



Multi-Stakeholder Consultation Workshop to Develop Tools and Perspectives for Conflict Sensitive Climate Change Policy



Workshop Proceedings

Peri-urban Water Security Project

CoCooN- CCMCC

2014-2018

ACKNOWLEDGEMENT

These are the proceedings of the multi-stakeholder workshop carried out under the project titled “Climate Policy, Conflict and Cooperation: Towards Resilient and Water Secure Communities”. The Netherlands Organisation for Scientific Research (NWO) is supporting the project; thanks are expressed to NWO for the support provided. We would like to express our gratitude to the staff members of the South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERS), for the organizational support during the workshop. Lastly, SaciWATERS would like to thank all the participants of the workshop for their insightful contributions.

BACKGROUND

South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERS) organized a multi-stakeholder consultation meeting in Hyderabad, India, that aimed to deliberate on development of tools and perspectives for conflict-sensitive climate change policy and financing mechanisms effectively contributing to the resilience of poor periurban communities. The meeting was a part of the ongoing project titled “Climate Policy, Conflict and Cooperation: Towards Resilient and Water Secure Communities” funded by Netherlands Organizations for Scientific research (NWO) under the CoCooN - Conflict and Cooperation in the Management of Climate Change - Integrated Project initiatives.

The idea was to initiate a dialogue platform to discuss on scientific evidences, different development and capacity building mechanisms of institutions, groups and individuals, to investigate, provide advice on and implement tools for conflict-sensitive climate change policy development and financing. There was representation from **Hyderabad Metropolitan Water Supply and Sewerage Board (HMWS&SB)**, which is responsible for supplying potable water in the Hyderabad city corporation and selected pockets of metropolitan area and also the planning, design, construction, maintenance, operation & management of water supply system. There was representation from other key departments such as **State Ground Water Board, Central Ground Water Board (CGWB), and Irrigation and CAD Department**, Government of Telangana which is the chief implementing department of the flagship program ‘Mission Kakatiya’ launched by the Telangana Rashtra Samithi (TRS), the ruling party. There was also representation from **Environmental Protection Training and Research Institute (EPTRI)**, which is the nodal agency in preparing the State Action Plan on Climate change and State Action Plan for Water for the state of Telangana. The dialogue was joined by representatives from Universities, Research Organizations and NGOs in Hyderabad and Delhi.

PROGRAMME OVERVIEW

Introductory Session

Dr. Aditya Bastola, Acting Executive Director of South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERS) gave a background of the organization and an overview of the various initiatives that SaciWATERS has taken up. Following this he briefed the participants of a project on 'Improved functioning of Telangana State Institutions to develop climate resilience policies and services' funded by the British High Commission. Following this Dr. Poulomi Banerjee explained the larger theme of the project 'Conflict and Cooperation over Natural Resources- Towards resilient and water secure communities". She further described the relevance of theme in the context of periurban areas and highlighted the purpose of the workshop, which were:



- To gain perspectives on the status of climate, water and urban policies in the state of Telangana;
- To initiate discussion on climate water forum and seek suggestions on introducing the concept of periurban areas in the forum;
- To know the key challenges in operationalizing the climate change forum and issues around the sustainability of such a forum and could it be scaled at South Asia level.

Open Discussion

1. Interface between climate, water and urban policies: Issues, constraints and challenges towards developing conflict sensitive climate change policies.

Facilitator: Sumit Vij

Key Questions

1. What are the key challenges of policy implementation in periurban areas?
2. What are the challenges of the forums where there is a dialogue between communities, researchers and governments and what are the issues of

sustainability of these forums?

Discussion

The discussion started with Dr. J.S. Srinivas, head Laboratory, Environmental Protection Training and Research Institute EPTRI, Hyderabad, Telangana, India who shed some light on the current issues that EPTRI is working on in relation to how climate variability is affecting the city of Hyderabad and different ways to conserve and sustainably utilize water resources. He mentioned that the state is focusing on climate adaptation especially in the agriculture sector under National Action Plan for Climate Change (NAPCC) project initiatives towards adaptation. These projects he mentioned are being implemented in the most vulnerable districts of Telangana one of them being Mahboobnagar. There are



Dr. J.S Srenivas,EPTRI

also plans for increasing climate resilience and management of urban water systems in the city of Hyderabad. Another important aspect he mentioned was that more than half of the wastewater produced in the city is not being treated. Hence, recycled water use needs to

be encouraged and fresh water should be diverted for other uses keeping in mind that groundwater is depleting at a fast pace.

“Policy implementation is a major challenge”

Dr. J.S. Srinivas

EPTRI has prepared the SAPCC for combined Andhra Pradesh, which was endorsed by National Steering Committee on Climate Change, Ministry of Environment, Forest and Climate Change (MoEF & CC) in 2013. In view of the bifurcation of the State, as the Environmental setting, land forms, sloping pattern in respective river basins and drainage pattern, Agro climatic Zones, soil patterns and other conditions, are different for both States of Telangana and Andhra Pradesh, Mo E F & C informed Government of Telangana to bifurcate the SAPCC report. Environment Forest, Science and Technology (EFS&T) Department, Government of Telangana, directed EPTRI to prepare the SAPCC for Telangana, vide its letter dated February 11, 2015.

In response to the growing concern of ground water depletion and its link with the water scarcity in urban and periurban areas Dr. P.N. Rao from Central Ground Water Board (CGWB) said that in peninsular states like Telangana, which are hard rock aquifers the groundwater potential is limited. Hence it is not possible to solely rely on groundwater unlike cities like Patna that has alluvial soil where the entire requirement is met by groundwater. He then highlighted some major challenges in periurban areas with:

- Low access to surface water i.e. less than 50%
- Heavy contamination of ground water due to lack of sewerage network
- Ground and surface water pollution due to industrial effluent discharge
- Location of Solid waste dumping grounds upstream of a water body thus causing heavy pollution.

There were questions on whether these challenges especially in periurban areas are being taken into account during the policy-making. Dr. J.S. Srinivas responded that these issues have already been communicated to the respective line departments. While there are policies in place for e.g. Andhra Pradesh Water, Land and Trees Act (AP WALTA), but there has to be stringent rules imposed by the government for implementing them. Currently policy implementation is a major challenge. Treatment of wastewater and Rain Water Harvesting (RWH) is to be made mandatory to increase the ground water levels. These rules also are to be made stringent irrespective of the government being formed at the state level following the model of Chennai.

Dr. Rudresh Kumar Sugam from Council on Energy, Environment and Water, a policy think tank, highlighted the declining role of surface water bodies in urban and periurban areas with an increasing dependence on ground water. One reason is non-realization of the significance of these water bodies by the community. It is important to regulate ground water extraction, and policies also have to mandate use of treated water by industries taking an example from Karnataka. Drawing from his experiences he also mentioned

“Decision making processes are dominated by the urban development authorities”

Dr. Rudresh Kumar Sugam



that decision-making processes are dominated by urban decision makers with an assumption that the urban needs are more important than that of peripheries.

Key Question

1. **What is the sustainability issue with the Mission Kakatiya? How to ensure that community aspect is integrated into the programme?**

Discussion

Dr. V. Ratna Reddy from Livelihoods and Natural Resources Management Institute comes with a huge experience in watershed programme and he shared his perspectives on this issue. He mentioned that firstly in the whole approach to water security, the missing aspect is integration, be it climate or water, natural science or social science. Hydrological aspects are not considered. Secondly,

“Approach to water security lacks integration and source sustainability”

Dr. Ratna Reddy

source sustainability is completely missing in the approach. Costing only takes into account the capital investment for source creation or source development and not sustainability. Sustainability through RWH or other approaches such as ground water conservation/regulation should be talked about otherwise ensuring water security for whatever length of time or investment is not possible. This will need the budgeting to be revamped and life cycle costing needs to be done. Categorization of tanks into percolation and irrigation tanks has not been done but they are being revived and reestablished. Social dimensions are missing in the project such as tank management committees.

Philanthropic approach is being used which is not going to work. There is a need for business models. Regarding the issue of community organizing themselves for their needs the question that arises is why do rural or periurban communities need to organize themselves for their rights while the urban population by default is provided with all the resources. It is an issue of equity and justice.



In line with the discussion Dr. Anantha from ICRISAT also emphasized on the importance of science based planning and that land use planning has to be considered in such initiatives. Dr. Tanvi from NGRI spoke about the role of geophysics and hydrology in such programs. She further added that we all talk

about recharging but recharging in areas of hard rock aquifer would be a waste at times so science helps us to know where should the recharge be done, otherwise the entire exercise becomes futile. While researchers shared his view of this entire issue, Mr. Suresh Kumar chief engineer of Irrigation and CAD Department who is closely associated with the Mission Kakatiya gave an overview of the mission and answered few concerns that were raised about the program. He shared the criteria used in the selection of tanks, which are:

- Areas receiving high rainfall
- Areas where land under irrigation is greater than 50 acres

The sarpanch of the village and the other villagers are consulted firstly for selecting the tanks and secondly for prioritizing. For tank maintenance he said there is a proposal for constituting tank parirakshana committee with all the stakeholders like fisherman, toddy tappers and all beneficiaries as members of the committee. Entire revenue collection will be given to them.

There were questions on whether Mission Kakatiya has taken into account equity factors, social capital and so on, or whether they are going to be included subsequently as in the case of watershed programme. Mr. Suresh Kumar said that the experience with this programme would be much better. There is a check at every level from ministers to local leaders to public. It is like social auditing of the entire programme. Dr. Bastola brought out a key point with regard to how the mission is going to address the challenge of coordinating with various departments that are a part of the mission? Mr. Suresh Kumar responded that it is being tried to address through organizing regular meetings at the district collector level with all the concerned departments such as forest, revenue, and agriculture.

Key Question

- 1. What were the aspects of the climate-water forum and how can it be taken forward?**

Discussion

Dr. Reddy was a part of the climate-water forum that was initiated by ICRISAT as a part of one of its completed projects. He shared some of his experiences, learning's and how can it be taken forward.

- The forum had a number of government officials on board who were interested in the research being carried out. But the officials at these levels keep changing and it depends on an individual's interest to be actively involved in the forum, which poses a sustainability issue.
- Consolidation of the research in a systematic way in the form of a working paper or a consolidated report was lacking.
- Ownership of the policy makers from the beginning is important. All the relevant stakeholders and departments should be a part of the forum.
- Packaging of the research work in the most appropriate manner to be conveyed to the policy makers is the biggest challenge. The ultimate output from the forum to the policy maker is integration of different research results in a systematic and logical fashion.
- A regular interaction with stakeholders is necessary.
- The role of the forum should be to drive a link between climate and water and bring on board all the

“Research needs to be packaged in the most appropriate manner to be conveyed to the policy makers”

Dr. Ratna Reddy



governments that may not be directly working on climate change.

shared his experience of working with MLAs. He explained how they had broken down climate change into more understandable terms by connecting on how people and economy of their constituency were being affected by climate change.

governments that may not be directly working on climate change.

- It has good potential but it has to be reformulated in the sense that research component has to be brought out in a much more strong manner.

- While policy enforcement is an issue climate water forum can at least take it to the policy level where the more scientific policies can be designed using these research initiatives.

In terms of packaging the research work Dr. Naren

Dr. J.S. Srinivas also mentioned that such a forum would help in building climate resilience of the state.

The first session ended with three key points:

- There are plurality of policies, clashes between various government departments and various other challenges that exist.
- What is the way forward that exists? Do we come up with new policies for peri-urban areas; is it possible? Does government wants to come up with an administrative understanding of peri-urban areas and is that possible?
- How do we take our science, which the researchers, NGOs and CSOs people do and package it and make it understandable, implementable and take it to the policy level? What is the way forward from this?

2. Interface between climate, water and urban policies: Way forward

Discussion

Dr. Ramachandra Prasad from IIIT spoke about a case study on Shamirpet lake that was done to study the spacio-temporal analysis of it. He mentioned two important points to take away, which are on the technical and the planning side it is important that the encroachments on the incoming channels are removed to any surface water body, secondly water bodies should be handed over to the local people so that they take the ownership of protecting them.

Dr. Sheela Prasad highlighted the need of interdisciplinary action to address the various issues that the peri-urban areas are facing in terms of water, climate and urban stress. She also spoke about the efforts of Mission Kakatiya that need to be appreciated and that all should fight against the vested



interests. Another suggestion that was put forth was that the expertise available with academic institutions in terms of research is not being utilised at present by the policy makers. This needs to be tapped and such institutions need to be given an important role. Dr. Srinivas made a mention of the preparation of state specific action plan on water for

“There is a need for interdisciplinary action to address the issues in peri-urban areas”

Dr. Sheela Prasad

Telangana, which is in the pipeline that is initiated by the Ministry of Water Resources and this responsibility in the state is entrusted to EPTRI. Under this plan EPTRI will be the nodal agency that will conduct workshops related to this with a number of departments. He mentioned that these discussion and inputs from such workshops can be put forward and they will be sent as a policy proposal to the government.

Key Question

- 1. What is HMWSSB's stand on water security issues in the villages which are very close to the city, out of which some are getting water from HMWSSB while some are not. How do you decide who will get and how do you ensure their security? Do you think peri-urban should be emphasised in your domain?**



Dr. P.S. Suryanarayana Chief Engineer (Technical) of HMWS&SB gave a brief introduction of the water board and statistics in terms of coverage area and water supplied. He spoke about the Government orders given to the board to extend supply to villages up to ORR beyond GHMC which is around 1300 sq. km covering 190 villages. Out of 190 villages, about 40-50 villages have been receiving bulk supply. He mentioned that individual supply needs a lot of infrastructure investment. The current status is that a profile to the government to finance the project was being sent. He further mentioned that those villages who have agreed to pay for the development expenditure for laying pipelines, the work is already underway. While for others the board is awaiting grants from the government. The challenge he mentions is that water cess is not sufficient to meet the capital costs. Appointment of a regulatory authority is important for water board, which can revise the water rates so that the deficit could be covered.

Summary and Conclusion

No matter how hard we try, peri-urban is difficult to demarcate. It can be looked as a concept and processes. The important point is to look for sensitivity to these processes rather than think of peri-urban as a geographical space, it's the processes that one has to be sensitive to while planning. It's the process of change, conflicts and contestations. The workshop has brought out diverse perspectives on addressing issues of peri-urban areas from technological, hydrological, social, ecological and economic areas. An important aspect in this whole regard is integrating the physical and social processes to identify various challenges and also to look at a way forward from the current scenario. While there are a number of policies addressing the pertinent challenges in peri-urban areas the lacuna lies in implementation of these policies. In order for the climate-water forum to be taken forward utmost attention is to be paid to packaging the research work to be conveyed to the policy makers. The ultimate output from the forum to the policy maker is integration of different research results in a systematic and logical fashion.

AGENDA

TIME	PROGRAMME	FACILITATOR/ PRESENTER
09:45 – 10:00	Registration	
10:00 – 10:10	Welcome Address	Ms. Monica Priya
10:10 – 10:30	Presentation on activities and current projects of SaciWATERS	Dr. Aditya Bastola
10:30 – 11:00	Overview of the Project	Dr. Poulomi Banerjee
11:00 – 11:15	Tea Break	
11:15 – 12:15	Open Discussion Interface between climate, water and urban policies: Issues, constraints and challenges towards developing conflict sensitive climate change policies	
12:15 – 12:30	Tea Break	
12:30 – 13:00	Open Discussion Interface between climate, water and urban policies: Way forward	
13:00 – 13:30	Closing Remarks and Wrapping Up	Dr. Poulomi Banerjee
13:30 – 14:30	Lunch	

ANNEXURE 1

LIST OF PARTICIPANTS

S.NO	NAME	ORGANISATION
Government		
1	Mr. P.S. Suryanarayana	Hyderabad Metropolitan Water Supply and Sewerage Board (HMWS&SB)
2	Mr. P. Narender	Ground Water Department, Telangana
3	Mr. P.N. Rao	Central Ground Water Board (CGWB), Hyderabad
4	Mr. Pandith Madhnure	Central Ground Water Board (CGWB), Hyderabad
5	Mr. Suresh Kumar	Irrigation & CAD Dept. Telangana
6	Mr. K. Chenna Reddy	Irrigation & CAD Dept. Telangana
Government affiliated Research Organisations		
7	Dr. J.S. Srinivas	Environmental Protection Training and Research Institute (EPTRI)
8	Dr. Tanvi Arora	National Geophysical Research Institute (NGRI)
9	Dr. Tabish Raza	National Geophysical Research Institute (NGRI)
10	Mr. Syed Adil	National Geophysical Research Institute (NGRI)
11	Dr. N.C. Mondal	National Geophysical Research Institute (NGRI)
12	Dr. Amarnath Tripathi	Institute of Economic Growth, New Delhi
Academic Institutions		
13	Dr. Vishal Narain	Management Development Institute (MDI), Gurgaon
14	Mr. Aditya Kumar	The Energy and Resources Institute (TERI) University, New Delhi
15	Mr. Sumit Vij	Wageningen University
16	Dr. Ramachandra Prasad	International Institute of Information Technology (IIIT), Hyderabad
17	Dr. K. Srinivasa Raju	Birla Institute of Technology and Sciences (BITS), Hyderabad
18	Dr. A. Vasani	Birla Institute of Technology and Sciences (BITS), Hyderabad

19	Dr. Sheela Prasad	University of Hyderabad
Research Organisations		
20	Dr. Rudresh Kumar Sugam	Council on Energy, Environment and Water
21	Dr. V. Ratna Reddy	Livelihoods and Natural Resources Management Institute
22	Dr. T. Chiranjeevi	Livelihoods and Natural Resources Management Institute
23	Dr. Anantha K.H.	International Crop Research Institute for the Semi-Arid Tropics (ICRISAT), Hyderabad
24	Ms. Monica Priya	SaciWATERS
25	Dr. Poulomi Banerjee	SaciWATERS
26	Dr. Manoj Jatav	SaciWATERS
27	Dr. Aditya Bastola	SaciWATERS
28	Mr. Samir Bhattacharya	SaciWATERS
29	Ms. Anshika John	SaciWATERS
30	Mr. C. Venu Gopal	SaciWATERS
31	Mr. Sai Kiran	SaciWATERS
Others		
32	Dr. Naren	British High Commission (BHC), Hyderabad