



# **Report On Customized Regional Training Programme on Cyclone Risk Reduction (For IAS Officers)**

**DATE: 29TH JAN TO  
31ST JAN 2024**

**Venue : Madhusudan Das  
Regional Academy of Financial  
Management (MDRAFM),  
Bhubaneswar**

# Customized Regional Training Programme on Cyclone Risk Reduction (For IAS Officers)

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The 3-day Customized Regional Training Programme on Cyclone Risk Reduction for IAS Officers from Coastal States & Union Territories was arranged to strengthen disaster resilience and elevate cyclone management expertise. This collaborative effort between Odisha State Disaster Management Authority (OSDMA), Lal Bahadur Shastri National Administrative Academy (LBSNAA) and National Disaster Management Authority (NDMA), aimed to enhance the capabilities of IAS Officers in effectively managing cyclone-related risks in coastal regions. The program was attended by experts in the field of disaster management from Odisha, who have experienced numerous disasters and played a pivotal role in shaping policy decisions to ensure the state's readiness and resilience in the face of disasters.



## Day 1 (29<sup>th</sup> Jan 2024)

The inaugural session was held on 29th Jan 2024, which was attended by esteemed dignitaries like Shri Pradeep Jena, IAS, Chief Secretary, Odisha; Smt. Anu Garg, IAS, Development Commissioner-cum Additional Chief Secretary; Shri Abhiram G Sankar, IAS, Deputy Director,

LBSNAA; Shri Ashok Kumar Mohanty, OFS, Director, MDRAFM; Shri Sriram Taranikanti, IAS, Director General, LBSNAA; & Dr. Gyana Das, IAS, Managing Director, OSDMA.

The session started with Dr. Sunita Jena, General Manager (P&A), OSDMA welcoming all the dignitaries and participants. Shri Abhiram G Sankar, IAS, Deputy Director of LBSNAA, delivered the welcome address, specifying that this was the second edition of the program and the inaugural one took place in the year 2021 which received positive feedback from the participants. This, in turn, prompted the organization to conduct a program in Odisha this year as well. Recognizing Odisha's frontline role in professionally managing coastal disasters, he extended gratitude to the leadership, starting from the Chief Secretary to OSDMA, for supporting LBSNAA's request to conduct the program.



He introduced Shri Pradeep Kumar Jena, IAS, Chief Secretary of Odisha, as a stalwart in the field of disaster management. Introducing Smt. Anu Garg, IAS, Development Commissioner Cum Additional Chief Secretary, he mentioned that she served in various departments of Government of Odisha as well as Government of India such as W&CD, ESI, Textile etc.

He also introduced Shri Sriram Taranikanti, IAS, Director General, LBSNAA, as a pillar of support for the academy. Further, he introduced Dr. Gyana Das, IAS, MD, OSDMA, who brings a wealth of experience in disaster management to his role. Dr. Das is recognized as an expert in community-based disaster preparedness and risk management. Mr. Sankar further thanked and welcomed Shri. Ashok Kumar Mohanty, OFS, Director, MDRAFM for hosting this event by providing the best of facilities.

**Shri Ashok Kumar Mohanty, OFS, Director of MDRAFM**, emphasized that Odisha and OSDMA learned the importance of resilience through the hard lessons of the Super Cyclone of 1999, making it a primary objective to achieve a resilient Odisha. He added that utilizing extensive experience and a strong foundation in knowledge management, this training program has been designed to assist participants in enhancing their risk perception abilities and advancing their risk management initiatives.

**Smt. Anu Garg, IAS, Development Commissioner Cum Additional Chief Secretary** emphasized certain critical aspects of disaster management, including the profound impacts of climate change on global ecosystems. Highlighting the alarming reality of climate threats, she explained Odisha's experience during the devastating super cyclone, which claimed over 10,000 lives and marked a "tipping point" in bureaucratic understanding and response. Cyclones have become a more frequent phenomenon, undoubtedly linked to the effects of climate change. She highlighted the importance of preparedness, citing Odisha's motto "Every Life is Precious." She mentioned about the installation of early warning systems and investments in training, community preparedness, cyclone-resilient infrastructure, cyclone shelters, and restoration activities. Further, she emphasized that community involvement is a strategic investment. In fact, in Odisha communities are in charge of managing the cyclone shelters.



Special attention is given to train task force and Apada Mitra volunteers. Village Disaster Management Plans, Block Disaster Management Plans, and District Disaster Management Plans need to be made and implemented effectively. Additionally, she emphasized the importance of special attention being given to pregnant ladies, children and elderly people. She stressed the need to break silos and highlighted the importance of interdepartmental coordination. She concluded by saying, "We need to think smart and think climate smart."

**Shri Sriram Taranikanti, IAS, Director General, LBSNAA**, welcomed everyone and emphasized that there is no better place to conduct Cyclone Risk Reduction training than Odisha, in more ways than one. It is because Odisha has demonstrated resilience in various aspects, especially in disaster management. Additionally, he highlighted that different states across India encounter various disasters such as floods, droughts, etc. However, coastal states are more vulnerable to cyclones and they can contribute significantly to national disaster management efforts.



He further mentioned that, desiloesation and efficient interdepartmental coordination are essential, along with the sharing of best practices and information for effective disaster management. Odisha can share its experience and expertise in prevention, mitigation, preparedness, response, restoration, rehabilitation, and reconstruction. He advised the



officers to apply the lessons learned from the training program in their respective regions and plan workshops for all stakeholders involved in the area of disaster management. He also highlighted that the economic impact of disasters is quite high, mainly due to the lack of insurance coverage. Thus, there's a need to sensitize people about the importance of insurance for their houses, livestock, crops, and other assets.

**Shri Pradeep Kumar Jena, IAS, Chief Secretary of Odisha**, expressed gratitude to LBSNAA for organizing the training program in Odisha. He emphasized the inevitability of disasters and the importance of continuous learning before, during, and after such events. Highlighting the necessity of addressing various types of disasters beyond cyclones and floods, such as landslides, earthquakes, lightning, and heatwaves, he cited that there is no one-size-fits-all solution for disaster management and that learnings in this field



are constantly evolving. Each disaster should be treated differently, and special preparations should be made for each one. However, with strong fundamental approaches and effective SOPs, the task of managing disasters can become somewhat easier.

He also mentioned that Odisha achieved Zero Casualty in cyclones after the tragic loss of 10,000 lives during the Super Cyclone of 1999. Moreover, he elaborated on Odisha's belief in fostering proper coordination among all stakeholders and promoting collaboration across various departments. He explained how the administrative officers and all the departments responded quickly and cohesively during the Bahanaga train accident. Additionally, he urged the IAS officers to enhance their own capacities in effectively handling disasters.

**Dr. Gyana Das, IAS, Managing Director of OSDMA**, extended a warm welcome to all the participants and expressed gratitude to all the dignitaries present on the dais.

**Conducting the first session of the training program**, Dr. Das highlighted an incident in June 2023 when Odisha faced one of its worst train accidents. Despite many passengers getting severely injured, coordinated efforts of response forces, medical teams, and community volunteers



played a crucial role in controlling the death toll. It was indeed a race against time; however, prompt and synchronized actions across all departments contributed to successfully conducting the rescue operations.

Furthermore, he elaborated on the devastating impact of the super cyclone and the widespread destruction caused by the tidal surge. However, Odisha has since developed expertise in tackling and responding to cyclones. Following the super cyclone, the state focused on four key areas: policy and planning framework, institutional capacity building, capacity building of all stakeholders, and networking and partnership with stakeholders.

Dr. Das informed the participants that, after the super cyclone, OSDMA became the first



disaster management authority to be established in the entire South Asia. Additionally, Odisha was the first state to establish a state-level disaster response force in 2001. He mentioned that the government prioritized the construction of safe shelters to evacuate people during crises. Presently, there are approximately 837 multipurpose shelters across 25 districts, equipped with essential

facilities such as ramps, water facilities, toilets, generators, and various equipment like inflatable tower lights, power saws, first-aid kits, life jackets, solar lanterns, and kitchen utensils.

At the shelter level, 50 local youth volunteers, both male and female aged 18-35, have been designated as task forces or Disaster Management Teams and trained in Search & Rescue and First Aid techniques by OSDMA. There are 20 ODRAF units across the state in 17 locations, with each unit comprising 50 trained personnel.

Subsequently, the government focused on strengthening Emergency Operation Centers (EOCs) and communication networks. Odisha also introduced State Disaster Management policy and village-level/community-level disaster management planning. In fact, it is the first state in the entire country to amend the PRI Act to make village-level plans and GP level plans a statutory requirement. PRI members and elected representatives are actively involved in planning, preparedness, management, response, mitigation, capacity building, and mock drills, facilitating community-led disaster preparedness efforts.

He further mentioned that the Odisha Disaster Resource Network (ODRN) serves as a comprehensive database containing details of all human resources, ambulances, emergency equipment, and institutions such as police stations, fire stations, cyclone/flood shelters, Kalyan Mandaps, etc. These resources can be utilized during times of need across various key

departments. Additionally, there are 122 Early Warning Dissemination Towers established to facilitate effective communication.

Dr. Das informed the participants that in May 2021, the state council of ministers made a decision to train all government officers in disaster management. According to the Council of Ministers Resolution, all government officials from Group D to A will undergo disaster management training. These initiatives aim to raise awareness among all stakeholders about various disaster risks, with the ultimate goal of minimizing loss of life and property. He emphasized the importance of having a disaster warrior in each household.

He concluded that unless communities become resilient and their capacity building is strengthened, mere discussions about an empowered state holds no significance. It involves all stakeholders, including government officials and communities.

The **second session was taken by Shri Vijay Amruta Kulange, IAS, Municipal Commissioner, BMC.** He shared his experience of handling cyclones during his tenure in Ganjam, emphasizing how the 1999 super cyclone served as a wake-up call for everyone. The 2012 Phailin cyclone demonstrated how with proper teamwork, Odisha was able to effectively manage cyclones and during the Titli cyclone, the state achieved Zero casualty. He emphasized that while preventing infrastructure damage is challenging, preventing loss of human lives and animals can certainly be achieved with proper management and planning. Community involvement is crucial in this regard. Effective measures such as coordination among all stakeholders, timely evacuation to cyclone shelters, providing information to all stakeholders, prepositioning of response forces, regular monitoring, and training and capacity building can mitigate the risks related to cyclones. Additionally, it is necessary to identify risk factors such as vulnerable structures like kachha houses and areas prone to waterlogging in the locality to enhance flood preparedness.

Further, he emphasized the importance of information flow between Emergency Operation Centers (EOCs), District Control Rooms (DCR), and State Emergency Operation Centers (SEOC) during disaster conditions, as well as the support received from central-level authorities. Parallel information dissemination is necessary and early warning messages should be shared through various channels including social media, women's groups such as Self-Help Groups (SHGs), and cyclone shelters communities (CSMMC/FSMMC). Proactive dissemination of information to both the public and the media is essential to prevent the spread of rumors.

He stressed the importance of educating people about the phenomenon of the eye of the cyclone, emphasizing that its calm appearance does not signify the end of the storm. He also mentioned that in the aftermath of disasters like cyclones, immediate measures such as rescuing people, clearing roads, ensuring electricity, and providing safe drinking water are essential. Therefore, preparatory steps such as filling up overhead tanks, keeping generators

ready, having wood cutting machinery on standby, etc. are crucial for effective response and recovery efforts. He cited the importance of conducting regular mock drills for cyclones, highlighting the necessity of proper evaluation of these drills to ensure they are carried out effectively.

He informed the participants about a special scheme introduced by the state called 'Swayam Siddha'. Under this scheme, Women Self-Help Group (WSHGs) workers receive disaster management training. In Ganjam district, these SHG workers are trained in evacuation, search & rescue, early warning systems, managing cyclone shelters, rehabilitation works during natural disasters, and other relevant skills.

**The third session was taken by Dr. Sudhansu Sarangi, IPS, DG, F&ES, Odisha.** He stressed the need for IAS officers to contribute to the future with a clear vision and set goals. Officers should take inspiration from both national and global practices to strengthen effective disaster management strategies. For the state to successfully handle hazards and disasters, it is essential to engage in long-term planning, establish a presence at the grassroots level, create necessary resources, and more.



Sharing his experience of the Bahanaga Train Accident, he informed the participants that the magnitude of the accident was very high, involving three trains. He mentioned that if the accident had involved a train carrying inflammable items or occurred on a bridge over a water body, the destruction would have been devastating and rescue operations would have been extremely challenging. So, he emphasized that scenario-based planning and preparedness is extremely essential for disaster management.

In Odisha, the fire department operates under a decentralized model, with one fire station per block. Designated as the primary responders under the Disaster Management Act, these fire stations are equipped to handle various disasters and extend their services to the Panchayat level. Under this decentralized approach, even the most remote areas of the state can be equipped with 15 to 20 responders and necessary equipment to promptly respond to any disaster. For instance, during the Bahanaga Train Accident, this model facilitated the mobilization of 272 firefighters within 30 minutes, highlighting its effectiveness in utilizing the "Golden Hour."

In his role as Incident Commander for the train accident, he emphasized the pivotal need for adequate resources, manpower, and equipment, along with decisive decision-making in managing critical incidents. Prompt decision-making in crisis situations is essential to avoid errors caused by procrastination or indecision. He informed the participants that 15% of the



State Disaster Response Fund (SDRF) is earmarked for capacity upgrading. He urged them to ensure that the allocated funds are directed to the Fire Department for capacity building and not diverted to other departments. Further, he highlighted the significance of having one fire station per block and the need for upgrading the equipment capacity under SDRF.

He concluded the session by emphasizing that manpower needs to be improved through regular and proper training, maintaining their fitness levels, enhancing their skills and ensuring motivation among them.

### **Visit to State Emergency Operation Centre (SEOC) and discussion on the process of Early warning Dissemination System (EWDS) in Odisha**

During the visit to the State Emergency Operation Centre (SEOC), discussions focused on the Early Warning Dissemination System (EWDS) process in Odisha. Participants were briefed about various components of the system, including 122 alert siren systems, digital mobile radio, mass messaging systems, and satellite-based mobile data voice terminals, highlighting their crucial role in the preparedness process.



The focus then shifted to the Cyclone Prediction System and the mechanisms for early warning dissemination. Additionally, impact-based forecasting techniques were explained, showcasing the utilization of technology for effective cyclone management. This involved a detailed analysis of how technological advancements are used to forecast cyclones accurately and disseminate early warnings based on the potential impact of the cyclone.



Furthermore, Indian Coast Guard and NDRF personnel elaborated on response strategies for search and rescue operations. Participants were also briefed on post-disaster damage assessment techniques using satellite images for evaluating crop loss, house damage, and other relevant factors.

## Day 2 (30<sup>th</sup> Jan 2024)

### **Scenario Based Demonstration on Aquatic Disaster Response by ODRAF Unit at Ramchandi, Puri**

On the second day of the training, which took place on 30th January 2024, the focus shifted



towards practical demonstrations, interactive sessions, and hands-on training to prepare for various scenarios. IAS officers went to Ramchandi in Puri district to gain insight into aquatic disaster response protocols during cyclones and floods. They were briefed on the necessity of such response forces and the importance of continuous training and capacity building. The preparedness efforts

ranging from boat capsizing drills to other critical response measures were witnessed by the officers. Further, the pivotal role played by ODRAF in saving lives was highlighted.

Under the guidance of Shri Sunil Kumar Sahoo, ODRAF personnel demonstrated various real-life scenarios and showcased their skills. Standard Operating Procedures (SOPs) were explained to the officers and different search and rescue operations scenarios were demonstrated. The IAS officers also had the opportunity to immerse themselves in the water to acquire basic life-saving techniques and receive hands-on guidance from ODRAF team members and trainers.



### **Exploring a Multi-purpose Cyclone Shelter in Tikana, GOP, Puri: Engaging with the Community and Cyclone Shelter Management Committees (CSMMC); Demos by Task Force & Apada Mitra Volunteers on Cyclone Management**

During the visit, under the guidance of Shri Meghanad Behera, Sr. DRR Consultant, OSDMA, villagers from Tikana showcased their Village Disaster Management Plan. They explained how they have organized themselves to respond effectively to various disasters that may affect their community.

This demonstration included details about evacuation routes, emergency shelters, communication strategies, and roles and responsibilities assigned to different community members during times of crisis.

Further, the villagers emphasized the importance of preparedness and community involvement in disaster management efforts.

The officers were briefed on Early Warning Systems and their overall functionality.



Also, they were given a tour of the cyclone shelter, where they observed the infrastructure, including separate rooms and toilets for males and females, water facilities, a sick room,



generators, and a display of 32 types of equipment such as tower lights, power saws, and search and rescue gear. Task force volunteers demonstrated various skills, including search and rescue techniques and first aid procedures. They utilized local materials like plastic bottles, bamboo sticks, coconut coir ropes, oil cans, tumblers, etc. to simulate rescue scenarios, such as floating and swimming during disasters.

Additionally, Apada Mitra volunteers showcased different methods for evacuating and rescuing individuals with injuries to the leg, back, lower body, stomach, or those who are unconscious. They also demonstrated the use of local materials to create stretchers.

The visit concluded with IAS officers engaging in interactions with the community and PRI members. They expressed interest in learning more about their roles, functions, and training and capacity building initiatives.





## Day 3 (31<sup>st</sup> Jan 2024)

The **first session on the third day of the training programme was taken by Shri Kamal Kishore, Member and Head of Department, NDMA**. During his session, he emphasized the significant progress made by Odisha since the 1999 super cyclone, although the mortality rate during disasters has decreased. The focal point now is the National Disaster Management System, which operates at the national, state, and district levels. At the national level, the apex body is the NDMA, chaired by the PMO, with similar structures at the state and district levels.



He proceeded to highlight three crucial points in disaster management planning:

Firstly, he pointed out the increased availability of resources in the last five years, emphasizing not only response capabilities but also reconstruction, building back better, preparedness, and investment in risk reduction. The current budget stands at approximately 30 billion, allocated in proportions of 4:3:2:1 for response, recovery, mitigation, and preparedness and capacity building, respectively. However, the importance lies in utilizing these funds effectively for projects that genuinely reduce risk. Dedicated funding for specific issues in coastal areas, such as coastal and river erosion, reflects the existence of a multitiered system that, while not flawless, is gradually improving.



Secondly, he emphasized a shift in focus towards the western coast, acknowledging its vulnerability, especially to the threat of rising sea levels. The changing risk landscape, influenced by factors like humidity, wind persistence, heatwaves, and coastal erosion, necessitates attention to both the eastern and western coasts. The impact on ports and

economic activities in coastal regions, considering these factors, raises questions about future prosperity not only for the state but also for the entire nation.

Lastly, he emphasized the need not only to concentrate on saving lives but also to prioritize the safeguarding of infrastructure and livelihoods. Viewing disaster resilience as a developmental issue, he urged officers to discuss short-term and long-term measures. Key points emerging from the discussion included standardizing capacity-building and training,



encouraging investment in resilience at the village level through initiatives like coastal conclaves, developing departmental disaster management plans, innovative financing through CSR engagement, utilizing next-generation cycle shelters as knowledge centers, ensuring disaster-resilient infrastructure in villages and districts, and promoting localized disaster response.

**Operation of emergency equipment for relief line clearance (hand on training) and mock drill by ODRAF Jawans on cyclone response at 7<sup>th</sup> Bn. Bhubaneswar**

The team proceeded to the 7th Battalion in Bhubaneswar to gain insights into the operations and functions of ODRAF. They observed demonstrations on various equipment and techniques, including relief line clearance, medical first aid response, CSSR (Collapsed Structure Search and Rescue) demonstration, and rescue from heights. Shri Sunil Kumar Sahoo, General Manager (T&C) at OSDMA, facilitated this session, which was highly praised by the participants. They gained an understanding of the advanced technology, equipment and training provided to ODRAF personnel to effectively operate in challenging situations.



The **second session of the day was taken by Shri Hemant Sharma, IAS, Principal Secretary, Industries Department.** He delved into the repercussions of cyclones on power and telecom infrastructure. During this discussion, he underscored the vulnerability of coastal states such as Odisha to a spectrum of natural disasters, including floods, cyclones, and droughts. Notably, he highlighted that the escalating frequency and intensity of these disasters stem from climate change, resulting in significant damage to power infrastructure. This damage is influenced by vertical issues, right-of-way challenges, vegetation concerns, design and material quality, and construction and operational practices.



Subsequently, while presenting statistical data, Mr. Sharma pointed out a positive aspect, highlighting the achievement of zero loss of life through standardized evacuation and improved shelter management. However, he also addressed the challenge posed by the rapid increase in infrastructure density in recent years. Additionally, he emphasized that with more people relying on electricity for various needs, the restoration of services post-disaster scenarios is becoming increasingly time-consuming and effort-intensive.

Mr. Sharma then delved into the preparatory planning and activities undertaken during cyclones, covering aspects such as protecting the grid from collapsing and minimizing commercial loss to prevent technical failures. He proceeded to explain the post-cyclone restoration activities within 0 to 72 hours, encompassing damage assessment and emergency service restoration. He highlighted the crucial role of management and coordination at all levels and between departments.

Before concluding his presentation, Mr. Sharma emphasized the critical role of the telecommunication system in disseminating warnings and facilitating rescue and relief operations. He stressed the importance of preparedness, including standby mobile towers, DG sets with fuel for power backup, and alternative communication systems like HAM Radio, SAT Phone, and Police VHF. He mentioned that normalcy depends on the quick restoration of electricity, advocating for a reconsideration of design and practices to build back better with strength and resilience. Recognizing that disasters are inevitable, he emphasized that proactive learning, strategic planning, and preparedness are essential components in building a robust and resilient state and nation.



In her closing address, **Dr. Ekta Uniyal, Reader in Political Theory and Constitutional Law**, expressed her honor to be part of the three-day Customized Regional Training Programme on Cyclone Risk Reduction for IAS Officers. The program, organized by LABASNAA in collaboration with OSDMA and sponsored by NDMA, presented an engaging blend of field and classroom sessions. Dr. Uniyal commended the practical hands-on sessions and the active participation of officers from coastal states, anticipating that the program would significantly contribute to their profound learning and enhance their understanding of cyclone management in their respective states.



Highlighting the program's impact and effective learning, she assured to organize more specialized training sessions in the field of disaster management in the future. In conclusion, Dr. Uniyal extended her gratitude and heartfelt thanks to NDMA, the Government of Odisha, and especially OSDMA for their unwavering support and active participation. She also expressed appreciation for the officers who dedicated their time from busy schedules to actively engage in the program, expressing hope that they would glean valuable insights and knowledge from the training.

Following the event, Smt. Susmita Behera, Executive Director of OSDMA, extended the vote of thanks and the participants were felicitated.

