



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Government Civil Society Partnership for Disaster Risk Reduction: Analytical Exposition of Post Odisha Super Cyclone Rehabilitation Measures

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Abstract

It has been almost three decades since the Super Cyclone ravaged Odisha. Around eighteen million people were affected, more than ten thousand precious lives were lost, and the economy was devastated. The event, however, marked a turning point in Odisha's development trajectory. Not only did the cyclone-prone state resolve to protect its people from future disasters setting the goal of zero-human casualties, it also emerged as a global pioneer in disaster management. Today, Odisha is more resilient with support from civil society organisations. When Cyclone Phailin struck the coast in 2013, Odisha carried out one of the most successful disaster management efforts in the world, evacuating close to one million people ahead of the strongest cyclone to hit the country since the Super Cyclone. In 2019, when another powerful cyclone Fani struck, the Odisha government showed a high degree of preparedness and effectively evacuated about 1.2 million people based on these predictions. In 1999, in the wake of the Super Cyclone, Odisha became the first state in India to establish a disaster management authority well before the establishment of the National Disaster Management Authority (NDMA) in 2005. But empowering communities is just one part of the solution. Building disaster-resilient infrastructure is equally important. Since this requires collaboration between several government departments and civil society organisations OSDMA has taken the lead in putting in place critical infrastructure that protects the lives and livelihoods of the people. The World Bank, along with several other multilateral agencies, has been privileged to partner with the Govt of Odisha, helping to strengthen it in its formative years. This article attempts a critical analysis of the steps augmented by international and national relief and rehabilitation organisations.

Key Words: Disaster, Risk Reduction, Management, Civil Society, Resilience, Preparedness

Introduction:

Orissa witnessed a series of major natural disasters in 1999. To begin with there were the severe floods in August, which affected seven coastal districts. Then, in October, within a span of just 11 days, 14 districts in the state were devastated by two cyclones. The first cyclone, which lasted overnight from 17 to 18 October, was classified as a very severe cyclonic storm with wind speeds reaching 200 km per hour. The second cyclone, from 29 to 30 October, was a rare cyclone of catastrophic intensity, with wind speeds of 300 km per hour. It swept the entire Orissa coast, affecting 12 districts and parts of neighbouring West Bengal, devastating a 250 km stretch of eastern Orissa's coast. Ten thousand people were reported killed and many thousands more devastated. The violent cyclone swept the state with sustained winds of 160 mph. It was the worst cyclone in meteorological history, with one of the highest wind speeds ever recorded - 223 mph. It lasted 24 hours when most cyclones last no longer than three. The storm hurled 30-foot waves onto shore, washing away entire villages, flattening mud huts and drowning thousands who managed to survive the powerful winds. The super cyclone exposed the people and the landscape to the impact of 3 natural hazards: storm surges, high-speed

wind heavy torrential rain; those resulted in 3 different types of impacts: like physical destruction, saline inundation and flooding. The official death toll was 9,893, but there were difficulties in making accurate estimates and local people insist the final death count was much higher. Whole villages along the sea in Ersama block of Jagatsinghapur district, were washed away and no one knows how many people were lost. The cyclone also destroyed the livelihood of the coastal state's farming community it saturated more than 1 million hectares of cropland under salty water and killed some 406,000 livestock. Drawing on the best technical expertise, OSDMA has built over 800 multi-purpose cyclone shelters together with evacuation roads along the state's entire coastline. Embankments are also being built to protect seaside villages from the ingress of the sea, and several vulnerable families have been helped to shift from straw huts to new multi-hazard disaster-resilient houses. Most importantly, Odisha is the first Indian state to have created an early warning system for disseminating critical disaster-related information to the very last mile. Nearly 1,200 villages in all the coastal districts of the state now receive cyclone or tsunami warnings through sirens and mass messaging. This early warning system, with watchtowers in over 120 coastal locations, forms the bedrock of Odisha's disaster preparedness and response.

Research Question:

In present context following decade long persistence in building both resilient infrastructure and resilient communities have stood the state in good stead. There is, however, more to be done. Disaster risk management is a dynamic process, requiring us to be ever-alert to new needs and challenges. Because every disaster is different, there are no textbook solutions. Yet, as a coastal state, we know that in the coming years, Odisha will have to brace for more frequent and intense cyclones, heat waves, droughts, extreme rainfall events, cloud bursts, floods/flash floods, lightning storm surges, tsunami, and sea-level rise. There is also an urgent need to protect Odisha's coast from sea erosion. Odisha has learnt and unlearned from its own experiences. As climate risks multiply, Odisha is raising its own bar for cyclone risk mitigation and exploring more sophisticated technologies while ensuring they are accessible to and owned by local communities as far as possible. As Odisha's experience shows, it is important for every state to recognise that disaster preparedness and management is a developmental priority to be pursued in accordance with every state's own socio-cultural context but in all cases with a sense of urgency and most important in collaboration with rescue relief and rehab organisations operating under the domain of larger civil society.

Objectives and Coverage of the Study

The objectives of the assessment were as follows:

- To study the effectiveness and impact of the civil society partnership in disaster response
- To assess whether the civil society partnership with largescale presence of NGOs and CBOs has enhanced government's capacity to deal with disaster risk reduction
- To determine the sustainability and replicability of the Community Based Disaster Preparedness (CBDP) model supported by UN agencies and Civil Society organisations
- To determine the cost effectiveness of the programmes pursued by Govt with Civil Society

Methodology of the Survey:

The survey conducted to measure the effectiveness of UN agency supported Disaster Risk Management (DRM) and Disaster Risk Reduction (DRR) programme initiatives, in managing the Severe Cyclonic Storm "Phailin" in Odisha recently. So, to conduct the survey, we had prepared and referred the following matrix to measure the effectiveness at different level, as the programme initiatives were undertaken starting from State, District, Block, Gram Panchayat and up to the Village levels, as well. GPs in 5 blocks (Cuttack, Jagatsingpur, Ganjam, Kendrapara, Astarang) were covered in the impact assessment study. GPs were selected at random to have a fairly representative sample to draw observations and conclusions from. A control GP (Ersama) wherein the key interventions were implemented was visited by the researcher to compare disaster preparedness activities without project interventions. In the field, the evaluation team had discussions and interactions with the Block Development Officers, National United Nations Volunteers (NUNVs), GP Disaster Management Committees/Task Force members, and Village Disaster Management Committees/Groups members, CBOs/NGOs, Self Help Groups (SHGs) and community members. These were complemented with the review of the project documents, reports and the Disaster Management Plans. The researcher observed the preparedness and mitigation activities such as (1) the Disaster Information Centre, (2) training of HAM radio volunteers, (3) construction of earthen mounds, (4) mock drills, (5) computer training, (6) safe but cost-saving building construction, and (7) technology demonstration units. Discussions with the UNDP Orissa Team, OSDMA, State Relief Commission (SRC), Panchayati Ray Department (PRD), and some NGOs based in Bhubaneswar focused on the following: (1) operational

issues, (2) the opportunities and constraints in sustainability, (3) multistakeholder participation, (4) recommendations on how to institutionalize and mainstream the preparedness and mitigation process and (5) ways ahead in CDBP.

Sample Survey:

The sample survey was planned especially to collect the information regarding Community level preparedness in selected villages of affected districts and covered under the programme, as well. The villages were selected after necessary consultation with the district and block administrations and based on the impact of the cyclone. The information collected from the respective villages may not reflect the preparedness level of the community in general, but keeping view of the information on the community response especially in evacuation operation, as per the government information, the best practices cited in the report, about specific villages, may be taken as examples of positive community preparedness guided by civil society partnership.

Data collection:

- Relevant data/ information on preparedness measures taken at different level by the administration were collected from the respective state, district and local authorities with prior intimation and consultation.
- Secondary sources of information like official websites, media publications and information received through email from respective forum or authorised sources are also taken into reference.
- Information shared by the government authorities, during personal interview are also recorded as the authentic information on the steps taken by respective departments and government bodies.
- Information included observation through transect walks and village mapping, individual interviews with key informants, focus group discussions and some basic survey tools to collect basic quantitative data for comparison purposes.

Matrix for conducting the civil society role survey :

| Level | Programme Component | Major Outcome of the Component | Parameters identified to measure the effectiveness | Process identified |
|----------------------|---|---|--|--|
| State District Level | Development DM Plan | State (draft) & District DM plans prepared in selected districts. | -Availability of updated version of DM Plans -SOPs of key line department authorities -DM plan referred during preparedness and response planning | -Personal interviews with Senior & key line department Authorities -Follow important instructions and government orders issued for preparatory and response measures |
| | Strengthening coordination Mechanism with Civil Society | GO-NGO coordination established for better response during emergency situation | -GO-NGO coordination cell established -Frequency of meeting and information sharing process -Volunteers database and Intervention planning | -Attend the Go-NGO coordination meetings and collection of meeting proceedings -Personal interviews with Senior Authorities and key informants • Access websites developed or online information available, if any. |
| Block & GP level | Preparation of Block Disaster Management Plan | Block Disaster Management plans prepared in coordination with line departments and concerned Gram Panchayats. | -Availability of updated BDMPs / GPDMPs -SOPs of key line department authorities - DM plan referred during preparedness and response planning | -Personal interviews with Senior & key line department Authorities -Follow important instructions and government orders issued for preparatory and response measures. |
| Community Level | Training & Capacity Building of Community members | Special training programmes organised at village level for CDBP process and skill development (like S&R, First Aid etc) | -Last training organised, on what aspect and other training details. -Participation details in the last training programme -Role Clarity -Availability S& R equipment & First Aid Box, if any -Special Training organised at Multipurpose Cyclone / Flood Shelters (MCS) | -Rescue, first Aid etc. -Individual interaction to capture specific intervention, success stories, innovative approaches etc -Stock taking of equipment available at MCSs and their usefulness. |
| | Mock Drills | Mock Drills organised at village level after organising skill development trainings on S&R and First Aid | -Response drills organised at MCSs --Mock drill at village level and frequency -Updation of VDMPs followed by mock drill and follow up trainings | |

Rehabilitation Activities by International Agencies

In the aftermath of the super cyclone on the request of the government of Orissa, a joint UN assessment framework was developed. Immediate assessment was carried out by UN Agencies:

- UNDP

- UNICEF
- FAO
- WHO
- WFP

To enumerate the loss caused to different sectors during the cyclone. In November and December 1999, several UN missions the International Labour Organization (ILO), WHO, UNESCO and the Food and Agriculture Organization (FAO) visited Odisha to assess the impact of the cyclone and the long-term rehabilitation needs in agriculture, livelihood, health and education. Thematic workshops aimed at addressing emerging issues at the relief, rehabilitation and reconstruction phases were organised. Workshops were held in February and March 2000 on shelter (sponsored by UNDP) and food security (FAO), and those on education (UNESCO) and health (WHO) in April and May 2000. A high-level team from the World Bank visited the cyclone-devastated state to assess the damage. The primary task of the 20-member team was to assess the resources needed to rebuild the state's economy. In addition to the regular coordination meetings, two policy workshops were held at the UN House in Bhubaneswar, bringing together key NGOs, government agencies, donors, bilateral agencies and UN organizations to focus on rehabilitation activities. The UN agencies worked out a preliminary budget of \$ 50 million to be spent in the 15 years following the disaster.

International Red Cross:

Under the Orissa Disaster Mitigation Programme - supported bilaterally by the German Red Cross - training for village level volunteers, task force members and woman volunteers were conducted in the disaster preparedness training centre of IRCS Orissa state branch. A twelve-member Disaster Preparedness Committee (DPC) was formed for each cyclone shelter and these in turn recruited about 25 persons as a task force. The Task force members are trained in disaster preparedness, first aid, search and rescue, home nursing and vocational training (to strengthen self-help groups) and health awareness. Between April and September 2001, 489 volunteers were trained in disaster preparedness and management, 321 volunteers in first aid, 312 in search and rescue and 239 in home nursing. A feeding programme was implemented in six villages catering to 852 children, 278 women and destitute people. This programme was supported by the Swiss Red Cross and the Bavarian branch of the German Red Cross.

UNICEF

According to its estimates more than 3.3 million children were affected by the cyclone and an undetermined number had been separated from their families, orphaned or seriously injured. In some of the affected districts of Orissa, UNICEF mounted a door-to-door campaign in conjunction with other agencies in which volunteers walked from village to village in an attempt to identify lost, injured or orphaned children. UNICEF laid out immediate, medium and long-term interventions based on the "Five-R Strategy" - rescue, relief, restoration, rehabilitation, and reconstruction – enumerated by the government of Orissa. It organised programs in the areas of health, education, nutrition, water & sanitation, early childhood care, and special protection of orphaned and injured youngsters. Among some of the donors of the UNICEF programme were the governments of Netherlands, France as well as the German and Spanish committees for UNICEF. UNICEF with DFID funds supplied textbooks printed by the government of Orissa to schools. The textbooks are part of the book bank scheme of the schools.

WHO

WHO was a part of the UNDAF assessment team to Orissa and conducted the initial rapid health sector assessment and provided inputs into the UN appeal. It also provided other technical assistance to the health authorities throughout the initial disaster period. Guidelines on the management of diarrhoeal diseases (including cholera guidelines) and acute malnutrition were provided. The World Health Organisation (WHO) and Medecins Sans Frontieres (MSF) helped the State government set up a disease surveillance system, which will give early warning in case of an outbreak of diseases following a cyclone. In the worst-hit areas, several U.N. volunteer-doctors were involved in training field staff and improving the quality of disease surveillance.

UNDP 1

UNDP launched the Community-Based Disaster Programme (CBDP) in the state which trained small armies of volunteers to handle evacuation, first aid, reconstruction, carcass disposal and counseling in disaster situations. (Case study: annex 4) UNDP contributed \$ 50,000 USD and DFID contributed \$ 270,000 USD for the programme. This programme on CBDM was supported by the United Nations Development Programme (UNDP) and the Department for International Development (DFID) of the Government of UK. The Orissa State Disaster Management Authority (OSDMA) was the nodal agency for implementation and monitoring of the project at the State level.

ACTION AID

Action Aid, the international development agency, launched its programme for the community care of destitute women and children, termed the Sneha Abhiyan Campaign, literally the Campaign of Love in November 1999. Between December 1999 and July 2000, hundreds of women and children were rehabilitated in temporary shelters called Mamta Gruhas. Under Sneha Abhiyan, 801 orphaned children and children at risk, 638 widows/single women at risk and 209 aged persons were identified and taken care of. The programme also targeted longer-term rehabilitation through education and livelihood- generation. Educational support was provided to 360 children. A sum of Rs 476000 was provided to restore the livelihoods of 170 families. Credit was provided to 99 families. These families would have to repay their loans to their self-help groups after a period of one year, at an interest rate of 12 per cent per annum. In response to this need, the UK government's Department for International Development (DFID) allocated a further £25 million to target the rehabilitation of the livelihoods of the poorest affected people. This money was administered through DFID's India office (DFIDI) based in Delhi.

YMCA

YMCA built cyclone resistant houses, particularly in two villages: Olatpur and Jojala. The beneficiaries were selected through Community Management Groups, formed by all sections of the community. The cyclone-resistant houses were designed and constructed with people's participation. The rehabilitation process included the preservation of people's livelihood, through the supply of agricultural tools, seeds and livestock. Two schools were rebuilt. A book bank was also planned and scholarships provided for students. Under the Integrated Health Promotion Project, a daily clinic was started at Olatpur, and children in the age group of 6 months to 2 years regularly receive milk mixed with high protein mix. Also, 5 tube wells were installed in the two villages.

CARE

The largest single programme of CARE in Orissa was the Household Livelihood Restoration Support Project. This project targeted 40,000 poor farmers and share croppers in 500 villages by supplying them with them with paddy seeds. Ploughing and planting was often difficult as hundreds of thousands of cattle had been killed in the storm, so, where possible, CARE helped farmers with tractors and power tillers. Another CARE project replanted 2.6 million saplings to help replace trees and bushes lost in the cyclone. Helping the population of Orissa prepare for future storms was another key part of CARE's response. One project established a baseline map of areas most at risk from future storms. CARE partnered with India's National Institute of Amateur Radio to organise a radio network and train volunteer radio operators to serve as an early warning system. CARE committed itself to building 20 cyclone shelters in Orissa aimed to protect 60,000 people. It also supported the poorest families to build smaller secure shelters on their land, to protect them during storms.

Survey Findings:

The survey findings are based on the questionnaire of the terms of reference shared by UNDP. Accordingly, it is divided into three sections i.e., state & district level, At Community level in each section, the assessment is based on the programme component as explained in the programme document and out comes as per the annual and last progress reports. The findings reflect the observations made by the researcher during visits to the field, meetings with key officials and study of available statistical information as well as documentation carried out as part of the study.

Envisaged through Civil Society Partnership:

- Development of state database on vulnerability, disaster risk management and sustainable recovery.
- Strengthening the Government through support for hardware and software for disaster risk management and capacity building of institutions.
- Awareness campaigns on disaster mitigation and preparedness for each programme state.
- Support to include disaster management in school curriculum and schedule to drills in disaster prevention and response for schools.
- Promoting partnerships with academic institutions and private sector in development of disaster risk management plans.
- Development of training manuals in Disaster Management for District, Block, Gram Panchayat, Villages/Wards for each State in vernacular languages.
- Capacity building activities for all stakeholders including civil society organizations in the rescue, relief and restoration in disaster situations and the use of equipment involved.

Direct outcomes of civil society partnership:

- Comprehensive disaster risk management framework and recovery strategies in all study districts.
- Aware and informed community in hazard-prone districts on disaster risk management multi-hazard prone districts have multi-hazard disaster risk management, response and mitigation plans based on vulnerability and risk assessment of women and children towards natural disasters.
- Greater participation of elected women representatives of local self-governments in districts in the process of disaster preparedness and risk management.
- Enhanced capacity of the government functionaries of the nodal agency at the state level in developing and updating the risk management and response plans for different hazards Enhanced capacity of women in First aid, Shelter management,
- Water and Sanitation and Rescue Evacuation at selected States and Districts.
- Emergency kit at all selected districts. Manual, training module and awareness strategies available for replication in other areas.
- Enhanced capacity of the training institutions for training in disaster risk management.

Indirect outcomes of civil society partnership

- Reduction of expenditure on disaster relief
- Increased investment in preparedness measures.
- Sharing of disaster relief cost by the community.
- Self-reliant village, Gram Panchayat, Blocks and Districts for preparedness.
- Convergence of services & links to area development plans.
- People's awareness and participation increased.
- Access to information by the people.
- Cost reduction in housing construction.

Sample Questions for survey:

- When was the emergency meeting called? Who participated?
- How useful was the State Disaster Management Plan (SDMP)/ District Disaster Management Plan (DDMP)/ Village Disaster Management Plan (VDMP) for responding to the disaster?
- Did the state/ district officials use the India Disaster Resource Network for resource mobilisation from civil society organisations?
- Did the Emergency Operation Centres (EOC) function well?
- Were people able to get relevant information from the EOCs?
- Did the Early Warning System function up to the mark and information from the state and district reach the community at right time?
- Did the volunteers trained under the project able to perform their duties especially the evacuation, search and rescue teams?
- Did the Cyclone Shelter accommodate the likely affected people (focus on pregnant women, old persons, persons, with disability) and was properly managed.
- Did the community member follow the basic do's and don'ts prescribed for the cyclone while evacuating.

Conclusion:

The Government civil society partnership has been successful in putting disaster preparedness on the agenda of local government and the Panchayati Ray Institutions (PRIs). The partnership has built capacity in disaster preparedness and in the integration of disaster management into the development programming process and system at the Block and GP levels to support the disaster preparedness and mitigation at the community level. The process has also strengthened the PRIs in their role in the delivery of public services, including disaster preparedness and mitigation. As a result of the partnership, a local disaster management (preparedness and mitigation) system has been installed within the blocks, from the Block level to the GP to the village levels. Increased level of appreciation, especially with case studies successful disaster preparedness activities and cyclone threat, has increased demand for the replication of the preparedness and mitigation activities in other blocks and for the other districts in Orissa.

References:

1. Colin Walch (2019) Adaptive governance in the developing world: disaster risk reduction in the State of Odisha, India,
2. Government of Odisha. (2002). Managing Disasters in Orissa: Background, Challenges and Perspectives. Bhubaneswar: Orissa State Disaster Management Authority.
3. Government of Odisha. (May 2019). Cyclone Fani: Damage, Loss and Need Assessment. Bhubaneswar: OSDMA, 2019. Retrieved from <https://ncrmp.gov>.
4. Hyogo Framework for Action (HFA). (2013). Local Progress report for Odisha cities.
5. World Bank - India—Odisha State Overview. (n.d.). Retrieved December 31, 2019,
6. from <https://www.worldbank.org/en/webarchives/archive?url=httpzxxxweb>.
7. Jha, A., Basu, R., & Basu, A. (2016). Studying Policy Changes in Disaster Management in India: A Tale of Two Cyclones. <https://doi.org/10.1017/dmp.2015.116>.
8. Kumar, T. N. (2012). Managing Disasters in India. *Yojana*, 56, 5–10.
9. Mani Murali, R., Ankita, M., & Vethamony, P. (2018). A new insight to vulnerability of Central Odisha coast, India using analytical hierarchical process (AHP)
10. Odisha State Disaster Management Authority (OSDMA). (2016). Orissa vulnerability to different disasters. Retrieved from <http://www.osdma.org/ViewDetails.aspx>
11. UNDRR. (2019). Global Assessment Report on Disaster Risk Reduction, Geneva, Switzerland, United Nations Office for Disaster Risk Reduction (UNDRR).
12. UN ESCAP. (2017). Asia-Pacific Disaster Report 2017: Disaster Resilience for Sustainable Development. Retrieved from <https://www.unescap.org/sites/>
13. UNFCCC. (2017). Opportunities and Options for Integrating Climate Change from https://unfccc.int/sites/default/files/resource/techpaper_adaptation.pdf.

