

# District Disaster Management Plan Gorakhpur

2013-14

## THE FORMATION PROCESS



According to National Institute of Disaster Management (NIDM), Ministry of Home Affairs, Govt. of India, there is no safe place in India which can be considered under disaster free area. Eastern Uttar Pradesh which is considered to be the most densely populated region in the country is highly prone to floods as well as earthquake. Not only these two hazards but recently it has been observed that dry spells in summers and winters have created drought like situation in the region because of its direct impact on agricultural production and allied services. Changing climate condition has had significant impact on disaster in past few years. It is important to mention here that there are growing evidences that climate change has significantly increased the intensity and frequency of disasters in rural as well as urban areas.

Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) approaches were integrated at national level under India's commitment to Hyogo Framework for Action (HFA 2005-15) which made it mandatory to mainstream climate change component in developmental themes, plans and departmental policies. Since DRR plan needs collaboration and coordination of all departments in preparedness, timely response and effective post disaster activities, central and state government have started mainstreaming DRR in all concerned departments. At district level, District Disaster Management Authority (DDMA) is supposed to make District Disaster Management Plan (DDMP) with integrating climate change component every year in consultation of every line department. Likewise every department is also supposed to develop the same at their level. Over a period of time various gaps have been observed in DDMP development such as lack of involvement of departments in developing DDMP, lack of departmental sensitivity and awareness and integration of climate change adaptation component in District Plans. Needless to mention here that Disaster Risk Reduction cannot be taken up alone in growing need of integrating and considering climate scenario in developing plans.



Flood situation in Gorakhpur

## Project Conceptualization

Gorakhpur district is situated in the basin of Rapti and Rohin and has proximity to Himalayas because of which the climate and natural characteristics of the region is quite different from other part of the state. Gorakhpur urban and rural areas are highly susceptible to natural disasters as it has faced severe flood events in 1998 and 2007. Presently situation has become worse in the region, specifically in Gorakhpur district where floods are a recurring phenomena due to its geographical specifications, unplanned development, lack of effective preparedness plan and lack of awareness at departmental level. Gorakhpur Environmental Action Group (GEAG) took up a pilot research project in Gorakhpur in collaboration with National Institute of Disaster Management (NIDM) and Institute of Social and Environmental Transition (I-S-E-T) for facilitating participatory development of district disaster management plan with integration of climate change adaptation. The Gorakhpur DDMA also took active part in this initiative. Project was financially supported by Climate and Development Knowledge Network (CDKN), United Kingdom.

## Project Objectives

- Understanding the systemic factors within the flood prone Gorakhpur district that contribute to resilience or exacerbate vulnerability.
- Understanding specific policy innovations that could help to bridge the vertical gap between the integrated national policy framework and local contexts and the horizontal gap between actions within sectoral development program to integrate DRR and CCA practice.
- Engaging and building capacity of scientists and young researchers from two key academic institutions promoting DRR and CCA.
- Documenting and disseminating the generated knowledge.

## Project Partners

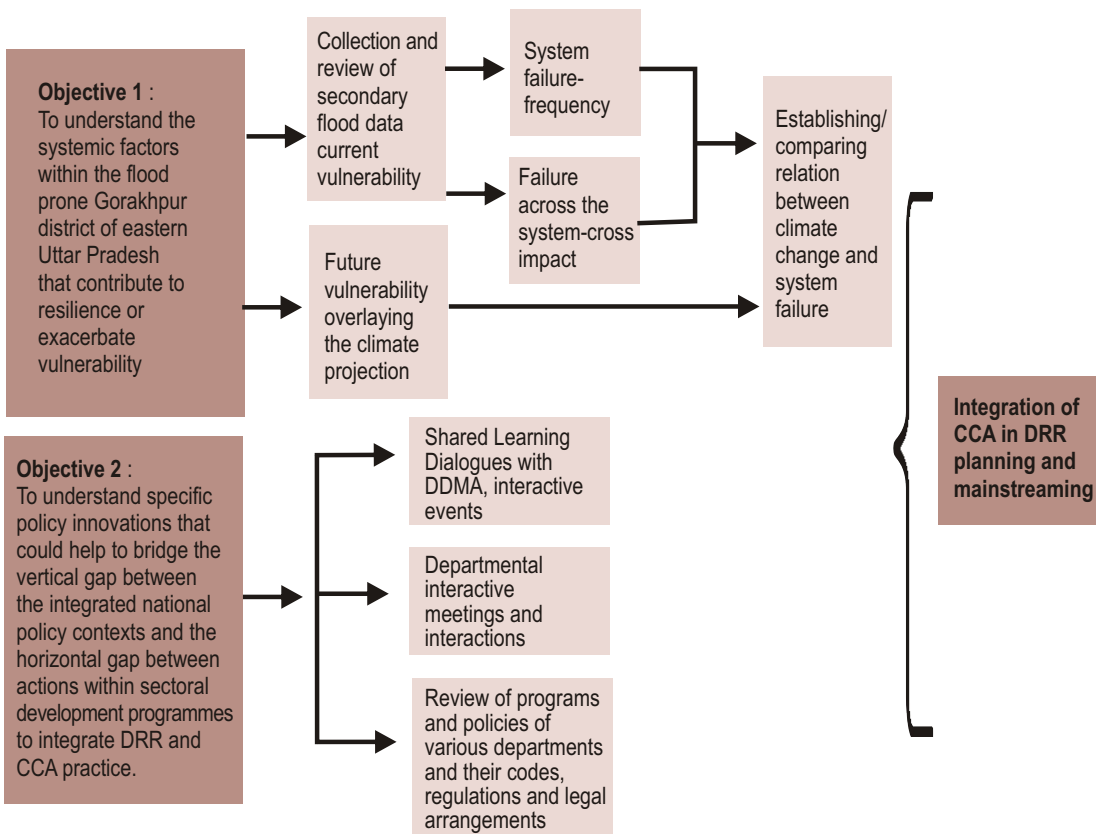
**GEAG:** Lead agency at city level to facilitate, implement and document the research project activities.

**NIDM:** Lead technical and supervisory agency to monitor project processes and outcomes and responsible for dissemination of learning and outcomes at state and national level especially for policy advocacy.

**I-S-E-T:** Technical agency to provide its expertise on building CCA and DRR integration processes.

**District Disaster Management Authority, Gorakhpur:** DDMA of Gorakhpur acted as the lead agency to undertake and supervise process at departmental level.

## Research Methodology



# The DDMP Formation Process

## 1. Project Launching Dialogue at Gorakhpur

In July 2012, a project launching dialogue was organized by GEAG and DDMA at DDMA office to share the project purpose, implementation plan and expected outcomes with the concerned line departments. 54 government officials from various departments participated in the workshop and expressed their viewpoints on the process. On the behalf of District Magistrate, Additional District Magistrate-Finance and Revenue (ADM-FR) chaired the workshop and facilitated the discussion. Representatives from NIDM, ISET and GEAG were present in the workshop. Key outcomes of the workshop were-

- ◆ Nomination of ADM-FR as Nodal officer for anchoring the project from DDMA Gorakhpur
- ◆ Placing of a representative from NIDM and GEAG in DDMA to manage the project and coordinate with various departments.
- ◆ Formation of Project Steering Committee at district level.
- ◆ Progress review meeting to be held quarterly. GEAG to be responsible for bearing expenses, record keeping and project related documentation and dissemination.
- ◆ Provision of separate meetings at all departments from time to time to make department wise preparedness and response plan for District.



Mr. Jitendra Kumar, District Nodal Officer, Disaster Management, Gorakhpur addressing in the Project Launching Workshop



Participants presenting sub-department structure and roles of department representative in disaster management

## 2. Data collection, plan collection

Various data and documents related to flood damage, relief distribution, disaster response planning were collected. Several Government Orders from the DDMA were collected and thoroughly analyzed to identify gaps at departmental level. Along with the observation of shared learning dialogues, identified points were used to prepare guiding documents or departments for preparing effective plan.

## 3. Departmental Shared Learning Dialogue

The Shared Learning Dialogue was organized by DDMA and GEAG and was titled as- Climate Change-District Disaster Management and Reduction Management Workshop to prepare Guidelines with different Departments: Problems & Opportunities. Below are the details of department wise identified gaps and recommendations.



Sharing of Sectoral Workshop findings with department heads in Chairmanship of Shri Dev Krishna Tiwari, Nodal Officer, Disaster Management, Gorakhpur

| Departments                                                   | Gaps Identified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Recommendations to Departments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Rural Development/<br/>Distt. Administration</b>           | <ul style="list-style-type: none"> <li>- Lack of adequate human resources.</li> <li>- Lack of information on fund disbursal to the beneficiaries under the disaster relief fund</li> <li>- Non-utilization of funds due to lack of information on disaster management relief fund</li> </ul>                                                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>- Development programs should be designed keeping in mind the local disaster threats and disaster reduction should be an integral part of the development programs</li> <li>- Coordination between governmental planning and development projects should be established</li> <li>- MGNREGA scheme should be utilized for cleaning of rivers and removal of silt. Several other developmental works can be done through MGNREGA funds.</li> </ul>                                                                                                                                                                                                                                                                                                                                                         |
| <b>Health Department</b>                                      | <ul style="list-style-type: none"> <li>- Connecting road to PHCs/CHCs gets damaged during rainy season</li> <li>- Long duration power cuts creates problems in attending the patients in the PHCs/CHCs</li> <li>- Women employees feel unsafe working in the late evening hours in the centers because there is no adequate arrangement of lights on the roads</li> <li>- Caution before floods are not given due to which adequate preparations are not made</li> <li>- Most of the health centres get water logged due to heavy rain.</li> </ul>                                                                                                                 | <ul style="list-style-type: none"> <li>- In the construction of PHCs/CHCs, it is important to include flood resistant techniques along with earthquake resistant techniques.</li> <li>- Training on Do's and Don'ts at times of disaster should be organized for the members of Village Health and Sanitation Committee</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Education</b>                                              | <ul style="list-style-type: none"> <li>- School premise is often used for shelter and relief centers during flood disaster.</li> <li>- Lack of knowledge in students regarding basic disaster preparedness and safety.</li> <li>- Many of the schools are not located at elevated land</li> </ul>                                                                                                                                                                                                                                                                                                                                                                  | <ul style="list-style-type: none"> <li>- In the construction of schools, it is important to include flood resistant techniques along with earthquake resistant techniques</li> <li>- Site selection for construction of schools should be done at a safe and elevated place</li> <li>- Information and awareness on use and management of fire extinguishers installed in the schools should be given not only to the teachers but also to accountants and employees of other departments</li> <li>- In the school campus, the Mark-II hand pumps should have proper water outlet arrangements</li> <li>- Mock programs in the schools should be organized on relief and management of disasters</li> <li>- The schools should not be used as disaster relief camps or for storage of food grains. This adversely affects education.</li> </ul> |
| <b>Agriculture/<br/>Agriculture Protection<br/>Department</b> | <ul style="list-style-type: none"> <li>- Crops get affected due to untimely rains, extreme cold and hot temperatures.</li> <li>- The situation of agriculture go-downs at the block level are not good due to which flood water enters the go-downs and causes damage to the chemicals stored there.</li> <li>- Water logging in the crop fields causes problems in controlling pests, insects and diseases. Also, application of pesticides in water logged areas cause water pollution.</li> <li>- Problems in storage of crops.</li> <li>- Soil structure gets affected and amount of silt increases</li> <li>- Floods negatively affect crop cycles</li> </ul> | <ul style="list-style-type: none"> <li>- Works related to land leveling and construction of farm bunds for the conservation of soil can be done under the MGNREGA program.</li> <li>- Promotion of vermin compost and Nadep compost structures under MGNREGA program.</li> <li>- Effective coordination should be established between soil conservation department, agriculture department and agriculture protection department.</li> <li>- There is a need to bring about awareness among farmers from the flood affected areas to use flood resilient varieties of crops.</li> </ul>                                                                                                                                                                                                                                                         |

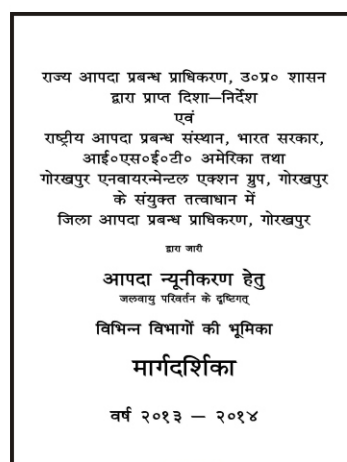
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| <b>Animal Husbandry</b>                     | <ul style="list-style-type: none"> <li>- Infertility problem in animals due to extreme temperatures</li> <li>- Non-availability of fodder because of water logging</li> <li>- Shelter problem for animals during rains and water logging</li> <li>- Water logging leads to diseases</li> <li>- Animals suffer because of unavailability of medicines at veterinary hospitals</li> </ul>                                                                                             | <ul style="list-style-type: none"> <li>- Pre-flood vaccination of animals</li> <li>- Shelter and fodder for animals should be the part of relief package</li> <li>- Ensure availability of medicines at village level</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Jal Nigam</b>                            | <ul style="list-style-type: none"> <li>- Most of India Mark-II pumps are not functional during disaster</li> <li>- Funds for installing hand pumps at elevated lands are not sufficient enough</li> <li>- The plan for establishing sewerage system for the city of Gorakhpur is ready but due to non-allocation of funds, the work has not yet started</li> <li>- For every scheme, there should be adequate number of regular staff to carry out the tasks</li> </ul>             | <ul style="list-style-type: none"> <li>- The India Mark-II hand pumps should be installed at a high elevated and safe place with the support of Panchayats.</li> <li>- While construction of buildings, problem of flood should be kept in mind</li> <li>- Renovation of water sources to enable access to water for everybody in the village and ward.</li> <li>- The Panchayat (Local body) should get the defunct hand pumps repaired in time.</li> <li>- For the implementation of schemes, the funds should be made available before the actual work on the ground starts.</li> <li>- System of quick communication, decision and implementation should be established in order to manage disasters effectively.</li> </ul>                                                                                                                                                                                                                                    |
| <b>Panchayati Raj Department</b>            | <ul style="list-style-type: none"> <li>- Lack of resources for repairing of destroyed public properties</li> <li>- Lack of active involvement in planning and implementation process</li> <li>- Capacity building of Pradhans and other members are not done at local level.</li> <li>- Lack of infrastructures and other facilities</li> </ul>                                                                                                                                     | <ul style="list-style-type: none"> <li>- Assessment of flood and other disasters in local areas should be done according to which provision for funds should be made for the maintenance of Panchayat bhawan and other public buildings.</li> <li>- Awareness should be brought about among villagers to keep their village surroundings clean and usage of individual, school, Anganwadi and community toilets should be promoted.</li> <li>- Awareness campaigns can be done by using motivation groups, nukkad natak, media, etc.</li> <li>- For the repair of India Mark hand pumps for drinking water, funds under Panchayat Raj, 13th Finance Commission should be increased.</li> <li>- Assessment of damage caused to public properties should be done and accordingly the demand for renovation/repair of these properties should be made. This should be implemented at the Gram Panchayat level for which adequate funds should be allocated.</li> </ul> |
| <b>Flood Division and Drainage Division</b> | <ul style="list-style-type: none"> <li>- Less number of work supervisors in the departments</li> <li>- The embankments get cracked in summer season due to high temperatures. Situation becomes even worse if this is immediately followed by heavy rains.</li> <li>- Pressure on the embankments increase when all of a sudden, water increases in the rivers which are on the way to Nepal</li> <li>- Lack of support and cooperation from Tehsil and local government</li> </ul> | <ul style="list-style-type: none"> <li>- As per the State Disaster Response Fund (SDRF) guidelines, the embankments should be re-established within 45 days. It becomes very difficult to get the work completed within this deadline.</li> <li>- It is important to activate the flood protection committees</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| Departments          | Gaps Identified                                                                                                                                                                                                                                                                                                                                                                                             | Recommendations to Departments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| Saryu Canal Division | <ul style="list-style-type: none"> <li>- Heavy rains rupture the branch-lets of canals which hampers irrigation facilities</li> <li>- Depletion in the groundwater levels due to which the discharge from tube wells is decreased</li> <li>- Low electricity voltage because of which the tube wells get defunct in the Kharif season, the pipelines are destroyed at some places by the farmers</li> </ul> | <ul style="list-style-type: none"> <li>- Construction and re-establishment related works are done during a fixed time. Considering the geographical and environmental situation of an area, it is important to place bans and restrictions on cultivation of water-intensive crops such as peppermint, etc.</li> <li>- Diversity in cropping systems should be strictly implemented.</li> <li>- The structural designs of various infrastructures which are related to canals are done as per the orders of respective departments. These infrastructures should also be made earthquake proof and flood resistant.</li> <li>- As a mechanism to adapt to drought and flood situations, various rivers should be joined so that they prevent floods and help in increasing the groundwater table levels.</li> <li>- It is important to have convergence between various departments and Panchayats in order to prevent encroachment.</li> </ul> |

#### 4. Guideline Preparation and Planning at Department Level

A guideline was prepared for all departments based on the various Government Orders and sectoral workshops experiences. This guideline was circulated along with government planning format. Even District Nodal Officer Disaster Management provided every required support to the project as he had already realized the gaps in the government planning and potential changes out of this project. He has significantly acknowledged research team's effort in developing DDMP. DDMP is now in printed and ready to use form.

*DDMA Gorakhpur has adopted Mahewa Ward of Gorakhpur city as model ward for participatory resilience planning. Mahewa ward is GEAG's intervention model of people centered climate resilience plan.*



#### 5. State Level Sharing with Honorable Minister and SDMA

This process, thus, was shared with Honorable Minister of Revenue and Relief Commissioner of Uttar Pradesh in a state level dialogue in Lucknow where process and outcomes were presented before them. ADM-FR from 24 districts were also present during the sharing. The prime purpose of sharing the process was not only to make them aware of it but also getting the process recognized at state level so that it can be scaled up at larger level though SDMA in other districts. As a result, Relief Commissioner instructed district representatives to follow the process undertaken in Gorakhpur in DDMP preparation.



Relief Commissioner- GoUP, Director- UPAAM and other during State Level Workshop

## 6. Second Round of Dialogues with Departments

Second round interaction was held with all the department to facilitate the planning and document preparation. Fifteen dialogues were organized with the departments under the guidance of district magistrate and ADM-FR. As a result of these dialogues, various points related to climate change were integrated in department level plan. Further these plans were integrated in district plan document.



Relief Commissioner- GoUP, addressing the participants during State Level Workshop

## 7. Young Researcher Training on CCA- DRR

The training program was organized to build capacity of young researchers and scholars from reputed institutions promoting DRR and CCA by seeking contribution to and sharing development of the knowledge.

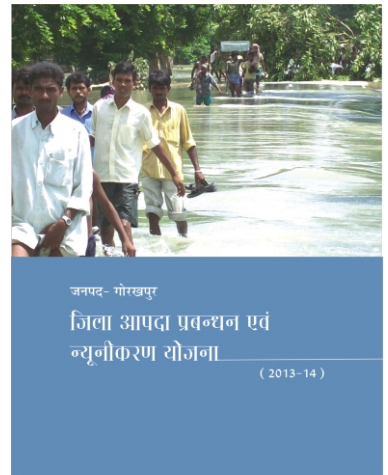
The Training provided an opportunity to young people to discuss and understand climate change and the need for risk reduction and adaptation.



Mr. Kailash Pandey interacting with participants during training programme

## Project Achievements

- ◆ Development of District Disaster Management Plan with inclusion of climate change issue
- ◆ Countered horizontal gaps by engaging departments in making plan in context of DRR and CCA
- ◆ Understanding of process and gaps at department level and corrective actions
- ◆ Shift change in planning process and content in DDMP which will possibly contribute to state and national planning framework in context of DRR and CCA
- ◆ Understanding of three Cs- Communication, Coordination and Convergence within organization, right from planning to implementation level.
- ◆ Recognition of DDMP preparation process at district as well as state level by officials and minister and need for considering climate change adaptation issue.



District Disaster Management Plan of Gorakhpur



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