A visit to Gorakhpur DDMA was done by the Chief of Field Office (UNICEF, UP) – Ruth Lascano Leano & DRR Officer (UNICEF, UP) – Dr. Urvashi Chandra for 2 days on June 27, 2018 for identification of the multi-hazard affected areas of Gorakhpur, that led to the outcomes as mentioned below:

School safety- Workout for school safety by drafting a plan for the same and implementing the plan into action in identified schools, focusing on filling up the loopholes in the school infrastructure & disaster management team of the same, to ensure the prevalence of safe & healthy atmosphere in the school.

Formation of Climate Cell Committee- The major outcome of the visit was the emphasis on the need for formation of a committee responsible for mainstreaming the hydro-climatological hazards with their disaster management strategies. The process adopted for mainstreaming is the integration of the timeline of climatological hazards and recent technological advancements in the field of disaster mitigation, thereby ensuring an effective disaster management plan.

Adoption of two multi-hazards prone villages for enhancing their coping capacity- Kaili & Banauda were identified as the proposed villages for project study to stands as a model village for replication by others. These villages will be modeled for capacity building of the communities by working on the issues concerned with Disaster Risk Reduction (DRR) & Climate Change Adaptation (CCA) in the aspect of multiple hazards.

Knowledge management for replication- Development of Village Disaster Management Plan (VDMP) through HRVA analysis of Kaili & Banauda, which can be efficaciously used for strengthening the disaster risk governance by other villages for reducing their exposure to multiple hazards.

Need for Capacity Building

Capacity building of the children & women by identification of existing resources & acquiring the resources to be created by providing needed training will reduce the risk of hazard in the adopted villages.
Aerial View of Flood 2017-Gorakhpur
One day Orientational Workshop in each tehsil of Gorakhpur

One day Workshop in all the Tehsils of Gorakhpur

One day Workshop emphasizing on the importance of hazard preparedness & climate change adaptation was organized in all the seven tehsils of Gorakhpur from August 23, 2018, to August 31, 2018. An overall 800 stakeholders were identified, including officials from the respective tehsil comprising mainly of lekhpal, revenue inspector & departmental employees. Stakeholders during the workshop were majorly trained about:

- Adverse impacts of the climate change.
- Method to procure the climatological data.
- Training of the vulnerable communities of all tehsils to enhance their disaster resiliency.
- Awareness of the stakeholders in the aspect of guidelines for utilizing National Disaster Relief Fund/State Disaster Relief Fund for disaster management.

Outcome of the Workshop

After examining the capacity building of communities during awareness campaign, the shattering fact obtained was that only Bansgaon & Chauri Chaura had the Automatic Rain Gauge installed by IMD and that too encroached with the plants. Remaining tehsils had the traditional rain gauges in ill-maintained condition.

Stakeholders laid down the fact for construction of relief shelters at an accessible location within the village itself. Also, they emphasized for the construction of schools & in-line government departments within the village at elevated spots.

Lekhpal of various tehsils requested for various safety equipment (life jackets), which they can use for the rescue of villagers during a threatening flood situation.
As Campierganj lies in Zone IV of the earthquake-prone area, stakeholders or Officials from various tehsil during the awareness campaign requested for the mock drill on the earthquake. Their request was immediately considered by organizing a Mock-Drill by NDRF in Campierganj regarding do’s and don’ts while undergoing rescue & response phase of the earthquake.

Chief of Field Office (UNICEF, UP) – Ruth Lascano Leano & Programme Officer (UNICEF, Lucknow) - Dr. Urvashi Chandra had a fruitful meeting with District Magistrate, Gorakhpur on August 30, 2018, regarding his advice & views on the effective implementation of the project of UNICEF in Gorakhpur. Chairman, DDMA apprised them about the vulnerable topography of Gorakhpur, which is being served with 6 rivers (Rapti, Rohini, Ghaghara, Saryu, Gandak & Ami), who too explained them the scientific cause behind the vulnerable position of the adopted villages in the aspect of flood and explained them about his way forward plan to mitigate the flood.

Meeting of UNICEF officials with the Chairman of DDMA-Gorakhpur (District Magistrate- Gorakhpur)

Identified targets of UNICEF in Gorakhpur for effective implementation of Project

Formation & Activation of Climate cell Committee by focusing on drafting & implementation of plan at various level for mitigation of climatological hazards.

Preparation of an effective Village Disaster Management Plan (VDMP) of the adopted villages.

Adoption of Kaili & Banauda (multi-hazard prone villages) for enhancing their disaster resiliency-focusing on capacity building of children & women.

Framing an effective & master School Disaster Management Plan (SDMP) of 60 Schools..
Mock Drill on Flood in Gorakhpur, 2018
Non-Residential Training on Village Disaster Management Plan

A 3 days non-residential training was organized in Kaili & Banauda during October 3, 2018, to October 5, 2018, at Primary School, Gadar-Kaili and Primary School, Banauda for capacity building of the identified villages in the aspect of CCA and DRR. Members heading the training campaign were from DDMA team, NDRF, Medical Officer-In-Charge (Primary Health Center) & experts from various fields of disaster management.

Social Mapping

The master trainers of DDMA did social mapping in Kaili & Banauda among the stakeholders concerned with school students, school staff, in-line government departments, local authorities & villagers. It was an initiative which was done totally by the support of the community, and the outcome was achieved magnificently as it led to the DRR strengthening of community majorly children because the event was organized at school and was lastly examined too.

Training by officials of NDRF & DDMA

NDRF official imparted training to the communities of Kaili & Banauda on the method of making improvised life jackets through disposed of plastic bottles, improvised rafts by utilizing plastic drums, the method to drag & rescue the affected community from respective disaster. Training on pre-hospital treatments like splinting etc. was also delivered to the communities. Apart from delivery of training on safety gadgets, official demonstrated them about Do’s & Don’ts on various stages of disaster (Pre, During & After) in the context of earthquake, flood, cyclone & lightning.

Training by officials from fire departments

A team from fire department imparted the needed training to the communities of Kaili & Banauda for enhancing their preparedness & disaster response in the aspect of agricultural land fire, gas explosion & structural fire.
Training imparted by DDMA team

Chief Executive officer (ADM-F/R, Gorakhpur) of DDMA demonstrated the stakeholders of Kaili & Banauda on the method for enhancing their disaster resiliency & the method for utilizing State Disaster Relief Fund & National Disaster Relief Fund in the case of an emergency. Also, elaborated them on the ongoing preparation of VDMP of Kaili & Banauda by DDMA-Gorakhpur in collaboration with UNICEF & motivated them to join their hands with DDMA with the best of their efforts for preparing a master VDMP.

Briefing by CEO of DDMA-Gorakhpur on the measures for enhancing disaster resiliency

Outcomes of the non-residential training campaign

Absence of Anganwadi and Asha center.

Flood post and relief centers must be located at an accessible locations of 5-6 kilometers near the village.

Absence of embankments leading to inundation of flood water in the villages during flood situation.

Schools are in damage condition since 2017 floods in Rapti River.

Restoration of Panchayat Bhawan of Kaili & Banauda by investiing 2 lacs of funds for each into their restoration from State Disaster Relief Fund.

Image depicting before & after analysis in the the context of restoration of Panchayat Bhawan
Training of Aapda Mitra (NDMA Scheme) of Gorakhpur on River Crossing by XI Battalion of NDRF, Varanasi
Installation of Automatic Weather Stations (AWS)

Gorakhpur district in its past had suffered a lot due to unprecise weather predictions and adverse weather conditions such as Cyclone Hudhud, Unprecedented rainfall of 2014, Floods of 2017. After considering the previous chain of the events and getting into the depth for exploring the solution for precise weather monitoring, Automatic Weather Stations (AWS) had been installed in the collectorate of Gorakhpur to monitor the weather-related events in & around the periphery of Gorakhpur.

Objective of Installing AWS

Simulation of the atmospheric variables (Dry bulb temperature, relative humidity, air velocity gathered, etc.) gathered from AWS for the issuance of a precise weather forecast.

Estimation of simulated variables for sharing the concluding information gathered from AWS to the concerned departments to increase their respective disaster preparedness measures.

Liaison with concerned departments such as health sector, agriculture sector, veterinary sector for drawing up an emergency action plan for the vulnerable communities to tackle an impending hazard.

Features of the AWS

Uses real-time in field data for assessing the atmospheric variables.

Preconfigured set of sensors for measurement of Dry Bulb, Temperature, Relative Humidity, Barometric Pressure, Wind Speed, Wind Direction, Rainfall, and Solar Radiation

Updates every 2.5 seconds for issuing advisories of weather parameters

Application of AWS

Field monitoring of an area of the confined domain to measure weather related parameters with high precision & accuracy.

Hydrological Management

Site-management concerned with mining, land-filling, roads & railways

Forecasting adverse weather conditions

Monitoring of Plant Canopies

Automatic Weather Station Installed at Tehsil-Sadar
The Prime Minister’s 10-point agenda on DRR is -

1. All development sectors must imbibe the principles of disaster risk management.
2. Work towards risk coverage for all-starting from poor households to SMEs to multi-national corporations to nation states.
3. Encourage greater involvement and leadership of women in disaster risk management.
4. Invest in risk mapping globally. For mapping risks related to hazards like earthquakes we have accepted standards and parameters.
5. Leverage technology to enhance the efficiency of our disaster risk management efforts.
6. Develop a network of universities to work on disaster issues.
7. Utilise the opportunities provided by social media and mobile technologies.
8. Build on local capacity and initiative.
9. Opportunity to learn from a disaster must not be wasted. After every disaster there are papers on lessons that are rarely applied.
10. Bring about greater cohesion in international response to disaster