

Governance of Climate Adaptation and Disaster Risk Reduction

in Vulnerable Low-Lying Countries



Participatory planning process



advancing human security and social justice



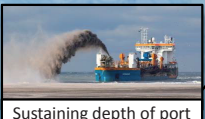
Improved port access and flow of goods



Expansion of quays and port industrial zone



Restoration of urban ecosystems and flood buffers



Sustaining depth of port access channel



Urban expansion in flood resilient areas



Resilient housing and urban services in flood prone areas



Enhancing coastal defence



World Water Week, Stockholm
Monday 24 August 2015
14:00-15:30 hours
Room FH202

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Vulnerable low-lying coastal countries have a high percentage of their GDP and livelihoods closely affiliated with climate-sensitive economic factors, such as agriculture and livestock, fisheries, natural protection and tourism. Their economies are thus vulnerable to climate change. To sustainably develop their economies, adapt to climate change, and reduce disaster risk, the integration of climate adaptation into mainstream planning and decision-making is crucial. In achieving this, the development of effective governance arrangements in a participatory process can play an important role.

Six exemplary cases from vulnerable low-lying coastal countries; Mozambique, Indonesia, Vietnam, Bangladesh and Zanzibar are presented in which climate change impacts have the potential to undermine and even undo progress in development.

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In collaboration with:

An international knowledge-driven network organization with the mission of improving the resilience of the world's deltas.



Climate proofing and Master-planning: the case of Beira, Mozambique

Beira is the second largest city in Mozambique located in the delta of the Pungue River, at the entrance of an important transport corridor. According to recent studies, Beira is seriously threatened by climate change. The city is just a few metres above average sea level and a clear adaptation strategy is required to provide enduring protection against water related problems: floods, coastal erosion and salt water intrusion. Beira needs to make sure that it has adequate and safe water supplies in the future. The increasing demand for water will affect the Pungue river and the delta. In addition, changes are needed to the drainage and sewage systems to prevent flooding. Spatial developments need to be addressed. Earlier municipal plans in Beira have not been implemented due to financial constraints and lack of support, enforcement and implementation capacity.

A consortium led by Deltares developed the Masterplan Beira 2035 (2014) in cooperation with the municipality of Beira (CMB) and local stakeholders. To facilitate the actual implementation of the Masterplan, special attention was given in the process to the acceptance and involvement of the stakeholders of the masterplan as well as to the financial and governance arrangements for the implementation. Integrated participatory planning played a



crucial role in this. Through the establishment of a so-called Land Development Company (LDC) the implementation and financial capacity will be strengthened as.

The pitch will further elaborate on the participatory planning process and on how the LDC will be implemented and how this intervention responds to most of the governance challenges identified.

Flood protection and National Capital Integrated Coastal Development (NCICD) in Jakarta

One of the biggest challenges for the future of the National Capital of Indonesia is to protect its 10 million inhabitants and fast growing economy against increasing flood risks due to a fast subsiding street level. The northern part of Jakarta is expected to subside up to 5 meters below sea level in 2050 and 7 meters in 2080. The National Capital Integrated Coastal Development program (NCICD) provides an integrated approach to address this challenge. Flood protection, improved sanitation and water supply, improved connectivity and sustainable community development are included in the development of the metropolitan coastal area; Key conditions for further sustainable economic development of Indonesia's national capital.





NCICD –started in 2013 - is in transition from Master Planning (which was just delivered) to Implementation. The implementation of the program creates substantial funding, organizational and governance needs over a period of 20 - 30 years.

Effective institutional arrangements and capacities must be developed to ensure a sustainable delivery of the program. NCICD is a 50 billion US\$ mega infrastructural and urban development challenge in which flood infrastructure is completely integrated. The concept is unique in the sense that it aims on a private sector share of more than 70%, whilst the government is in the lead, keeps main responsibility and is accountable.

In other delta cities in the world it is common that when government invests in and realizes the flood safety infrastructure, other urban development and economic investments will follow. Because of the uniqueness of the program, its approach, funding structure and risk profile it needs a unique institutional setup and organization structure. A combined Public-Private institutional set-up will be implemented after careful assessment of similar projects and governance arrangements worldwide. Part of that approach is to pay attention to the development of capacities and a solid knowledge base at individual, organizational and institutional levels.

The pitch will elaborate further on the institutional requirements and setup and particularly on the knowledge management aspects of the NCICD organization. Aspects are participation of Indonesian knowledge partners, development and implementation of a knowledge management system based on the principles of a learning organization.

The Mekong Delta Plan 2013

The Mekong delta has faced a period of tremendous agricultural growth since American War, yet stagnant economic growth and service sector that lags far behind. The vulnerability of the system is increasing due to untenable agriculture and fish farming practice, loss of water retention area, salinization, high rate groundwater extraction, subsidence, upstream dam construction and climate change.

A Dutch consortium led by Royal Haskoning DHV developed the Mekong Delta Plan (MDP) presented in 2013, a long term vision and strategy for a safe, prosperous and sustainable delta. The MDP required a willingness to address strategic socio economic planning and spatial and water resource management in a collaborative and holistic way. MDP presents a vision to use the comparative advantages of the delta and focus on agro-business industrialization. MDP offers an assessment framework for government, donors and international financial institutions for moving from planning to implementation.

Setting up a coordinating body at interprovincial level would be essential and could facilitate effective funneling of resources of investments. It is recognized that to set up the new institutional arrangement under de MDP the orientation of the existing government policies and the institutional framework for the agricultural sector must change.



The pitch will elaborate on challenges to get from plans to implementations and recommendations to improve institutional arrangements. What lessons can be learnt from the process of the MDP for other deltas? What are points of attention in the planning phase to enable smooth implementation? What are general characteristics of effective institutional arrangements and how can these be implemented in the Mekong?



Bangladesh Delta Plan 2100: a holistic, long-term, vision-based plan for the Bangladesh Delta



Bangladesh is the largest delta of the world. Its rivers and floodplains, which make up 80% of the country, support life, livelihoods and the economy. Bangladesh is a rapidly developing country, envisaging to be a middle-income country in 2021. The country faces major inter-related delta challenges in water safety, food security and socio-economic development and is prone to natural calamities such as floods, cyclones, and droughts.

An international consortium led by Twynstra Gudde is formulating the Bangladesh Delta Plan (BDP) to be finalized in 2016. BDP addresses the challenges by developing a long term holistic delta vision, adaptive strategy and implementation plan. These will act as a framework for new governmental policy, thereby supporting the integration of existing sectoral development plans. At the same time the plan aims to provide anchorage for on-going projects and no-regret measures to delta challenges in the short term. The plan will consist of national strategies for drought and flood manage-



ment, and regional approaches for the main river system, coast and estuaries. In addition an institutional framework for delta planning, including a delta fund and act, is in the process of being developed.

Lessons learnt so far are first the need to match the existing well-developed planning processes, which build on the strength of each sector, with the flexible and adaptive integrated planning process. Second the need to devote adequate resources and time to joint development of a sound knowledge base and prioritization framework for measures at the short, medium and long term.

The pitch will elaborate on the replicability of Adaptive Delta Management (ADM), the concept that is underlying the development of Delta plans in the Bangladesh, Vietnam and the Netherlands. To which extent are scenarios, assessment framework, adaptive plans and the focus on national and hot spots (regional) strategies applicable for other deltas?

A second point that will be elaborated in the pitch is the replicability of methods in deltas in general. The ADM, based on the Dutch Delta program and the Assessment approach, developed by the Delta Alliance, are examples.

Participation in Climate Adaptation, Long An Province, Vietnam

People living in the villages and cities of Long An are under serious threat from the impacts of climate change, including river floods, salt water intrusion, water scarcity, droughts and water pollution. The same can be said about socio-economic development and ecosystems in the province. The pilot project 'Participation in Climate Adaptation, funded by the governments of Vietnam and the Netherlands, developed an integrated and community-based climate change adaptation strategy for the Lower Vam Co River Basin in Long An province. It offers decision makers and stakeholders of Long An province a clear implementation framework for climate-resilient and sustainable development in the pilot area in the next decades. The pilot area is located between the Mekong Delta and Ho Chi Minh City (HCMC). Hence, the bottom-up strategy development needed to be fine-tuned in parallel with top-down policy and visions, such as the Mekong Delta Plan and the HCMC Flood Management Program.

The consortium was led by Water Partner Foundation, in close collaboration with Long An province, and with support from Deltares, IVM and CESTE.



The strategy development is based on a **comprehensive approach for full-scale and meaningful participation** of relevant stakeholders at provincial, district, and commune levels, supported by innovative participation methods in combination with advanced decision support tools. The pilot project demonstrated the added value of applying a participative planning process to integrate different interests and spatial challenges into one single strategy.

The participatory planning process took into account the Vietnamese culture and context. In 6 multi-stakeholder dialogues, more than 200 representatives of organizations at provincial, district and commune levels contributed to a series of design sessions to arrive at a common understanding of problems, causes, solutions and development of strategy components. The pilot project shows that advanced planning and facilitation methods such as Group Model Building (GMB) and highly-interactive forms of learning are possible, if properly embedded, initiated and facilitated.

The **participative planning process** involved local actors to ensure that their priorities and the challenges they face in reducing climate risks are effectively addressed. Local experiences are key to developing an **adaptation strategy tailor-made** for the local geography, hydrology, ecology, economy and culture. As such, effective participation, learning based on local knowledge and integration play a crucial role in the **implementation of adaptive delta management (ADM)**, since all stakeholders have relevant



experience, knowledge and information that ultimately will inform and improve the quality of the planning process as well as any actions that (may) result. By bringing together stakeholders, the project enhanced levels of trust between them, contributed to capacity building, generated commitment and ownership with key stakeholders, jointly produced and shared knowledge and information, and generated consensus-based solutions and relevant good practices.

The pitch will elaborate on the replicability of ADM in non-Western cultures, on multi-level governance challenges, on trust and confidence building measures, and on effective stakeholder participation, learning, and integration.

Governance of Climate Adaptation in Small Island Developing States: Zanzibar

Small Island Developing States (SIDS) such as Zanzibar are vulnerable to sea level rise due to their small land masses, concentration of populations, and high dependence on the coastal ecosystems for food, livelihood, security, and protection against extreme events. At the same time, their adaptation capacity is often lacking. In Zanzibar, this lack of adaptation capacity at the international level includes the capacity to access international climate financing, to participate effectively in international negotiations, and to implement climate-related policies. At the national and local level, there is a lack of capacity in advance information management and integration cooperation structures, in climate-related technical expertise and awareness, in mainstreaming climate change into sectoral planning, and in facilitating stakeholder participation.

A consortium led by The Hague Institute for Global Justice, together with its partner Deltares and the Department of Environment in Zanzibar aims to contribute to sustainable economic development, climate change adaptation and disaster risk reduction (DRR) in Zanzibar through developing effective governance arrangements in a participatory process. By doing so, it will support the




implementation of the Zanzibar Climate Change Strategy. A comparative assessment of frontrunner case studies, such as Fiji and Barbados, will be used to draw lessons on the governance of climate adaptation and DRR, and to enable mutual learning and reflection.

The project identified the following key governance challenges for climate adaptation and DRR:

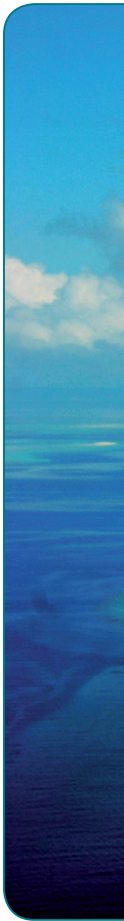
- Tensions among economic sectors, such as agriculture, livestock, fisheries, tourism, extractive industry, coastal protection and nature protection.
- Tensions and disputes among land owners are on the rise due to forced (seasonal) relocation.
- While poverty remains prevalent, climate change impacts have the potential to undermine and even reverse social and economic development.
- Awareness of climate change and its impacts on livelihoods is low among stakeholders.
- Adaptation capacity within the government is limited (financial resources and know-how).

The project is ongoing, but lessons learnt so far:

- Solutions are not always complex but need to be implemented in an integrated approach involving all relevant stakeholders, in order to ensure social justice and human security

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- Sound adaptation can lead to multiple-win situation for all. Interests of different sectors can be compatible as issue linkages are important.
 - Seeking consent is far more realistic and productive than seeking full consensus.
 - Awareness raising is important, both among the general public and the policy-makers
 - Perceived legitimacy at the community level and political commitment at the highest governmental level can be created through participatory planning processes.

The way forward:

- Implementation of local climate change adaptation plans tailored to communities' specific needs and vulnerabilities.
 - Consolidation of commitment and ownership at multiple levels of governance.
 - Capacity building of organizations to be involved in adaptation.
 - Peer-to-peer knowledge and experience exchange among SIDS.
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