

National Workshop on Integration of Disaster Risk Reduction-Climate Change Adaptation in Developmental Planning: The Actions at Sub-National levels



9th December 2016

Hotel Eros, New Delhi



The Background

Impacts of climate change on disaster risks and vulnerability are widely recognized as critical for the sustainability of infrastructure, ecosystem services, livelihood resources and local economies in Asia–Pacific which encompass the world’s most disaster prone countries besides inhabiting largest number of poor people. As observed in the recent years, climate change has increased the magnitude and occurrence of precipitation related hazard events like floods, droughts, landslides, typhoons and cyclones. Adaptation to the impacts of climate change across all aspects of disaster risk management is critical to ensure our journey to sustainability and safety together. It calls for the adoption of an integrated approach that can address both the challenges together.

The Sendai Framework for Disaster Risk Reduction (SFDRR) recognizes the importance of integrated Disaster Risk Reduction (DRR) for sustainable development. There is a need to transform the relationship between development and disaster risks so that the development process better take into account the existing and future disaster risks and the underlying causes of risks which exacerbates them. Building resilient societies needs integrating these risks as well as potential opportunities into development planning and budgeting. The Sustainable Development Goals (SDGs) (Goal 13th, Target13.1) directly indicates to build adaptive capacity and resilience to climate induced disasters to prevent vulnerabilities of poor and marginalized.

Integration of DRR and Climate Change Adaptation (CCA) in disaster management and developmental planning processes and practices is a newly adopted approach at various levels to address climate induced disaster risks-which also demands national motivation. The sub-national or district level is the most important level of governance for developmental program execution and for the achievement of targets of SDGs within the framework of SFDRR and integrates DRR and CCA in departmental as well as disaster management plans. Risk informed departmental plans with multi-sectoral convergence can communicate climate information to actual users and are able to deal with existing and future risks.

Given the above backdrop, Gorakhpur Environmental Action Group (GEAG) and the Institute for Social and Environmental Transition-International (ISET-I) in collaboration with National Institute of Disaster Management (NIDM) for capacity and policy process, implemented a scale-up intervention drawing lessons from the successful “Gorakhpur Model” in the first phase. The intervention led to mainstreaming of DRR and CCA in development planning especially in diverse and multi- hazard contexts in India. Puri and Almora districts in Odisha and Uttarakhand states respectively were selected for this purpose. A bottom up approach was used in all these interventions to identify sectoral vulnerabilities and an inclusive mechanism was evolved to address these vulnerabilities through mainstreaming DRR and CCA in developmental planning.

Despite of phenomenal progress in policy and institutional-legal fronts and pilot projects on climatic and disaster resilience, integration at local level planning and action still needs more concrete actions. The National Workshop was organized to discuss the potential challenges, constraints and opportunities for the demand driven integration of DRR and CCA at sub-national level identifying the needed policy and practice support.

The Workshop

A National Workshop on –“**Integration of Disaster Risk Reduction-Climate Change Adaptation in Developmental Planning – The Actions at Sub-national Level**” was organized by Gorakhpur Environmental Action Group (GEAG) and the Institute for Social and Environmental Transition-International (ISET-I) supported by Climate and Development Knowledge Network (CDKN). The National Workshop was held on 9th December 2016 at Eros Hotel, New Delhi.

The interactive workshop aimed at sharing experiences and learning on climate and disaster-smart development planning at the sub-national level in India and to understand the legal and institutional frameworks on climate change and disaster management and their effectiveness in mainstreaming DRR and CCA in development planning. Further, the workshop also deliberated on the practical challenges on mainstreaming DRR and CCA in development planning and ways to overcome the challenges and to identify tools and methodologies for converging SFDRR, SDGs and Paris Climate Agreement at state, district, and below levels.

The workshop had participation from various practitioners and policy makers including National Disaster Management Authority, government departments from select districts affected by hydro-meteorological hazards across select states, particularly the District Disaster Management Authorities and State Disaster Management Authorities, representatives from key Ministries (such as Home Affairs, Environment and Forests, Urban Development), Niti Aayog, key national and international NGOs working on disaster and climate risk reduction, donors and academia.

The workshop deliberated on the following two thematic issues:

(I) Experiences from sub-national level: To give an overview of the interventions: -how they were developed, what were the key steps taken during implementation of various programmes under these interventions, what are the major outcomes and what factors contributed to their success.

A Training Manual on Climate Resilient and Disaster Safe Development which draws largely upon the experiences of integrating DRR and CCA in developmental planning at sub-national level in all the three districts and a Handbook for District Collectors/Magistrates on Climate Resilient Disaster Risk Reduction- a ready reckoner of key activities that need to be taken up

to integrate DRR and CCA at sub-national level were released in the inaugural session of the workshop.

(II)CCA-DRR Convergence at State Level (SFDRR Context): To understand the essentials of mainstreaming the integration of DRR and CCA at state level learning from the experiences of interventions areas while achieving the targets of SFDRR for integrated DRR.

Several speakers gave their remarks on the issues related to scaling-up this intervention at state and national level, the gender concerns which needs to be addressed and type of institutional reforms which are required for such integration.

Mr. Kamal Kishore, Member, National Disaster Management Authority, emphasized that there is a need to create evidences of climate change at local level in different geo-climatic zones of the country rather than just learning from the perceptions of change. Mr. K R Vishwanathan, from Practical Action remarked that these interventions have proved that when we integrate gender equality even at the design stage of these programmes, the outcomes in terms of climate compatible development are much more effective and fruitful. Prof. Santosh Kumar, Executive Director, National Institute of Disaster Management, Government of India raised the concerns of developing a “Technology based knowledge bank” where all the knowledge from such interventions will be gathered and one or two key organizations will modulate the entire process and give filtered information globally.

Mr. Anil Sinha, Ex-Vice Chairman, BSDMA, Bihar re-iterated in his remarks that integration will be successful only when we ensure that no risk is re-created. Similarly, no new risk must be created; the endeavor must be to reduce risk continuously. Dr. Shiraz A Wajih, President, Gorakhpur Environmental Action Group, hoped that this interactive workshop brought an invaluable learning from the sub-national experiences for integration of DRR and CCA. Many new important issues and concerns related to this integration came into light during the workshop which will pave a way for further actions.

Welcome and Introduction

Opening Remarks - Dr. Shiraz A Wajih, President, Gorakhpur Environmental Action Group

Evolution of knowledge about Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) based on the learnings derived from pilot and scale-up interventions at sub-national level is very crucial for developing resilience. Dr. Shiraz A Wajih, President, Gorakhpur Environmental Action Group, set the context of the National Workshop by giving a background of these interventions jointly implemented by three organizations; Gorakhpur Environmental Action Group (GEAG), Institute for Social and Environmental Transition-International (ISET-I) and National Institute of Disaster Management (NIDM) with the support of Climate and Development Knowledge Network (CDKN), UK.



Giving a brief overview of the entire process of integration of DRR and CCA in developmental planning, Dr. Wajih talked about the experiences of working with the marginalized communities like small and marginal farmers and especially the women farmers on the issues of DRR and CCA. He talked about the processes of developing resilience among the communities.

A good development will always help in developing resilience. The question was how this good development could be institutionalized in the system. It was found that the nearest stream which is available for mainstreaming having well laid out mechanisms is the Disaster Management (DM) stream. It is a multi-tier institutional mechanism at district level, state level and the national level. The whole process of DM planning from a relief centric approach to a pro-active forward looking process with integration of Climate Change (CC) was the mandate of the process which started in Gorakhpur district of Uttar Pradesh. The successful completion of the process in Gorakhpur resulted in a climate smart District Disaster Management Plan (DDMP) of Gorakhpur District. The key learnings derived from the process were used to scale-up the intervention in different hazard settings of Puri in Odisha and Almora in Uttarakhand.

The purpose of the workshop was to give an overview of the intervention: -how it was developed, what were the key steps taken during implementation of various programmes under this intervention and to make recommendations on the following:-

- How can we scale-up this process and mainstream it in the state level and national level processes?

- How can we actualize the actions proposed at ground level in the three key international agreements of Sendai Framework for Disaster Risk Reduction (SFDRR), The Sustainable Development Goals (SDGs) and the Paris Climate Agreement in 2015?

Dr. Wajih gave his heartfelt thanks to CDKN for supporting the entire process of integration of DRR and CCA in developmental planning at sub-national level. He also congratulated the State Disaster Management Authorities (SDMAs) and District Disaster Management Authorities (DDMAs) of Gorakhpur, Puri and Almora for the successful completion of the interventions in these three districts.

“We need to bring a good development process in the system- a development which is socially and culturally appropriate, economically good and ecologically sound.”

Ms. Aditi Paul, Country Programme Manager, India, CDKN

In her welcome note on behalf of CDKN India, Ms. Paul highlighted the involvements and achievements of CDKN in innovative interventions at sub-national level in context of DRR and CCA. For the past 7 years, CDKN has created a network of partners working in this domain. A lot of research work has been done in collaboration with partners like GEAG, ISET-I, SEEDS, AIDMI and Practical Action. These collaborations helped to collect evidences for what needs to be done at ground level in the field of disasters and disasters that are induced by climate actions and climate change. She mentioned how the evidences were collected with the help of research programmes.



The local level organizations, the state level bodies and the national level agencies supported the cost for such research programmes and came out with lot of innovative approaches and ideas which actually gave a platform to explore how does the integration can happen practically and can be implemented in states like Uttar Pradesh and Uttarakhand. Sharing the experience of CDKN at city level, she mentioned that CDKN has experienced such integration at city level like Heat Action Plan across 10-12 cities.

These interventions at sub-national level are an endeavor which would not have been possible without partners like GEAG and ISET-I. The contributions of NIDM were invaluable throughout the entire process. She ended up her welcome remarks by thanking all the partners with a hope that a new platform will be evolved by this intervention for practically implementing the integration of climate change into disasters or rather building up climate change into resilience building.

“The learning derived from the innovative interventions in Gorakhpur, Puri and Almora needs to be taken up to develop a platform to demonstrate how integration of DRR and CCA into developmental planning can happen practically.”

Inaugural Session

Panelists:

- *Mr. Kamal Kishore, Member, National Disaster Management Authority*
- *Mr. Lars Bernd, Chief, Disaster Risk Reduction Section, UNICEF India*
- *Moderator: - Mr. Mihir Bhatt, Advisor, CDKN*

Mr. Kamal Kishore, Member, National Disaster Management Authority: It is very important to know the challenges at sub-national levels while we are talking about practical integration of DRR and CCA in developmental planning. Mr. Kamal Kishore gave five key challenges for this integration in his inaugural address:-

- There is a need to create evidences of climate change at local level in different geo-climatic zones of the country rather than just learning from the perceptions of change. These evidences from local level must be collected for a long period of time so that we can move ahead from *“Risk Perception to Evidence of Risk”*.
- The need to maintain a balance between short-term and long-term data on disasters is very crucial at local level. Presently, the data on disaster losses is extremely poor and not consistent. For long-term, a consistent data across different parameters is required so that a long-term analysis can be done.
- There is a need to build systems at local level which are iterative in nature, which can re-invent themselves in the face of observed changes in climate.
- How can we use attribution of extreme events to climate change and downscaling of climate models at local level for decision making at local level. Citing an example of observed changes in rainfall, Mr. Kishore pointed out that for such changes we need not to look into the aspects of attribution and downscaling. Here, the important question is the identification of those factors about which we have a very high degree of confidence.



- Our focus should not be the hazard itself, but the exported hazards and the vulnerabilities from the hazards. Quoting an example of mal-adaptation he pointed out that we should not always blame the climate and we must be very careful in bringing about the integration of DRR and CCA.

“We need to set up our systems in such a manner so that a balance can be maintained between short-term data on disasters for assistance and long-term data for trend analysis.”

Mr. Lars Bernd, Chief, Disaster Risk Reduction Section, UNICEF, India: Talking about the advances of UNICEF India, Mr. Bernd highlighted how continuous efforts are being done to integrate aspects related to child development and survival in local development. UNICEF is supporting the actions on Education, Child protection, Nutrition, Health and WASH into child development plans. Quoting the example of children of Assam, Mr. Bernd remarked how the experiences from Assam have revealed the multi-dimensional impacts of disasters on children like the impacts on Anganwadi centers and primary health care centers. He emphasized that for improved assessment we need to share a lot of data across all the states.



Keeping in mind the urban context and seeing the children as agents of change, we should work on how to make the cities more children friendly. Praising the speech given by Prime Minister Mr. Narendra Modi at AMCDRR 2016 in India, he emphasized that we have to systematically see how we can improve the resilience of critical infrastructure.

Putting emphasis on the challenges of integration of DRR and CCA at state level, Mr. Bernd pointed out that there are certain misunderstandings at state level, including lack of recognition of state platforms for such integration. There are existing inter-departmental mechanisms but at the same time there is a need to help them to understand that a platform is not only a government authority, a technical service but the expertise is also coming from private sector and academia. There is a coalition gap of willing partners to engage in this topic and we need to fill this gap.

“Good alliances, collaborative efforts, new platforms and combined expertise are required to integrate DRR and CCA in local planning.”

Mr. Mihir Bhatt, Advisor, CDKN: Drawing lessons from the interventions taken up by GEAG and ISET-I and CDKN’s other related projects, Mr. Bhatt summed up the inaugural session by sharing some important points about these interventions in Gorakhpur, Puri and Almora.

An important thing to deal with integration at sub-national level is the ability to deal with multiple scales; scales in terms of populations and scales in terms of geographical locations. Specific to Indian scenario, this integration directly confronts the scales when the planning of integration is taking place. All the three intervention districts have dealt with multiple scales. The acceptance of both; “Accuracy & Certainty” while doing integration and some



“Uncertainties”, for example trend analysis is very important for integration. System wide planning is another key outcome of these interventions and CDKN’s other related interventions. The systems are connected and a good integration cannot take place unless there are system wide approaches.

Relationships between hierarchies and institutions across different

administrative structures and government structures are also very important for disaster smart development. Highlighting the importance of attribution and integration, Mr. Bhatt emphasized that we should know first and then integrate. Attribution and integration are useful in many examples such as Insurance, if you are able to attribute the reason, then you know from which stream it comes from. Another important point is about collaborative learnings from disaster communities, disaster risk reduction communities at district level and climate communities. We need to work upon how these collaborative learnings can be taken to other countries across the regions.

Few key suggestions which came out of the inaugural session for further efforts are:-

- Look into the fact that how this integration can unfold in vulnerability assessment that has been done all across the country. How the vulnerability assessment exercise itself is integration at sub-national level?
- From an Indian scenario we need to look carefully at both; risk pooling and risk chance so that we can address the risks.
- Integration of DRR and CCA in development in the light of new hazards such as heat waves.
- Addressing the issues of sustainable livelihoods by this integration.

Giving a vote of thanks to the partner organizations and panelists, Mr. Bhatt appreciated the successful completion of the interventions and the learnings derived from the inaugural session.

“Integration of DRR and CCA at sub-national level should have the ability to deal with multiple scales”.

RELEASE OF TRAINING MANUAL AND DISTRICT COLLECTOR'S HANDBOOK

The inaugural session was followed by the release of **Training Manual on “Climate Resilient and Disaster Safe Development”**. To share the experiences and strive for scaling-up and replicating the efforts done in the innovative interventions, the experiences are captured in the form of a training manual. The main aim of this manual is to promote & support training and capacity building on mainstreaming of DRR and CCA integration into developmental planning processes with a special focus on sub-national and urban area contexts.

A **“District Collector’s Handbook on Climate Resilient-Disaster Risk Reduction”** developed as a sort of quick guide (ready reckoner) was also released. There is a tremendous potential for reducing vulnerability and risks through integration of DRR in national and state schemes through structured framework and operational measures which a collector can only help in proper implementation. This handbook gives a quick overview of roles & responsibilities of collectors in disaster management and will guide the collectors/magistrates on various issues of DRR and CCA mainstreaming into development planning of districts.



TECHNICAL SESSION 1: Experiences from sub-national level

Chair: Professor Santosh Kumar, Executive Director, National Institute of Disaster Management, Government of India.

Moderator: Dr Anil K Gupta, Head, Division of Policy Planning, National Institute of Disaster Management, Government of India.

Discussants:

- *Mr. K R Viswanathan, Practical Action*
- *Ms. Aditi Paul, Country Programme Manager, India, CDKN*



Sharing of Sub-national level experiences of DDMP and Departmental DM revision:

(I) District Disaster Management Plan-Process and learning: Mr. Prasanna Kumar Dash, Deputy Collector cum Emergency Officer, Puri, Odisha

Puri is one of the coastal multi-hazard prone districts of Odisha. Potential hazards identified for Puri district are tropical cyclones, extreme precipitation, floods, water-logging, hail storms, earthquake, tsunami and heat wave. Cyclones and floods are the most prominent disasters faced by Puri. The existing DDMP of Puri before the intervention of GEAG and ISET-I with



support of CDKN was more response and relief centric. There was a lack of understanding to mainstream the disaster risk management in the annual plans of various departments.

The intervention in Puri focused on integrating climate change component in disaster management plan of district and the departments so that a robust plan of action can be developed by involving various stakeholders. It not only developed climate smart DDMP and

DPs but also built the capacities of various government departments on how to develop the plan and mainstream DRR and CCA concerns in their developmental plans.

The key steps taken by District Emergency Operation Centre (DEOC) with GEAG & ISET-I includes district and state level inception meetings, two rounds of shared learning dialogues (SLDs) which helped in identifying key vulnerabilities at the time of pre-, during- and post-

disasters and the resilience options and mechanisms required to overcome these vulnerabilities. Community consultations were held to identify block wise hazards and exposure to climate change and disasters, assess the seasonality of hazards, analyze the history of hazards in the blocks and vulnerability, risk and capacity analysis with communities and block level officials. This led to a more comprehensive and effective DDMP of Puri district in view of climate change through validating the information in DDMP and including community voice in planning.

This climate-smart DDMP includes a mitigation plan as per SFDRR priority areas and it is updated with insights from structured process of two rounds of consultations with key line departments (SLDs) on issues of mainstreaming DRR and CCA. Further, results from specific analysis on cyclones and extreme precipitations, and consultations with communities from select blocks/ villages/ urban areas contributed to the updation.

Addition of urban component with DRR and CCA approach is also very important which led to training to Emergency Officers (EOs) on urban risk and management and created greater awareness among urban communities about crowd management, cyclones, water logging and Tsunami. The revised DDMP is hosted on web by DDMA of Puri and it is also appreciated as a model DDMP for other districts of Odisha by Odisha State Disaster Management Authority (OSDMA).

“The Climate Smart DDMP of Puri which also puts focus on gender as a cross cutting issue, can be used as a model DDMP for other 30 districts of Odisha and can be scaled-up at national level.”

(II) District Disaster Management Plan- Almora: Mr. Rakesh Joshi, District Disaster Management Officer, District Disaster Management Authority, Almora, Uttarakhand.

Almora is a hilly multi-hazard prone district in the state of Uttarakhand with more than fifty percent of the land area covered with forest. The climate in different parts of Almora varies due to wide difference in altitudes. The climate is marked by variations in temperature in various seasons and the tropical rains affect the district during monsoons. Almost all disasters occur between June and September in Almora. An analysis of past disasters and losses indicates that cloud



burst, land-slides, flash floods, earthquake and forest fires are some of the major disasters. A realization of including climate component in DDMP came from the fact that the district is not ready to face climate induced disasters like heavy snowfall which was not observed earlier and now can be attributed to climate change.

The intervention in Almora district by GEAG, ISET-I and NIDM with support of CDKN, effectively incorporated climate change considerations into disaster management planning and development planning. It built the capacities of district and state level departments on mainstreaming DRR and CCA integration. This initiative was rested upon the principles of Climate Resilience Framework (CRF) which helped to assess climate exposure, systems, institutions and change agents and showed an over-simplified understanding in the District Disaster Management Plan of vulnerability issues and their root causes. The socio-economic, environmental, physical/infrastructural vulnerabilities were assessed and current climate trends were assessed and based on that future probabilities were calculated.

The CRF and SLDs provided conceptual and handholding support to departments for assessing vulnerability pertaining to their sectors in first round, and investigate the inter-linkages between departments that influence vulnerability in the districts in the second round. Another key achievement of the intervention along with climate smart DDMP and DPs of Almora district is the greater communication and coordination between the departments which helped DDMA in improving mechanisms to engage with departments in more effective manner.

Learning from the experiences and findings of this innovative intervention, DDMA Almora is trying to scale-up the efforts in other districts of Uttarakhand. Some of the future plans include block and village level vulnerability mapping and using this mapping in plans, strengthening the existing database on disasters, climate and improving coordination among different departments at District, Block and Tehsil level and linking MNREGA in Almora with disaster management so that livelihood opportunities are generated along with minimizing the losses from disasters.

“Process of DDMP revision in Almora has the potential to help state and national authorities to review their existing norms and policies and facilitate climate-smart sub-national disaster management plans.”

(III) District Disaster Management Plan, Gorakhpur: Mr. Guatam Gupta, Disaster Management Officer, District Disaster Management Authority, Gorakhpur, Uttar Pradesh

Gorakhpur in eastern Uttar Pradesh lies in the lower catchment area of river Rapti and it is highly prone to natural disasters. A number of rivers like Rohin, Rapti, Aami and Ghaghra intersect and pass through Gorakhpur which increases the chances of flood when the rivers flow above the danger line. It is the bowl shaped topography of Gorakhpur which makes it vulnerable to floods every year.

The DDMP formulation in Gorakhpur had various gaps such as lack of involvement of departments in developing the DDMP, lack of departmental sensitivity and awareness and integration of climate change adaptation component in the district plan. The line departments

were not aware about the impacts of climate change and DRR issues. The DDMP was more response centric rather than addressing preparedness and mitigation measures. To deal with these concerns the first phase of pilot initiative started in 2013 with CDKN-START Project in Gorakhpur district of Uttar Pradesh. The initiative focused on integrating climate change component in disaster management plan of district and the departments.

A forward looking approach was used in the initiative where future climate projections for district were done which was synergized with traditional knowledge and experiences of the departments through the process of SLDs. The major outcome of the initiative was development of a climate smart DDMP of Gorakhpur district. Training courses were organized at district and state level to build the capacity of young researchers on DRR and CCA issues.

The Government of Uttar Pradesh directed all the 75 districts in the state to follow Gorakhpur's process of disaster management planning. To aid development of climate smart plans, the experience has been shared with all the 600 plus districts of India through a training module which was developed by National Institute of Disaster Management in partnership with GEAG and ISET-I.

“The initiative was unique in its way that for the first time in the country, capacity building of government officials from various departments was done on the concepts of DRR and CCA and how to integrate these aspects into developmental planning.”

(IV)Scaling up sub-national climate and disaster smart development: - Process and Key Findings at sub-national level: Mr. Amit Kumar, Gorakhpur Environmental Action Group

The four key components evolved out of the interventions in the three districts which are essential for integration of DRR and CCA in developmental planning at sub-national level include: - Technical assistance to mainstream climate compatible disaster risk management in



developmental planning, mainstream climate and disaster smart development at state level, capacity support mechanisms and facilitation for wider scaling at national level. The aim of first two components is providing technical support and capacity building. The third and fourth components were more on to develop some reference material and capacity support mechanisms for the states and

districts in the form of District Collectors' Handbook, Training Manual and some Policy Briefs.

The community shared learning dialogues were used for vulnerability, risk and capacity analysis and validating the finding from departmental shared learning dialogues. Different

tools were used to gather different information from communities like historical analysis for signature events and losses, social/resource mapping for social and infrastructural vulnerability and transect walk etc. for glimpse of area, identification of key vulnerable points and socio-economic conditions.

The community perspectives which came into light after successful community consultation enhanced the awareness among various stakeholders by their direct engagement with development of disaster management plan and establishing a process for regular up-gradation of it in future. From the community perspective, some of the key points are: developmental planning should be focused on strengthening the very basic services in villages and wards, separate arrangements of shelter, health food and nutrition during disasters should be there for pregnant and lactating mothers and children, drought and flood early warning systems, diversified and resilient livelihood options, better water management practices and adequate compensation of losses. Mr. Kumar ended up his presentation with the quote that the

“State Disaster Management Plan+ State Action Plan on Climate Change+ Departmental Plans can be the key to achieve benchmarks of Sendai Framework for Disaster Risk Reduction and Sustainable Development Goals.”

(V) Mainstreaming DRR and CCA in Developmental Planning- Lessons from Almora (Uttarakhand) and Puri (Odisha): Mr. Shashikant Chopde, Senior Research Associate, Institute for Social and Environmental Transition-International

In the three intervention areas, the focus was on departmental norms, functioning, capacities, resources and knowledge at sub-national level. The Climate Resilience Framework (CRF) used in these interventions is an analytical, system-based approach with an aim to build networked resilience that is capable of addressing emerging, indirect and slow-onset climate impacts and hazards. CRF helped in sound understanding of vulnerability in a comprehensive way as inter-relationships exists between climate exposure, systems, institutions & agents. The framework explained the key characteristics of vulnerability under each component of systems (flexibility, redundancy and safe failure), institutions (rules, laws and regulations) and agents (capacity to learn and re-organize in government, academia and civil society organizations and community groups). With the help of this framework, the issues of vulnerability were communicated to district level departments.



The analysis of vulnerability, capacity and risk revealed that the communities in all the three locations are less resourceful and have very weak capacities. Resource depletion due to disasters year after year and lack of field level staff are the major concerns. In planning and design of infrastructure the technical norms are not being followed for designing resilient infrastructure because the norms are not being provided by the top level administration. There is also an urgent need to allocate more budgets to disaster prone areas.

The key recommendations which evolved out of the process are: -

- CRF and SLDs are very useful tool for the process of integration and mainstreaming of DRR and CCA
- Learning from the climate smart DDMPs, the other districts and also other states should show interest in replication
- There is a need to create pool of 10% flexi funds with clear guidelines and orders
- All infrastructural projects need screening for potential impacts on environment and vulnerabilities
- Investments are required for diversifying livelihoods in disaster prone areas
- Women, children and aged generally more vulnerable; safeguard targeting needed in development policies, plans and programmes

“Mainstreaming at sub-national level is a governance problem first which needs to address the issues of local person-power, procedures, and technical norms and should be backed up by supportive guidelines/rules/circulars/GOs.”

Panel Discussion:

Mr. K R Vishwanathan, Practical Action: Making the development resilient to disasters as well as climate change in more diverse set of geo-climatic locations in the need of the hour. While discussing some challenges and opportunities which have evolved from the innovative interventions, Mr. Vishwanathan praised these efforts at sub-national level and gave his valuable observations.

Climate change and disasters are the two sides of the same coin. What is good about these interventions is that we have started building up from what is already available. For example, in this case the disaster management plans were already there, so it became much easier to integrate CCA in these plans. It will influence the larger mainstream developmental plans in order that climate change and disaster risks are effectively integrated in these developmental concerns.

The climate smart DDMPs in intervention areas have managed to address the entire DM cycle; be it disaster response, reconstruction and preparedness. Now, it is important to look how

these interventions can be scaled-up and shared with other districts and states. We have to look for a learning platform at state level so that the experiences can be effectively shared.

It is also an opportunity to integrate gender equality in climate compatible development. The experiences have proved that when we integrate gender equality even at the design stage of these programmes, the outcomes in terms of climate compatible development are much more effective and fruitful. Women should not only be looked at as the most vulnerable, but as the agents having special skills, knowledge and experiences which can help in finding certain solutions.

“Strengthening climate sensitive infrastructure at the district level in terms of providing climate information to the stakeholders is very important for integration of DRR and CCA at sub-national level.”

Ms. Aditi Paul, Country Programme Manager, India, CDKN: From a development partner’s point of view, Ms. Paul appreciated the work done by all the partner organizations and gave the key takeaways of these three innovative interventions:-

- It is very important to believe in the partner organizations while doing integration at sub-national level. The expertise and knowledge of all the organizations will give a platform to reach other districts also.
- A key essential to these interventions was using the existing institutional structures without setting up any new institutions for integration.
- Gender issues were taken up in disaster management and developmental planning in all the three districts. How the women are impacted differently and how they can help each other is clearly getting reflected in the new DDMPs.
- The interventions demonstrated a practical approach for integration by institutional and paradigm shifts which can actually happen at sub-national levels.
- The Shared Learning Dialogues (SLDs) are very useful tools- *“A 360 Degree feedback which is coming from all the stakeholders who have been involved in the project”*.
- The interventions developed a framework which can be used to strengthen up the existing institutional structures to deal with slow and onset changes in climate.
- Documentation and dissemination of the key findings of the intervention so that it can be scaled-up to sub-national level to build the resilience of the most vulnerable. The District Collector’s Handbook has been translated Oriya language also. It can be translated into other languages also so that it can effectively reach out to the officials and communities.
- There is a need to focus more on economic losses from disasters. This will lead to more contribution of private sector in disaster management planning and mitigation at district and state level.

“The capacities which are developed by these interventions will continue to achieve further in the path of climate compatible development even when such projects are not there.”

Prof. Santosh Kumar, Executive Director, National Institute of Disaster Management,

Government of India: The interventions created a lot of enthusiasm among the partner organizations, the government officials and the stakeholders at local level. Prof. Kumar gave his valuable remarks about the three interventions while appreciating the efforts. He



emphasized that the departmental convergence is very important for such integration which was brought about very nicely in the three intervention areas. It addressed both the type of Risk Reduction- “Risk due to hazards and risks due to climate change induced hazards”.

All developmental initiatives must have the components of DRR and

CCA. We need to sensitize our development partners and development stakeholders on the issues of DRR and CCA. The year 2015 was a landmark year where the three international agreements committed to implement actions at local for climate and disaster smart development. There is a need to enhance the capacities to understand risk. We are still struggling to understand the risks around us. The quantification tools are there but only for monitoring purpose. It does not give us a clear picture of social, economic and ecological vulnerability. These innovative interventions can be used to develop 5 to 6 indicators for quantifying risks.

We also have very good technologies to create public awareness about climate change and disasters like Facebook, Viber, and Whatsapp etc. We should look into the matter how these technologies can be used in mainstreaming DRR and CCA integration. We have to create a “*Technology based Knowledge Bank*” where all the knowledge from such interventions will be gathered and one or two key organizations will modulate the entire process and give filtered information globally.

“Are we really changing? The change has to come in policies, institutional mechanisms, financial systems and capacity development mechanisms.”

TECHNICAL SESSION 2: CCA-DRR Convergence at state level (SFDRR context)

Film Screening

The post lunch session of the workshop began with the screening of the film “For a Safer Future”. It is based on the first phase of pilot initiative which was supported by START-CDKN and implemented by GEAG, ISET-I and NIDM in Gorakhpur district of Uttar Pradesh. It aimed at mainstreaming CCA and DRR concerns in DDMP and in Development Plans of various departments at district and state levels. The film highlights the efforts of Gorakhpur district, which despite the mounting fury of nature, is building a new path towards a safer and more resilient future.

Chair: Mr. Anil Sinha, Ex-Vice Chairman, BSDMA, Bihar

Co Chair: Dr. B N Satpathy, Sr. Advisor, Niti Aayog, New Delhi

Panelists:

- *Dr Anil K Gupta, Head, Division of Policy Planning, National Institute of Disaster Management, Government of India.*
- *Dr. Aditya Bahadur, Action on Climate Today, Oxford Policy Management, New Delhi.*
- *Ms Aditi Kapoor, IFRC, New Delhi.*
- *Dr. A A Khan, OSD and Focal Point – Climate Change, Directorate of Environment, Govt of Uttar Pradesh*

The technical session began with Mr. Anil Sinha’s appreciation of the film viewed and comments that all the answers for the integration of DRR-CCA-Development seem to resonate in the film itself. He brought to notice how in bureaucratic circles there is a tendency to think in terms of silos or boxes, but praised how the film showing farmers, women and local people who actually adapt to climate change in an innovative manner. What is developmental process, and who are involved in it- the sectors, players and the departments; this question initiated the discussion. It is not a simple question of listing various departments, or just working with them, but understanding that all will be affected and that the actual implementation lies with these varied sections. Also, there is a need to understand risk, and how the actions at the sub-national levels must be at the Panchayat level rather than the at the village level, because they have a constitutional recognition & validity and that is where the local self governance happens; which is closer to the grassroots and the people.

The 3 Mantras that will lead to integration of Disaster Risk Reduction-Climate Change Adaptation in developmental planning are:

- ***Do not recreate an existing risk***
- ***Do not create a new risk***
- ***Ensure constant efforts to reduce risk***

Dr. B N Satpathy, Sr. Advisor, Niti Aayog, New Delhi: Multiple actions are going on at Niti Aayog, a major to prepare a vision document for the complete country, which includes a 15 year plan. The inputs from the workshop and various stakeholders will be incorporated and

integrated at the macro level. Giving an example of the Tamilnadu's Climate Change Action Plan which requires a huge amount of resources, Dr. Satpathy asserted that this kind of integration was impossible. What is needed is to leverage the existing schemes and resources for integration. Additional resources or manpower if needed, have to be taken into account well in advance to accomplish integration, which thus becomes a pre-condition. It is the people at the ground who are the champions for integration, and must be relied on for this work. For integration to occur, one must look at the resources available both at the state and the local level.

Another important suggestion is to think of some kind of e-money or currency for DRR purposes. During disasters all transactions go haywire; bank accounts are lost, farmers forget their pin numbers for their *Kisan Credit Cards*. In DRR strategy, thus payments and bank accounts too must be considered; can there be a payment system exclusively for DRR? Maybe something on the lines of Iceland dual currency- one normal currency and another specific currency that comes into force when disaster strikes.

“A new perspective: Need to think of compensation or payment through digital means for improved DRR”.

Dr. Aditya Bahadur, Action on Climate Today, Oxford Policy Management, New Delhi:

Talking of the similarities and differences between DRR and CCA, and their linkages, Dr. Bahadur spoke of how his organisation provides technical assistance to governments that



aims at building the knowledge of decision makers on various DRR and CCA issues, within the core of developmental planning, and focuses on climate finance as well. They work at state level and work on how existing resources can be tweaked for adaptation benefits, such that these adaptation activities become a core of development activities, rather than seen as separate projects which need to be funded separately. This first looks at the

loss and damage suffered by the state, the available resources and then at the possible funding available. If a gap is found, only then is additional financing is sought for supplementation. Asserting the importance of linkage between DRR, CAA and development, Dr. Bahadur said that this needs to be mainstreamed as climate change will increase the intensity and variability of both old and new disasters. Thus, there is a need to shift. There is scientific evidence to show that there is an increase in extreme events, and so climate adaptation must occur across varied cross sections.

Ms. Aditi Kapoor, IFRC, New Delhi: Sharing her experiences, Ms. Kapoor spoke about a programme “Integrated Risk Management” that incorporates both DRR and CAA, and also the

ecosystem management. It has to be ensured that the micro-climate does not get affected, or there is a deepened risk. Giving an example of a village in Bihar, who removed soil from river banks to increase the plinth height of their homes as per standard DRR activity in flood prone areas, realized that the river was now flowing closer to their habitats. So in case of flash floods, which are likely, the whole village, may be washed away. Thus, there is a need to look at larger issues for managing risk.

It is also essential to work with the Panchayats, as they are the ones who have the finances and the authority to tweak, change or modify programmes. Another acquired learning is that there is a need to work with a cluster of villages, looking at the complete eco- system, rather than in a piecemeal manner. Empowering Panchayats is thus critical and so is climate science for climate change adaptation. For water conservation 30 years later, for example rainwater harvesting may prove to be better than simply digging in more tube-wells. Thus, adaptation interventions need to look at long term modeling, which is easily down scalable.

State government must understand that they need to work with climate science and real scientific information; because the problem is not that climate is changing, but its variability. Looking at governance, different departments hold different portfolios, and development goals too fall under various ministries. Looking through a vulnerability and exposure perspective, many of the core government departments are not part of the DM initiatives. As per an earlier study, most of the money goes into poverty alleviation and not adaptation, and there is a need to look at the adaptation rather than just DRR. Who is the adaptation for, which vulnerable group is being looked into? More research needs to be done on all this. There is also an interest by the private sector to invest in climate adaptation, which is both an opportunity and a challenge; which needs more engagement so there is no reinvention of the wheel. As per the latest Sendai Framework for Disaster Risk Reduction, enhancing preparedness must be addressed too, as must be response, rehabilitation, restoration, reconstruction and more importantly focus on climate science.

“Information is the first thing that we need to do when we are trying to integrate DRR and CCA”.

Dr. A A Khan, OSD and Focal Point-Climate Change, Directorate of Environment, Government of Uttar Pradesh: Appreciating the work done in Almora and Puri, Dr. Khan spoke of taking these models being replicated in other states as well. Speaking of Uttar Pradesh, he brought forth the issues that plague the state, with climate change bringing in an added dimension of vulnerability and risk; and creating greater stress for the government, hampering the development process. Some shortcomings in the government regarding DRR and CCA include lack of political will in adaptation, tendency to be response



centric and lack of convergence between DRR and CCA. Drawing from his own experiences, he explained how a lot of issues between DM and climate change overlap, and how disaster risk and adaptation are missing or non-existent in Action Plans at all levels. Disaster Risk Assessment, like the EIA, can be brought to the grassroots level if it becomes a legislative mandate for the people. Binding CSR is another option that can be looked into for DRR and CCA integration, which are multi sectoral issues. There is a need for convergence of departments, lack of capacity in stakeholders & institutions, mainstreaming of DRR and CCA at all levels of government, all of which are essential to achieve the integration goal.

“The Sendai Framework for Disaster Risk Reduction, Prime Minister’s 10 point agenda and Goal No. 13 of SDGs; If we pursue these 3 things, we can achieve DRR and CCA integration in mainstream”.

Dr. Anil K Gupta, Head, Division of Policy Planning, National Institute of Disaster Management, Government of India: Taking the session ahead, Dr. Gupta spoke of the two salient features- issues of convergence and how to address the requirement of sustainable development from a policy perspective, both national & international. He agreed that there has been a lack of convergence, and discussed the opportunities that do exist, and how they can be utilized.

In strategic hierarchy, the SAPCCs are between the national policy (NAPCC – with Eight National Missions and National Disaster Management Plan) and the ground level implementation of proposed actions and programmes at lowest administrative levels-district and local levels (Urban Local Bodies, Gram Panchayats). Thus, the implementation of SAPCCs at local level can be significantly bolstered by engaging with institutional, financial and monitoring mechanisms as envisaged in these Climate-Smart DDMPs (for example, Gorakhpur in Uttar Pradesh, Puri in Odisha and Almora in Uttarakhand).

An innovative exercise of ‘Qualitative Coding System’ has been undertaken as a tool for assessing effectiveness of climate smart DDMP in implementing SAPCC. The SAPCC is a quasi-policy document, where the implementation occurs at a much lower level. The developed matrix clearly brought out these linkages and showed that whatever provisions are required for SAPCC, has many avenues available in the climate-smart DDMP along with the avenues for financial allocation.

“An enabling framework that is backed by relevant policy and financial provisions is the need of the hour for actualizing the implementation of SAPCCs using the provisions of climate-smart DDMP.”

Panel Discussion:

Moderator: Mr. Mihir Bhatt, Advisor, CDKN

How do each of us view success of this integration of DRR and CCA from own individual perspective? This was the moot question that the panelists began the discussion on. Should it be seen at a science/ policy assessment?

This session was indented to discuss the following key issues:-

Issue 1: What does successful INTEGRATION looks like?

Issue 2: What are the GENDER concerns that need to be addressed for integration?

Issue 3: Where will the FINANCES come from?

Issue 4: What are the INSTITUTIONAL REFORMS needed?

Panelists

- *Dr. George V Joseph, Deputy Director, Disaster Management Institute, Bhopal;*
- *Dr. Divya Sharma, Action on Climate Today, Oxford Policy Management, New Delhi;*
- *Ms. Ranjani Krishnamurthy, Gender Expert, Chennai;*
- *Ms. Jennifer Steeves, Risk Analyst, Acclimatise Group, India.*

What does successful INTEGRATION looks like?

Dr. George V Joseph, Deputy Director, Disaster Management Institute, Bhopal: Dr. George V Joseph, spoke of three plans being prepared by integrating CCA into disaster management. He suggested having more pilot projects in various parts of the country, so that more experience can be gained. Integration at the government, ministry and institutional level must also be looked into. For DRR and CCA separate ministry by themselves do not send the correct message for integration, and there must be advocacy for synergizing this convergence, especially at the district level. CCA could be given to the district DM Authority, as a part of district mitigation which will take care of the extra legal framework. Integration of CCA at the DM at various levels is needed. In Madhya Pradesh, the Planning Commission has ensured that CCA must be integrated in the DDMP, which can succeed in a more systematic and organized manner.

What are the GENDER concerns that need to be addressed for integration?

Ms. Ranjani Krishnamurthy, Gender Expert, Chennai: Recalling Chennai floods, where the water bodies had been encroached, Ms. Krishnamurthy questioned the direction in which today's development is headed, and whether it leads to mal-development. Central to integration of DRR and CCA are women's voice, gender expertise which is much more than simple participation; political commitment which misses marginalized women, Muslim women; how Action Plans are gender blind which need work upon through inter departmental meetings; and ensure informed women and finally the SDGs and women. Gender DRR must realize that male migration is not an acceptable mitigation strategy, it is stressful to both.

Where will the FINANCES come from?

Dr. Divya Sharma, Action on Climate Today, Oxford Policy Management, New Delhi: Looking at the urban spaces in context of DRR, it involves a huge number of complexities as talking of area or space which is multi-disciplinary in nature, which calls for sectoral, departmental and budgetary processes integration. The first is to look at sectoral integration, and the second is the holistic risk information which is not only about EWS, but also deals with what has already been built and the risks this construction or infrastructures pose. This translates dealing about resource deficiency and how systems work and what they lack. The third point is about planning and project level integration, integrating CCA, and mitigation in infrastructure and land-use policy planning. Basically, this means talking of smart cities, the 500 odd AMRUT cities, and a lot of infrastructure will be finalized here. It is when the projects are being planned and designed, the right moment to integrate the CC options and mitigation options in the project itself. Another vital point is the risk that urban areas deal with and then design the projects according to it, of which risk mapping is an essential part.

What are the INSTITUTIONAL REFORMS needed?

Ms. Jennifer Steeves, Risk Analyst, Acclimatise Group, India: Speaking of loss and damage, Ms. Steeves clarified how there must be an understanding between people, CCA and DRR practitioners, even though historically there has been a division between the two groups of people. At the international level, the topic of loss and damage has garnered a lot of attention which practically attempts to bring these two fields. The need is to avoid and manage loss through comprehensive disaster risk management. Taking a holistic view, climate risk starts with understanding the risks that could lead to potential loss and damage. Another point for successful integration of DRR and CCA is the involvement of the private sector, which could be an actor for the convergence of the two, which has recently shown a lot of interest in this. Acclimatise itself works with a lot of companies on developing risk management strategies, which many companies do not publicize.

Bringing forth the example of Chennai floods, the private sector had a large role to play in disaster response there. There were many pockets of effort by these players probably driven by social responsibility, but also as an effort to build brand reputation. The flip side is that these businesses too are at risk during these times, and thus there is an opportunity here for the future. Private sector is as yet a largely untapped potential, and their local knowledge can be utilized and put to good use during times of emergencies & disasters.

Dr. Aditya Bahadur added on this discussion of the engagement of private sector and noted that this space is still vacuous. He spoke of business continuity, business opportunities and business of stakeholders as the three main centers for getting the private sector engaged. Ms. Jennifer commented that business continuity has been the huge driver here, and they themselves are adapting to become more resilient and help communities also to adapt. CSR is the least powerful driver being used, she added, even as the informal private sector seems to be missing from the complete discourse.

Ms. Aditi Kapoor clarified that there is a need to pursue and persuade businesses and private sectors for capturing the informal private sector to be a part of the development process. Unless the businesses understand that there is an inherent incentive to them for taking part in the development process itself, which includes building risk management into their systems and climate proofing businesses, this capture may be difficult.

Mr. Amit Kumar contributed by saying that true success is when children continue to be in school and not drop out post disasters, especially those of the Dalits, of sex workers and other marginalized and vulnerable society members. Other attributes to success as gathered from the audience include: care of children & women, revival of existing systems, creation of a role model and how much of the activity plans at the PRI level are actually achieved. Mr. Mihir Bhatt added to these the idea of an economy of nurturance or climate compatible development, where the economy is re-sought due to the process of integration.

Key Findings of the Workshop

Mr. Mihir Bhatt, Advisor, CDKN, summarised the panel discussion by collating what could be the indicators of success for integration of DRR and CCA at sub-national level, from various varied perspectives. These points can be a guide, as to when we can say we have succeeded in integrating DRR and CCA. Some of the factors that can be used to gauge the success as per the panellists include:-

- The presence of a pilot project that has taken place.
- Awareness of the District Management of this integration process happening.
- An advocacy opportunity for those who want to add or oppose to what's happening because of this integration.
- Required funds for the state to work with and an assurance that development does not cause a disproportionate un-development.
- This integration is only possible where women have a voice in terms of direction & expertise and there is a political will to include not women per se, but also the excluded women like Dalits, Muslims etc.
- It is essential to understand that integration deals with complexities, thus risk information must be clearly available and the project level integration activities & tasks must be thoroughly worked out.
- CCA is not only about adaptation in urban areas but has the benefit of mitigation measures too, and so CCA and DRR need to mutually understand each other, such that the community and everyone involved truly understand resilience.
- Success can be said to be achieved where loss and damage are reduced; where there is an enhanced role of the private sector that is active in making this integration take place and also where there is a creation of a role model that can be emulated.

- Another direct indicator of success is when somebody else wants to replicate what has been done; and an actual achievement will be when the activity plans are created at the PRI level itself.

True success will be when the demand for integration comes from the departments themselves or the private sector; when successes co-benefit everyone; when integration reduces risks, poverty and exclusion; where economic growth is accelerated and also where there is the dawn of a whole new thinking because of the integration that is taking place about the economy per se; A clean and green economy or a climate compatible development where the economics itself is being re-thought due to this process of integration.

Closing Remarks: Mr. Anil Sinha, Ex-Vice Chairman, Bihar State Disaster Management Authority, Bihar

Mr Anil Sinha, Ex Vice Chairman, BSDMA, summed up the day's workshop by stating that developmental planning must be sustainable, else the plan will not be enduring or long lasting, and our next generation will not inherit a better world from us. He reiterated that the demand for integration must come from the people, organizations and various levels themselves. Resilience is a key indicator, economic growth goes up and an overall new thinking is involved. Climate change impacts are seen in all aspects of life, and though DRR is a generic term, ultimately the three mantras mentioned earlier will hold great stead for integration of DRR and CCA, even as risk is still being aggravated in many places till today. There is a need for forging the partnerships among government (at various levels), academia, civil society organizations, and donors. It will contribute to the successful implementation of India's National Disaster Management Plan, 2016 and achievement on SFDRR. *"Building Back Better"* means neither re-creating risks, nor creating new risks. For this, each and every one of us must understand and practice risk reduction at an individual level. Also, the SAPCCs must be more gender inclusive, and for integration to succeed there is an urgent need to work on public awareness, education and sensitization at all levels, and be trained for every eventuality, and move continuously in this direction.



Vote of thanks: Dr. Shiraz A Wajih, President, Gorakhpur Environmental Action Group

Dr. Shiraz mentioned the invaluable learning, and the sub-national experiences shared at the workshop, and spoke of the challenging path still ahead. He gave his heartfelt thanks to all the participants and the panelists, for providing inputs for the very interesting discussion and the key recommendations gained from these immeasurable talks between such eminent practitioners. He reiterated that this has been a great learning lesson for everyone present.

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