



Draft

Lessoned Learned in Transboundary Water Management

The following are the lessons learned derived from the Workshop Experiences from Latin America and the Caribbean in Good Practices of International Waters (Mexico Workshop) held in March 09. Other workshops in Asia and Africa will add and enhance the list.

Lesson Learned	Location and context	Issue
Governance is an over-riding issue and needs to adapt to multi-level and multi-scale realities of resource. Can use a network approach	Caribbean LME Complex jurisdictional, institutional, geopolitical constraints	No overall fisheries commission possible.
Resource and national institutions should drive governance structure. Governance structure should be a balance of necessity and practicality.	Caribbean LME Complex jurisdictional, institutional, geopolitical constraints	Because of the complexity of institutional bodies it was not possible to develop a single coherent governing structure that all countries would agree to. Nor was it necessarily desirable.
Information sharing and gathering should be determined by decision-making needs (active adaptive management)	Caribbean LME Transactional costs of maintaining commissions, and conducting research can be enormous.	A lot of money and time can be spent obtaining information which is ultimately not necessary for better management.
Build from the ground up. Agreements should focus on functional necessity. There was no need for large framework agreement – rather information sharing and some localised cross border management done.	Guarani Aquifer System Groundwater system shared by Brazil, Uruguay, Argentina and Paraguay.	Initial move was to create a large framework agreement for management. But it was deemed unnecessary at the current time.
Integration in other sectors can help ‘leverage’ cooperation in groundwater.	Guarani Aquifer System There are many towns which are across the border form one another and pump water from the aquifer system.	Integration from trade and commerce, family ties, across the border has helped leverage cooperation in the water sector. (example: Brazil-Uruguay)
The process of greater integration and cooperation can stimulate action at the local level (despite no overall framework for management). There has been the development	Guarani Aquifer System No framework agreements exists for cooperative management, yet cross border management on a localised level occurs were	The Guarani Steering Committee is composed of politicians, diplomats and technical personnel. They have been successful in facilitating cooperation at a

Lesson Learned	Location and context	Issue
of bi-lateral local commissions.	needed.	local level.
Information should be gathered and used to help facilitate decision-making for actions (active adaptive management) - the GIS system developed for Guarani could be expanded to look at climate change, socio-economic development etc.	Guarani Aquifer System There was a focus to develop information system to look at specific characteristics of the aquifer.	Groundwater is a poorly understood resource by most people and education was needed. Effort was placed on understanding the resource through scientific means based on the needs of GW management.
Education of decision makers and stakeholders is important. Scientific knowledge regarding how groundwater functions. Use of media to reach larger stakeholders.	Guarani Aquifer System There were many misconceptions regarding groundwater. So called 'Hydro-myths'.	GW extractions are often very localised and affect only a limited area.
Look for opportunities to use existing legal mechanisms to assist with promoting cooperation.	Guarani Aquifer System The countries are all part of the La Plata Basin Agreement which is more developed	There is a possibility to integrate the Guarani aquifer work into the La Plata Agreement, also the La Plata is building relations to a regional economic agreement -MERCOSUR.
Education of decision makers and stakeholders is important. Scientific knowledge regarding combined sewage effects.	Caribbean Islands IWCAM Promote watershed and coastal management in individual islands	Control of LBSMP is seen as localised problem – difficult to develop 'common' approach.
Education of decision makers is important. – preparation of a legal tool kit to facilitate understanding of How to ratify Cartagena Convention	Caribbean Islands IWCAM Many different islands states with different legal structures and different line agencies responsible.	Complex legal systems and difficult to get agreement for CARICOM.
Information should be used to help facilitate decision-making for actions (active adaptive management)	Caribbean Islands Project There is a reluctance to share specific information regarding coastal pollution for instance.	There is sensitivity regarding how information is used as it is seen as potentially harming tourism locally.
Actions need to address local / national interests – Use of local level demonstration projects.	Caribbean Islands Project Individual states do not necessarily see the benefit of collective action.	Often it is not clear to decision makers how international cooperation can deliver at local levels
Being part of a regional entity may help access mechanisms to solve internal/local issues.	Caribbean Islands Project Individual states do not necessarily see the benefit	Often
Unilateral initiatives can be	Pantanal & Upper	It may be difficult to develop



Lesson Learned	Location and context	Issue
expanded to international cooperation. In this case Brazil initiated activities and will now include others in follow up projects.	Paraguay Large wetlands between Bolivia/Paraguay/Brazil	cooperation between 3 countries if the needs are not clear. Unilateral actions can show the need for international cooperation.
Neutral parties, NGOs with research interests and credibility, can assist in developing linkages between stakeholders, institutions and across borders.	Pantanal & Upper Paraguay A very complex institutional situation, made more complex when dealing with institutions in other countries.	There were problems with respect to information exchange between Brazilian institutions involved, and also with institutions across the border.
Include stakeholders in development of strategies and planning. Many stakeholders brought in to develop TDA, choose pilot projects etc. Project now 'owned' by a variety of institutions.	Pantanal & Upper Paraguay There are a variety of stakeholder groups and interests (mining to fishing)	There are many users of the waters, indigenous communities, fishers, miners, municipalities, etc. Balancing various views was difficult.
Develop smaller sub-areas or pilot projects. This will also help with building trust and capacity.	Pantanal & Upper Paraguay It is an enormous area to cover geographically -	The geographic area and populations are enormous within the Pantanal.
Information should be used to help facilitate decision-making for actions (active adaptive management).	Pantanal & Upper Paraguay It was very complex institutionally, with different mandates for different actors.	With many institutions, both governmental, NGO and private, focussing on their own interests it was important to develop focus.
Look outside only the water (or marine) sector to build incentives for cooperation.	Artibonite River Basin Haiti and Dominican Republic have different levels of development and different goals.	In simply dealing with issues related to water use it may be very difficult for the two countries to agree. Haiti needs energy and agriculture and DR is interested in security and environment.
Neutral parties, can help manage and promote international projects. In this case an NGO with projects on both side of the border. Must be technically competent and trusted.	Artibonite River Basin There is a difference in capacity to undertake project management and projects.	The difference in relative capacity to undertake sub-projects and manage the overall project may give too much control to one state.
Neutral parties, can help manage and promote international projects. In this case an NGO with projects on	Artibonite River Basin There is often a high turnover of decision-makers and thus a loss of continuity.	It is difficult to maintain continuity when there is high turnover of decision-makers and government staff. 'One

Lesson Learned	Location and context	Issue
both side of the border.		step forward and two back’.
Use existing institutions which are functioning to help facilitate dialogue. In this case the Technical Institution Group for desertification has worked well over three governments to look at deforestation issues.	Artibonite River Basin There exists and old agreement – but it is not used. There is also a bi-national commission for economics, trade, relations etc.; but it is not working well.	The existing institutions which are likely mandated to undertake the work are not functioning well. They may be over worked. In this case the bi-national commission.
Use neutral parties to manage, undertake managerial responsibilities. In the case of NGOs, costs of research and managerial costs can be kept low.	Artibonite River Basin There is little national capacity to undertake the costs of research or monitoring and enforcement of any project or agreement.	One or more of the countries cannot undertake the agreed duties or responsibilities within a project or agreement. The project or agreement may fail.
Information sharing can help build trust.	Mexico-US There is a long history of water use conflict between the US and Mexico, however, the IBWC has been able to focus on cooperation.	Information sharing is well refined, and only joint studies are undertaken by the International Boundary and Water Commission.
Technical approaches and expertise can help drive cooperation. Even the Minutes of the Joint Commission are based on scientific validation.	Mexico-US They deal with very complex systems ranging from salinity, water quality, quantity, etc. And there are conflicts between stakeholders.	Issues that arise within the 1944 Treaty are generally dealt with using technical task forces.
Flexibility in the Treaty and for decision making can help maintain adaptable water use. The Treaty depends on Minutes of the Joint Commission which allow for adaptive decision making.	Mexico-US The 1944 Treaty has been functioning for over 60 years and has seen a variety of situations.	The Treaty is very flexible in its use of Minutes to allow larger changes to cross border policy. While the Minutes are not binding, they hold political weight and have been generally followed.
You don’t need to formalise issues that don’t need formalisation. The Minutes have worked to date. At what point do they need formalising?	Mexico-US Decisions of the IBWC are not binding on the two states. Will they be able to adapt to future issues related to climate change?	There is concern that the Minutes from the IBWC are not binding and that they should be. There is other concern that states will not want to place decision power over ‘national’ resources in the hands of a joint commission.
Many issues may be domestic and should be addressed	Mexico-US Some issues, such as	Often some of the issues are purely local and domestic,



Lesson Learned	Location and context	Issue
locally, but should support regional cooperation.	adequate storage, are local issues.	such as development of sufficient storage capacity. However, even local issues can be approached with regional cooperation in mind.
Water can be a focal point for promoting integration in other areas.	Mexico-US There are US and Mexican towns across from each other on the different rivers.	Management of the water, the rivers, irrigation etc. has allowed greater integration to take place.
Greater integration between states (trade, power others) will help stability for water issues.	Mexico-US There has been generally a sense of cooperation when solving water resource problems.	While there has been conflict over water use it has been solved, for the most part, in a cooperative manner for over 6 decades.
Values and social issues will change over time and need to be addressed – either through flexibility in the agreement or with greater stakeholder input.	Mexico-US IBWC and its technical committee are generally engineers.	The problems that are addressed are primarily technical in nature. Times have evolved and more social issues need to be incorporated into the decision-making process. There is very limited stakeholder input.
Greater effort is needed to integrate gender issues into management process.	Water-Gender issues In many places most water or marine development continues without integration of women.	Simply including a certain number of women in the decision-making does not mean women's issues have been considered.
Find legitimate entry points for women to be included, and respected, in the decision-making process. (this extends to freshwater as well as marine sectors).	Water-Gender Issues In the example of Costa-Rica Panama local marine development, women were included in policy development.	While the main persons affected are fishermen (men) women are important in bringing fish to market, processing, and responsibility for wider social issues.
Application of the Bank policy poses challenges in the application and needs to be tailored to the country and indigenous communities concerned.	Indigenous Communities Indigenous communities hold a special status in terms of consultation with World Bank Projects	The World Bank reconciles the results of consultations of indigenous peoples in transboundary projects with different institutional frameworks and needs, and incorporate them into implementable measures that ensure that harms are mitigated and/or benefits accrue in a culturally appropriate manner.
When national capacity is not sufficient or there is no	Costa Rica/Panama Local communities and	Local communities and NGOs have been developing



Lesson Learned	Location and context	Issue
incentive, local communities and NGOs can develop projects with transboundary implications. Build from the ground up.	NGOs active in developing sustainable management in Gulfo Dulce	community fishing policy with implications for conservation across the border.
Unilateral initiatives can be expanded to international cooperation.	Costa Rica/Panama Costa Rica initiated the projects and is extending activities now to include Panama.	It was too complex to initially address transboundary work at a local community level.
Neutral parties can help manage and promote international projects. In this case an NGO with projects on both side of the border. Must be technically competent and trusted.	Costa Rica/Panama Local communities and NGOs active in developing sustainable management in Gulfo Dulce	NGOs have been facilitating the interchange of information across the border, as well as conducting monitoring.
Local stakeholders can be important sources of information and also assist the implementation of management goals.	Costa Rica/Panama Local communities are key in managing the resource	In many cases national ministries do not have the capacity to do all the work. Local communities and NGOs can assist with monitoring etc.
Have realistic time frames for developing cooperative mechanisms.	Costa Rica/Panama Local communities	It took over 10 years of work to develop community structures which are only now starting to look across the borders.
Know and understand how national and local regulations can assist, or be obstacles to international cooperation	General Observations The regulatory environment of international waters can be confusing.	Many national or local laws and regulations do not support international principles or law.
Ensure that decision-makers are familiar with basic principles of international law (Water, Law of the Sea, etc.)	General Observations Knowledge regarding international law and principles is not always clear.	Often there is an assumption that decision-makers are aware of basic principles of international law – this is not always the case.
Not all mechanisms need to be formalised – and not all formal mechanisms are effective.	General Observations Formal, informal, substantive implementation.	Often there is a push for formal agreements, but fall short in substance. Informal mechanisms can be effective.
An adequate technical understanding of the resource is needed for decision-making.	General Observations Technical information of the resource at the ground level is essential for developing cooperation.	The first thing that should be done is to better understand the substantive issues around the resource in question.
Sensitisation and awareness	General Observations	Politicians and decision-



Lesson Learned	Location and context	Issue
building of stakeholders is important to develop political will.	Politicians and decision-makers are often seen as acting in their personal interests.	makers will make greater strides for cooperation if they know stakeholders understand issues and support them.
Develop mechanisms for continuity independent of political leadership. – a commission, or link to another larger framework such as trade agreement.	General Observations Often leaderships change and agreements are not advanced	Too often there is no continuity in leadership for and agreement and it is put aside. (Amazon Treaty an example)
Look outside the resource to help create incentives, economic or other, to assist cooperation.	General Observations Lack of incentive to cooperate over water or marine issues.	Too often there is no incentive of one state or another to cooperate over certain issues (water, or marine resources)
Focus on areas of mutual benefit if possible. Link single issue interests to larger framework of cooperation.	General Observations Sovereignty issues may supersede international cooperation.	Decision-makers will usually weigh national interests over international cooperation on certain issues.
Information sharing and exchange can be an important tool for building trust when needed.	General Observations When objectives and motivations are not clear, mistrust can develop.	Often states will be reluctant to engage cooperatively due to the lack of understanding of the motivation or interests of others.