

D. 4.5: Twin2Go Policy Workshops Report

Twin2Go Coordinating twinning partnerships towards more
Adaptive governance in river basins

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1 Introduction and Summary

A key goal of Twin2Go was the effective dissemination of research results, policy lessons learnt and recommendations to policy and decision makers. In order to achieve this, a series of dialogue workshops was organised back-to-back with important water conferences and meetings relevant to the Twin2Go target regions. This approach ensured a high level of participation and helped reach a broad base of policy and decisions makers as well as practitioners. During the policy workshops Twin2Go presented results and policy lessons drawn from comparative research, expert consultations, and analysis. Panel discussions and interaction with the audience facilitated an exchange of insights from research and practical experience on questions such as:

- how a water governance system should be designed in order to be able to cope with complexity and uncertainty;
- how approaches can be transferable across different basins and governance levels;
- how transition towards adaptive water governance can be included in existing policy processes.

Side-event at UNECE Water Convention Workshop

The first in the series of policy workshops took place on 13 April 2011, in the context of the 2nd Workshop on Water and Adaptation to Climate Change in Transboundary Basins, hosted by the UNECE (United Nations Economic Commission for Europe) Water Convention in Geneva. Given the UNECE Water Convention Secretariat's involvement in this region, this workshop specifically focussed on the Twin2Go target region of Russia and the New Independent States (NIS). More than 30 participants and four panellists shared views on the different opportunities and barriers in introducing and implementing more adaptive water governance practices. In speaking about obstacles the panellists stressed the importance of institutional resistance to change, as well as other cultural issues such as perceived value of water. In terms of opportunities the panel stressed the importance of education and scientific input for adaptive governance.

Co-located workshop at the Singapore International Water Week

In order to reach an audience with a South and South East Asian focus, Twin2Go organised the second policy workshop as a co-located event at the Singapore International Water Week on 4 July 2011. The panel included speakers from the Departments of Water Resources in Thailand and in Assam, India; the Water and Energy Commission Secretariat in Nepal; and the Centre of Sustainable Water Resources Development and Adaptation to Climate Change in Vietnam. Together with more than 25 workshop participants, they discussed policies and programmes that can support

the transition towards more adaptive water governance at the local, provincial, national and transboundary levels as well as the specific national framework conditions influencing this process.

Twin2Go seminar at the World Water Week in Stockholm

On 25 August 2011, the third in the series of Twin2Go policy workshops took place at the Stockholm World Water Week. Twin2Go collaborated with members of its Advisory Board, namely the Global Water System Project (GWSP), the Global Water Partnership (GWP), and UNESCO's International Hydrological Programme (IHP) to set up and host the event. The seminar titled *"Governing Water Wisely: Adaptive Approaches to Water Resources Management"* attracted more than 60 international participants. Together with the panel speakers – who represented transboundary river basin organisations (RBOs), international organisations, national governments, and NGOs – the participants discussed barriers and opportunities for introducing more adaptive governance approaches, the importance of coordinated action, and policy programmes to support transition in water governance.

Twin2Go Africa Policy Workshop

The fourth and last in the series of Twin2Go policy workshops took place on 14 September 2011, back-to-back with the 9th GWP-Southern Africa Consulting Partners Meeting, held in Gauteng, South Africa. This enabled Twin2Go to share and discuss the project's policy lessons and recommendations with more than 45 delegates representing Country Water Partnerships from Southern Africa as well as RBOs and regional GWP programmes. A panel discussion with speakers from national governments, academia, and RBOs discussed how improved coordination and innovative ways of dealing with uncertainties can be implemented in practice. This discussion was followed by a working group session to review and discuss Twin2Go's recommendations for the transfer and implementation of better practices in water governance.

2 Side-event at UNECE Water Convention Workshop

The first in the series of policy workshops took place on 13 April 2011, in the context of the 2nd Workshop on Water and Adaptation to Climate Change in Transboundary Basins, hosted by the UNECE Water Convention in Geneva. For this workshop, Twin2Go collaborated closely with the UNECE Water Convention Secretariat which is also a member of the Twin2Go Advisory Board.

2.1 The UNECE Workshop

The UNECE Water Convention's Second Workshop on Water and Adaptation to Climate Change in Transboundary Basins: Challenges, Progress and Lessons Learnt was organised on 12 and 13 April 2011, in Geneva, Switzerland. It brought together countries and other stakeholders engaged in activities on water and adaptation to climate change, in particular in transboundary basins, with the aim to:

- Exchange practical experience and share lessons-learnt on the technical and strategic aspects of adapting to climate change;
- Analyse the specific challenges of adapting water management to climate change in the transboundary context, identify best practices, success factors and lessons learnt; considering the different steps of developing an adaptation strategy: from the assessment of impacts and vulnerability to the selection of measures;
- Exchange experience between the pilot projects on adaptation to climate change in transboundary basins under the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) as well as other similar initiatives;
- Support governments, organizations and joint bodies engaged in the process of preparing national or regional adaptation strategies;
- Promote and discuss the implementation of the UNECE Guidance on Water and Adaptation to Climate Change.

The workshop was the second one organised on this theme in the framework of the UNECE Water Convention within its platform for exchanging experience on adaptation to climate change in the transboundary context. It built on the results of the previous workshop and illustrated recent developments in this area. Please see the UNECE website¹ for the programme and participants list of the UNECE workshop.

2.2 The Twin2Go side event

Given the UNECE Water Conventions broad involvement in Eastern Europe, Caucasus, and Central Asia (EECCA), the workshop especially attracted participants from this region and therefore provided a unique opportunity to target policy and decision makers from the Twin2Go target region of Russia and the New Independent States (NIS). Twin2Go thus organised a side event titled *“Making water resources management more adaptive – Opportunities and barriers for implementation”* at the UNECE workshop on 13 April 2011.

Annika Kramer, adelphi, presented the most recent Twin2Go results in the plenary of the UNECE workshop (see the UNECE website² for the presentation). The Twin2Go side event then allowed to discuss these in more detail. Four eminent speakers from Russia and the NIS were then invited to comment on the Twin2Go results and to share their experience. The following speakers were invited on the panel:

- Mr. Georgy Fomenko, Director, Institute “Cadastr”, Member of the Science & Technology Council of the Ministry for Natural Resources and Environment, Russian Federation
- Ms. Elena Ostrovskaya, lecturer in Environmental Policy at UNESCO-IHE Institute for Water Education, The Netherlands
- Mr. Mykola Babych, Deputy Head of the State Committee of Ukraine for Water Management
- Ms. Irina Gromova, Director of Quality and Management Development at the Cherepovets branch of PhosAgro, Russian Federation

The panel discussion started with an input statement of each of the panellists that was introduced with some guiding questions. This was followed by a facilitated panel discussion and finally an open discussion with the audience. The discussion was held in Russian with simultaneous translation to English. Please see Annex 1 for the detailed programme of the session, including CVs of the panellists.

¹ http://live.unece.org/env/water/meetings/transboundary_climate_adaptation_workshop.html

² http://live.unece.org/fileadmin/DAM/env/water/meetings/Water.and.Climate/transboundary_adaptation_workshop/Presentations/Kramer_Twin_2_go.pdf

2.3 Summary of the discussion

2.3.1 Panellists' input statements

Mr Gyorgy Fomenko

In his input statement, Mr Fomenko stressed that policies and programmes to promote river basin management and adaptation should incorporate harmonisation with international legislation and standards, implementation of best practices in legislation and introduction of mechanisms to involve businesses in the processes. He further pointed out that ecological hazards can be a trigger for new policy initiatives. For instance, after the drought and big fires that Moscow had to face in 2010, it became clear that more financing for adaptation programmes were necessary.

However, he underlined that there are some significant challenges in harmonisation with international standards. These could be observed, e.g. within the framework of becoming a member of the OECD, where the transformation process was hampered by the institutional memory and resistance to change of organisations that have been existing for a long time. With regards to the barriers to transfer of legal practices from one country to another he further pointed out the importance of cultural norms, such as e.g. the perceived value of water, and the tradition of self-governance and public participation. These may differ considerably from one country to another and therefore need to be taken into account when transferring governance practices.

Ms Elena Ostrovskaya

Elena Ostrovskaya of UNESCO-IHE, first explained that to her understanding adaptive governance is guided by learning by doing; it is an integrated process where diversity and flexibility play a crucial role, and that requires a combination of top-down and bottom-up approaches. The role of education and the role of science are therefore growing under conditions of adaptive governance. According to her experience from projects dealing with development of institutions and organisations, there is often a lack of understanding among managers and decision makers with regards to environmental issues in general and climate change adaptation in particular. In the next ten years education should be key in order to promote adaptation in water resources management. New knowledge is needed as to how water resources are changed under climate change. UNESCO-IHE therefore offers several courses on climate change and water resources, and on river basins management. Furthermore, science cooperation between developed and developing countries should be promoted in order to develop capacities for climate change adaptation in developing countries.

Mr Mykola Babych

Mykola Babaych started his input statement with explaining the approaches to water resources management and climate change adaptation in the Ukraine. In the Ukraine, the main challenge and therefore the main goal of water-related policies, legislation and management strategies is to retain the spring floods in order to provide water in the dry summer months through the operation of 40,000 small reservoirs and over 1,000 dams. However, the floods that the Ukraine had to face in the years 2000 and 2008 forced water resources management to increasingly consider flood prevention. Consequently, models have been developed to assess the impacts of climate change on water resources and river flows and to establish early warning systems. Other initiatives such as introducing economic instruments and ecosystem-based approaches to flood prevention have been considered to some extent, but have faced barriers of acceptance. The argument towards more ecosystem-based approaches should be made based on the economic benefits that these approaches can bring. Therefore, awareness raising campaigns have been started in the Ukraine.

Ms Irina Gromova

Ms Irina Gromova in her input statement provided insights on private sector experience in introducing environmental measures and transferring international environmental best practices to the Russian context. She underlined that the private sector should be considered as a partner in developing and introducing better environmental practices. There is considerable potential for partnerships between research and industry: while universities and research organisation can provide the scientific input to developing new solutions and approaches, the private sector can provide financial resources and practical experiences. Research should increasingly involve private sector representatives to ensure practical relevance and feasibility of implementation. Public-private partnerships provide another opportunity for coordination of environmental activities of the industrial and other sectors

2.3.2 Open discussion

The input statements were followed by a facilitated panel discussion and questions from the audience. The following topics were discussed:

- **Coordination:** Horizontal coordination, i.e. coordination across sectors relevant to water resources management, might be easier to achieve at lower levels of administration. In Russia, for example, it has been observed that coordination at the ministerial level is not taking place as effectively as for instance in local level partnerships in smaller river basins.

- **Establishment of river basin organisations:** It is sometimes difficult to transfer across countries. In the Ukraine, for example, in the 1990s there were initiatives that aimed at introducing river basin management agencies based on the French model. These initiatives were however not successful. Still, today, Ukraine has found its own approach to implement the river basin principle and has established river basin councils in four out of five basins. In order for participatory approaches to work, there is also a need for development of the civil society in order for it to be ready to be pro-actively involved in water resources management. In general, in establishing new organisations in water resources management sufficient time needs to be given to allow for full development of its functions.
- **Transfer of best practices in water governance:** Transfer of so called best practices should not be taken as a goal in itself. The initial goals behind introducing new practices in water resources governance, such as the aim to improve water quality or provide water services more efficiently, need always to be kept in mind.

3 Co-located workshop at the Singapore International Water Week

In order to reach an audience with a South and South East Asian focus, Twin2Go organised the second policy workshop as a co-located workshop at the Singapore International Water Week on 4 July 2011.

3.1 The Singapore International Water Week

The Singapore International Water Week (SIWW) brings together policy makers, industry leaders, experts and practitioners to address challenges, showcase technologies, discover opportunities and celebrate achievements in the water domain. The SIWW comprises of flagship programmes including: Lee Kuan Yew Water Prize, Water Leaders Summit, Water Convention, Water Expo, and Business Forums. The Water Convention provides a platform for water professionals and academics to share experiences, through oral and poster presentations as well as so called “Hot Issues” Workshops. The themes and topics in the Water Convention are designed specifically to examine trends and challenges faced by Asia-Pacific and the Middle East regions. The SIWW 2011, held from 4 – 8 July and themed “*Sustainable Solutions for a Changing Urban Environment*” addressed the latest and most pertinent water challenges amidst a rapidly urbanising world. Recognising the impact that global population growth, increasing urbanisation and rising emerging economies have on precious resources, the focus at the SIWW 2011 went beyond urban water solutions, to include climate change and management of watersheds and river basins. The Twin2Go co-located event perfectly fitted into the SIWW “Hot Issues” Workshops programme.

3.2 The Twin2Go co-located event

In the Twin2Go session titled “Adapting to climate change – policy insights and best practices for adaptive water governance”, eminent policy makers, practitioners and researchers from South and South East Asia were invited to join in a panel discussion in order to facilitate the exchange of insights and policy lessons on adaptive water governance from comparative research and practical experience. The following speakers were invited on the panel:

- Mr Anup Kumar Mitra, Chairman, Technical Advisory Committee, Water Resources Department, Assam, India
- Mr Dao Trong Tu, Director, Centre of Sustainable Water Resources Development and Adaptation to Climate Change, Vietnam
- Mr Iswar Singh Thapa, Joint Secretary, Water and Energy Commission Secretariat, Nepal
- Ms Sukontha Aekaraj, Director, Department of Water Resources, Thailand

- Mr Louis Lebel, Director of the Unit for Social and Environmental Research, Chiang Mai University, Thailand and Twin2Go

Around 25 participants joined the workshop in the audience. Before starting the panel discussion, Louis Lebel, Chiang Mai University, presented Twin2Go's most recent results and lessons learnt (see the Twin2Go website³ for the presentation). In his presentation he explained that adaptive governance incorporates learning from past experience and accordingly adjusting policies and practices; but adaptive governance is also forward looking e.g. through early warning mechanisms. He then explained the Twin2Go approach to comparative analysis of water governance systems and presented its preliminary results with regards to adaptive governance in the context of climate change. He underlined the positive impacts for responsiveness to climate change of: polycentric governance architecture, the use of multiple economic instruments, innovative ways for dealing with uncertainties, the formalisation of IWRM and good governance principles.

The panel discussion then started with an input statement of each of the panellists, in which they shared their experience in introducing more adaptive approaches to water governance at the local, provincial, national and international level. This was followed by a facilitated panel discussion and finally an open discussion with the audience. The discussion was held in English. Please see Annex 2 for the detailed programme of the session, including CVs of the panellists.

3.3 Summary of the discussion

3.3.1 Panellists' input statements

Mr Iswar Singh Thapa

In his input statement, Mr Iswar Singh Thapa stressed the potential of IWRM as an inherently adaptive approach. IWRM should however not be considered as a fixed prescription, but as an iterative process strategically designed to suit the needs of a country based on its socio-economic and geopolitical situation. Implementing more adaptive water governance, just as implementing IWRM, requires a paradigm shift away from conventional, exclusively top-down supply-oriented and sectoral approaches. Bottom-up, integrated approaches with more coordinated decision-making across sectors and scales should be pursued in order to promote economic efficiency, social equity and environmental sustainability. More coordination is also required between disciplines in order to develop sustainable solutions and approaches to adaptation: engineering approaches need to be blended with natural and social sciences but also with indigenous knowledge.

³ <http://www.twin2go.uos.de/workshops/policy-review-workshops>

Ms Sukontha Aekaraj

Sukontha Aekaraj pointed out to the fact that adaptive water governance needs to involve many actors and stakeholders with sometimes different interests. In case these coordination tasks are to be carried out by a river basin organisation, its mandate needs to be clearly defined and leadership be ensured. It further needs to work according to a transparent strategy and formulated action plan and be equipped with sufficient resources. Another precondition for decision-making in the face of complexity and uncertainty is the existence of a database that includes data not only on the water resources but also related data on agriculture, industry, energy, and land use. This data is often not collected in a systematic manner and not available to local governments and stakeholders. In general, there is a need for developing the capacities of local governments and other actors in water resources management. This should also include knowledge from related disciplines, such as economics and social sciences.

Mr Anup Kumar Mitra

In India, the main climate change impacts are expected to result in increased frequency of floods and droughts. Anup Kumar Mitra underlined, however, that the impacts of climate change on water resources are not yet fully understood and predictable. Therefore, flexible river basin management strategies need to be developed, in these IWRM can be a suitable approach to dealing with uncertainties and complexity. With regards to climate change adaptation, the strategies and action plans to be developed in the state of Assam need to be embedded into the National Action Plan for Climate Change. Challenges in implementing such strategies correspond with general problems in implementing laws and policies in Assam. Therefore, detailed plans for implementation need to be set up, a clear allocation of tasks and responsibilities is necessary, and stakeholders, especially from the affected areas, need to be involved in decision-making.

Mr Dao Trong Tu

Mr Dao Trong Tu stressed the importance of strengthening the scientific research capacity in water and related systems for better understanding the expected changes, in particular through climate change, in the natural and river basin systems. Therefore, capacities need to be developed in human resources as well as in hydro-meteorological monitoring networks. These can then provide the basis for a national strategy as well as water governance that is able to cope with complexity in the context of climate change. Furthermore, there is a need to review the existing legal frameworks for water resources management in Vietnam, so as to better reflect the past and expected changes due to socio-economic development and climate change. A review of the legal framework should consider

increasing challenges to water resources management resulting from increasing pollution, industrialisation, urbanisation and hydropower development. It should further incorporate changes in the water governance structure so as to reduce overlap in mandates and to allow for bottom-up approaches and stakeholder participation in decision-making.

3.3.2 Open discussion

The input statements were followed by a facilitated panel discussion and questions from the audience. The following topics were discussed:

- **Conflict resolution:** Stakeholders and government authorities do not always cooperate to address the challenges in water resources management, such as the need to adapt to climate change, because of conflicting interests in water use. Therefore, it is necessary to establish some kind of resolution mechanism. Ways to promote cooperation include facilitated dialogues between stakeholders and data sharing to achieve a common understanding of the water-related challenges.
- **Stakeholder involvement:** Is of utmost importance to increase acceptance of adaptation strategies and measures. In cases of emergency that need immediate action it might however sometimes be difficult to thoroughly consult with stakeholders due to time constraints. In the Murray-Darling Basin in Australia, for example, no comprehensive consultation was undertaken to develop an emergency drought response plan. As a result, the plan was later not well accepted, and stakeholders protested against the measures foreseen. Participatory approaches further provide opportunities for community-based adaptation measures that involve stakeholder and rural communities, e.g. in the implementation, maintenance and repair of flood protection structures or in communication systems for early warning.
- **Implementing IWRM:** Implementing an integrated approach to water resources management and climate change adaptation is still challenging under the existing conditions in the countries of South and South East Asia. Barriers include: lack of cross-sectoral coordination, limited availability of data and information, insufficient human capacities and public awareness, and inadequate legal frameworks to support integrated approaches. Nepal has taken a bottom-up approach for introducing IWRM: integrated governance structures are

implemented in pilot projects at the local level with the aim to later upscale and transfer them to other basins.

- **Integrated land and water resources management (ILWRM):** There is a need to integrate the management of both land and water resources in order to adequately take into account issues of erosion, sediment transport, mitigation and impacts of floods.

4 Twin2Go seminar at the World Water Week in Stockholm

On 25 August 2011, the third in the series of Twin2Go policy workshops took place at the Stockholm World Water Week. Twin2Go collaborated with members of its Advisory Board, namely the Global Water System Project (GWSP), the Global Water Partnership (GWP) and UNESCO's International Hydrological Programme (IHP) to set up and host the event.

4.1 The Stockholm World Water Week

The World Water Week is hosted and organised by the Stockholm International Water Institute (SIWI) and takes place each year in Stockholm. The World Water Week has been the annual focal point for the globe's water issues since 1991 and provides a unique forum for the exchange of views, experiences and practices between the scientific, business, policy and civic communities. It focuses on new thinking and positive action toward water-related challenges and their impact on the world's environment, health, climate, economic and poverty reduction agendas. The perspective is global, but the context is attuned to differences and similarities between regions of the world, phases of development, political systems and climatic conditions. Each year the World Water Week addresses a particular theme to enable a deeper examination of a specific water-related topic. The theme for 2011, *"Water in an Urbanising World"*, fits within a broader "niche" that covers several years, designed to develop a long-term perspective on a broad yet significant water and development issue. The current niche for 2009-2012 is "Responding to Global Changes", which looks at the potential and necessary responses in water policy, management and development to address pervasive and increasingly impacting global changes.

4.2 The Twin2Go Seminar

The Stockholm World Water Week provided the opportunity to present Twin2Go results to a broader audience. The aim of the seminar titled *"Governing Water Wisely: Adaptive Approaches to Water Resources Management"* was to share and discuss Twin2Go's insights and to complement the picture with knowledge and experience of other initiatives such as GWSP, GWP and UNESCO-IHP. In the first part of the session, presentations were held by Twin2Go partners and members of its Advisory Board (see the SWWW website for the presentations: <http://www.worldwaterweek.org/>). Claudia Pahl-Wostl, University of Osnabrück, provided insights gained by the Twin2Go project through context-sensitive analysis of water governance systems in river basins. Elena Nikitina, EcoPolicy, presented results from the analysis of 48 best practice examples in water governance, and Annika Kramer, adelphi, presented Twin2Go policy lessons for adaptive water governance. Anil Mishra, UNESCO-IHP, held a presentation on "Adapting to the impacts of global changes on river

basin and aquifer system” and finally, Danka Thalmeinerova, GWP, gave a speech on the linkages and challenges between “Water, climate change adaptation and development”.

A panel discussion on adaptive water governance and transferability of best practices followed, moderated by Janos Bogardi, GWSP. The following speakers were invited on the panel:

- Ms Sonja Koeppel, Associate Expert in Environmental Affairs, UNECE Water Convention Secretariat
- Mr Ebenizario Chonguica, Executive Secretary, OKACOM - Okavango River Basin Commission, Botswana
- Mr Partha J. Das, Programme Head Water, Climate & Hazard (WATCH), Aaranyak Water, India
- Mr Mario López Pérez, Manager of Engineering and Technical Standards, Comisión Nacional del Agua, Mexico
- Mr Louis Lebel, Director of the Unit for Social and Environmental Research, Chiang Mai University, Thailand and Twin2Go

The panel discussion started with an input statement of each of the panellists that was introduced with some guiding questions. This was followed by an open discussion with the audience. The discussion was held in English. More than 60 participants followed the discussions. Please see Annex 3 for the detailed programme of the session, including CVs of the panellists.

4.3 Summary of the discussion

4.3.1 Panellists' input statements

Ms Sonja Koeppel

Sonja Koeppel in her input statement pointed out the specific challenges that initiatives to introduce more adaptive governance have to face in transboundary basins. First of all, adaptive governance in transboundary basins will have to be adapted to the different governance systems in the riparian countries, which can be quite diverse. Furthermore, riparian countries sometimes use different data and information for national planning, leading to different and sometimes contradicting management approaches. For example, while some of the riparians had predicted a sea level rise for the Caspian Sea, others planned with a sea level decline. Transboundary cooperation is therefore an important part of adaptive water management. The differences in governance systems and knowledge bases in riparian countries also hamper the transferability of adaptation practices. However, lessons learnt

and success factors can be transferred and knowledge exchange, e.g. through online platforms can be helpful in this regard.

Mr Ebenizario Chonguica

From his experience from the Okavango River Basin Water Commission, Ebenizario Chonguica observed a high motivation for transboundary cooperation and an enabling policy environment – but an institutional construct that is still characterised by a nationalistic approach based on the principle of sovereignty. In addition to this lack of implementation of far reaching transboundary cooperation, there is a lack of cross-sectoral coordination: in basin committees, be it on the transboundary or local level, water experts still dominate, and there are hardly any representatives from the agricultural or other relevant sectors. In southern Africa, adaptive approaches to transboundary management are further hampered by limited ability to manage risks. Planning does not take into account long time horizons, e.g. with regards to recurrence of extreme weather events.

Mr Partha J. Das

Mr Partha J. Das underlined that the main challenges in introducing more adaptive governance approaches at the local level exist in the conventional top-down approach of planning and implementing adaptation and water resources management measures. National and state-level policies should provide for adequate delegation of power, responsibility and financial support to local governance agencies, while assuring accountability, transparency and efficiency of the use of resources. Insufficient community participation results in a lack of ownership and consequently implementation. Community involvement also helps to prevent that management practices are chosen that are not in line with existing cultural norms and traditions. Moreover, it provides access to indigenous knowledge, which often reveals intelligent water resources management and adaptation options. Opportunities for introducing more adaptive approaches to water governance exist in linking adaptation measures and programmes to multiple socio-economic development objectives such as enhanced livelihoods and water security.

Mr Mario López Pérez

Focussing on the Mexican experience Mario Lopez Perez underlined that the rather polycentric water governance regime that has been established in Mexico has been helpful in promoting an adaptive approach to water governance. In Mexico, for example, the goals for river basin management are developed by the basin organisations together with relevant stakeholders, allowing for the necessary balance between bottom-up and top-down approaches. This polycentric regime however, requires clear and strong institutional arrangements supported by clear regulations, decrees, or agreements

and well defined implementing procedures. Further adaptive capacity of the governance structures needs to be supported by comprehensive capacity building programmes, including trainings that target officials at all levels of government as well as the public. Capacity building in its first steps also includes generation of knowledge on vulnerabilities and economic valuation of adaptation measures, but should go beyond that so as to finally promote adaptive approaches including learning cycles.

Mr Louis Lebel

Louis Lebel underlined the importance of developing and adopting innovative ways to dealing with uncertainties as one important aspect of adaptive water governance. This should include different types of uncertainties including about hydro-meteorological parameters, the effects of policies and interventions, and even normative uncertainties. Innovative ways for dealing with uncertainties include exploration and use of flexible water resources management options and an emphasis on soft rather than hard solutions. Soft solutions, such as institutional or financial tools including insurance or compensation, are easier to adjust to changing circumstances than large-scale physical infrastructure. Other important ways of dealing with uncertainties include formal monitoring and review of policy and deliberative processes to reduce normative uncertainties.

4.3.2 Open discussion

- No general prescriptions can be made, how deliberative processes in support of adaptive governance should be designed. One lesson learnt is that informal actor networks can play important roles in transition processes. Building on existing structures can be very helpful. This also applies to transfer of other practices in water governance, apart from deliberative processes.
- Education plays an important role in promoting more adaptive water governance. International programmes such as the UNESCO-IHE can play an important role in developing capacities in this regards.
- Implementation of more adaptive governance practices at the local level requires collaborative efforts between formal governance agencies, local communities, experts from various disciplines and media. At the transboundary level it requires involvement of various relevant national organisations and stakeholders. Precondition for collaborative approaches are dialogue interventions to resolve contradictory views and if necessary modification of measures and programmes.

5 Twin2Go Africa Policy Workshop

The fourth and last in the series of Twin2Go policy workshops took place on 14 September 2011, back-to-back with the 9th GWP-Southern Africa Consulting Partners Meeting, held in Gauteng, South Africa.

5.1 The 9th GWP-Southern Africa Consulting Partners Meeting

The 9th Global Water Partnership - Southern Africa (GWP-SA) Consulting Partners Meeting was held on 13th and 14th September 2011. The biannual GWP-SA Consulting Partners Meeting brings together the GWP Partners in Southern Africa to address both governance and programmatic matters of the regional partnership. The Consulting Partners include Country Water Partnership coordinators and chairs, which represent national ministries, water authorities and research organisations from twelve member countries. The meeting presents an opportunity for partners to reflect on the IWRM work being done at regional and country level and is also used as a capacity development platform to share knowledge and build and strengthen strategic alliances with other organisations and initiatives. For the programmatic session of this year's Consulting Partners Meeting, GWP-SA has partnered with the Twin2Go project, which has contributed to the adaptive water management aspects of the programme. Please see Annex 4 for the official invitation to the joint event.

5.2 The Twin2Go sessions

The GWP-SA Consulting Partners Meeting provided an excellent opportunity for Twin2Go to share and discuss its results with around 45 policy and decision makers from African countries. The Twin2Go session was divided into two parts. In the first part of the session, Annika Kramer, adelphi, presented the methods and results of the Twin2Go analysis of governance systems in 29 basins around the world. The results were then discussed by a panel with eminent speakers and the audience, facilitated by Palle Lindgaard-Jorgensen, DHI. The following speakers were invited on the panel:

- Maria Amakali, Deputy Director: Water Environment, Department of Water Affairs and Forestry, Namibia
- Sabine Stuart-Hill, University of KwaZulu Natal, South Africa
- Jeffer Sakupwany, Pungwe Basin Transboundary Integrated Water Resources Management and Development Programme, Mozambique

- Lenka Thamae, Executive Secretary, Orange-Senqu River Commission (ORASECOM) Secretariat, South Africa

The second part of the session was organised as a working group session to receive direct feedback on the Twin2Go recommendations for transfer and implementation of better practices in water governance. The session was facilitated by Annika Kramer, adelphi, and started with a presentation by Palle Lindgaard-Jorgensen on the Twin2Go analysis of best practices and recommendations drawn.

Please see Annex 4 for the detailed programme of the session. The Twin2Go presentations are available for download at <http://www.twin2go.uos.de/workshops/policy-review-workshops>.

5.3 Summary of the discussions

5.3.1 Panellists' input statements

Ms Maria Amakali

Maria Amakali pointed out to the importance of national water policies as the cornerstone of water resources management. However, developing national policies is a lengthy process and the conditions for water resources may in the meantime change. Therefore, there should be room to revise national policies, and/or they should be formulated in a more general and flexible manner. In Namibia, it is very difficult to ensure sustainability given the uncertainties associated with hydrological and hydrogeological systems. Water resource management in the Namibian context is, above all, an exercise in risk management, thus flexibility in policies is key. While national policies can provide guidance in water resources management, targeted tools and measures need to be developed. In Namibia, the existing uncertainties and risks are addressed through for example: real and near real-time monitoring, conjunctive water use, enhanced recharge, aquifer-storage-recovery and source protection, and above all a strong focus on water demand management so as to reduce vulnerability.

Ms Sabine Stuart-Hill

Sabine Stuart-Hill in her input statement underlined that water resources management does not have to adapt to climate change or change, but its impacts and feedbacks within the socio-ecological system. A useful approach therefore exists in the concept of vulnerability. Several African countries have recently begun transforming their water governance with the aim to reduce vulnerability through promoting sustainable and equitable use of water resources as well as decentralised and

participatory approaches to water resources management. There are however often problems in the implementation of these governance reforms. Reasons for slow or missing implementation include: lack in human capacities due to high staff turnover, limited understanding of new legislation and unclear responsibilities. The transformation of water governance needs a consolidation period in order to overcome these barriers – in spite of the problems, achievements should not be abandoned hastily. Research has shown for example, that catchment management agencies (CMAs) in South Africa provide suitable space for negotiations, innovation and learning, and provide opportunities to enhance knowledge and understanding of uncertainties. Despite the hurdles in the implementation process the CMA approach should thus not be abandoned.

Mr Jeffer Sakupwany

In responding to the Twin2Go recommendations on adaptive governance systems, Jeffer Sakupwany pointed out that there are several barriers to implementing a polycentric governance architecture: first of all it requires a clear division of roles and responsibilities and a common understanding of how decentralised decision-making should take place. The distribution of responsibilities clearly needs to be accompanied by capacity development, especially for the local authorities. A polycentric water governance architecture further requires effective coordination across sectors and across different levels of administration. For this, the water sector should take advantage of existing coordination structures and interventions that exist on other topics. Mechanisms of coordination could for example take the form of working groups that are created on specific issues. Good communication is an important prerequisite for coordination and should therefore be improved as a first step towards more effective coordination.

Mr Lenka Thamae

Referring to the experiences from the Orange-Senqu River, Lenka Thamae underlined that a first step to dealing with uncertainties is to establish a common understanding of the basin and the resource basis. In this assessment it is also important to define the geographical scale, as water uses and discharges might take place outside the catchment area. A common understanding of the resource base can then serve as basis for developing responses to climate change. Modelling and scenario exercises are helpful in developing water resources management strategies in the context of climate change. Furthermore, coordination plays an important role. In the Orange-Senqu basin, the need for coordination across administrative levels includes coordination between the existing bilateral cooperation mechanisms on the one hand, and the basin scale agreement including the ORASECOM on the other. Another important aspect of coordination is the need for coordination between different sources of financing. Donor coordination is an important aspect here. In the

Orange-Senqu basin, innovative financing sources for water-saving measures have been identified in the form of a public private partnership with Sasol New Energy.

5.3.2 Open discussion

- Effective coordination is often based on coordination and communication on a personal level, between the key role-players.
- International cooperation projects that require or introduce a coordinated planning approach can serve as an entry point to promote coordinated planning also in other cases.
- In coordination with stakeholders, the existing asymmetries with regards to access to knowledge and information, as well as power need to be taken into account. In order to ensure effective participation in decision-making, there is a need to level the playing field, otherwise the outcome might not reflect the actual stakeholder needs. Furthermore opening the space for stakeholder participation also entails some risks for integrity, for example if powerful stakeholders dominate decision-making.
- When opening the space for stakeholder participation, it has to be made sure that the stakeholder decisions and recommendations are actually taken up and translated into implementation and obligations. In South Africa for example, some of the catchment management agencies have already developed catchment management strategies. However, the approval of these strategies through the ministry is delayed. This creates frustration with the stakeholders.
- A balance has to be found between flexible management approaches, such as regular revision of management plans, water allocation, etc. on the one hand, and predictability on the other.

5.3.3 Working Group Session

In the working group session, participants were asked to provide feedback to the Twin2Go recommendations on transfer and implementation of better practices in water governance, by responding to the following questions:

- **Comments:** Do these recommendations reflect the most important aspects in view of the goal they are aimed to achieve? What other aspects/recommendations are important? Any other comments on the recommendations?
- **Who:** Which actors in water management (including e.g. government agencies at different levels, river basin organisations, non-governmental organisations, local communities, international donors, and research organisations) does this recommendation particularly refer to?
- **How:** How can these recommendations be put into practice? What are successful examples?

The participants were divided into four working groups and asked to fill prepared worksheets to answer these questions for selected sets of recommendations. Facilitators and rapporteurs had been appointed for each working group in advance. The rapporteurs presented the working groups' results to the plenary for further discussion. Please see Annex 4 for the instructions and filled worksheets of the working groups.

In general, the working groups agreed to the overall goals and to most of the recommendations except for the one to "create interim institutions to support embedding of better practice" (Goal 2, (recommendation 5)). The participants further amended the existing recommendation with details or additional recommendations.

The working groups could in most cases identify the organisational level and in some cases also the specific type of organisation who should implement the recommendation. This however would often depend on who introduces or implements the water governance practice. The participants further provided examples from Africa and in particular southern Africa on how the recommendations had been or could be put into practice.

6 Conclusions

The Twin2Go Policy Workshops provided excellent opportunities to disseminate the most recent Twin2Go results and to discuss ways of their translation into policy and implementation. All four workshops generated great interest among the participants of the respective international meetings and conferences, which they were attached to. All four workshops achieved very good participation, in numbers as well as in relevance of participants for the target group of policy and decision makers.

While the discussions did not strictly focus on adaptive water governance, they provided valuable insights on issues around water governance, adaptation of water resources management to climate change, implementation of better practices in water governance and transferability of approaches. In conclusion, it can be stated that the concept of adaptive water governance is not yet well established among many policy and decision makers in water resources management. Nevertheless, the discussions mostly confirmed the Twin2Go findings on adaptive water governance, for example with regards to the importance of coordination, bottom-up approaches, capacity development, and the need for governance approaches that are adapted to the environmental and socio-economic context. In establishing the link between these factors and adaptive water governance, the Twin2Go Policy Workshops thus initiated dialogue on adaptive water governance between research and policy and contributed to disseminating and raising awareness of this rather new concept.