Similarly, as per Section 25 of DM Act, DDMA is to be constituted in each district to act as a district planning, coordinating and implementing body for disaster management. Further, Section 27 of the Act stipulates that they should meet as and when necessary.

Audit noticed that the DDMA were constituted as late as in November 2010 and even after their constitution did not meet till March 2012 though major disasters occurred almost every year in the State. In absence of DDMA,

systemic approach to disaster management as envisaged under the Act was absent.

2.2.5 Incorporation of provisions of DM Act in State DM policy

Provision of Para 3.2.21 in State DM Policy states that the policy should be updated and revised as and when required. Audit noticed that though the State DM Policy was formulated in March 2005 prior to enactment of National DM Act (December 2005), and promulgation of National Policy on DM (October 2009), the State DM Policy was not revised and updated so far. Due to non revision of State DM policy, it was not consistent with the National DM Policy/ Act and lacked aspects like (i) non inclusion of manmade disasters like chemical, biological and radiological disasters, (ii) adoption of safe construction practices, (iii) retrofitting of life line buildings, (iv) owner driven reconstruction practices and (v) provision to generate temporary livelihood option for the affected community.

Government stated (June 2014) that steps were being taken to prepare revised Disaster Management Policy keeping in view the development in disaster management sector.

2.2.6 Formation of Advisory Committee

As per Section 17 (1) of the DM Act, State Authority may, as and when it considers necessary, constitute an Advisory Committee, consisting of experts in the field of disaster management and having practical experience of disaster management to make recommendations on different aspects of disaster management. However, no such Committee was constituted in the State (June 2013).

Department stated (June 2013) that Advisory Committee was not mandatory and would be constituted when considered necessary. However, the fact remains that due to non-formation of the committee, the State is deprived of expert opinions and recommendations for effective management of disasters on a continuous and sustained basis.

2.2.7 Restricted powers and authorities of SEC and DDMA

Section 24 of the DM Act provides that for the purpose of assistance in protecting the community affected by disaster or providing relief to such community or preventing or combating disruption or dealing with the effect of any threatening disaster, the SEC is required to be empowered to control and restrict vehicular traffics, restrict entry, movement and departure of persons, remove debris, conduct search and carry out rescue operations in the affected areas.

- Audit noticed that, no such powers were bestowed on SEC thus making it virtually a fund allotting body, as it largely approved proposals for funds submitted by various departments and allocated funds out of State Disaster Response Fund (SDRF). Monitoring of preparedness, rescue and relief operations by SEC remained almost absent due to want of above powers.

- Similarly, authority and power are given to DDMA's under section 30 (2), 33 & 34 of DM Act. Though as per ORC (para 12 and 15), the SRC/ Board of Revenue at the State level and District Collector at the district level are responsible for overall management of relief operation, with powers to transfer personnel, make requisition of services of any personnel of a department, requisition vehicles, DDMA's have not been vested with any such power.

Government stated (August 2012) that by virtue of the provisions of the DM Act, the power specified under the sections automatically devolve upon the SEC and DDMA for which no further delegation was required. But Audit noticed that since no specific rule or instruction or guidelines was framed by the Government to enable SEC and the DDMA's to exercise such authority under DM Act, the DDMA's followed the provisions of ORC to deal with disaster management.

2.3 Disaster preparedness, prevention and mitigation

Natural disasters like flood, cyclone and earthquake cannot be avoided as they are dependent on external factors like weather conditions, earth pressure etc. However, impact of these disasters could be minimised by taking preventive and mitigation measures. National Policy on DM 2009 emphasised preparedness, prevention and mitigation of disasters.

After super cyclone 1999, the Government took different measures like construction of cyclone and flood centres, equipping these centres with various instruments, setting up of Emergency Operation Centres at State and District level and creation of disaster response force towards preparedness, prevention and mitigation of disaster. Audit examined Government's response towards preparedness and mitigations of disaster including *Phailin* that occurred during period of audit. The observations of Audit are discussed below:

2.3.1 Deployment of staff in SDMA and DDMA

Section 16 and 29 of DM Act provide that the State Government shall provide such officers, consultants and other employees as it considers necessary for carrying of the functions of SDMA and DDMA's.

Audit noticed that DDMA's were established in each district in November 2010 with Collector as the Chairperson but no dedicated staff was provided to these Authorities. Additional District Magistrate was designated as the ex-officio Chief Executive Officer of DDMA while one Deputy Collector was designated as District Emergency Officer. Both also remained in charge of other non-disaster management related functions like election, revenue collection, establishment, planning, etc. leaving little scope to attend to issues on disaster management.

Audit further noticed that State Emergency Operation Centre (SEOC) at the State level functioning under SDMA and District Emergency Operation Centres (DEOCs) functioning under DDMA's for management of disaster related operations were run without required staff. Staff of SRC managed the SEOC

in addition to their regular assignment till May 2011. Further, in absence of required staff for DEOC, various staff of other offices in the district like Land Acquisition Office, District Planning Office, Sub Registrar, District/ Circle Inspector of Schools etc. were posted on rotation basis in the DEOC to man the control room.

Government created (March 2011) 14 posts of support staff for SEOC who were posted during June - September 2011 but, no such post for support staff were created for DEOC except one Data Entry Operator.

Government stated (June 2014) that though Deputy Collectors remained in charge of other functions, they looked after emergency work on priority during any disaster. However, the fact remains that due to such adhoc arrangement, committed staff was not made available though Sections 16 and 29 of DM Act stipulated appointment of officers and other employees to carry out the function of SDMA and DDMA.

2.3.2 Creation of State Disaster Response Force

Para 3.4.5 of the National Policy on DM 2009 provides that the State would create State Disaster Response Force equipping and training police forces for the purpose of specialised response to disasters. Besides, as per decision (June 2004) of National Disaster Management Division of GoI, the State Disaster Response Force should be composite with State Armed Police specialised in search and rescue, one mobile engineering unit with necessary equipment and one medical assistance team. The force would also include women member for looking after the needs of women and children. Audit, however, noticed that though Odisha Disaster Rapid Action Force (ODRAF) was created in 2001 and was increased to 10 units⁶ in 2009, the same was not made a composite unit of police, engineering and medical staff as it consisted of personnel from State Armed Force only. Further, the ODRAF team did not comprise of women.

Government, while accepting the observation stated (June 2014) that ODRAF personnel were mostly trained to operate in disaster situation to carry out search and rescue operation.

2.3.3 Creation of State and District Disaster Mitigation Fund

Section 48 of DM Act prescribes establishing State Disaster Mitigation Fund (SDMF) and District Disaster Mitigation Fund (DDMF) by the States to meet the expenses on disaster mitigation. However, Audit noticed that the Government has not created SDMF at the State level and DDMF at the District level. Expenditure thus for mitigation activities was met from SDRF.

Government stated (June 2014) that the said provisions have not yet been given effect by the GoI as the 13th Finance Commission did not approve allocation of funds. The reply is not tenable as incurring expenditure related to

⁶ Balasore, Baripada, Bhubaneswar, Bolangir, Chhatrapur, Cuttack, Jharsuguda, Koraput, Paradeep and Rourkela

disaster mitigation out of SDRF was contrary to the provisions of GoI Guidelines.

2.3.4 Early warning mechanism and communication systems

Section 22(2) and 30(2) of DM Act read with National Policy on DM 2009 required SEC and DDMA to ensure that communication systems are in order for early dissemination of disaster related information to public and to establish, upgrade and modernise forecasting and early warning systems.

2.3.4.1 Working of VHF network

State Government provided Civil VHF network systems in 414 locations covering DDMA, block headquarters, disaster prone tahasils and GPs. However, Audit noticed that six⁷ out of 10 VHF sets under test checked DDMA were not in working condition. This would negatively affect transmission of messages in absence of telephone network.

Government stated (June 2014) that VHF sets had become outdated and that Department had decided to discard the same and replace them with satellite phones.

2.3.4.2 Functioning of HAM radio, Satellite phones

HAM radio stations used to establish link between districts/ State headquarters and remote areas during natural calamities were out of order in Jajpur and Jagatsinghpur district. Government stated (June 2014) that agreement would be signed with the National Institute of Amateur Radio, Hyderabad to assign the maintenance of HAM radios. The fact remains that belated steps are now being taken to repair the HAM radios.

Similarly, Annual Maintenance Contract (AMC) for 35 satellite phones provided to DEOCs and other offices expired between October 2010 and December 2011 which were not renewed (March 2013). Of the above, two such phones at DEOC Jagatsinghpur and Cuttack remained out of order since October 2011 and were not repaired (June 2013).

Government stated (June 2014) that decision has been taken to discontinue the use of these satellite phones and go for latest model of satellite phones for disaster management. The fact however, remains that no steps were taken either to renew AMC or replace the systems during the intermittent period.

2.3.4.3 Status of equipment at Flood/ cyclone centres

Out of 195 Flood and Cyclone centres available in the State as of March 2013, equipment availability in 114 such centres of six districts were examined from records available in OSDMA and Audit noticed that rescue items like 27 Generator sets, 28 tower lights, 39 power saws, 41 mega phones, 37 search lights, five sirens and 35 solar lanterns in these centres remained defective since October 2011. Besides, all the life buoys, life jackets and fibre ropes

⁷ Angul, Dhenkanal, Jagatsinghpur, Jajpur, Keonjhar and Subarnapur

available with cyclone/ flood centres had crossed their expiry date since June 2012.

Further, joint physical inspection in nine cyclone centres and eight DEOCs revealed (June 2012) that, three tower lights, one power saw, six mega phones, five search lights, one siren and two solar lanterns were in defective condition. Government stated (June 2014) that the equipment have now made workable and steps are being taken to improve their conditions.

2.3.4.4 Basic infrastructure for cyclone centres

In another 12 cyclone centres, physical inspection revealed that none of the cyclone centres had arrangement for permanent electricity connection and regular water supply. In one such cyclone centre in Balasore Sadar block, there were unhygienic conditions and water supply system was damaged. Similarly, in Jajpur Block, a cyclone centre was constructed in shallow area and there was no road to that centre. Local people complained that during rainy season, the area was flooded with water.

Government stated (June 2014) that the cyclone centres were fully electrified during construction and steps had been taken to supply electricity to all the shelter buildings and construct approach roads in a phased manner to connect them to avoid problem during emergency.

2.3.4.5 Availability of boats

During the years 2009-12, it was seen in Balasore district that out of total 14 power boats available during 2009-10 for stationing in various vulnerable places of the district, six boats were out of order. Similarly, four boats in 2010-11 and three in 2011-12 out of 17 boats available were also not in running condition.

Government stated (June 2013) that all these boats had been repaired and were now in running condition.

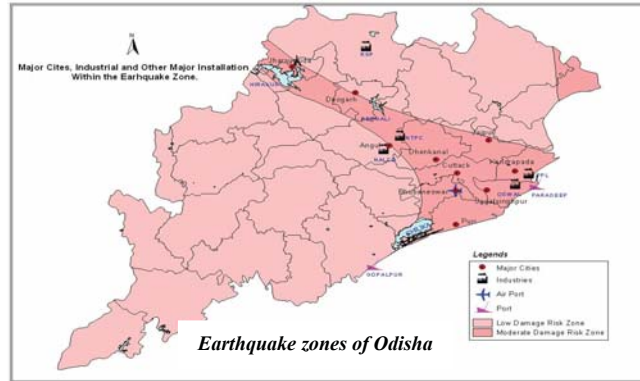
2.3.5 Measures to make urban areas disaster resilient

Paragraph 6.1.1 of National Policy on DM 2009 requires that relevant Acts, Rules and Regulations warranting amendments need to be identified and brought in conformity with the DM Act in a phased manner by both the Central and State Governments and other agencies concerned. Audit noticed that Government failed to take adequate measures in making urban areas disaster resilient as discussed under:

2.3.5.1 Amendment of 'Building bye-laws/ regulation'

As per paragraph 6.2.1 and 6.4.1 of National policy on DM 2009, Building bye-laws and structural safety features are to be reviewed periodically to identify safety gaps from seismic, flood, landslide and other disasters and suitable modifications are to be made to align them to the revised building codes of the Bureau of Indian Standards. National Building Code is to be made mandatory in all building bye-laws.

Audit, however, noticed from records of Directorate of Town Planning that standards of safety for natural hazards based on National Building Code were incorporated in the 'Planning and Building Standard Regulation' (PBSR) of only two local development



authorities (Bhubaneswar and Rourkela) out of nine such development authorities. One hundred and three local bodies also did not comply even though 43 urban centres of the State are under earthquake Zone III.

Government stated (June 2014) that PBSR of other development authorities and ULBs would be finalised and implemented soon. However, the fact remains that delay in finalisation of PBSR would enhance the risk due to upcoming construction of buildings under 43 ULBs located in earthquake zones.

2.3.5.2 Provision for reinforcement and reconstruction in urban planning

Para 3.2.16 of State Disaster Management Policy 2005 provided for strengthening public and community buildings to make them disaster resistant.

Audit noticed that OSDMA issued (23 March 2007) necessary instruction to Housing and Urban Development Department to include reinforcement and reconstruction (retrofitting of old building) in urban planning. Test check of records at eight sample districts revealed that retrofitting of old buildings have not been done in any of the districts. As a result, structural safety of old lifeline buildings was left unassessed.

Government stated (June 2014) that under the project 'Seismic Vulnerability Assessment of building types in India', field survey of the buildings of Bhubaneswar and Cuttack had been undertaken by a project team of Indian Institute of Technology, Kharagpur. Necessary steps were being taken for incorporating provisions as per findings of the survey. The reply is, however, silent regarding delay by the Department in including the reinforcement and restructuring in urban planning despite instruction from OSDMA since 2007.

2.3.6 Emergency training for staff

As per Para 5.2.10 of National Policy on DM 2009, State and District authorities would encourage a culture of preparedness and quick response through training, seminars and mock drills.

Audit test checked the training and emergency exercises conducted in the State for disaster mitigation and found the following:

Under National Programme for Capacity Building of Engineers in Earthquake Risk Management (NPCBEERM) and National Programme for Capacity Building of Architects in Earthquake Risk Management (NPCBAERM), GoI trained 17 master trainers during 2004-05 under NPCBEERM and four master

trainers under NPCBAERM in the State as State Resource Persons. However, against a target fixed by the National Institute of Disaster Management for training 320 engineers (Government: 192 and private: 128), only 80 Government engineers were provided with training as of March 2013.

Government replied (August 2012) that due to dearth of privately practicing structural engineers, training programme was conducted for sufficient number of Government engineers. But it is evident that training programme for Government engineers also fell short by 112 and not a single private engineer was trained.

2.3.7 Building community resilience

Section 22 (2) (i) and 30 (xiii) of DM Act required that SDMA and DDMA facilitate community training and awareness programmes to sensitise local community to respond to any threatening disaster situation. Periodical mock drills should be conducted in which personnel from medical, home guard, civil defence etc. were to be included to prevent, mitigate and respond to any disaster. Audit noticed:

- Though local mock drills were conducted periodically at District level and cyclone shelter level in the presence of ODRAF team, personnel from medical, home guards, fire service etc. who were required to be involved in rescue and relief operations in case of disaster, were not involved (June 2012). However, Government stated (June 2014) that other government functionaries like District and Block functionaries, Medical officers, Non-Governmental Organisations (NGO) and other stakeholders of disaster management were being involved in the mock drills and planned to conduct such mock drills in 234 cyclone/ flood shelters of flood/ cyclone prone districts very soon.
- Though OSDMA imparted training to 10212⁸ local people through four types of trainings in 111 flood/ cyclone shelters of six coastal districts during 2008-09, no such training was imparted thereafter. Government stated (June 2014) that OSDMA had imparted training in 2013-14 in 128 flood/ cyclone centres and training at flood/ cyclone centre level would be imparted regularly.

2.3.8 Emergency Action Plan (EAP) for Dam safety

The Central Water Commission issued (May 2006) guidelines for development and implementation of EAP to preplan the coordination of necessary action by the dam owner and the responsible local and state officials to provide for timely notification, warning and evacuation in the event of an emergency to reduce the risk of loss of life and damage to property.

Audit noticed that though there are 205 large dams in the State, there was no EAP for any of the large dams except two (Balimela and Jalaput). Thus in absence of EAP, safety of life and property of local people could be compromised.

⁸ 4440: Orientation training; 2775: Search and rescue; 2775: First aid; 222: Operation and maintenance of equipment

2.3.9 Establishment of standby SEOC

SEC sanctioned (March 2011) ₹ 15 lakh from Capacity building component for Disaster Response (13th Finance Commission grant) for setting up of a standby SEOC in the SRC office at Cuttack. However, the same was not set up till June 2014.

Government stated (June 2014) that the building in which the standby SEOC was proposed to be set up, was demolished for extension of an office building. But Government could have arranged an alternative building.

2.3.10 Evacuation of people/ animal before occurrence of disasters

As per DM Policy (Paragraph 3.2.5) of the State, a mechanism is required to be put in place for evacuation of people to safer places before disaster.

Audit noticed that test checked districts had identified cyclone/ flood shelters, school/ college buildings for accommodating evacuated people before any imminent disaster. During *Phailin* Government reportedly evacuated 11.55 lakh people and 31,062 cattle to safe places in 15 affected districts.

Scrutiny of records in respect of evacuation during *Phailin* revealed that the number of people evacuated contained discrepancies as below:

- As per records of six test checked districts, 15.17 lakh population were evacuated. However Government reported evacuation of only 11.55 lakh in the 15 cyclone/ flood affected districts.
- DDMA, Balasore initially reported (25 November 2013) to SRC evacuating 5.62 lakh people and later intimated (28 November 2013) evacuating only 3.54 lakh people.
- DDMA, Puri intimated (16 and 27 October 2013) SRC about evacuation of 2.11 lakh people but, later it informed (10 December 2013) Odisha Legislative Assembly that 1.83 lakh people were evacuated.
- Though data was consolidated at the district level from feedback of the blocks, audit noticed that while the Block Development Officer (BDO), Delanga of Puri reported (5 December 2013) to the Collector about evacuation of 18970 people but the Collector reported (10 December 2013) evacuation of 3500 people to SRC.
- Government instructed (October 2013) Chief District Veterinary Officers (CDVOs) to evacuate animals to the nearest upland areas before striking of *Phailin*. Audit noticed that CDVOs of Ganjam, Puri and Balasore instead of evacuating the animals, simply made people aware of this. Thus, 21,305 animals lost their lives in the cyclone as people came to cyclone centres leaving their animals in their village.

Government stated (June 2014) that as the impact of cyclonic storm was wide spread, large number of people were evacuated which was a herculean task for district administration and accepted the shortcoming of over/ under reporting which they stated should be ignored due to massive

scale of evacuation work. Though, the State Government could save human life through early warning system and administration of evacuation to safer place, more could have been done to save the livestock which is main livelihood of the affected population.

2.4 Distribution of Relief

As per Para 66 and 165 of ORC read with RDM Department resolution (October 2008), immediate relief was required to be provided to people in distress with emergency assistance like rice, wheat, *chuda*⁹, *gur*¹⁰, biscuits etc.

During 2007-11, immediate relief materials (rice: 31357.15 MT, *chuda*: 3966.48 MT, *gur*: 323.49 MT) were distributed to 1.65 crore beneficiaries as detailed in table below:

Table 2.1: Year wise distribution of relief material

Year	Rice (MT)	Chuda (MT)	Gur (MT)	Beneficiary covered (number in lakh)
2007	8318.52	800.96	78.31	35.79
2008	NA	NA	NA	60.18
2009	170.71	77.27	10.35	6.61
2010	374.72	23.64	2.26	0.90
2011	22493.20	3064.61	232.57	61.24
Total	31357.15	3966.48	323.49	164.72

(Source: Records of SRC)

Audit scrutiny revealed that relief and rehabilitation measures left some gaps. There were cases of payment made to the Civil Supply Officer (CSO) by the Collector for rice without distribution in relief operation, distribution of relief materials without acquittance rolls, damage of rice, delay and short distribution of relief materials etc. as discussed in succeeding paragraphs:

2.4.1 Payment for relief rice without actual utilisation in relief operation

As per Paragraph 176 and 180 of ORC, the Food Supplies and Consumer Welfare (FS&CW) Department has to provide food stuff for two months requirement for implementation of the relief which are to be stocked at places ordered by the Collector. In case, the stock is utilised for relief distribution, the cost will be made out of SDRF.

Audit noticed that, Collector, Jagatsinghpur allotted (June 2009) ₹ 49.59 lakh to CSO, Jagatsinghpur to store 7292 qtl of rice at 93 GP godowns for providing food assistance to people likely to be affected by flood in 2009. Subsequently, Collector withdrew the said allotment in July 2009. Despite withdrawal of sanction, the CSO submitted Utilisation Certificate (UC) for ₹ 49.20 lakh towards utilisation of rice though there was no relief distribution during 2009-10 as ascertained from the Annual Report of the SRC. Thus, SDRF was misutilised.

Government stated (June 2014) that the matter was reviewed in a meeting wherein it was advised that the UC for the said amount should not be accepted and the amount involved would be refunded by the CSO, Jagatsinghpur.

⁹ *Chuda*: Parched rice

¹⁰ *Gur*: Molasses

2.4.2 Distribution of relief materials in absence of acquittance rolls- cum- beneficiary lists

As per instruction issued (April 2012) by SRC, beneficiary list in support of distribution of emergent food assistance/ relief should be prepared with a column for signature of the person receiving it which would serve as acquittance roll before distribution of emergent relief including cooked food services. After distribution of relief, Government official in-charge of the relief operation has to submit acquittance rolls-cum-beneficiary lists to the BDO within three days of the distribution which was to be compiled by BDO and Collector and sent to SRC. Audit observed that:

- Acquittance rolls-cum-beneficiary lists in support of distribution of emergent relief materials valuing ₹ 10.08¹¹ crore reported as distributed to 14.91 lakh people and cooked food at a cost of ₹ 18.06¹² lakh to 0.19 lakh people of three districts (Bhadrak, Jagatsinghpur and Angul) affected by flood in 2007, 2008 and 2011 were not maintained at the district level. The said acquittance rolls were not available in test checked blocks (Dhamnagar, Tirtol and Athamalik). This indicated that acquittance roll were not made after distribution of relief due to which actual distribution could not be ascertained.
- BDO, Delanga submitted report to Collector, Puri about providing food at free kitchen centre to 263 people in Sujanpur GP at Mahatab High School cyclone centre during *Phailin* 2013. No acquittance roll in support of providing food at free kitchen was available. However, during interview of the beneficiaries, all 20 beneficiaries of that village stated that no cooked food was provided in the temporary cyclone centre at Mahatab High School. In absence of detailed acquittance roll, genuineness of the distribution of cooked food could not be verified in audit. In reply, the BDO stated that no payment was made on account of free kitchen and payment would be made only after submission of acquittance rolls.

Government stated (June 2014) that Additional District Magistrates were instructed to place beneficiary list of all villages on the website of the district for public access.

2.4.3 Damage of relief rice due to improper storage

Paragraph 177 of ORC assigned the responsibility to Collector for ensuring distribution of standard quality of food for relief and to store it at damp-proof and



Damaged rice stored in one GP of Dhamnagar block

¹¹ Bhadrak: rice-5035.66 MT, *chuda*- 405.66 MT, *gur*-28.50 MT costing ₹ 7.48 crore; Angul: rice-154.98 MT, *chuda*-11.20 MT, *gur*-1.21 MT, Dal- 5.38 MT costing ₹ 0.34 crore; Jagatsinghpur: rice-1411.66 MT, *chuda*- 463.34 MT, *gur*- 43.96 MT costing ₹ 2.26 crore

¹² Bhadrak: ₹ 12.85 lakh; Angul: ₹ 1.52 lakh and Jagatsinghpur: ₹ 3.69 lakh

leak-proof places to prevent damage.

Audit noticed that as per the instructions (May 2011) of the Collector, Bhadrak, the CSO, Bhadrak, supplied (June 2011) 2047.59 MT of rice which were stocked in various GP godowns. Out of these 115.45¹³ MT of rice valuing ₹ 23.16 lakh was damaged (September 2011) due to storage in 14 godowns located in low lying areas of Dhamnagar and Bhandaripokhari Block. Physical inspection of one such godown revealed that the relief rice stored was damaged and rotten.

Thus, due to incorrect sites selection of GP godowns in low lying areas without considering the past incidence of floods, Government sustained a loss of ₹ 23.16 lakh.

Government stated (June 2014) that instruction was given to all the Collectors to store relief materials in GP godowns lying in higher places which are not susceptible to floods to avoid damage of food grains.

2.4.4 Delay in distribution of relief

As per Paragraph 57 of ORC, reserve stock of relief materials was to be maintained to provide timely relief to the disaster victims.

During flood in 2011, Government decided (October 2011) to give additional 10 days relief to Below Poverty Line (BPL) families to mitigate hardship. On the basis of the decision, FS&CW Department allotted 22403 MT of rice to 19 districts in March 2012 *i.e.*, after six months of the flood in September 2011.

Physical Inspection of one godown in Balasore sadar block revealed that 226.80 MT of rice received (April 2012) for distribution of relief to BPL families were not issued (10 July 2012) and rice was found to be infected by insects. On this being pointed out in Audit (10 July 2012), the BDO immediately issued (11 and 12 July 2012) the rice to GPs for distribution to BPL families. This indicated that the rice was being distributed to the affected people after nine months of occurrence of flood and was unfit for human consumption. Delay in distribution of rice could have been avoided, had the FS&CW Department allotted rice immediately after the decision of the Government.

Government stated (June 2014) that supply of relief rice was delayed due to restriction/code of conduct on account of election to Panchayati Raj Institutions. In respect of infected rice, Collector Balasore was intimated to cause an enquiry and take action against erring officials.

2.4.5 Distribution of relief below the prescribed norm

As per Paragraph 165 of revised ORC, one kg of rice per adult and half kg of rice per child per day should be given as relief.

In Subarnapur District, 181.57 qtl of rice was distributed to 21302 persons of 4262 affected BPL families for 10 days' relief against requirement of 2130 qtl

¹³ Dhamnagar: (10 GPs) 103.60 MT and Bhandaripokhari: (4 GPs) 11.85 MT.

as per ORC norm. The amount of rice distributed works out to about 850 grams per person for 10 days which is not even sufficient for a family with one member who is entitled to receive 10 kg rice. This indicated that relief was given below the norm.

Government stated (June 2014) that the Collector, Subarnapur was instructed to review and suggest suitable action.

2.4.6 Non distribution of dal as emergency food assistance

As per para 165 of ORC, rice at the rate of one kg and required quantity of dal limited to ₹ 20 per adult and 500 gram of rice and dal limited to ₹ 15 per child is to be distributed as food assistance.

Audit, however, noticed from records of districts affected by flood in 2011 (Jagatsinghpur, Bhadrak and Angul) that though relief in shape of rice was distributed to 4.39 lakh flood victims, dal was not distributed. During beneficiary survey, 30 beneficiaries of three villages in these districts also confirmed non-distribution of dal.

Government, while admitting the fact, stated (June 2014) that though dal was not distributed as emergent food assistance with rice during flood in 2011, the same was provided with rice during *Phailin*. However, the reply is silent regarding non distribution of dal during flood in 2011.

2.4.7 Short distribution of dry food

As per norms of ORC, *chuda* of one kg per adult and 500 grams per child is to be distributed as dry food.

It was observed in Balasore Sadar Block that during *Phailin*, only 345.50 qtl of *chuda* was distributed to 135735 affected people (Adult: 81441, Child: 54294). However, as per norms of assistance 3257.64 qtl of *chuda* was required to be distributed. Thus, there was short distribution of 2912.14 qtl of *chuda*. During beneficiary interview, all the 100 beneficiaries of that block confirmed distribution of lesser quantity of *chuda*.

Government stated (June 2014) that Collector, Balasore was instructed to review the fact and take suitable action against erring official.

2.4.8 Inequitable distribution of relief materials

Para 165 of ORC stipulates quantities of rice and dal to be distributed as food assistance. Some irregularities noticed on distribution of relief during *Phailin* are discussed below.

- Government in lieu of adopting the ORC norm to provide relief on the basis of person affected, declared (15 October 2013) that food assistance of 50 kg of rice and ₹ 500 for 14 days relief and 25 kg rice and ₹ 300 for 7 days relief should be provided to every House Hold (HH).

Test check of acquittance rolls of 1101 HHs for distribution of relief in Ganjam revealed that two *per cent* of HH (20) had one member, eight *per cent* (83) had two members, 23 *per cent* (249) had three members, 37 *per cent* (415) had four members, and 30 *per cent* (334) had five or more than five members. This implied inequitable distribution of relief.

Government stated (June 2014) that this was done to ensure convenient and speedy distribution of relief. However, the fact remains that there was inequitable distribution thereby depriving some and giving superfluous relief to some others.

- Further, to distribute relief on the basis of HH, BDO, Balasore sadar prepared HH list on the basis of census 2011. As after two years of census in 2013, new HHs came to existence, some were not included in the list prepared by the BDO. This caused resentment among people and 772 qtl (3088 HHs X 25 Kg.) of rice was not distributed to 3088 HHs of nine GPs.

Government stated (June 2014) that Collector, Balasore was instructed to review the fact and take suitable action against erring officials.

2.4.9 Non distribution of polythene sheets

RDM Department instructed (22 October 2013) district Collectors to provide, on priority basis, polythene sheets to victims whose houses were fully damaged and to others on the basis of availability. As per the report of Tahasildar, Balasore Sadar, in eight GPs, 2960 houses were damaged in *Phailin* and subsequent flood out of which, 380 houses were fully damaged and concerned HH were eligible for polythene sheets as per norms. However, Audit observed that these were not supplied though 1151 pieces of polythene sheets were available in stock as per stock register of the Tahasildar concerned.

Government stated (June 2014) that all beneficiaries were provided with polythene subsequently by the Tahasildar, Balasore. However, the fact remains that the polythene sheets were not distributed during necessity.

2.5 Restoration/ reconstruction after disasters

As per items and norms of assistance from the CRF/SDRF issued by the GoI, damages related to infrastructure like roads and bridges, drinking water supply system, irrigation, power are identified as activity of repair and restoration of immediate nature.

Audit noticed that Government took up reconstruction and restoration works which were not of immediate nature and works which were not damaged by disasters. After *Phailin* also, Government failed to manage repair and restoration activities effectively though 132.35 lakh people in 171 Blocks, 44 Urban Local Bodies in 18 Districts were affected, 44 lost their lives and standing crops in 5.56 lakh Ha were reportedly damaged. Scrutiny of records in respect of action taken by Government towards restoration/ reconstruction revealed the followings:

2.5.1 Execution of repair and restoration of works not of immediate nature

Paragraph 3 of GoI guidelines provides that the fund under CRF/ SDRF was to be utilised only for meeting the expenditure for providing immediate relief to the victims of cyclone, flood, drought, earthquake, fire etc. Audit noticed that, fund amounting to ₹ 3.37 crore (**Appendix 2.1.2**) was utilised during 2007-12 for construction and restoration of 100 works like repair of buildings of Home Guards, Town Hall, Regional Transport Office building, renovation of tanks etc. which were not of immediate nature.

2.5.2 Execution of work not related to disaster

Audit also noticed that ₹ 2.70 crore was utilised on 148 works (**Appendix 2.1.3**) like repair and renovation of Government office buildings and staff quarters etc. by eight executing agencies which were not damaged in flood or any other disaster.



Renovation of Town Hall, Subarnapur

2.5.3 Construction of new works

As per the guidelines, works of repair and restoration of immediate nature should be taken up out of CRF/SDRF. Audit found in three (Subarnapur, Balasore and Jajpur) out of eight test checked districts that ₹ 3.20 crore was released (February to June 2012) by Fisheries and Animal Resources Development Department to four executing agencies for construction of 42 new Livestock Aid Centres (LAC)/ Veterinary Dispensaries (VD) as indicated in table below.

Table 2.2: Construction of new works (₹ in lakh)

SI No	Name of the EE	Nature of projects	No of works	Fund released
1	RWD, Subarnapur	Construction of VD/ LAC	7	53.00
2	RWD-I, Balasore	Construction of VD/ LAC	8	61.50
3	RWD-II, Balasore	Construction of VD/ LAC	6	45.00
4	RWD, Jajpur	Construction of VD/ LAC	21	160.00
Total			42	319.50

(Source: Records of test checked RW Divisions)

Joint physical inspection of nine¹⁴ such works conducted in presence of representatives of the Department revealed that, in all cases construction of new buildings were under progress. In reply, the Executive Engineers (EEs) of Rural Works Division (RWD), Subarnapur, Balasore and Jajpur stated that the works were taken up as per the requirement of Fisheries and Animal Resources Development Department.



LAC building at Mahadevpali

¹⁴ Binika, Mahadevpali, Sindhoh, Sindhpur of Subarnapur District, Basta of Balasore District, Pritipur, Sujapur, Paramanandapur and Rampa of Jajpur District

Government stated (June 2014) that all the projects had been duly sanctioned by the State Level Committee for Administration of CRF/ SEC that has the mandate of deciding all matters connected with financing of relief expenditure from CRF/ SDRF. But sanctions for works contravene the provisions as outlined in CRF/SDRF guidelines.

2.5.4 Restoration and reconstruction after Phailin

2.5.4.1 Restoration of roads

As per guidelines issued by GoI, repair restoration of immediate nature of the damaged infrastructure is to be completed within maximum period of 45 days in plain areas and 60 days for hilly areas from the date of occurrence of disaster. As reported by Government, 11429 GP/ village roads under Panchayati Raj were damaged in *Phailin* and subsequent floods of which only 11321 roads were taken for restoration and 9926 roads were completed. The repair and restoration of remaining 1503 roads of were not completed (March 2013) even after lapse of five months.

Further, Audit noticed in Ganjam, Puri and Balasore districts that against assessed damage of ₹ 103.20 crore to 1060 roads under nine Roads & Building Divisions and Rural Works Divisions, only



Bipulingi to Gangapur road fully washed and not restored

₹ 44.41 crore was provided and 903 (85 per cent) roads were restored (April 2014).

Joint physical inspection of one road (“Bipulingi to Gangapur” under RW Division, Ganjam-II) revealed that the road, which also served the purpose of an embankment of a serving irrigation canal, was fully washed away and not restored, thereby creating inconveniences to local people and also disrupting supply of water in the canal thereby affecting rabi crop in the lower reaches of the canal. Locals present there also stated to the joint inspection party that immediate repair of the road was urgently required for smooth communication and also for providing irrigation to around 10 Ha where rabi crop had already been affected in that season.

Government stated (June 2014) that all the roads have been completed by April 2014. But Audit saw that local roads were found to be in damaged condition as verified during May 2014.

2.5.4.2 Energy Infrastructure

Energy infrastructure was worst affected among all public properties. There was damage to 33/ 11 KV Lines, Distribution Transformers and Low level transmission networks ultimately resulting in non-supply of power to



People in Puri working in water logged area to restore power supply

domestic consumers and institutions of public utilities.

Scrutiny of records revealed that power distribution companies took 10 weeks in Ganjam to complete restoration works and supply power to all the affected consumers.

Restoration of power supply to piped water supply (PWS) systems took eight weeks in Ganjam.

Distribution companies attributed such delay in restoration to huge nature of damage, non availability of adequate stock of different electrical material to meet such huge requirement, lack of adequate man power to tackle the situation and water logging in the affected area.

2.5.4.3 Drinking Water

On account of power breakdown, PWS systems did not function. Government made arrangements for supply of drinking water in the cyclone & flood affected areas through water tankers and generator in the PWS systems. Audit, however noticed that:

EE Public Health Division, Ganjam could not supply required quantity of water after *Phailin* in the areas under ULBs, where PWS was the only alternative for the inhabitants. Percentage of requirement of water supplied to the resident in Digapahandi, Chikiti and Gopalpur Notified Area Councils was six, eight, and 39 respectively.

Government stated (June 2014) that before restoration of power supply to water supply system, water was supplied by hiring generator sets. However, the required quantity of water could not be provided as noticed in audit.

2.5.4.4 Health & Sanitation

Chief District Medical Officers of Balasore, Ganjam and Puri intimated (November 2013) SRC that they distributed 94.95 lakh halogen tablets and 5.92 lakh Oral Rehydration Salt packets to affected people and disinfected 5.11 lakh water sources. Audit noticed that in Balasore, Ganjam and Puri, despite above intervention, there was report of water borne diseases like simple diarrhoea (13290), severe diarrhoea (9457) and Bacillary Dysentery (4694).

Government stated (June 2014) that there was no case of epidemic and no report of loss of life due to health and sanitation problem. However, the fact remains that water borne diseases were reported despite disinfection of water sources.

2.5.4.5 Restoration of Irrigation Canals/ MIPs/ LIPs

- Test check of seven Irrigation Divisions revealed that against the



Embankment in Subarnarekha River not restored

assessed damage of 1060 river embankment, saline embankment, canal breaches etc. involving ₹ 139.08 crore, only ₹ 30.85 crore was provided by Government for restoring 442 breaches. Thus, 618 works could not be taken up for restoration even after five months of the cyclone flood thereby affecting flow of water in the canal. Moreover, possibility of further damage to the embankment in monsoons cannot be ruled out. Joint physical inspection of one river embankment in Subarnarekha River revealed that the embankment was not restored and local people stated that their villages would be in danger if embankments are not restored before rainy season.

- Test check of three Minor Irrigation Divisions (Ganjam-I & II and Puri) revealed that against the assessed damage of 457 canal breaches



Ranki Ghai Bhagabanpur MIP under MI Division-II, Ganjam not taken up for restoration

affecting water supply to 73180 Ha which required ₹ 23.23 crore for repair, only ₹ 6.80 crore was provided by Government for restoring 436 breaches. Thus, 21 works could not be taken up for restoration even after five months of the cyclone/ flood thereby affecting flow of water in canal.

- As per the instructions issued (November 2013) by Managing Director, Odisha Lift Irrigation Corporation, all repair works should be completed by December 2013 so as to enable Lift Irrigation Projects (LIPs) to run in Rabi 2013-14.



LIP at Agasti Nuagaon-1 village under Chhatrapur Block not restored

Test check of two Lift Irrigation Divisions (Balasore and Ganjam) revealed that against assessed damage of 1311 LIPs (only civil work) of ₹ 15.63 crore affecting water supply to 22911 Ha, only ₹ 8.11 crore was provided by Government. Thus, 389 LIPs could not be restored affecting water supply during Rabi season.

Government stated (June 2014) that taking into account the availability of fund in SDRF, amount had been allocated to different departments for restoration work after prioritising the projects.

2.5.4.6 Livelihood restoration

As per norms of assistance from the CRF/SDRF issued (June 2013) by GoI, loss to houses, agricultural crop, perennial crop, animal husbandry, boat and net, raw material and equipment of artisans are eligible for assistance.

- **Input subsidy for damage of crop:** As reported by Government, 5.56 lakh Ha of cropped area sustained crop loss of more than 50 *per cent* in *Phailin* and subsequent flood. SRC instructed (13 December 2013) Collectors for completion of assessment of crop loss and enumeration of farmers by 15 January 2014 and disbursement of input subsidy by 31 January 2014.

Audit noticed that Collectors of affected districts assessed damage to crops and requested (16 January 2014) for placement of funds. SRC returned (20 January 2014) the enumeration report submitted by the Collectors as report appeared to be exaggerated keeping in view the position of paddy procurement in the district and directed the Collectors for resubmission of the proposal after re-examination/ enquiry. However, the final enumeration was not completed (April 2014). Thus, even after lapse of six months of *Phailin* and subsequent floods during October 2013, no assistance could be provided to the affected farmers for loss of crops over 5.56 lakh Ha of land due to non completion of such enumeration.

Affected beneficiaries and farmers' society also represented to Collectors for early and adequate payment of compensation to strengthen their economic backbone.

- **Assistance to farmers for loss of horticulture crop:** As per norms of assistance from the SDRF, if the loss of perennial horticulture crops is 50 *per cent* and above, input subsidy of ₹ 12000 per Ha is to be paid subject to a minimum of ₹ 1500 and restricted to sown area.

Audit noticed that in Ganjam, Puri and Balasore districts, Deputy Directors of Horticulture assessed the loss to perennial crops (Mango, Cashew, Kewda and others) of 95976 farmers in 33571 Ha of land requiring ₹ 64.20 crore for payment of input subsidy. However, audit noticed that only, in Puri, ₹ 21 lakh was paid as assistance and in Ganjam and Balasore no assistance was given even after five months of the cyclone/ flood as no fund was received for that purpose. Affected persons represented to the Deputy Directors of Horticulture and District Collectors for prompt payment of input subsidy.

- **Assistance to Fishermen:** As per norms of assistance from the SDRF, assistance to fishermen for loss of boats was to be given at a flat rate ranging from ₹ 1500 to ₹ 7000.

As reported by Government, 6209 boats and 9622 nets were fully damaged and 1899 boats and 21436 nets were partially damaged due to cyclone. In Ganjam, Balasore, and Puri, 8907 fishermen were provided assistance of ₹ 2.60 crore toward their loss of boats and nets.

Audit noticed that norms of assistance stipulated by GoI was at a flat rate for damage to all variety of boats like country boat, FPR boat, mechanised boat etc. Distribution of assistance at flat rate for loss of all type of boats was inadequate in comparison to actual damage. Inadequacy of assistance was also confirmed from the representation of a Fishermen Society who requested for payment of adequate compensation considering the repair cost of boats ranging from ₹ 1 lakh to ₹ 1.50 lakh and for cost of nets at ₹ 80,000.

Further, it was noticed in two districts (Balasore and Puri) that there was damage of ₹ 1.96 crore to tanks, storage godowns, water pumps, boundary walls of Government fish farms where fish seedlings are produced. But, fish farms were not repaired as no fund was provided. Non restoration of these farms would affect production of seedling of fish and ultimately reduce fish production of the district.

- **Assistance to rural artisans:** As per norms of assistance from SDRF, assistance to artisans for repair and replacement of equipment and raw material is to be given at a rate of ₹ 3000 for equipment and the same for raw material and finished products.



Damaged loom of a Weaver Cooperative Society Baliapal

Government reported that 3455 traditional craftsmen and 767 handloom weavers of 19 districts were affected.

Audit noticed that in Balasore and Puri districts, 701 rural artisans were paid assistance of ₹ 28.88 lakh. However, though their loss was assessed up to ₹ 70000, they were paid only ₹ 1500 to ₹ 6000.

Further, audit noticed that there was no provision of assistance for loss of livelihood to small businessman like pan shop, street vendors. 36 such affected businessmen represented to the Collector, Puri for providing assistance. But no assistance could be provided to them, as norms of assistance of SDRF did not provide for such assistance.

Government stated (June 2014) that as small amount was received from NDRF, there were inadequacies in livelihood restoration like distribution of input subsidy, assistance for loss of horticulture etc. State Government was making budget provision for livelihood restoration. However, the fact remains that appropriate financial assistance was yet to be paid to affected population even after seven months of *Phailin* (June 2014).

2.5.4.7 Animal Care

As reported by Government to GoI, 31,062 animals were shifted to safer places. 283 veterinary teams were deployed in the cyclone and flood affected

areas. 89,840 livestock were given medical treatment and 2.30 lakh cattle were vaccinated.

Audit noticed the following:

- **Supply of fodder:** As per instruction (13 October 2013) of Commissioner-cum-Secretary to Government, Fisheries and Animal Resources Department, evacuated animals are to be provided with cattle feed at 1 kg per large animal and 200 gm for small animal, maximum for three days depending on the situation. Audit noticed that CDVOs Ganjam, Puri and Balasore neither evacuated any animal nor distributed any cattle feed to the animals evacuated by the farmers themselves. But later, CDVOs distributed 2696.05 MT of fodder during the period 14 October 2013 to 10 December 2013 with a maximum delay of 58 days after *Phailin*.
- **Short distribution of cattle feed:** In Bhadrak and Puri only 824 MT of cattle feed was received and distributed against requirement of 1901.5 MT cattle feed.

2.5.4.8 Construction of damaged houses

As per norms of assistance from SDRF revised (21 June 2013) by GoI, assistance to affected people is to be given for damage to their houses. Further, clothing assistance at ₹ 1300 per family and utensil assistance of ₹ 1400 per family are to be given whose houses were fully damaged. As per report of Collectors, in *Phailin* and subsequent flood, 4.24 lakh houses were damaged in six test checked districts for which ₹ 117.69 crore was sanctioned and ₹ 101.30 crore was distributed as of February 2014.

Audit noticed that though GoI revised norms of assistance from SDRF for the period 2010-15 from ₹ 1900 to ₹ 70000, the Collector, Jajpur sanctioned and distributed house building assistance (HBA) at pre-revised lower rate of ₹ 1500 to ₹ 35000. Thus, in two test checked tahasils (Dasarathpur and Jajpur) 2547 beneficiaries received ₹ 10.24 lakh less due to distribution of HBA at lower rate.

Further, in Puri, 907 HHs, whose houses were fully damaged, were not paid clothing and utensil assistance of ₹ 24.49 lakh. In reply, the Collector, Puri stated that no fund was received towards clothing and utensil assistance.

Government stated (June 2014) that disbursement of HBA was completed by May 2014, and all Collectors were strictly instructed to provide assistance at revised norm.

2.5.4.9 Assistance for poultry loss

As per norms, assistance at the rate of ₹ 37 per poultry bird subject to a ceiling of ₹ 400 per beneficiary is to be compensated to owners of poultry in case of death on account of natural calamity. Audit noticed that though 6.36 lakh poultry bird died in cyclone/ flood in October 2013 in Balasore, Ganjam and Puri, no compensation was so far been paid to the owners of poultry birds even after grievances submitted by them in Ganjam and Puri.

Government stated (June 2014) that the Collectors were instructed to review and take necessary action.

2.6 Financial Management

As per guidelines, SDRF is to be used only for meeting expenditure for providing immediate relief to victims of cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloud burst and pest attack.

Audit noticed that out of ₹ 3640.28 crore (CRF: ₹ 1150.30 crore and SDRF: ₹ 2489.98 crore) available during 2007-13, ₹ 3455.96 crore was utilised as of March 2013, leaving ₹ 184.32 crore unutilised. Besides, external assistance of ₹ 38.98¹⁵ crore was received from United Nations Development Programme (UNDP) and World Bank during 2007-12 of which ₹ 25.47 crore¹⁶ was utilised during this period on disaster preparedness, infrastructure development, reconstruction and capacity building.

Audit noticed cases of irregular expenditure on inadmissible works, non-submission of UCs, non-crediting of interest to SDRF etc. as discussed in the succeeding paragraphs:

2.6.1 Inadmissible expenditure out of SDRF

Paragraph 3 of GoI guidelines on SDRF provided that SDRF should be used only for meeting the expenditure for providing immediate relief to the victims of any disaster and Paragraph 17 provided that expenditure on disaster preparedness, restoration, reconstruction and mitigation was not to be made out of SDRF but be borne by State Government under State Plan funds. However, Government had not made any provision of funds for disaster preparedness, mitigation, repair and restoration in the State Plan except its share of contribution to SDRF and the expenditure related to above were met from CRF/ SDRF as discussed in the succeeding paragraphs.

2.6.1.1 Inadmissible sanction of fund on disaster preparedness

Audit noticed that ₹ 29.46 crore (**Appendix 2.1.4**) was sanctioned out of CRF/ SDRF for disaster preparedness in violation to the above norms, despite utilisation of ₹ 25.47 crore from UNDP and World Bank for disaster preparedness.

Government stated (June 2014) that all the projects had been duly sanctioned by State Level Committee and SEC. But these sanctions for works contravene provisions as outlined in CRF/ SDRF guidelines.

2.6.1.2 Ex-gratia to the victims of lightning

As per guidelines, the fund from SDRF shall be used only for meeting the expenditure for providing immediate relief to the victims of cyclone, drought, earthquake, fire, flood, tsunami, hail storm, land slide, avalanche, cloud burst and pest attack.

¹⁵ DRM: ₹ 4.34 crore, DRR: ₹ 1.08 crore and NCRMP: ₹ 32.81 crore/ ICZMP: ₹ 0.75 crore

¹⁶ DRM: ₹ 6.28 crore, DRR: ₹ 1.20 crore, NCRMP: ₹ 17.81 crore, ICZMP: ₹ 0.18 crore

Audit noticed that Collectors of eight Districts incurred expenditure of ₹ 5.17 crore towards ex-gratia payment to victims of lightning out of CRF/ SDRF during 2007-12 in violation of guidelines. Besides, 13th Finance Commission did not recognise lightning as a calamity/ disaster though State Government considered lightning as a disaster as per ORC.

Government stated (June 2014) that it was decided (August 2012) to meet the expenditure on *ex-gratia* assistance for the lightning victims out of Chief Minister Relief Fund. However, the fact remains that, inadmissible payment were made from the SDRF.

2.6.2 Submission of Utilization Certificate

As per provisions of OGFR, UCs were to be submitted to the Government latest by 30 June of the year succeeding the year of release of funds.

Audit noticed that during the period 2007-2013, ₹ 3455.80 crore was released out of CRF/ SDRF by SRC to 30 Collectors and 33 departments of the State Government against which UCs of ₹ 1999.38 crore were received. Remaining UCs for ₹ 1456.42¹⁷ crore were awaited.

Government stated (June 2014) that steps would be taken to collect UCs or deduct the balance amount of subsequent release of fund in favour of executing agencies.

2.6.3 Interest not credited to SDRF

As per Para 4 of SDRF guidelines, SDRF would be retained in the Public Account under the Reserve Fund bearing interest and would be invested in Central Government dated securities, auctioned treasury bills etc. and the State Government would pay interest to SDRF at the rate applicable to overdrafts under Overdraft Regulation Guideline of Reserve Bank of India. Such interest is to be credited to the SDRF on half yearly basis.

Audit, however, noticed that though State Government retained SDRF under 'interest bearing public accounts' from 2011-12, no interest was credited (October 2013) to SDRF and reason thereof could not be stated to Audit.

In reply, the Government stated (June 2014) that ₹ 9.78 crore had accrued as interest out of investment in treasury bills during 2013-14 which will be credited to SDRF in 2014-15. However, reply was silent on non crediting of interest since 2011.

2.6.4 Idling of fund due to unrealistic assessment

Rule 242 of OTC Vol-I provided that no money shall be drawn from the treasury unless it is required for immediate disbursement.

¹⁷ 2007-08: ₹ 36.80 crore, 2008-09: ₹ 165.41 crore, 2009-10: ₹ 57.16 crore, 2010-11: ₹ 140.22 crore, 2011-12: ₹ 579.34 crore and 2012-13: ₹ 477.49 crore

During 2008-11, SRC released ₹ 33.42 crore to Collector, Keonjhar for input subsidy, ex-gratia, gratuitous relief (GR), assistance for house building etc. and for repair/ revival of public utilities affected by natural disaster during the period. Audit noticed that though amount was released on the basis of requisitions from Collector Keonjhar, ₹ 10.11 crore remained unutilised with the Collector for one to four years as of September 2012 as detailed in the table below.

Table 2.3: Unutilised fund with district authorities (₹ in lakh)

Year	Type of disaster	Purpose of Assistance	Amount released	Amount retained as of September 2012
2008	Flood	GR and HBA	12.20	11.70
2010	Unseasonal rain	Subsidy, <i>ex-gratia</i> and others, GR in kind	2297.54	551.48
	Draught	Subsidy <i>ex-gratia</i> and others	423.50	179.27
2011	Flood	Subsidy, <i>ex-gratia</i> and others	608.65	268.67
Total			3341.89	1011.12

(Source: Records of DDMA Keonjhar)

Retention of balance indicates that requisition for funds were made by Collector without proper assessment of requirement.

Government stated (June 2014) that Collectors were strictly instructed to submit their requirement after assessing crop loss in the field and funds would be placed with them as per requirement.

2.6.5 Surrender of input subsidy

As per Paragraph 6 of the ORC, gratuitous relief in terms of assistance was to be provided to cultivators to retrieve losses. Audit scrutiny revealed that, SRC released (March 2011) ₹ 3.85 crore towards input subsidy (Drought 2010) for disbursement amongst affected farmers of Subarnapur district on basis of report of Collector, Subarnapur. Tahsildar disbursed ₹ 2.62 crore and surrendered (November 2011) remaining ₹ 1.23 crore to DDMA as subsidy was not disbursed, suggesting that assessment was on higher side.

Government stated (June 2014) that Collectors were strictly instructed to submit their requirement after assessing crop loss in the field and funds would be placed with them as per requirement.

2.6.6 Donation received for Phailin in Chief Minister Relief Fund (CMRF)

After striking of *Phailin* (12 October 2013), general citizens, Central and State Public Sector Undertakings, Corporate, Business and Industrial houses, banks and other institutions contributed ₹ 238.71 crore to CMRF as of 11 March 2014.

Audit noticed that out of these ₹ 64.08 crore was released to Women and Child Development Department for additional pension to old, handicapped and widows and ₹ 5.96 crore to School and Mass Education Department for

reconstruction of fully damaged elementary schools in 13 *Phailin* affected districts. Balance ₹ 168.67 crore was retained without utilisation, though many breaches in river embankment and canals were yet to be repaired and many farmers, fishermen and artisans were either not paid any assistance or paid less assistance as mentioned in *paragraphs 2.5.4.1, 2.5.4.5, 2.5.4.6, 2.5.4.8 and 2.5.4.9*. Thus, non utilisation of fund for calamity purposes defeated the very objective of its collection.

Government stated (June 2014) that balance fund would be utilised for providing relief and restoration activities.

2.7 Monitoring by the State, District Apex bodies

As envisaged in DM Act, SEC and SDMA have been constituted to oversee and monitor enforcement and progress of disaster related policies and practices.

Audit examined adequacy of monitoring and noticed the following deficiencies:

2.7.1 Monitoring by SEC

Section 22 (1) of the DM Act required SEC to act as a coordinating and monitoring body for management of disaster in the State. The Odisha Disaster Management Rules 2010 required SEC to meet at least once in three months.

Audit noticed that against the required 10 meetings to be held since its formation (December 2010) till June 2013, the Committee met only five¹⁸ times for approval of projects without monitoring disaster preparedness, mitigation etc. in the meetings.

In reply, the Government stated (June 2014) that SEC met four times during 2013-14 and discussed various issues on disaster management.

2.7.2 Supervision of Flood Damage Repair work

Government decided (October 2011) to constitute State level and District level squads to inspect repair and restoration work of damaged infrastructure of Flood in 2011. They were to report to Collector and SRC, who in turn were required to communicate adverse findings with recommendation of squad to executing agencies concerned for prompt rectification.

Audit observed that:

- In Jajpur, the squad inspected (04 May and 25 May 2012) seven works executed by six executing agencies¹⁹ and reported adversely on poor soil quality, poor compaction etc. on six works and recommended corrective measures to ensure quality, standard and design. But, Collector Jajpur neither instructed executive agencies for taking corrective action nor

¹⁸ 11 March 2011, 7 October 2011, 7 January 2012, 29 August 2012 and 23 May 2013

¹⁹ Jajpur Irrigation Division, Jaraka Irrigation Division, OLIC Division, Jajpur, Minor Irrigation Division, Cuttack, RW Division-II, Jajpur, R&B Division, Panikoilli

ensured their rectification. Executing agencies had also not submitted any action taken report in compliance to the comments.

- In five out of eight test checked districts, District squads were formed during October and November 2011, but neither was any report received by Collectors nor was any such report discussed in the review meeting of respective district DLNCC²⁰ meeting.

Government stated (June 2014) that Collectors were instructed to review the matter and take necessary action.

2.7.3 Redressal of grievances petitions and complaints

Audit observed that Complaint registers were maintained by District Emergency Officers only after Flood in 2011 in all eight test checked districts. During 2011-12, grievances petitions received from flood affected people, NGOs etc. complaining about favoritism in providing house damage assistance, distribution of relief materials, false inclusion of area as flood affected to get assistance, were routinely forwarded by Collectors to Tahsildars, BDOs, DRDAs and other executing agencies. But, compliance of the executing agencies to these grievances was not monitored.

In Jajpur district, four NGOs submitted (21 October 2011) complaint with documentary proof on inclusion of GPs not affected in the flood in the list of affected GPs. No action was taken by the Collector to verify the complaint.

Government stated (June 2014) that Collectors were instructed to review and suggest remedial action.

2.8 Conclusion

The SDMA constituted in October 2010 after a delay of five years of enactment of Disaster Management Act 2005 under the Chairmanship of the Chief Minister for overseeing activities relating to disaster prevention, mitigation, preparedness, relief and reconstruction, did not meet till July 2013. The State Government also failed to incorporate disaster management into the development planning process due to non-preparation of SDMP till July 2013 as envisaged in the Disaster Management Act 2005. SDMP was, however, prepared in August 2013.

Though early warning mechanism and communication systems for disaster preparedness were in place, the system was not effective due to inadequate staff and non-functioning of machinery. Relief, rehabilitation and reconstruction measures had gaps as payments of ₹ 49.59 lakh were made for rice without actual distribution, relief materials valuing ₹ 10.26 crore were issued without acquittance roll and beneficiary lists, rice got damaged due to improper storing etc. There was delay of six to nine months in providing relief to affected people and dal being basic food, was not distributed in relief operation.

²⁰ District Level Natural Calamity Committee Meeting

During *Phailin*, though, the State Government could save human life through early warning system and administration of evacuation to safer place, more could have been done to save the livestock which is main livelihood of the affected population. Further, the post disaster relief measure and restoration/reconstruction measures undertaken by the Government were not comprehensive. There were cases of inequitable distribution of relief and short distribution of relief material. Restoration was not adequate due to delay in restoration of power infrastructure, piped water supply system, roads, irrigation canals and Lift Irrigation Projects affecting rabi crops/ agriculture in the *Phailin* affected districts. Besides, input subsidy for loss of crop was not paid and artisans were not adequately compensated for loss of livelihood.

There was improper financial management as ₹ 29.46 crore was sanctioned from CRF/ SDRF towards disaster preparedness in violation of GoI norms. UCs for ₹ 1456.42 crore were pending from executing agencies and Collectors against the release of fund of ₹ 3455.80 crore during 2007-13. Despite retaining the SDRF in interest bearing public accounts during 2011-13, interest thereon was not paid by State Government.

Monitoring of preparedness, rescue and relief operations by SEC was largely absent as its meetings were limited to approval of projects of various departments and sanction of fund out of SDRF.

2.9 Recommendations

Government may consider:

- incorporating the provisions of DM Act in the State DM Policy and formation of Advisory Committee;
- strengthening institutional mechanism with adequate manpower for SDMA and DDMA for effective disaster management;
- providing infrastructural support like permanent electricity, roads and improve the conditions of equipment in cyclone centres;
- ensuring adequate and timely distribution of relief materials;
- ensuring speedy restoration of the damaged infrastructure and provide immediate and sufficient support for livelihood restoration as per norms;
- creating Disaster Mitigation Fund as envisaged in the DM Act and ensuring utilisation of SDRF for immediate relief and restoration as envisaged; and
- strengthening monitoring system for relief and reconstruction.