URAdapt

Managing Water at the Urban-Rural Interface: The key to climate change resilient cities

REPORT

URAdapt Accra Fourth Re-SAP Meeting.

Tuesday, May 31st, 2011

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Coconut Grove Regency Hotel, Accra

1. Welcome Remarks and Overview of Project

The meeting commenced at 9.30am with an opening prayer by Enoch Ofosu of MWRWH-Water Directorate. Dr. Liqa Raschid-Sally welcomed all participants to the meeting and introduced Joan Baxter; a feature development writer of IDRC who has been engaged to do a profile write-up for the project as it had been identified as one of the flagship projects by the donor. She then went through the agenda for the meeting indicating that more emphasis would be placed on research updates and project impacts.

Dr. Raschid-Sally proceeded with a brief update of the project. Most of the work done so far had focused on the technical aspects of the project, i.e. Climate Downscaling and the Hydrological Modeling in order to understand potential impacts on the city and its water sources. There had however not been much attention paid to the impacts on specific vulnerable groups and the socioeconomic aspects which influence resilience and adaptation capacity. This meeting would focus on those areas and address them accordingly.

She then touched on the issue of applying outcome mapping as a tool for participatory evaluation of the project, which was discussed at a previous meeting by Dr. Philip Amoah. She indicated that at the end of the last meeting, it was clear that our understanding of how outcome mapping fitted into the project framework was still insufficient. Therefore this meeting would provide another opportunity for Dr. Amoah to explain the concept better, using the results from the questionnaires administered at the last meeting. This would enable participants understand better, how the concept was being incorporated into the project framework.

She further indicated that the time was right for the group to have a common understanding of what the impact of the project really means and this aspect would be addressed in the programme. This was necessitated by the assertions made by many of the participants at the previous meeting, concerning how their contributions to the project could be translated and incorporated at the institutional, regional and national levels.

Dr. Raschid-Sally concluded by introducing Mr. N. Dokurugu of NADMO as chairperson for the morning session of the meeting. He in turn invited Dr. Raschid-Sally for the first morning presentation.

2. Research Update

Dr. Raschid-Sally's presentation was on urban vulnerability and resilience to water mediated climate impacts. The presentation would cover working definitions, and move onto developing a vulnerability assessment framework and an exposure risk map for Accra which would identify hotspots of vulnerability. These would in turn serve as cases for more detailed study. Dr. Raschid-Sally noted that

the importance of having an analytical framework for understanding vulnerability was to assist with identifying recommendations that would be translated into implementable actions at city level, and for policy level interventions.

According to Dr. Raschid-Sally, literature on the concept of vulnerability of cities indicates three schools of thought; climate scientists look at vulnerability from the angle of identifying hazards, planners and policy makers focus on city characteristics that determine susceptibility of cities to climate change, and economists who focus on economic consequences of adaptation measures when addressing vulnerability. There was however a lack of focus on quantitative assessment of climate change which the project seeks to address.

Vulnerability therefore as defined within the conceptual framework would refer to the product of the exposure of people or systems to the impacts of climate change which is influenced by the constraints they face in being able to reduce or minimize this exposure, and their sensitivity and resilience. Sensitivity would mean the degree to which a system is affected; and resilience the amount of change that a system can undergo without changing its original state. This is influenced by physical, social and environmental factors.

The objective of assessing vulnerability within the conceptual framework was to identify and assess the vulnerability of systems and groups within cities, in order to propose adaptation responses that needed to be addressed through both policy and city level interventions. This can be viewed from the broader perspective of systems, where the whole city or the larger environment can be affected as well as from narrower perspective of individuals and groups where poor people in legal or illegal areas are more affected than other groups.

In order to understand and deal with urban vulnerability to climate change, a mapping of risk exposure areas in Accra was carried out followed by ground-truthing. This was to assess the vulnerability of the areas especially to flooding as there was no single map showing this. As a guide, factors considered were the locality's susceptibility to flood, sanitation level or service quality and water supply service quality. Through a combination of these factors, new high exposure areas were identified which were classified as extremely high exposure risk under normal circumstances, high exposure risk at normal circumstances and high exposure risk under extreme circumstances (longer rainfall durations).

According to Dr. Raschid-Sally, there were some limitations to the study. The visits to the areas were reconnaissance visits and as such quality of results depended on knowledge of people met and therefore not really uniform across the sites. The ground-truthing exercise applied rapid assessment techniques by interviewing key informants, so no statistical validations were intended. Additionally, different data sources described different administrative boundaries for the districts in Accra making it difficult to confirm which is official. Lastly the selection of the 12 communities was based on the first exposure risk map. This map was based on low quality data. Therefore, it could be that some areas have wrongly been excluded from the fieldwork.

Dr. Raschid-Sally concluded by indicating that, seven localities were at a very high exposure risk for climate change effects and therefore very vulnerable and that projects to decrease Accra's vulnerability to climate change should focus on these seven most exposed areas.

The chairman, Mr Dokurugu thanked Dr. Raschid-Sally for her insightful presentation and called on Felix Agyei Amakye from the Institute of Local and Government Studies (ILGS) for the second presentation.
Felix Amakye's presentation was on an ongoing as yet incomplete research on Community Adaptation to Climate Change - Building Resilience to Flooding Risk and Vulnerability which was the follow up activity to the Vulnerability analysis presented earlier. In his presentation he focused on the methodology that was being applied and some preliminary findings.

By way of introduction, he referred to the report of Working Group 1 of the Intergovernmental Panel on Climate Change which asserts an anticipated climate change leading to a possible increase in both frequency and intensity of extreme weather events, such as hurricanes, floods and droughts. He remarked on the fact that urban flooding is a crucial developmental challenge facing community members and decision makers. This is because flooding has dire consequences on the socio-economic activities of the communities as well as the health of individuals and could lead to displacement, spread of diseases, damage of assets and properties, low income generation, high cost of living, loss of lives, etc.

According to him, the real issues have to do with what community members, governments (both local and national) and institutions are doing to address flooding problems and how decisions should eb made: whether there should be migration from flood prone areas or an adaptation to minimize the risks. Understanding this would help form a proactive attitude of strengthening people and communities to be resilient thereby reducing the degree of vulnerability towards floods.

To achieve this, the objective would be to explore, through a systems analysis perspective, the experiences of communities in flood prone areas of Accra, the conditions of exposure and vulnerabilities to flooding, poor sanitation and inadequate water supply, to collate narratives of the coping mechanisms adopted by the communities in flood prone areas, extract from the coping mechanisms the actions adopted that enhance their adaptation and resilience to flood risk and allied vulnerabilities, examine the effects of community cohesion and adaptation to flood risk and determine the perceived responsiveness of public (local and / or central government) interventions to flooding vulnerability.

There would be research questions which would facilitate the achievement of the objectives. These questions would be based on factors and conditions that enable high risk and vulnerable communities in flood-prone areas to build and sustain their resilience to perennial flooding events. Methodology to be engaged in would be literature review, selection of flood prone communities, observation, semi-structured interviews, FGDs and institutional study.

The expected outputs would be a research report presenting findings, policy brief on building community resilience against climate change-induced flooding and a case study monograph on

adaptation and resilience to climate change based on community flood experiences. The expected outcome would contribute to (1) influencing behavior of community to minimize human settlement contributions to flooding risks, (2) enhancing the knowledge of communities in climate change & flooding and their impact on water and sanitation and livelihood, (3) empowering local governments in mitigating flooding risks through a better understanding of issues that prepare them for pro-active settlement planning and management, and (4) building the cohesiveness of the community as a tool for self-help projects for reducing the risks of flooding.

Felix Amakye concluded by elucidating some of the conditions necessary for flooding as resulting from the location of the communities, lack of proper drainage and poor household solutions. He again made reference to preliminary findings which espoused the views of people affected by floods.

The chairman thanked Felix Agyei Amakye and requested comments and questions from participants.
Enoch Ofosu of Ministry of Water Resources Works and Housing (MWRWH-Water Directorate) wanted clarification on the actual causes of flooding as there was some ambiguity about the effects of climate change and activities of people causing floods.

Daniel Ayivie of the Town and Country Planning Department of the Greater Accra Region (TCPD-GAR) wondered if the research questions address reasons why people live in flood prone areas. He again wanted clarification on whether there was a link between flooding and the issue of land value asking if land values in locations like Nima or old Fadama were low.

Felix Amakye answered by explaining that climate change was not the only causative factor of flooding. Human activities, he noted, can cause flooding. He agreed that awareness of communities to climate change is necessary for adapting to and mitigating flooding issues. He also agreed with the land value issue but was however quick to add that the research sought to find out all these issues and as such did not want to pre-empt the outcome of the research.

Delali Nutsukpo of the Ministry of Food and Agriculture (MoFA) asked a more general question on whether the URAdapt research was going to look at the causes of increasing frequency of flood and suggested an investigation into the extent to which it is exacerbated by climate change. He also suggested from an agricultural perspective, that this was an opportunity to investigate responses to scarcity which is also prevalent in the country. He also raised the important issue of who would be responsible for the achievement of the outcomes.

Ebenezer Allotey of the Hydrological Service Department (HSD) noted that some of the areas considered such as Gbegbeyisa, are originally in low-lying areas, and valleys and as such are prone to flooding. He suggested that though they might have good drainage, the least downpour causes flooding and that the backwater effects are non-negligible in some instances. It was therefore imperative to include institutions and ministries responsible for infrastructural development in the country.

Dr. Elaine Lawson of the University of Ghana (UG) wanted to find out what sampling method was used in the selection. She wanted clarification on how gender issues were going to be factored in the analysis of results. George Owusu of ISSER, UG commented on the objectives of the study and advised that they should be better reflected in the research questions. He also suggested the inclusion of traditional leaders as a source of information.

Dr. Barnabas Amisiogo of CSIR-WRI shared his view on climate change. He explained that climate change compounds existing stresses the country faces. The problems are not exclusively due to climate change but climate change exacerbates the problems. The platform therefore seeks to brainstorm on how to cope with the impacts of climate change.

Edith Clarke of Ghana Health Service (GHS) also commented on Dr. Raschid-Sally's presentation. She found the presentation very interesting, especially the illustration on how qualitative environmental data contributes to the various determinants of vulnerability. She wanted to know how the vulnerabilities expressed were being translated into impacts. She was particularly interested in the health impacts, considering the problem of sanitation and water availabity in most areas. She made suggestions to the effect that a sort of map to linking diarrhoeal disease to the vulnerable areas will go a long way to enable GHS to proactively control diseases in the event of outbreaks. She would be happy to engage with the research team on this.

Dr. Raschid-Sally explained that, the current project does not concentrate on the health impacts as it is a complex area. However another "sister project" by the Regional Institute of Population Studies of the University of Ghana focuses on the health impact issues. She suggested discussions with the project members for more information. She added that the development of the sanitation burden model to some extent addresses health issues.

Sean Doolan of DFID made an observation that, climate change compounds issues and not necessarily causes them. He also commented on the difficulty in accessing data and wanted to know whether the project had a database for all data sets. Dr. Raschid-Sally indicated that data sets from all the work done were available for future access. She posited that there were plans to have a compilation of data sets at one place. The universities were also custodians of information which could be accessed and shared.

Dr. Busia Dawuni of Ghana Irrigation Department Authority (GIDA) was interested in the extent of collaboration of institutions towards adopting recommendations of the project findings in their organizational framework. He suggested finding out how targeted institutions are implementing project finding to serve as a guide for future activities. Dr. Raschid-Sally asserted that, organizing meetings such as this one, to update participants on information available and on research impacts is part of the process of knowledge sharing and stakeholder feedback. She alluded to the fact that, such seminars are attended by representatives of these institutions whose contributions are integral to the success of the project. She also expressed the hope that pertinent information would not be left on shelves at the various institutions but would be shared with higher levels within the organization, and would empower platform members in their decision making.

Mr. Dokurugu thanked all for their participation and recommendations. The first session came to an end with participants proceeding on a tea break. The second session began with the introduction of Dr. Barnabas Amisigo of CSIR-WRI as the facilitator. He in turn introduced Dr. Philip Amoah of IWMI Ghana to make a presentation on the results of outcome mapping.

3. Results Impact

Dr. Amoah's presentation focussed on the analysis of results of the questionnaire marking progress on the outcomes, that had been filled at previous meetings. According to him, the exercise was important to determine whether the project was on course to achieve its mission and vision. It also showed participants view on progress made by the project from its inception meeting in February 2010to the meeting in December 2010.

A total of 18 questionnaires were filled out of the 25 administered. 10 stakeholders filled the questionnaires both at the inception and the meeting in December 2010. This made for easier comparison to assess progress made on the platform. 8 members filled the questionnaire in December only, indicating that those people were not present at the first meeting. He indicated that although participants gave positive rating for the progress indicators, there was still room for improvement on project progress in meeting its targets. He also stressed on the importance of descriptive reasons for the rating which would allow the project evaluator to interpret the information.

Dr. Amoah showed that at the inception of the project in February, rating for project evolution, and platform's reflection on the goals, and inclusion of relevant stakeholders was very low. This he explained was due to the fact that there had not been any explanations given to the platform members on the intent behind the questions at the time. However with improved understanding of the purpose of the exercise, participants rating indicated a general improvement, especially on the "like to see" indicators. Reasons for this included participants view that stakeholders play an active role and this is evident in all activities of the project, activities engaged in are in line with the goals, presence of stakeholders in all programs and the inclusion of more stakeholders.

The second progress marker concerned the issue of identifying tasks of the research policy platform and agreeing on the modus operandi, whiles setting target achievements for the platform as a whole and for members. Participants rated low at inception but indicated improvement in December. Their perception was based on reasons that there had been some improvements in monitoring the attainment of targets, that stakeholders are now involved in the decision-making processes around issues, and the view that though some assessment had been done more could be done.

On the issue of the platform together with the project team developing scenarios linking urbanization, water resources management and climate change, the rating at inception was low. In December, participants indicated progress. The reasons attributed by participants included the view that climate change issues had been included in the meeting's agenda and there had been improvement in water

management. Others were skeptical and gave reasons to the effect that the project was still at a basic level, and that the scenarios were yet to be developed. Dr. Amoah intimated that the URAdapt team had to do more to inform platform members on scenarios.

On the progress marker concerning the platform's development of a strategic plan for adapting to climate change through water resources management, rating at inception was low but there had been some progress made in December, though still low. Some reasons for this according to participants were that scenarios and strategic plans had not yet been done, some claimed not to have seen the plan yet and outcome of the platform not yet clarified. He indicated that some of the answers showed a lack of understanding of the platform's goals and the process, which needed to be addressed.

On the issue of strategic plan being presented to key policy and decision makers during policy roundtables for recommendations, rating at inception was very low. Although participants indicated some progress made as at December, the rating was not too good. Participant's low rating was due to reasons such as: this had not been done yet, no knowledge of any plans, no knowledge of any key policy makers and no knowledge of any meetings.

On the issue of members of the platform continuously conveying messages between their respective organizations and the platform, rating was very high. There were various suggestions and explanations given such as: that the activity did not exist, no messages were received, progress depends on intensity of communication, channels were unclear; on the plus side, inter-sectoral coordination was seen as being part of the project from inception.

On the issue of members meeting regularly to share experiences and review progress on the implementation of strategies identified by the platform, the rating was high at inception and moderate in December. Explanations given were that more regular meetings were necessary and the gap between meetings was long. If members could commit more time from their daily activities, they felt they could do better.

On stakeholder organizations on the platform incorporating some of the adaptation recommendations, the rating was low. Dr. Amoah explained that this would be better understood at the end of the project when recommendations are made and platform members would incorporate into their plans.

On vulnerable groups having access to information, and as a result, being better positioned to contribute towards decision-making, rating was low with the reasons that the platform was still in its early stages. Again there had been improvement in public education. Dr. Amoah wondered if this could be solely attributed to the platform.

On URAdapt outputs supporting Accra, Addis Ababa and other Africa cities in making informed decisions to build urban resilience, Dr. Amoah opined that this would be more evident at the end of the project. The rating was therefore low.

On cities enjoying climate change resilient water-based services, Dr. Amoah was again of the opinion that would be achieved at the end of the project. The rating was also low for this progress indicator.
Dr. Amoah concluded by soliciting conclusions and recommendations from the platform members.

Ms. Esi Biney from the Water Resources Commission (WRC) commented that communication is vital. She recommended that the team should come together to develop a comprehensive communication strategy, that would keep all members informed and updated on all issues.

Mr. B.K. Addo of the Regional Coordinating Council of the Greater Accra Metropolitan Assembly (GAMA RCC) was of the opinion that, the same platform members should be present at all meetings. This would ensure some level of consistency and regular updates at all times. He again re-emphasized the need for articulating the goals of the team to ensure adherence to guidelines.

Dr. Claudious Chikozho of IWMI Ghana recommended that progress markers should be quantitatively expressed. This would help platform members to better judge the progress of the platform.

Ms. Edith Clarke of GHS suggested that some practical examples of the progress indicators should be provided to enable participants understand better. She also suggested that indicators should be broken down to sub-details.

Dr. Raschid-Sally commented on the issue of holding regular meetings and the lack of continuity in the attendance. She felt that the members had to make more of an effort in this. She also touched on the process and approach for higher level influence. She felt that it's time for the platform with the team members to start thinking about the approach and how to push for more influence and policy implementation.

Mr. K.Y. Oppong-Boadi of the Environmental Protection Agency (EPA) suggested including questions on climate change activities being carried out by other projects. Dr. Amoah explained that the project does consider what other projects are doing. The platform however has its own vision and mission which it has set progress markers to achieve. Dr. Raschid-Sally wanted clarification from Mr. Oppong-Boadi on whether some other activities have taken place that the project can contribute to. Mr. Oppong-Boadi answered in the affirmative by stating that there are other activities like climate change adaptation strategy for Ghana being drafted and also development of policy briefs for cabinet by African Development Program. Dr. Raschid-Sally referred to the point of the role of platform. According to her, platform members have been identified to give advice to the platform which in turn develops briefs for policy influencing. It was therefore imperative that knowledgeable people are invited to contribute to the project.

The Chairman thanked all participants for their contributions. Dr. Claudious Chikozho was invited for his presentation on Understanding Project Uptake. He commenced with an introduction on the paradigm shift from implementing research and development projects guided by mainstream processes of Rigid Log frame Approach to one of Uptake.

He explained uptake as the process of actual adoption and application of research and development outputs by targeted beneficiaries as policy-makers, government officials, communities, NGOs, Extension Officers, research organizations, etc. According to him, it is important to know the dynamics of why end-users would take up outputs. He explained that, project members had to come up with relevant and novel solutions that addressed the real-felt needs on the ground.

According to him, the fundamental principles and approaches to understanding project uptake include defining the challenge with potential end-users through a participatory approach, analysing the socio-economic context and mapping key stakeholders and institutions to determine real targets and knowing your end-users and their needs through listening and learning. It also included the use of animators/facilitators (at community levels), initial training to ensure basic competencies and knowledge of project objectives, regular 2-way communication to ensure momentum, planning to directly engage key players early on and throughout, being clear about purpose of engaging the public so as not to raise unrealistic expectations and approaching project design and implementation as a social learning process and not linear top-down technology transfer process.

He explained further that, indicators of uptake would include widespread adoption of technologies and innovative approaches emanating from the project; requests for more copies and/or reprints of published outputs; incorporation of project recommendations in policy documents; invitations to speak and/or advise locally, nationally and beyond; Public debate and correspondence stimulated by disseminated outputs from the project.

Some challenges in understanding project uptake include the problem of policy-makers emphasizing political expedience and disregarding scientific evidence, short time-frames of projects leaving limited room for uptake activities, knowing limitations and seeking strategic partnerships or using consultants, identifying and creating appropriate dialogue platforms and the issue of finding funding for these types of activities.

In conclusion Dr. Chikozho pointed out that uptake strategies stand a better chance of success if they are conceived simultaneously with the projects that they support and not as a substitute for effective project formulation and implementation. The uptake agenda must therefore be in support of projects that address development priorities of the day. He indicated that failure to consider all these may lead to brilliant options being disregarded and not being implemented by the end users.

Mr. Delali Nutsukpo started by expressing his pleasure at the presentation. He went ahead to comment on relating the presentation to progress markers. He suggested relating livelihood and the progress markers.

Mr. Felix Adjei Amakye commented on managing community expectations. He agreed with the point and suggested that as much as possible, realistic expectations should be set.

Mr. B.K. Addo hoped that their expectations on the outcome mapping would be revisited to clarify any misconceptions.

Mr. K.Y. Oppong-Boadi also agreed with the assertion of developing realistic objectives to meet expectations of the community. He saw it a necessary guide for project developers when setting objectives for community development projects. He again expressed his satisfaction with the presentation.

Dr. Barnabas Amisigo reiterated the need for the project to identify the target beneficiaries and select the most knowledgeable people to make vital contributions. He also stressed on the need to get beneficiaries and platform member's involvement in all activities relating to a project.

The chairman thanked Dr. Chikozho for his comprehensive presentation. Dr. Raschid-Sally was called upon for the closing remarks.

4. Closing Remarks

Dr. Raschid-Sally wrapped up by first referring to the importance of learning and how best to use information from the platform. She said it had helped in investigating causes and establishing links on climate change issues. She commented on the good suggestion made on the subject of vulnerability and how she and Felix Amakye would look critically at them for use. On the issue of livelihoods, she stressed that it was an integral component of resilience and included in the questionnaires.

She again commented on how enlightening the discussions on outcome mapping had been. She noted three very important aspects from the discussions ie the importance of communication by the platform members which required more meetings and interactions, importance of the self assessment tools used by the platform to monitor progress made, and the discussion on how to influence policy makers for implementation.

Finally, she commented on the best strategies for achieving the objectives of the project. She referred to uptake strategy and how its fundamental principles are essential food for thought. With regard to the way forward, she suggested the platform members start thinking of the best uptake strategies to be adopted at different levels. Also it is expected that recommendations would be used by city authorities.

Dr. Raschid-Sally apologised to participants for the posting their telephone numbers and email addresses on the web and asked for permission for Joan Baxter to use photos from the meeting in her write up. She thanked everyone for their participation and contributions towards the project. Mr. Enoch Ofosu was called upon to give the final prayers.

List of Participants

No	NAME	ORGANISATION/ LOCATION
1	Fred Logah	WRI
2	Naambuyi Dokurugu	National Disaster Management Organization (NADMO)
3	Sean Doolan	DFID/ Netherlands Embassy
4	Solomon Tetteh	Great Thinkers Club
5	Esi Esoun Biney	Water Resources Commission
7	Felix Amakye	Institute of Local Government Studies (ILGS)
8	Elaine T. Lawson	IESS - University of Ghana
9	Eugene Amoako	Ghana Irrigation Development Authority
10	Busia Dawuni	Ghana Irrigation Development Authority
11	Ebenezer Allotey	Hydrological Services Department
12	Edith Clarke	Ghana Health Service
13	K. Y. Oppong-Boadi	Environmental Protection Agency
14	G. Nii Teiko Tagoe	GAMADA-AMA
15	Hans Koranteng	Accra Metropolitan Assembly (AMA)
16	Enoch Ofosu	Ministry of Water Resources Works and Housing
17	A. Amartefio	Ministry of Food and Agriculture (MOFA)/AMA
18	George Owusu	ISSER, University of Ghana
19	Daniel Ayivie	TCPC - GAR
20	Joan Baxter	IDRC
21	George Freduah	ILGS
22	B. K. Addo	Greater Accra Regional Coordinating Council
23	Joseph Otoo	AMA
24	Delali Nutsukpo	MOFA
25	Stephen E.D. Ackon	ASIP
26	Lucky Worgbah	WMD Drain Unit
27	Seidu Benjamin	NADMO-AMA
28	Eunice Agyarko-Mintah	MOFA - AMA
29	Liqa Raschid-Sally	International Water Management Institute (IWMI)
30	Barnabas Amisigo	CSIR-WRI
31	Edmund Kyei Akoto-Danso	IWMI
32	Claudious Chikozho	IWMI
33	Diana Owusu	IWMI
34	Philip Amoah	IWMI