PERIURBAN WATER SECURITY

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Report on Annual Project Meeting

7 – 11 December, 2015 at Hyderabad, India

CoCooN – CCMCC

Climate Policy, Conflicts and Cooperation in Peri-Urban South Asia: Towards Resilient and Water Secure Communities

SaciWATERs

NWO
Netherlands Organisation for Scientific Research

Acknowledgement

This report contains discussions carried out in the annual meeting of the project titled "Climate Policy, Conflicts and Cooperation in Peri-Urban South Asia: Towards Resilient and Water Secure Communities". We would like to express our gratitude to the Netherlands Organisation for Scientific Research (NWO) for supporting the project. We would also like to thank all the participants, advisory committee members, and the project team for their insightful contribution during the meeting.

Background

South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERs) organised a project meeting with stakeholders, project team and advisory committee members from 7th to 11th December 2015 at Hotel Plaza, Hyderabad, India. This scheduled meeting was a part of the ongoing project titled "Climate Policy, Conflicts and Cooperation in Peri-Urban South Asia: Towards Resilient and Water Secure Communities", funded by the Netherlands Organisation of Scientific Research (NWO) under the Conflict and Cooperation in the Management of Climate Change – an Integrated Project initiative.

Day 1

Introductory session

The programme started with a welcome address by Dr. Dik Roth. This was followed by a round of introduction by the participants post which Dr. Dik shared the overview of the project. Also present at the meeting was Dr B. Janardhan Reddy, IAS, Commissioner, Greater Hyderabad Municipal Corporation, GHMC. He spoke about the severe water crisis in the city due to consecutive onset of droughts, and how the city is getting water from a distance of 187 kms. He shared his concern about the unaccounted water loss, and cost implications of getting water from a greater distance from the city. The problem is more severe in the peripheral areas of the city, where the population is rising at an alarming rate while the institutions are not able to keep up with the ever increasing demographic pressure to provide basic services like water. While deliberating on the probable solutions he felt that revival of the indigenous water bodies and appropriate harvesting of water can address these issues. He pointed out the significant role that research organisations and NGOs play in spreading awareness of Rain water harvesting and ground water recharge. He mentioned that Hyderabad Metropolitan Water Supply and Sewerage Board, HMWWSB is

closely working with SaciWATERs to undertake advocacy with different group of stakeholders in urban and peri-urban Hyderabad towards roof top rain water harvesting.

Site specific presentations

After a short discussion with the commissioner country level presentations were made. Mr Zakir Hussain, Executive Director, JJS spoke about the issues and challenges in Khulna, and the several advocacy and Capacity Building activities which the project has undertaken for the last 2 years. While highlighting the reason of selecting specific cases from peri-urban Khulna, he mentioned that climate variability particularly in terms of rising sea level and saline intrusion has impeccable bearing on the water security of the peri-urban areas. He also highlighted several community mobilizing programs that have been undertaken in the last two years. Questions essentially revolved around issues of climate variability faced in Khulna.

Next presentation was made by team Nepal on changing urbanization pattern, climate variability, and conflicts and cooperation's over water resources. Mr. Saroj Yakami from MetaMeta highlighted about the settlement trends in Kathmandu Valley, the demand for water and how water from agricultural and peri-urban domestic needs has been diverted to meet the rising water demand in the urban areas. He mentioned the problems faced in the valley, which are-

- Severe water security challenge regarding both quantity and quality of water,
- Groundwater depletion: 1-4 m in average in deep tube wells and approx. 2.5 m in shallow wells, and
- Problems resulting from the dynamics of urbanization in the peripheries:
  - Conversion of agricultural lands into urban uses, and
  - Extraction of water and other natural resources in unsustainable ways to meet the

incremental urban needs.

While detailing the steps followed in the selection of case study areas he focused on the criteria used to select the smaller study areas within the basin. He ended his presentation by detailing out the site-specific issues of wastewater usage, sand mining, heavy ground water extraction, and the strong presence of water market/ water vending in the area.

Final presentation was from team India where Dr. Poulomi presented two cases i.e. Hyderabad and Gurgaon focusing on research objectives, methodology, site selection and insights obtained from the scoping study. While giving a comparative understanding between Hyderabad and Gurgaon Dr. Poulomi spoke about the unit of analysis between the two cases. In Hyderabad water security was measured at the community level where the unit of analysis was village, while in Gurgaon the water security of the waste water irrigators was analyzed taking canal as a unit. Presentation highlighted the key conflicts and cooperation's in the five selected peri-urban villages around Hyderabad.

Conflicts, contestations and cooperation's' were observed around drinking water access and availability while irrigation, livestock and other livelihood based water use presents hidden or latent conflicts or cooperation's. Dr. Poulomi mentioned that the research considered peri-urban as an open space of both opportunities and vulnerabilities where conflicts are not always leading to misappropriation of resources. The presenter argued industrially affected village of Edthanur and Chitkul present a case where scarcity triggered conflict, which in turn led into organised movement and institutional transformation for better resource appropriation. While speaking on the notion of cooperation, Bowrampet case was presented to highlight the negtive ocila capital that has been generated through cooperation of a particular community. While detailing the Bowrampet case study the presentation spoke about the Reddy community, which are involved in water market. In all the cases it is observed that the principal use of water in the past was for irrigation, which now has turned to commercial mostly industrial.

General discussion

The discussion generally moved around conflicts, contestations and resilience and how different quantitative data can be used for ethnographic study. The purpose of the session was to get a feedback from the audience on two main themes:-

1. Communication strategy for scaling up and scaling out of the project, and
2. Network mapping and stakeholder engagement

Ms. Ramya said that poetry and Kalajatha are effective communication tool to reach to the masses. Dr. Mani gave her inputs on water modeling and using an integrated approach of both qualitative and quantitative analysis in the research. In the discussion Mr. Narsimhulu suggested the departments that the team can engage with and also encouraged of working with Ground Water Department. Dr. Giridhar, professor of Jawaharlal Technological University, JNTU emphasized on rain water harvesting techniques and encouraged that the project promote awareness campaigns on harvesting rain water, and said that the university would extend support by sending student volunteers.

Day 2

Presentations on project update and action plan 2016

The second day of the meeting began with the presentation by Team Bangladesh by Mr. ATM Zakir. His presentation covered the activities carried out under Knowledge and research, Development and Capacity Building with special emphasis on the workshop conducted by JJS on Cooperation in peri-urban water management. He also presented the plan for activities to be undertaken in 2016 in Bangladesh.

The next presentation was made by Team India where Dr. Vishal made a presentation of Gurgaon case and Dr. Poulomi presented Hyderabad case. Dr. Vishal gave an overview of

the three canals that have been selected for study and gave a rationale for the selection of these canals. He then mentioned that in the case of Gurgaon conflict of interests are more common than conflicts, and that conflict and cooperation are not mutually exclusive, conflicts occur within overarching context of cooperation. He also presented the impact of climate variability. The presentation ended with the contributions made in attaining the goals of Research and Knowledge, Development and Capacity Building. Dr. Poulomi presented the activities undertaken by India Team under the three heads, and mentioned what the team has planned for 2016. She mentioned that the project is focusing on understanding the social dynamics, power relations, climate change and urbanisation linkages. The presenter said that the review of Integrated Water Management Plan, IWMP at the village level will be another key activity under knowledge and research. The presentation ended with a detailed plan of action for 2016.

Meeting with project advisory committee (PAC) members

The PAC meeting followed the presentations. Present at the meeting were the 3 PAC members, Dr. C. Suvarna IFS, Telangana State Biodiversity Board, Prof. Dilip Dutta, Professor, Khulna University, Bangladesh and Dr. Tripti Rai, Country Representative, WaterAID, Nepal. Prof. Dilip Dutta and Dr. Tripti Rai marked their presence virtually via Skype. Dr. Anamika welcomed the PAC members followed by a presentation made by Dr. Dik. He gave the overview of CoCooN - CCMCC project and the activities undertaken. The presentation essentially covered the key questions guiding the project, why the project focuses on peri-urban areas, the objectives of the project and various activities of the project.

This was followed by a short update of the work done by Ms. Anushiya, wherein Dr. Tripti gave some guidance on how the further progress can be made. Dr. Poulomi gave an overview of the study sites in Hyderabad. Dr. C. Suvarna showed her intrest in the project and suggested that the Telangana Biodiversity Board can step in to provide help in Training and Capacity Building activties. She laid empasis on looking at where peri-urban areas stand from a policy lens. Dr. Poulomi spoke about the challenges that the team faces in lobbying with government, for which Dr. C. Suvarna said that in order to develop an effective communication strategy with the government it is important to develop an individual rapport. It is also equally important to convey the salient features of the project as well as the contribution that the project will make to the government.

Presentations on project update and action plan 2016 (contd)

Mr. Saroj representing Nepal team presented the detailed project update. The key point in his presentation was the development of connection with Bagmati river basin improvement programme to initiate Kathmandu Valley Water Forum. He also presented a detailed plan for activities that will be undertaken in 2016 along with the time frame.

Research update and discussion (PhD and Post Doc)

Ms. Anushiya presented the progress made by her. She started the presentation by talking about the urbanization in Nepal with special focus on Kathmandu valley. When talking of the peri-urban processes and issues, she highlighted the drying of spring sources, extensive land conversions, large-scale water extraction and sand mining. She presented the climate change trends in Nepal and how her research objectives try to fill the research gaps that exist in the sphere of peri-urban studies. The presentation detailed the theoretical framework that will be used which is political ecology of water for the in-depth analysis of hydro-social changes and (re) distribution of related burdens and benefits with focus on access, rights, and the conflicts and cooperation around changing peri-urban water (in) security and what this means for various actors. Following this presentation focused on the

research methodology, sites for case study, insights on conflicts and cooperation, and the expected outcomes of the research. Questions essentially asked were the differentiation between access and rights and other questions were on water markets and water transfers.

Dr. Anamika Barua made the final presentation on climate change policies. The presentation focused on reviewing and analysing climate change and water policies and strategies to identify areas where the peri-urban water security contexts need to be addressed through the comparison of policies and cross country learning. While talking of climate change the presentation covered the background of policies in Bangladesh, India and Nepal and also the policies and Action plans across National, Regional, State and the local level. The presentation also covered a detailed background of water policies in the three countries. The presenter spoke about census of India, which recognizes peri-urban as urban outgrowths and the Hyderabad Metropolitan Development Authority, HMDA which also makes mention of peri-urban. She mentioned that peri-urban agriculture was found to be mentioned in National Urban development strategy 2007 of Nepal. It also mentioned the features of National Water Plan 2012 and National Action Plan on Climate change. The presentation ended with a detailed work plan for 2016.

Day 3

Review of theory of change and log-frame

The theory of change was critically reviewed based on the research insights and findings. Led by Dr. Dik every team analysed on whether the theory has been an effective guiding principle. As a team we revisited the theory of change and every aspect of the log

frame. Dr. Dik and Dr. Philippus Wester took the lead and the theory of change was revised based on the experiences in the last two years. Dr. Dik took the initiative and by the end of the day he reworked on the log frame, after deliberating with the team.

Revisiting the workplan

The entire team was divided into three groups to work on the three activity heads of Knowledge and Research, Development and Capacity Building. Each team was to prepare a workplan for that head for 2016. At the end presentation was made by each of the team to the remaining members.

DAY 4

Field visit to Peddpapur, Edthanur and Chitkul villages was made to interact with the community and to observe the ground level problems. While Peddapur village is more rural in character, Chitkul and Edthanur have more urban influence. The nature of conflict also varies between these two villages. Water transfer through HMWSSB (water service provider for the city and its peripheries) pipeline is a bone of contention between the villagers and the nearby municipality. While for Chitkul dumping of the industrial waste on the Nakkavagu river is the source of conflict across villagers, industries and the local government.

A meeting of team members with the Sarpanch and the village locals (which includes the village elders, women and farmers) of Peddapur was organised at the Panchayat Office. The meeting discussed issues of water scarcity and the difficulties faced by the farming community,

which was shared by the villagers. Sarpanch mentioned the initiatives that were taken by the Panchayat in ensuring drinking water security in the village. The medium and big landholders present in the meeting shared the issues of high input costs in terms of labour which was exacerbated by government schemes that are employing labours at a higher rate per unit time. They also raised concern of the presence of HMWSSB filter plant in the village, which has not been supplying water to the village itself. From the interest shown by the team members the villagers shared the entire history of negotiations and dialogue exchanges with HMWSSB for the provision of drinking water. The team raised few questions to the women groups over the dynamics of water fetching from the filter plant. The meeting ended with a vote of thanks by Mr. Venu Gopal, Field Associate, SaciWATERs.

The meeting was followed by a visit to a local farm that uses waste water for irrigation and a meeting with members from Scheduled Caste, SC at SC colony. The meeting saw attendance of a small group of men and women who shared the difficulties faced in fetching water from the filter plant, and over the laying of bore well adjacent to the waste water channel that has contaminated the water. This community who are *patta* holders of land adjacent to the canal mentioned how uncertain rainfalls and drying up of canal has led to lands being left fallow, and how agriculture has turned into a secondary activity. This was followed by a visit to the filter plant, wherein a tour of the plant was made to understand its functioning. The team members made a short discussion with the workers who mentioned the shutting down of plant in the near future as the reservoirs have dried up.

After a short meeting at SC colony a visit was made to Ippalagadda Thanda. The team got an opportunity to interact with the women who were in queue to fetch water from a common standpost. They shared the issue of erratic drinking water supply and objectionable quality of ground water. A visit was also made to an open well in the village, which has been unused for years because of heavy pollution from the nearby industries. Post this visit was made to Turkam cheruvu in Edthanur. This surface body is an example of drought hit water body that has completely run dry due to climate variability and encroachment of water inlets. This was followed by team lunch.

Post lunch the team visited Pedda cheruvu in Chitkul village and Nakkavagu stream along the Outer Ring Road to get a visual feel of pollution in the water due to the release of industrial effluents. With this the day 4 came to an end.

Day 5

Each team member shared his or her insights and learning's from the field trip. The two major issues that the team observed were water shortages and contestations, and severe pollution due to industrialization. This was followed by overview of the action points from the last 5 days of the workshop.

Self-assessment

SWOT analysis was done to assess the strengths and weaknesses of each country team while looking for potential opportunities. The common strength observed across all the teams was strong linkage with the stakeholders, team resilience and skilled staff. While team Bangladesh

and India mentioned that convergence with other projects has been another big strength. For the entire project the strengths that have emerged from the analysis are Increased sharing of understanding / finding common ground in conceptual and theoretical issues, Mutual guidance and support, Strong composition as team (background; experience, age, gender), Regional coordination, Networking skills and network building, history of the partnership; continuity in theme, study sites etc. Weaknesses observed were lack of coordination and communication: periodic meetings (countries, activity groups), and lack of common framework and understanding of the relations between knowledge, development and capacity building.

More exchanges with CCMCC projects; cooperation with other research projects from e.g. NWO etc., Seeking new conferences, panel, publication opportunities (e.g. Water Forum), Influence policies on climate change, water and peri-urban areas were the potential opportunities that the team came out with in the analysis. The session ended with a detailed discussion of tackling the weaknesses that were observed within each team and also across the entire project.

Closing note

The workshop ended with learning's and experiences from each of the team members present. Dr. Dik ended the workshop with a vote of thanks.