

# COURSE REPORT



## Training Programme on "Role of NCC in Disaster Management"

Organized by

**IUINDRR & CCDRR Centre**

**National Institute of Disaster Management, South Campus**

**(Ministry of Home Affairs, Government of India)**

**Date : 12 to 15 FEB 2024 Venue : NIDM South Campus**

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### 1.About NIDM

The National Institute of Disaster Management (NIDM), constituted under an Act of Parliament, with a vision to play the role of a premier institute for capacity development in India and the region. The efforts in this direction that began with the formation of the National Centre for Disaster Management (NCDM) in 1995 gained impetus with its re-designation as the National Institute of Disaster Management (NIDM) for training and capacity development. Under the Disaster Management Act 2005, NIDM has been assigned nodal responsibilities for human resource development, capacity building, training, research, documentation and policy advocacy in the field of disaster management.

Both as a national Centre and then as the national Institute, NIDM has performed a crucial role in bringing disaster risk reduction to the forefront of the national agenda. The Institute believes

that disaster risk reduction is possible only through promotion of a "Culture of Prevention" involving all stakeholders. The Institute works through strategic partnerships with various ministries and departments of the central, state and local governments, academic, research and technical organizations in India and abroad and other bi-lateral and multi-lateral international agencies. NIDM is proud to have a multi-disciplinary core team of professionals working in various aspects of disaster management. In its endeavour to facilitate training and capacity development, the Institute has state-of-the-art facilities like classrooms, seminar hall and video-conferencing facilities etc. The Institute has a well-stocked library exclusively on the theme of disaster management and mitigation. The Institute provides training in face-to-face, on-line and self learning mode as well as satellite based training. In-house and off-campus face to-face training to the officials of the state governments is provided free of charge including modest boarding and lodging facilities. NIDM provides support to various National and State level agencies in the field of Disaster Management & Disaster Risk Reduction training, research, ~ 10 ~ documentation, awareness and human resources and capacity development in the field of disaster mitigation and management in India and in the region. NIDM also provides Capacity Building support to various National and State level agencies in the field of Disaster Management & Disaster Risk Reduction. The Institute's vision is to create a Disaster Resilient India by building the capacity at all levels for disaster prevention and preparedness.

## **2.About the course**

### **Background**

India stands as one of the world's most vulnerable nations when it comes to disasters. The country faces a persistent threat from various natural calamities like floods, cyclones, earthquakes, landslides, and droughts. This already challenging scenario has been exacerbated by the impacts of climate change, the depletion of biodiversity, and the deterioration of the environment.

The armed forces of India, have an important role to play in managing disasters especially providing relief to the affected people and restoring essential services like water, communication connectivity and power supply. The recent flash flood and landslides in Himachal Pradesh and Uttarakhand (2023), Latur earthquake, floods in Chennai in 2015, Uttarakhand floods of 2013, Tsunami in 2004, Kerala floods of 2018, etc. In all these incidents, the armed forces of India had a major role to play.

The reach of the armed forces is undoubtedly formidable, but they cannot be everywhere at once. This is where the training of the National Cadet Corps (NCC) takes center stage in disaster management. **National Cadet Corps**

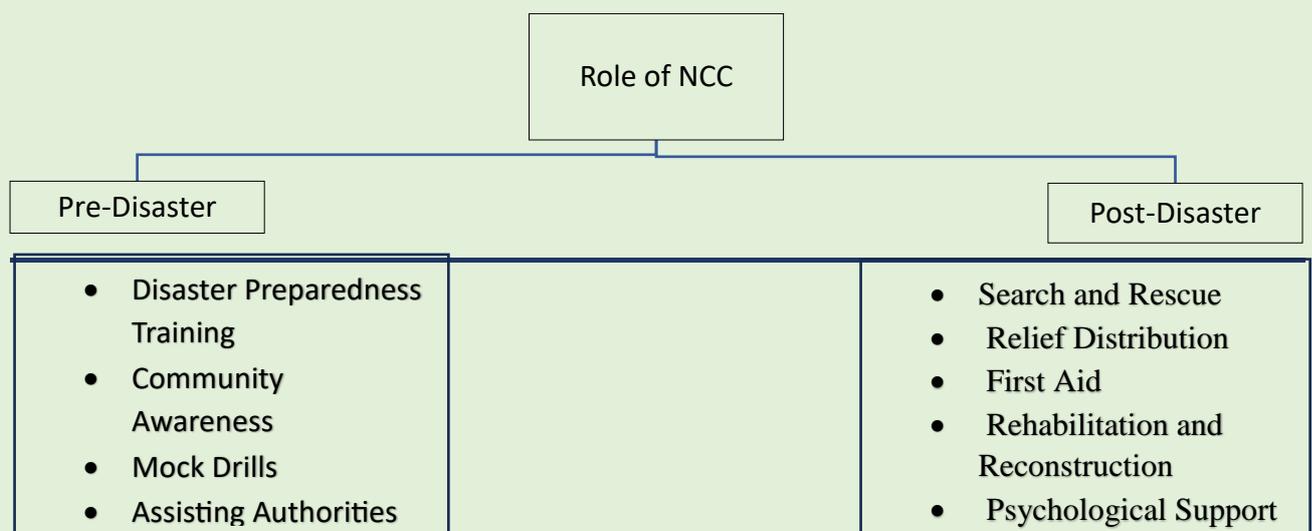
The Indian National Cadet Corps (NCC) is the youth wing of the Indian Armed Forces, founded in 1948 from the 'University Corps' established under the Indian Defence Act of 1917. It began as a response to Army personnel shortages and later included the Girls Division in 1949, aiming for equal opportunities. The NCC expanded with the Air Wing in 1950 and Naval Wing in 1952, becoming a comprehensive entity.

Operated voluntarily, the NCC shapes disciplined citizens through military training from various educational institutions. Its mission focuses on nurturing youth into responsible citizens. The NCC's aims are character development, leadership, and promoting career choices in the Armed Forces. The NCC's motto is "Unity and Discipline," representing the brotherhood of India's people and the foundation of a nation. The current enrolment of the NCC comprises around 14.8 lakh cadets, encompassing both high schools and higher education institutions.

### **Potential role of NCC in Disaster Management**

With a robust strength of approximately 14.8 lakh cadets from diverse educational backgrounds, the National Cadet Corps (NCC) emerges as a powerful force transcending academics. This vast pool of dedicated individuals presents an incredible opportunity to harness their collective strength in pre and post-disaster scenarios.

The National Cadet Corps (NCC) plays a crucial role both before and after disasters in India:



### **Capacity building of NCC for Disaster Management**

With an impressive enrolment of approximately 14.8 lakh students representing diverse educational backgrounds, the National Cadet Corps (NCC) stands as a formidable and capable

collective. Notably, leveraging the NCC's potential during times of calamity can greatly contribute to India's resilience when adversity strikes.

To equip NCC cadets at the college and university levels with the skills required for both pre and post-disaster scenarios, India Universities and Institutions Network for Disaster Risk Reduction (IUINDRR), in collaboration with the University Grants Commission (UGC), is proposing a pioneering program focused on disaster management and mitigation.

This initiative aims to empower NCC students across various regions of India, enhancing their adeptness in addressing disasters while also providing support to local disaster management authorities like DDMA and SDMA.

Given India's diverse geography encompassing six distinct regions – the Himalayan Mountains, Northern Plains, Indian Desert, Peninsular Plateau, Coastal Plains, and Islands – each region faces its own set of unique disaster challenges and requires a unique set of skills to tackle the disasters. The proposed program seeks to provide specialized training, ensuring that NCC students are adept at handling the specific types of disasters that may occur in their respective areas.

By equipping NCC cadets with the skills and knowledge needed for both pre and post-disaster scenarios, we empower communities with a dedicated extra local force. This force will be used for implementing DRR strategies at grassroots level. By adopting this proactive approach, India can ensure that NCC cadets across the nation are well-prepared to effectively manage disasters, thereby contributing to the safety and security of communities.

### **Objectives**

1. To equip NCC cadets with a unique set of skills to tackle region specific disasters.
2. To establish an additional local force to aid local communities and to reach out to the vulnerable sections of society during both pre and post disasters.
3. To enhance disaster preparedness among NCC cadets, particularly at the college and university levels.

### **Expected Outcomes**

1. Improved Disaster Response: By equipping NCC cadets with disaster management skills, the initiative aims to improve disaster response capabilities. This includes faster and more effective response efforts during disasters, potentially saving lives and minimizing damage.
2. Empowered Local Communities: The creation of a strong local disaster response force through NCC cadets will empower local communities to take charge of disaster preparedness

and response. This will enhance community resilience and reduce reliance on external assistance.

3. Region-Specific Disaster Expertise: Specialized training for region specific disasters will result in NCC cadets possessing expertise in addressing the unique challenges faced by their regions. This expertise will be valuable in both preparedness and response phases, ensuring a more targeted and efficient approach to disaster management.

## **Patron**

### **Shri. Rajendra Ratnoo, IAS**



Shri Rajendra Ratnoo is an IAS officer of 2001 Batch of Tamil Nadu Cadre. He is presently serving as Executive Director, National Institute of Disaster Management (NIDM), Ministry of Home Affairs, Govt. of India. Before joining NIDM, he was working as Joint Secretary, Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India, where he was looking after International Coordination with European Countries, including India's participation in World Economic Forum (Davos), National Industrial Corridor Programme, India International Convention Centre, Industrial Development Schemes for Jammu & Kashmir, Himalayan and North East states. He was also heading the 'Project Monitoring Group' in DPIIT where he supported the Cabinet Secretariat for monitoring of all the projects of the country above Rs. 500 crores. He was also holding the charge of Controller General of Patents, Designs and Trademarks (CGPDTM).

## **Supervision and Guidance**

## **Dr. Santosh Kumar, Project Director**



A Disaster Risk Reduction, Policy Planning and Capacity Development expert with 35 years of experience in different positions in the Development Planning and DRR Sector. A PhD. in Economics, he studied Gender & Development in IDS, Sussex, UK and received professional training in Disaster risk Management from Israel , backed with International work exposure at The World Bank and Inter- governmental body of SAARC. He has also worked at state levels in different capacities in UP Academy of Administration, Nainital and RIPA, Jaipur. He is an experienced hand in designing, Planning and implementing mitigation and long term disaster recovery plan and projects. He brings with him rare combination of operations and academia. His experience of working at the grass root to national to international level in all aspects

spanning DRR is an added value. His specializes in disaster management planning, Post disaster loss and need assessment, Recovery and inclusive Disaster Risk Reduction. His insight of bringing development into disaster risk reduction has also allowed new thinking in the framework. At the international level he has been contributing in shifting International and national policies by engaging himself in dialogues, negotiations and participating in international strategic conferences. He is engagement in disaster risk reduction process is since 1995.

## **Resource Persons**

### **1. Dr. Kumar Raka Sr. Programme Officer**



A Social Scientist & a reputed Disaster Management Professional. He has completed his Masters, M. Phil and Ph. D in Sociology from JNU, New Delhi. He also earned a Masters in Disaster and Emergency Management from Tel Aviv University, Israel. With more than 18 years of professional experience in DRR his contributions are significant in establishing NDRF in its early years. As Planning Specialist & HoD, Disaster Management, Noida Authority he established a vibrant DM mechanism in twin-cities of Noida & Greater Noida and conducted a Mega School Earthquake Evacuation Drill ‘on the Same Day at the Same Time’ wherein 110 Schools with over one lakh stakeholders (students and faculties) participated and that

earned a place in ‘Limca Book of World Records’ 2018 edition. Presently, in lieu with visionary initiatives of the ED, NIDM; he is proactively engaged in establishing CCDRR Centre of NIDM as ‘Centre of Excellence’ and has created two more Records mentioned in ‘India Book of Records’ 2021 edition. Besides conducting numerous research studies, capacity building programmes, trainings, preparing policy papers, writing research papers, articles etc. Dr.

Kumar has been instrumental in mainstreaming children, adolescents, youth centric DRR with gender sensitive and disability inclusive approach.

## 2. Dr. Balu I, Consultant



A Disaster Risk Reduction, Development management and Capacity Development Professional with 15 Years of Experience in different positions in the Development Management and Disaster Risk Reduction Sector. A PhD in Sociology, studied Development Management from Tata-Dhan Academy, backed with national work exposure at National Institute of Rural Development & Panchayat Raj, Ministry of Home Affairs, Government of India and Rajiv Gandhi National Institute of Youth Development, Ministry of Youth Affairs and Sports, Government of India. Experience of working at the grass root to national level in all aspects Development Management and Disaster Risk Reduction is an added value. Specialised in Child Centric Disaster Risk Reduction, Youth for Development & Disaster Management. Presently working at CCDRR Centre, National Institute of Disaster Management, Ministry of home affairs, Government of India. Created two Records mentioned in 'India Book of Records' 2021 edition. Received Subhas Chandra Bose Excellence Award for Care and protection of children from Disaster, Excellence award for school safety.

### 3. Shri. Ranjan Kumar, Consultant



Mr. Ranjan has 12 years of experience in core a Risk reduction, Integration of DRR and Climate change Adaptation, Recovery and reconstruction and hand on experience in project management, Policy Planning and Strategy in Emergency Response, Training and Capacity Building, Research and Data analysis. He has vast experience in working with SAARC Disaster Management Centre, UNDP, UNICEF and other National Organization on various issues. He is an experienced hand in designing, planning and implementation of plan and project at Regional, National and Local Level. He brings with him the rare combination of exposure variation from grass root to national level. He has presented papers on various subjects in seminar and workshops.

### 4. Inauguration

NIDM South Campus Successfully launched a 4-day pilot training (Feb 12- 15, 2023) on the Role of NCC in Disaster Management jointly by IUIN-DRR & CCDRR center of NIDM in alignment with the Hon'ble \*PM's 10-point agenda on DRR (point no. 8)\*.

Col. PS Reddy (JD, South Campus), \*Dr. Kumar Raka\* (Sr. Prog Officer, CCDRR) & Sh. T. Uday Kumar(Addl. Director, Fire Services, AP) was the key speaker during the inaugural.

More than 48 (28 M & 16 F) NCC Coordinators from the States of Andhra & Telangana are participated in this programme. National Cadet Corps (NCC) can make a real difference in establishing last-mile connectivity & be the frontline heroes we need in emergencies by mastering vital skills in DRM.

### 5. Day wise -Technical Sessions

#### **SESSION 1: CONCEPTS OF DISASTER RISK MANAGEMENT** **Resource person: Dr. Kumar Raka, Sr. Programme Officer, NIDM**

Dr. Kumar Rakha introduced basic terminologies associated with disaster management and explained the differences between them. He explained how the risk is associated with the major factors like hazard, vulnerability, exposure and capacity. He termed hazard as a process, phenomenon or activity that may cause loss of life, injury or other health impacts, property, damage, social and economic disruption or environmental degradation. It can be either natural

or anthropogenic in origin. Whereas disaster is a serious disruption in functioning of a community or a society at any scale due to the hazardous events interacting with conditions of exposure, vulnerability and capacity leading to one or more of the following, human, material, economic and environmental losses and impact. He explained that exposure is the situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard prone areas. Whereas capacity refers to all the strengths attributes resources available within a community, organization, society to manage and

reduce disaster risk and strengthen resilience. He explained the difference between prevention and mitigation. Prevention reduces vulnerability and exposure through that remove the risk of disaster, whereas mitigation is the lessening or minimizing of the adverse impacts of a hazardous event. He explained the concept of mitigation with the example of helmet usage by motor vehicle riders: where helmet lessen the impact of accident.

He explained that preparedness is the knowledge and capacities developed by governance, response and recovery organizations, communities and individuals to effectively anticipate respond to and recover from the impact of disasters. The response phase actions taken directly before, during or immediately after a disaster to save lives, reduce health impacts, ensure public safety and make the basic subsistence needs of the people affected. The rehabilitation includes the restoration of basic services and facilities for the functioning of a community or society affected by a disaster.

The recovery phase includes restoring/improving livelihoods and health, as well as economic, physical, social, cultural, and environmental assets, systems and activities of a disaster-affected community or a society. He explained reconstruction is the medium- and long-term rebuilding and sustainable preparation of resilient critical infrastructures, services housing facilities and livelihoods required for the full functioning of a community or a society affected by a disaster. Finally, he explained about the resilience, which is the ability of individual, communities or societies and system to be resistant to shock and stress brought about by natural hazards and bounce back better or bounce forward. He gave an example by sighting the structural resilience of building in Japan, and how bridges were constructed to withstand the natural disasters like earthquake.

## ***SESSION 2: HAZARD AND VULNERABILITY PROFILE OF INDIA AND THE REGION***

***Resource person: Dr. Balu I, CCDRR, NIDM***

Dr. Balu I explained about the vulnerability of India towards disasters including flood, drought, cyclones, earthquake and landslides. The geography of India with vast coastline of approximately 7540 km and the presence of Himalayan mountains in the north east region make the country more prone to disasters. The intensity, duration and condition of the location are the major factors which determine hazard. The occurrence of an earthquake during a day time lessens the impact due to the greater response level. Any how the destruction depends on

the its intensity and geographical features of the locality. He explained that the natural disaster like flood, landslide, and earthquake are common all over the world. Sometime one hazard led to another hazards. As a result of it the same area faced number of hazards at the same time and brought into uncontrolled disaster event. In this case mitigation of disasters is very challengeable issue. So for the preparation of disaster management plan of a region, consideration of all possible hazards is important. He concluded that holistic approach is the only way for development of these multihazard prone area

### ***SESSION 3: Disaster Management Mechanism in India***

***Resource person: Dr. Kumar Raka, Programme Officer, NIDM***

The session began with an overview of the vulnerability profile of India, considering various natural and human-induced hazards prevalent in different regions. Dr. Balu presented the latest research findings and data related to disaster risks, allowing participants to grasp the magnitude and complexity of vulnerability in the country. He discussed the role of various agencies, including the armed forces, in coordinating and executing emergency response plans during disasters. He emphasized on the significance of community-based vulnerability assessments and the need for inclusivity in disaster planning and highlighted the importance of understanding the unique vulnerabilities of different social groups to develop targeted and effective disaster management strategies.

The trainer facilitated interactive discussions and group activities, encouraging participants to share their experiences and insights on disaster management in their respective regions.

#### **KEY OUTCOMES:**

- Participants gained a thorough understanding of the vulnerability profile of India, including the diverse range of natural and human-induced hazards prevalent in different regions of the country.
- The session provided participants with insights into the magnitude and complexity of disaster risks faced by India, based on the latest research findings and data.
- Practical experiences and examples from disaster response operations enriched the participants' understanding of the challenges and opportunities in disaster management.
- Participants understood the roles and responsibilities of various stakeholders, including government agencies, NGOs, and local communities, in disaster management and response.
- A significant paradigm shift has taken place because of the Disaster Management Act of 2005, from Relief Centric to a Holistic and Integrated Approach with the emphasis on preparedness.
- Response Mechanism includes Specialized Response & proactive deployment during impending disaster situations.

- The session emphasized the importance of a holistic and collaborative approach to disaster management, encouraging participants to foster cooperation among various stakeholders for better outcomes.

#### ***SESSION 4: Evolution, Establishment and Way forward to NCC***

***Resource Person: Col. Chandrasekhar, Group Commander, NCC, Guntur***

**Col.Chandrasekhar** provides some information on NCC's evolution, establishment, and potential way forward. The specifics may vary depending on the country, as the NCC exists in various forms in different nations. The trainer discussed the Evolution and Establishment as follows.

**Evolution: Historical Context:** The NCC typically has its roots in the historical context of a nation. It might have evolved as a response to specific needs such as national defense, youth development, or instilling a sense of discipline.

**Military Training:** In many cases, the NCC has evolved from military cadet programs. These programs were initially established to provide basic military training to young individuals, often as a precursor to potential recruitment into the armed forces.

Establishment:

**Formal Establishment:** NCC is usually formally established through legislative or executive actions. Governments may recognize the need for a youth organization that focuses on discipline, leadership, and national service.

**Educational Institutions:** NCC often has strong ties with educational institutions. It might be integrated into the school or college system, providing students with an opportunity to join as cadets.

Finally, he stressed some way forward techniques like Technological Integration, Diverse Skill Development, Community Engagement, Diversity and Inclusion ,and International Collaboration.

#### **KEY OUTCOMES:**

- The NCC serves as a platform for holistic youth development, nurturing qualities like leadership, discipline, and civic responsibility.
- By instilling a sense of national service, the NCC plays a vital role in preparing young individuals for active citizenship and potential roles in the armed forces.
- Through international collaborations and peacekeeping initiatives, the NCC contributes to the development of global citizens who understand and appreciate their role in the broader world.

#### ***SESSION 5: Role of NCC in Disaster Management***

***Resource person: Dr. Balu I, CCDRR, NIDM***

**Dr. Balu**, I explained that the National Cadet Corps (NCC) plays a pivotal role in disaster management by actively engaging in preparedness, response, and recovery phases. NCC cadets undergo comprehensive training in essential disaster management skills such as first aid, search and rescue operations, and effective communication. During disasters, they contribute significantly to search and rescue efforts, providing immediate medical assistance, and establishing communication networks when regular systems fail. NCC's disciplined and well-trained cadets play a crucial role in relief distribution, ensuring the efficient and organized delivery of aid to affected areas. Beyond immediate response, NCC participates in community engagement, conducting awareness programs to educate communities about disaster preparedness and mitigation. Their collaboration with civil authorities enhances the overall coordination in disaster response, integrating NCC seamlessly into the national disaster management framework. In the aftermath of disasters, NCC contributes to rehabilitation and reconstruction efforts, providing logistical and volunteer support. NCC's role in disaster management reflects its commitment to national service, community welfare, and the development of resilient communities capable of handling and recovering from emergencies effectively.

### **KEY OUTCOMES:**

- NCC's training equips cadets with essential skills for search and rescue operations, first aid, and communication, ensuring an efficient and effective response during disasters.
- Through awareness programs, NCC contributes to community preparedness, enabling people to better understand and respond to disasters in a timely and organized manner.
- NCC cadets, trained in first aid, provide timely medical assistance, significantly reducing the impact of injuries and increasing the chances of survival for disaster victims.
- NCC's community engagement activities and disaster preparedness initiatives contribute to building resilience, helping communities withstand and recover from disasters more effectively.

### ***SESSION 6: Search and Rescue Techniques for Major Disasters -I***

***Resource person: Shri.Md.Aslam, NDRF 10<sup>th</sup> BN.***

**Shri. Md. Aslam** elucidates that Search and rescue (SAR) operations during major disasters involve coordinated efforts to locate and assist victims in challenging environments. In such scenarios, rapid deployment and effective techniques are crucial. First, establishing a command centre facilitates communication and coordination among various agencies. Utilizing advanced technology like drones and satellite imagery aids in surveying vast areas quickly.

And he also uttered that Urban search and rescue (USAR) teams play a vital role, employing specialized equipment such as seismic and acoustic sensors to detect signs of life beneath rubble. Canine units are also deployed for their exceptional scent detection capabilities. Structural engineers assess building stability to ensure the safety of rescue teams and victims

Additionally, he stressed that communication tools, such as two-way radios and geospatial mapping, enhance coordination. Continuous training and international collaboration are

essential for ensuring the efficiency of search and rescue teams in major disasters, saving lives and mitigating the impact of catastrophic events.

### **KEY OUTCOMES:**

- Rapid and efficient deployment of search and rescue teams is critical to reaching affected areas promptly and initiating life-saving efforts.
- Establishment of a well-coordinated command center facilitates seamless communication and collaboration among various agencies involved in the rescue operations.
- Integration of advanced technologies, such as drones, satellite imagery, and seismic sensors, enhances the efficiency and effectiveness of search and rescue efforts.
  
- Ongoing training programs for search and rescue teams ensure their preparedness, adaptability, and effectiveness in responding to evolving disaster scenarios.

### ***SESSION 7: Search and Rescue Techniques for Major Disasters -II***

***Resource person: Shri. Md.Aslam, NDRF 10<sup>th</sup> BN.***

In this session **Shri. Md. Aslam** delineated that Search and rescue (SAR) techniques for major disasters involve a multifaceted approach to efficiently locate and assist victims amid challenging conditions. Global positioning systems (GPS) and Geographic Information Systems (GIS) play a pivotal role in mapping affected areas, aiding SAR teams in navigation and resource allocation. Unmanned aerial vehicles (UAVs) equipped with thermal imaging and sensors enhance visibility, especially in inaccessible or hazardous terrains.

He also mentioned that Collaboration with local communities is crucial for gathering valuable information about missing persons and understanding the topography of the affected region. Community engagement also fosters a sense of collective responsibility and aids in the dissemination of vital safety information.

Furthermore, he said that the utilization of simulation exercises and table top drills prepares SAR teams for the dynamic challenges they may encounter during actual disasters, fostering quick decision-making and adaptability.

And also explained about the logistical support, which includes the establishment of base camps and supply chains, ensures sustained operations. Interagency cooperation and standardized protocols streamline efforts, allowing diverse teams to work seamlessly during complex search and rescue missions.

At the end of the session, he summarizes that the integration of technology, community involvement, preparedness training, and logistical support are essential components of effective search and rescue techniques for major disasters, maximizing the chances of saving lives and minimizing the impact of catastrophic events.

### **KEY OUTCOMES:**

- The use of GPS and GIS facilitates accurate mapping of affected areas, aiding search and rescue teams in navigation and resource allocation.

- Unmanned aerial vehicles equipped with advanced imaging and sensors improve visibility, particularly in challenging terrains or areas difficult to access by traditional means.
- Conducting drills and exercises prepares search and rescue teams for dynamic challenges during actual disasters, promoting quick decision-making and adaptability.
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## ***SESSION 8: Leveraging Innovations & Technology in Disaster Management.***

***Resource Person: Anil Tentu, CEO, AP Innovations, Govt of AP***

In this session, Mr. Anil Tentu explained that Leveraging innovations and technology in disaster management has become a critical imperative in enhancing preparedness, response, and recovery efforts. The integration of cutting-edge technologies not only expedites the identification and assessment of disasters but also facilitates more effective communication and coordination among response teams.

He also said that Remote sensing technologies, such as satellites and drones, play a pivotal role in real-time monitoring and assessment of disaster-stricken areas, enabling authorities to make informed decisions swiftly. Artificial intelligence and machine learning algorithms enhance predictive modeling, allowing for early detection and warning systems to mitigate the impact of disasters. Moreover, Geographic Information System (GIS) applications enable precise mapping of affected areas, aiding in resource allocation and evacuation planning.

Communication technologies like social media platforms, mobile apps, and emergency alert systems facilitate rapid dissemination of information to the public, promoting awareness and guiding individuals during crises. Additionally, wearable devices and Internet of Things (IoT) sensors can provide real-time health and environmental data, aiding in the assessment of casualties and the deployment of medical resources.

### **KEY OUTCOMES:**

- Real-time data from remote sensing technologies, such as satellites and drones, provide a comprehensive view of disaster-affected areas. This heightened situational awareness aids in more informed decision-making, allowing for the efficient deployment of resources and personnel.
- Technology facilitates seamless communication among various response teams and stakeholders. Social media, mobile apps, and emergency alert systems ensure timely dissemination of critical information to the public, promoting swift and organized responses.
- Drones and other surveillance technologies enable remote monitoring and assessment of disaster-stricken regions. This capability aids in conducting damage assessments without putting responders at risk and allows for a quicker understanding of the scale of the disaster.
- Technology allows for the collection and analysis of vast amounts of data, enabling data-driven decision-making. This evidence-based approach enhances the effectiveness of disaster management strategies, leading to more efficient responses and recoveries.

## ***SESSION 9: Application of Geo-Spatial Technology in Disaster Management.***

**Resource Person: Dr. Sridevi Talluri, Founder & CEO, Spaceinf Technologies Pvt. Ltd.**

**Dr.Sri Devi Talluri** mentioned that Geospatial technology plays a pivotal role in all phases of disaster management, offering innovative solutions for preparedness, response, recovery, and mitigation. Geographic Information Systems (GIS), remote sensing, and Global Positioning Systems (GPS) contribute to a comprehensive and efficient approach.

She discussed that In the preparedness phase, GIS enables the creation of hazard maps, identifying high-risk zones, and aiding in the formulation of evacuation plans. GPS technology assists in the real-time tracking of resources and personnel, facilitating swift mobilization and response coordination. Remote sensing provides critical data on environmental conditions, helping authorities anticipate and prepare for potential disasters.

She also explained during the response phase, geo-spatial technology aids in rapid damage assessment, resource allocation, and search and rescue operations. GIS supports situational awareness, allowing for better-informed decision-making, while GPS guides responders to precise locations. Real-time satellite imagery aids in monitoring changing conditions, optimizing the deployment of resources.

In the recovery phase, geo-spatial technology contributes to rebuilding efforts by providing accurate spatial data for infrastructure reconstruction and assessing long-term environmental impacts. GIS aids in land-use planning for resilient redevelopment, minimizing future vulnerabilities.

### **KEY OUTCOMES:**

- Geo-spatial technology enables the creation of accurate hazard maps, identification of vulnerable areas, and development of evacuation plans, enhancing preparedness for potential disasters.
- During the response phase, real-time tracking through GPS, GIS, and remote sensing assists in rapid damage assessment, efficient resource allocation, and well-coordinated search and rescue operations, minimizing response time.
- GIS provides a platform for real-time data visualization, improving situational awareness for decision-makers and responders, leading to more informed and effective responses.
- Remote sensing provides valuable data for assessing long-term environmental impacts, aiding in the formulation of strategies for environmental recovery and conservation.
- Geo-spatial technology helps identify and assess potential risks, allowing authorities to implement proactive measures to mitigate the impact of future disasters.
- The use of standardized geo-spatial technologies facilitates international collaboration, enabling the sharing of data, expertise, and resources for a more effective and coordinated global response to disasters.

### **SESSION 10: First Aid to Disaster Victims**

**Resource person: Smt.Radhika Ashok Patali, State Coordinator, Indian Red Cross**

In this session, **Smt.Radhika** illustrated that Providing first aid to disaster victims is a critical and immediate response that can significantly impact survival and recovery. In the aftermath

of a disaster, trained first responders and community members play a crucial role in offering timely and appropriate medical assistance.

She also said that the initial focus of first aid is to ensure the safety of the rescuer and the victim. This involves assessing the scene for potential hazards and taking necessary precautions. Basic life support techniques, including cardiopulmonary resuscitation (CPR) and the use of automated external defibrillators (AEDs), may be crucial in cases of cardiac arrest.

Further, she stressed that Addressing immediate medical needs, such as controlling bleeding, stabilizing fractures, and providing wound care, is paramount. Triage helps prioritize care based on the severity of injuries, directing resources to those in critical condition. Basic hygiene and sanitation measures are also vital to prevent the spread of infectious diseases in crowded and challenging post-disaster environments.

Additionally, she mentioned that emotional support and reassurance are essential components of first aid. Victims may experience shock, anxiety, or trauma, and providing comfort and a sense of security can aid in their psychological well-being.

Finally, she summarized that first aid to disaster victims involves a holistic approach, encompassing medical interventions, psychological support, and prioritized care, with the overarching goal of minimizing further harm and promoting recovery in the immediate aftermath of a disaster.

## **KEY OUTCOMES:**

- First aid interventions aim to stabilize and address immediate life-threatening conditions, such as controlling bleeding, managing airways, and performing basic life support techniques like CPR.
- Timely and appropriate first aid helps prevent the exacerbation of injuries and minimizes the risk of complications, promoting a more favorable outcome for victims.
- Prompt and effective first aid significantly improves the chances of survival for disaster victims, especially in cases of cardiac arrest, severe bleeding, or respiratory distress.
- First aid includes providing emotional support and reassurance to victims, addressing shock, anxiety, and trauma, contributing to the overall well-being and mental health of individuals affected by the disaster.
- First aid serves as a bridge between the immediate aftermath of a disaster and the arrival of professional medical responders, ensuring a continuum of care and a seamless transition to more advanced medical interventions.

## **SESSION 11: Field Visit to NDRF 10<sup>th</sup> BN, Kondapavulur, Krishna District, Andhra Pradesh.**

Participant's field visit to the National Disaster Response Force (NDRF), 10 BN offered a first-hand and immersive experience into the realm of disaster preparedness and response. NDRF, a specialized force in India, is equipped to handle various disasters, including natural calamities

and man-made emergencies. The field visit allowed participants to witness the operational capabilities, training methodologies, and state-of-the-art equipment utilized by the NDRF personnel.

During the visit, participants often engaged in interactive sessions with NDRF experts, gaining insights into the strategies employed for disaster management. They observed live demonstrations of search and rescue techniques, medical first aid, and the use of specialized tools and equipment. Understanding the coordination and communication protocols within the force enhances participants' comprehension of the collaborative efforts involved in disaster response.

Moreover, the visit facilitates discussions on the challenges faced by NDRF and the evolving landscape of disaster management. Participants learned about the significance of pre-positioning resources, community engagement, and the role of technology in augmenting response capabilities.

Overall, a field visit to NDRF enriched participants' knowledge, fostered a deeper appreciation for the complexities of disaster response, and empowered them with practical insights that can be applied to their roles in emergency preparedness and management.

### ***SESSION 12: Fire safety Mock Drill***

***Resource person: Shri. Swamy, Regional Fire Officer, Rajahmundry.***

**Shri. Swamy** said that conducting fire safety mock drills is a crucial aspect of ensuring preparedness and responsiveness in the event of a fire emergency. These simulated exercises provide an opportunity for organizations, businesses, and communities to evaluate the effectiveness of their fire safety protocols, identify potential shortcomings, and train personnel on appropriate responses.

During a fire safety mock drill, participants practiced evacuation procedures, the use of firefighting equipment, and communication protocols. The realistic scenarios created during these drills help individuals understand the urgency and importance of quick and orderly evacuation. Simulating various emergency scenarios, including different fire sources and locations, ensures that responders are well-prepared for diverse situations.

He also elucidated that mock drills also serve as an educational tool, raising awareness about fire safety measures, the location of emergency exits, and the proper use of firefighting equipment such as fire extinguishers. Regularly conducting these drills fosters a culture of vigilance and preparedness, ensuring that individuals are equipped to respond swiftly and efficiently in real emergencies.

Additionally, he interpreted, mock drills provide an opportunity to assess the overall effectiveness of fire safety plans, identify areas for improvement, and reinforce the importance of continuous training. Ultimately, these exercises contribute to creating safer environments and minimizing the potential impact of fire emergencies on lives and property.

### **KEY OUTCOMES:**

- Participants become familiar with emergency evacuation procedures, fire escape routes, and the proper use of firefighting equipment, enhancing overall preparedness for a real fire emergency.

- Regular practice through mock drills helps individuals respond quickly and efficiently to a fire emergency, reducing evacuation time and minimizing potential risks.
- Mock drills reveal weaknesses and gaps in fire safety plans, allowing organizations to address and rectify issues before they become critical during an actual emergency.
- Mock drills provide an opportunity to test communication systems and protocols, ensuring that messages can be effectively conveyed to all individuals within the organization during an emergency.
- Mock drills contribute to verifying compliance with fire safety regulations and standards, ensuring that organizations meet legal requirements and industry best practices.

### ***SESSION 13: Assisting Line Departments and Response Agencies in DRM.***

***Resource person: Dr. C. Nagaraju, Executive Director, APSDMA.***

In this Session, **Dr. C. Nagaraju** explained that Assisting line departments and response agencies in disaster risk management is a collaborative and multidimensional effort aimed at enhancing the overall resilience of communities and minimizing the impact of disasters. Line departments, which include various government agencies responsible for specific sectors such as health, transportation, and environment, play a crucial role in disaster risk reduction and response.

He suggested that supporting line departments involves providing them with the necessary resources, training, and expertise to integrate disaster risk management into their regular functions. This collaboration ensures that each department is well-equipped to address potential risks within its domain. For instance, health departments can focus on medical preparedness, while transportation agencies can develop evacuation plans and infrastructure resilience.

He also mentioned that Response agencies, such as emergency services and national disaster response teams, benefit from coordination and assistance in terms of resource mobilization, training, and information sharing. Creating inter-agency networks facilitates a more cohesive and effective response during disasters, ensuring a rapid and well-coordinated effort.

Additionally, further he stressed that assistance involves the development of comprehensive risk assessments, early warning systems, and community engagement initiatives. By supporting line departments and response agencies, there is a collective strengthening of the entire disaster management ecosystem, creating a more resilient and adaptive framework for addressing the diverse challenges posed by natural and man-made disasters.

### **KEY OUTCOMES:**

- Line departments incorporate DRM strategies into their regular operations, ensuring a more comprehensive and integrated approach to risk reduction across various sectors such as health, education, and infrastructure.
- Line departments and response agencies are better prepared to anticipate, respond to, and recover from disasters through the implementation of tailored preparedness plans and training programs.
- Collaborative efforts foster improved coordination among line departments and response agencies, leading to a more seamless and effective response to disasters.
- Line departments and response agencies benefit from improved data sharing and information exchange, facilitating a more informed decision-making process during all phases of disaster management.

## ***SESSION 14: Mental Health and Psychological First Aid to Disaster Victims***

***Resource person: Dr.Kumar Raka, Sr.Programme Officer, CCDRR,NIDM***

In this session **Dr. Kumar Raka** specifies that Mental health and psychological first aid are integral components of disaster response, addressing the emotional and psychological well-being of individuals affected by disasters. The impact of a disaster extends beyond physical injuries, often causing trauma, grief, anxiety, and other mental health challenges.

Further, he confers that Psychological first aid involves providing immediate and compassionate support to disaster victims, emphasizing safety, comfort, and connection. Trained professionals and responders offer practical assistance, actively listen to survivors, and validate their experiences, fostering a sense of emotional safety.

He emphasizes how to Understand the psychological effects of trauma, psychological first aid aims to mitigate distress, promote resilience, and facilitate coping mechanisms.

Finally he stressed on Mental health support during disaster recovery is a long-term process, addressing not only immediate concerns but also the evolving emotional needs of survivors. Community-based interventions, counselling services, and peer support contribute to the overall mental well-being of affected populations.

### **KEY OUTCOMES:**

- Mental Health and Psychological First Aid (PFA) aims to provide immediate and practical support to individuals affected by disasters. It helps address immediate emotional needs, reduce distress, and offer a sense of safety and comfort.
- Timely PFA interventions can help reduce acute stress reactions that individuals may experience in the aftermath of a disaster. This can prevent the development of more severe mental health issues later on.
- Mental Health and PFA training enables responders to identify individuals who may be at higher risk for developing more serious mental health conditions. Early identification allows for targeted interventions and support.
- By providing Psychological First Aid to disaster victims, communities can build resilience collectively. PFA encourages community members to support each other, fostering a sense of solidarity and shared coping strategies.
- Early psychological support can contribute to preventing the development of long-term mental health issues such as post-traumatic stress disorder (PTSD) or depression. It serves as a preventive measure against chronic psychological conditions.
- Incorporating mental health considerations into emergency response efforts improves overall disaster response. It recognizes the interconnectedness of physical and mental health in the aftermath of a disaster.

### **Key takeaways :**

- NCC provides comprehensive training to its cadets, equipping them with essential skills such as first aid, search and rescue, firefighting, and emergency response procedures.

- Cadets learn to handle various disaster scenarios and acquire practical knowledge to assist in times of crisis.
- NCC engages in community outreach programs to raise awareness about disaster preparedness and mitigation measures.
- Cadets often participate in campaigns to educate local communities, promoting a culture of resilience and proactive disaster management.
- NCC conducts regular mock drills and simulations to simulate real-life disaster scenarios.
- These exercises help cadets practice their skills, test their readiness, and identify areas for improvement in a controlled environment.
- NCC actively engages in disaster risk reduction activities, working towards minimizing the impact of potential disasters.
- Cadets learn about risk assessment, early warning systems, and measures to reduce vulnerabilities in their communities.
- NCC collaborates with government agencies, NGOs, and other stakeholders involved in disaster management.
- Cadets work in tandem with authorities to ensure a well-coordinated and efficient response to disasters.
- NCC aims to build strong character and resilience in cadets, preparing them to face challenges with determination and composure.
- The values instilled in NCC cadets contribute to their ability to cope with adversity and support others in times of crisis.

### **Programme Schedule :**

Day	9.30-11.00	11.00-13.00	14.00-15.30	15.30-17.00
Day1 12 Feb 2024	Registration, Inauguration, and Ice Breaking  <b>Dr. Balu I</b>	Basic Concepts of Disaster Risk Management <b>Dr. Kumar Raka</b>	Hazard and Vulnerability Profile of India & the Region <b>Dr. Balu I</b>	Disaster management Mechanism in India <b>Dr.Kumar Raka</b>
Day2 13 Feb 2024	Evolution, Establishment and Way forward toNCC <b>Col. Chandrasekhar</b>	Role of NCC in Disaster management Cycle <b>Dr. Balu I</b>	Search and Rescue Techniques for Major Disasters -I <b>Shri. Mohamed Aslam</b>	Search and Rescue Techniques for Major Disasters-II <b>Shri. Mohamed Aslam</b>
Day 3 14 Feb 2024	Leveragi ng Innovation s and Technolo gy in Disaster Managem ent Mr.Anil Tentu,	Applicati on of Geo Spatial Technolo gy in Disaster Managem ent Dr. Sridevi Talluri	First Aid to Disaster Victims <b>Ms. Radhika</b>	<b>Field Visit Dr. Balu I/ Ms.Nazia Shaik</b>
Day 3 15 Feb 2024	Fire safety mock drill <b>Shri Swamy</b>	Assisting Line departments and response agencies in DRM <b>Dr.C. Nagaraju</b>	Mental Health and Psychological First Aid to Disaster Victims <b>Dr. Kumar Raka</b>	Feed Back and Valedictory <b>Shri Ranjan Kumar</b>
Day 5 16 Feb 2024	<b>Workshop on CCDRR cum Valedictory</b>			
<b>11:00-11:15-Tea Break; 13:00-14:00-Lunch Break; 15:30-15:45-Tea Break</b>				

## 10. List of participants

A Four Days Training of Trainers Programme on “Role of NCC in Disaster Management” (12 February to 15 February 2024) Attendance of the Participants						
S.No.	Full Name	Designation	Address	Gender	Email	Phone No
1	ACHANTA MARUTI SRIHARI RAO	Associate NCC Officer	Ramakrishna Degree and PG COLLEGE JAGTIAL	Male	achanta.srihari@gmail.com	9246939447
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32	Rekha Rani	Assossiate Ncc officer	3-54-101 pl no98 Saraswathi agar lothkunta	Female	rekha21061984@gmail.com	7794052058

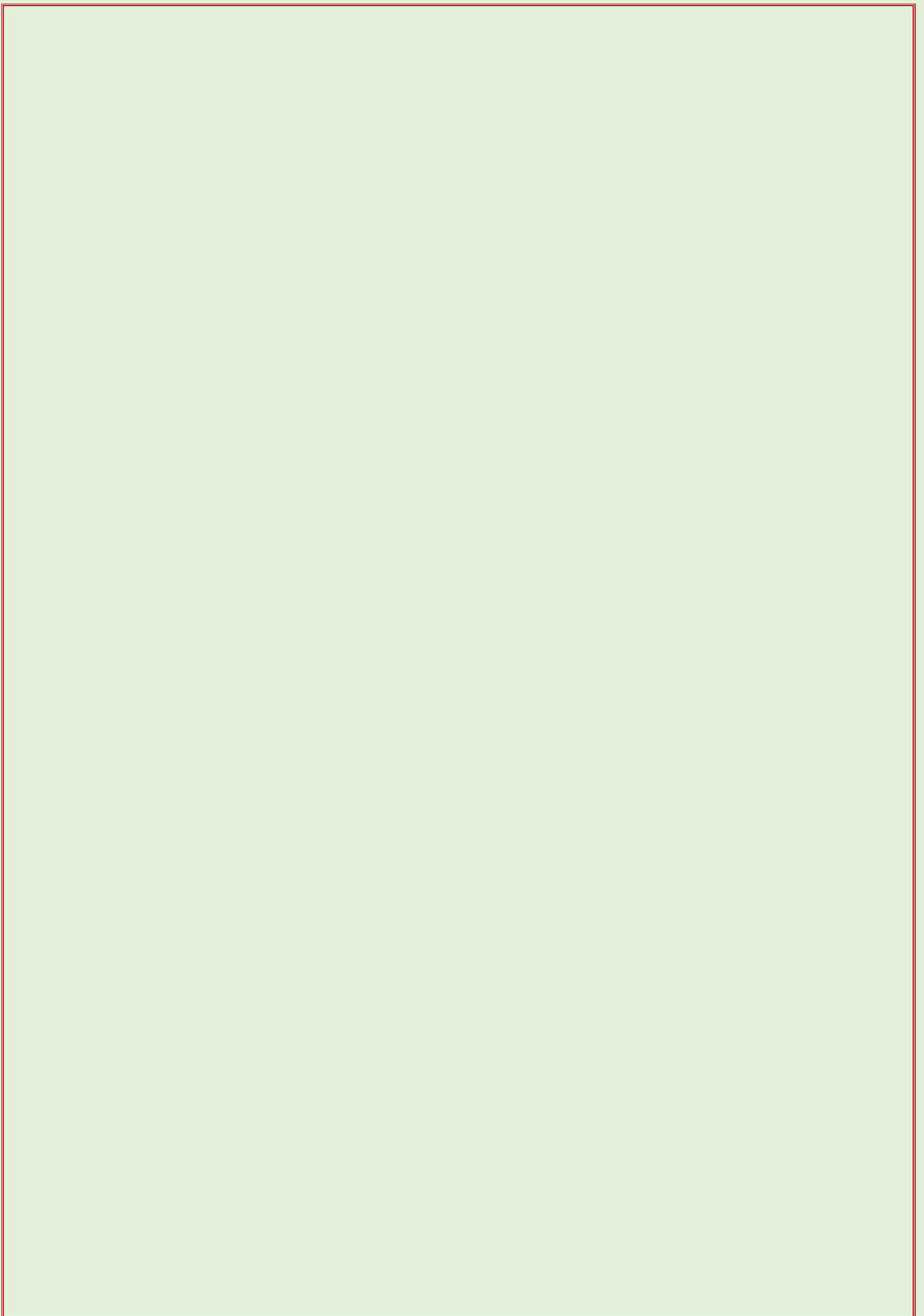
33	Ramesh POTHAPRAGADA	Third officer	46-32 Fort MAHADEVAPATNAM, Kurnool.	Male	rppragada@gmail.com	9440596030
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45	NANNEBOYINA VENKATAPPAIAH	NCC SECOND OFFICER	KRRZPHSCHOOL H NIDAMANUR NAGULUPPALAPADU PRAKASAM523183	Male	venkatappaiah9@gmail.com	9966601033
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47	D.Sulochana	Associate NCC Officer	Near Mahalashimi temple,second Lane,Karlapalem Mandal.	Female	Sulochana.ncc@gmail.com	9989354272
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## 11. Photos





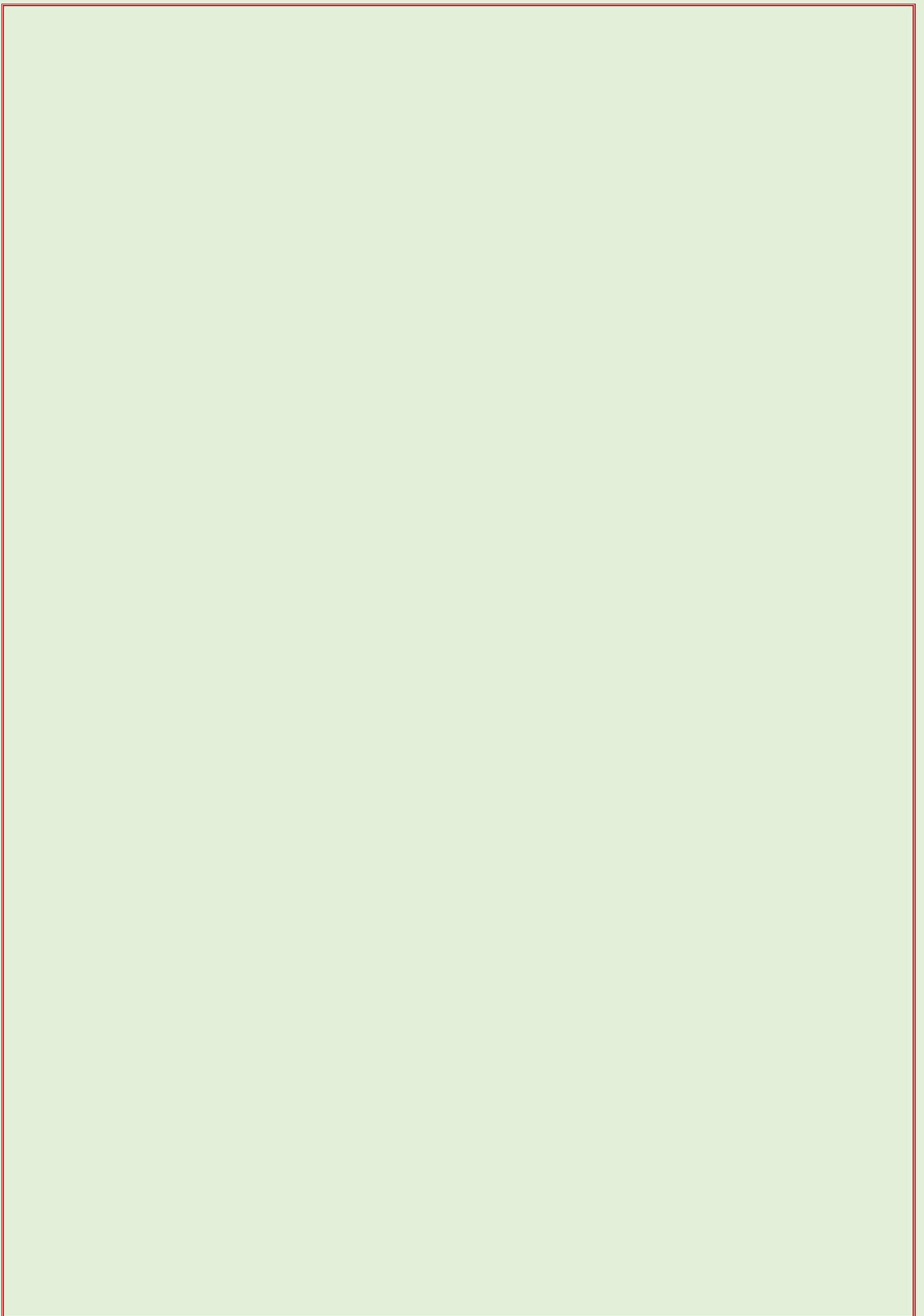














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