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SDC's Transboundary Waters Programme

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Annika Kramer, Lukas Ruettinger,
Paola Adriázola, Sabine Blumstein (Schulze)

Mandated by the Swiss Agency for Development and Cooperation (SDC)

FINAL REPORT

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Executive Summary

The "Water Diplomacy and Governance of Key Transboundary Hot Spots" (KTBHS) programme is part of Component 2 ("Water Governance") of the SDC's Global Programme Water Initiatives (GPWI). The KTBHS programme is currently in its second phase, which started on 1 April 2013 and will end by 31 December 2015. In this phase, the programme is implemented through five partial actions (PAs) carried out by five organisations and their partners.

Objective and approach of the external review

The external review conducted by adelphi consult comprised a review of the overall KTBHS programme as well as a more detailed assessment of three partial actions (PAs 1, 2 and 3) implemented in cooperation with the Centre of Development and Environment at the University of Bern (CDE), the International Union for the Conservation of Nature (IUCN), and the United Nations Educational, Scientific and Cultural Organization (UNESCO). The PAs were reviewed along our four main evaluation criteria: relevance, effectiveness, sustainability and strategic partnerships. The main objective of the external review was to provide a basis for internal learning and recommendations for improvements with a forward-looking view to the implementation of the programme's third phase, which will start in 2016. The review followed a qualitative assessment based on primary document analysis and semi-structured interviews conducted with relevant stakeholders. The data collection process included four field missions to key project sites where the three partial actions are implemented. The individual reviews of partial actions focused on the activities implemented by CDE in East Africa, by UNESCO in Central America and Central Asia; and by IUCN in the Mekong Basin and Central America.

Review findings

The **WLRCs in Kenya and Ethiopia** progressed well in the second phase of the programme. Both organisations' main strengths are their experiences in applied watershed research and their strong links with local communities and ability to mobilize them while at the same time being well networked at the national research and policy levels. The centres therefore constitute an important connective link between local and national actors. Nonetheless, room for improvement with regard to its institutional consolidation (Ethiopia), financial sustainability (Kenya) and transboundary policy outreach remains.

IUCN BRIDGE's flexible approach has allowed it to adapt to (changing) circumstances. Nevertheless its effectiveness has been varying in different basins. In **Central America**, IUCN successfully promoted transboundary cooperation at various levels through stakeholder engagement and capacity development. These activities should now be further strengthened with complementary activities in the specific basins. Yet, the case of the Coatán basin, where the Guatemala Foreign Ministry is sceptical of work on transboundary cooperation, shows where IUCN's multi-level, multi-stakeholder approach hits a road block. In **South East Asia,** IUCN's effectiveness was impeded by changes in the political context and project management problems. Building on recent changes and improvements in these regards, it is recommended to strengthen efforts on capacity development for hydro-diplomacy at higher political levels and to explore ways to improve the sustainability of the champions networks.

The **UNESCO GGRETA** approach to use technical assessments and data sharing as an entry point or basis for transboundary water cooperation has shown to be successful mainly in Southern Africa, where riparian countries are committed to cooperation. The lack of commitment in Central Asia has shown the limits of an approach that is too much focused on technical assessments. In general the issue of transboundary aquifers is very relevant and the work that has taken place on assessing aquifers in Central America and Central Asia is important in the regions and should be complemented with increased efforts to build trust, stakeholder engagement and developing capacities in hydro-diplomacy.

Relevance and coherence of the overall programme

While the expected outcomes of the GPWI, and thus the KTBHS, seem very ambitious considering the limited timeframe and budget of the KTBHS programme, the review showed that the KTBHS PAs are generally relevant and coherent with GPWI strategic goals: The partial actions involve the development of new concepts and innovative methodologies that can demonstrate potential solutions in transboundary basins and thus could serve as vehicles for policy negotiation if they are embedded in appropriate political processes. Furthermore, the PAs address globally relevant topics, such as transboundary aquifers, that have to date not received sufficient attention. Through capacity development and institutional support, the PAs have contributed to building up the basis for transboundary water management frameworks in selected basins. Moreover, in supporting long-term initiatives, such as those of IUCN, UNESCO, CDE, and UNECE, the KTBHS can provide long-term learning processes and lessons relevant globally, for other development cooperation initiatives on this topic. **Challenges** remain in insufficient communication within the KTBHS programme, synergies and complementarity across PAs, as well as with other SDC programmes. This contributed to limited awareness of GPWI overall goals at the project manager level, insufficient coordination with SDC country programmes and other projects, as well as foregone opportunities for exploiting synergies.

Recommendations for GPWI/KTBHS

The reviewers find that the continued funding of the five partial actions is well-justifiable. The following recommendations could support increased effectiveness and impact of the KTBHS programme in the next phase:

- Formulate clear and achievable intermediary goals towards GPWI's strategic objectives.
- Request the elaboration of clear theories of change towards GPWI's/ KTBHS's overall objectives and intermediate objectives in project proposals.
- Focus on limited basins, instead of expanding further.
- Ensure coordination with other donors and programmes to achieve maximum impact in hot spot basins.
- Strengthen communication and coordination between and across GPWI, implementing organisations of the KTBHS programme, and other SDC programmes.

Recommendations to strengthen synergies between PAs

The reviewers identified several potential synergies that should be exploited in order to increase impact and avoid duplication and therefore recommend to:

- Coordinate capacity development and training on hydro-diplomacy and international water law.
- Support targeted activities to facilitate cross-PA learning and synthesizing overall lessons learned of the programme.
- Explore the possibilities to test and/or adapt concepts and approaches developed by UNECE in case study basins of the PAs.
- Facilitate partnerships between partial actions taking place in the same region.

Lessons learned

The review of the three partial actions further allowed to draw some important general lessons on fostering transboundary water cooperation that could have implications for the future of the KTBHS programme or may be relevant for wider application (see Chapter 8).

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List of Abbreviations

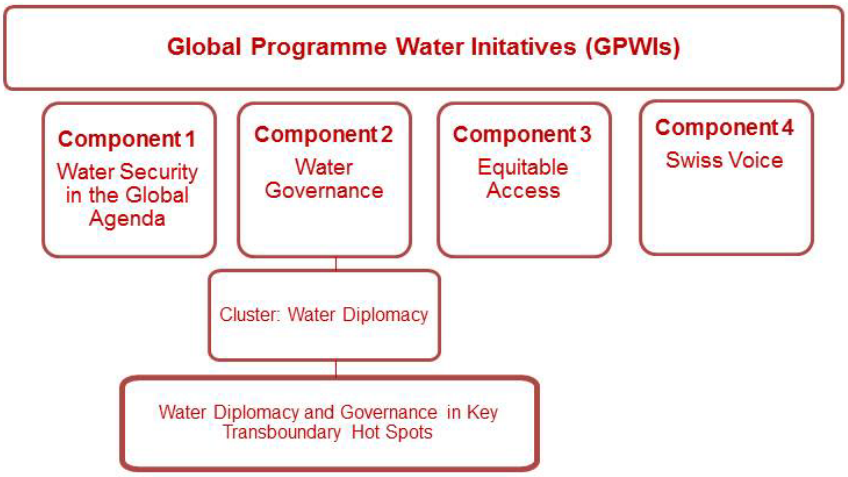
AAU	Addis Ababa University
ASEAN	Association of Southeast Asian Nations
BRIDGE	Building River Dialogue and Governance
CDE	Centre for Environment and Development
CETRAD	Centre for Training and Integrated Research in ASAL Development
CLV	Cambodia, Laos and Vietnam
CNMC	Cambodian National Mekong Committee
ENNDA	Ewaso Nyiro North Development Authority
ENTRO	Eastern Nile Technical Regional Office
EU	European Union
FT	Forrest Trends
GERD	Grand Ethiopian Renaissance Dam
GGRETA	Groundwater Resources Governance in Transboundary Aquifers
GIS	Geographic Information System
GIZ	Gesellschaft für Internationale Zusammenarbeit
GoE	Government of Ethiopia
GoK	Government of Kenya
GPWI	Global Programme Water Initiatives
HEKS	Hilfswerk der evangelischen Kirchen Schweiz
IAEA	International Atomic Energy Agency
IGAD	Intergovernmental Authority on Development
IMS	Information management system
IUCN	International Union for Conservation of Nature
KTBHS	Water Diplomacy and Governance of Key Transboundary Hot Spots
LMNN	Lake Malawi/Nyasa/Niassa
LW	Learning Watershed
LWF	Laikipia Wildlife Forum

MFA	Ministry of Foreign Affairs
MoWI	Ministry of Water and Irrigation
MoU	Memorandum of Understanding
MRC	Mekong River Commission
NBI	Nile Basin Initiative
NGO	Non-Governmental Organisation
PA	Partial action
PuBuSa	Pungwe - Busa - Save basins
RBO	River basin organisation
SDC	Swiss Development Cooperation
SHIP	Socio-Hydrological Information Platform
SICA	Central American Integration System
SLM	Sustainable Land Management
TBA	Transboundary Aquifer
TWAP	Transboundary Water Assessment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNDP	United Nations Development Programme
UNWC	UN Watercourses convention
USAID	United States Agency for International Development
WALRIS	Water and Land Resources Information System
WLRC	Water and Land Resources Centre
WRMA	Water Resources Management Authority
WRUA	Water Resources User Association
WFP	World Food Programme
WWF	World Wildlife Fund

1 Introduction and Background

The "Water Diplomacy and Governance of Key Transboundary Hot Spots" (KTBHS) programme is part of SDC's Global Programme Water Initiatives (GPWI) Component 2 "Water Governance" which aims to contribute to the overall objective: "Influence the global policy dialogue on Integrated Water Resource Management (IWRM), fostering sustainable water cooperation and promoting an equitable and balanced socio-economic development with gender inclusion ensuring access for the poor". The following scheme illustrates how the KTBHS fits into the overall structure of the GPWI

Figure 1: Overall GPWI Structure



Being an integral component of GPWI's Water Diplomacy Cluster the "Water Diplomacy and Governance of Key Transboundary Hot Spots" programme is expected to contribute to the cluster's overall outcomes, which are:

- Global commitments, concepts and platforms on water and security increase cooperation over water resources and reduce conflict potential,
- Transboundary water management frameworks and cooperation are in place in hot spot regions,
- Data, information and knowledge management is effectual and backs evidence-based dialogue and decision making in water resources management.

The KTBHS programme has three lines of actions: i) water governance, ii) water diplomacy, and iii) strategic projects. These are implemented through five partial actions (PAs) carried out by five organisations: the Centre of Development and Environment (CDE), University of Bern; the International Union for the Conservation of Nature (IUCN); the United Nations Educational, Scientific and Cultural Organization (UNESCO); the United Nations Economic Commission for Europe (UNECE) and the United Nations Institute for Training and Research (UNITAR).

Partial action 1: Water and Land Resources Centres (WLRC) implemented in cooperation with CDE focuses on the establishment of two WLRC in two African transboundary river basins, the Blue Nile Basin (Ethiopia) and the Ng'iro Basin (Kenya and Somalia). The aim is to improve the generation, processing, and dissemination of data and information on issues such as hydro-sedimentology, meteorology and land management and to link this knowledge with policy decisions in order to inform policy planning and allow for knowledge-based deci-

sion making. While the first phase of the project concentrated on the establishment of the two WLRCs, the second phase focuses on the generation of knowledge products, the up- and outscaling of the approach and on the institutional and financial consolidation of the centers.

Partial action 2: Building River Dialogue and Governance (BRIDGE) implemented by IUCN focuses on developing the capacities of countries that share a river or lake basin to institutionalise effective water governance arrangements. The project covers more than a dozen transboundary basins in Central America, South America, Southeast Asia and Africa. IUCN's activities in these basins focus on a range of activities, including the facilitation of dialogue between different authorities and other stakeholder groups, supporting the establishment of legal and institutional frameworks.

Partial action 3: Groundwater Resources Governance in Transboundary Aquifers (GGRETA) implemented by UNESCO. With the overall goal to contribute to governance capacities and arrangements that support the long-term and sustainable management of selected groundwater aquifers, GGRETA focuses on generating data and information on the physical and socioeconomic characteristics of groundwater resources and on facilitating the establishment of joint governance mechanisms between countries. The project is implemented in three groundwater aquifers, the Trifinio Aquifer in Central America, shared by El Salvador, Guatemala and Honduras; the Pretashkent Aquifer, shared by Kazakhstan and Uzbekistan; and the Stampriet Aquifer in Southern Africa, which falls within the territory of Botswana, Namibia and South Africa.

Partial action 4: Online Course on Transboundary Water Law implemented by UNITAR's Virtual Learning Environment with the main objective to improve the knowledge of water professionals on the principles and rules of international water law and furthermore to support networking between them. The project comprises a five-week long online course aimed at water professionals such as government officers dealing with transboundary water issues, diplomats, negotiators, specialists from various ministries (Foreign Affairs, Environment, etc.) and governmental agencies working in the field of water management, law professors and researchers.

Partial Action 5: 1992 UNECE Water Convention carried out by the Convention Secretariat focuses on the implementation of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE Water Convention, 1992). The project's objectives are to promote the adoption of this convention outside the UNECE region. The partial action particularly focuses on supporting processes around the adoption and implementation of the UNECE 2013-2015 work programme and aims to contribute to the high level debates around the ratification processes beyond UNECE member states.

The "Water Diplomacy and Governance in Key Transboundary Hotspots" programme is currently in its second phase which started 1 April 2013 and will end by 31 December 2015. The external review conducted by adelphi consult and whose results are presented here, focused on the second phase of the programme and provides lessons learned and recommendations for the third phase of the programme.

2 Scope of the review

The external review was carried out by adelphi consult and comprised a review of the overall KTBHS programme as well as a more detailed assessment of the partial actions implemented in cooperation with IUCN, UNESCO, and CDE respectively.

The main objective of the external review, as outlined in the initial Terms of Reference (ToR) and further elaborated during the briefing session held in Bern on June 1, 2015, was to provide a basis for internal learning and recommendations for improvements with reference to the third phase of the programme.

Based on this, the Partial Actions (PAs) were reviewed with regard to four main evaluation criteria: the programme' relevance, effectiveness, sustainability and strategic partnerships.

Relevance

The review firstly examined whether the programme's objectives are relevant in relation to target groups and country priorities. Furthermore, we examined whether the objectives and design of the programme have been adequately adapted the context of each target region and basin. The guiding question for this criterion was the following:

- *Are the problems that the project intends to address of relevance in the target region and for the target group?*

Effectiveness

Considering the limited time and budget available for this review of the PAs, it was agreed with SDC that it would not include a detailed and systematic assessment of the PAs' progress and performance based on indicators included in the logframes. Instead, the objective of the review with regard to performance assessment was to highlight (a) the main achievements with regard to the PAs' expected outcomes and objectives and contribution towards the KTBHS programme's overall objectives, (b) major gaps in progress or performance, (c) strengths and weaknesses in each PA's project design, project management and steering, and influence on policy and political decision-making.

The guiding questions for this criterion are:

- *Is the project on track to reach its objectives?*
- *What are the main achievements and gaps of implementation?*
- *What are the reasons for the achievement or non-achievement of objectives?*

Strategic partnerships

This evaluation criterion focuses on the suitability of chosen partners and recommendations on the partners that should be involved in the next phase. It also explores how cooperation with them could be managed most effectively. Furthermore, the review assessed how stakeholders have been identified and involved in the project and to what extent synergies have been exploited with other donor-funded project as well as SDC programmes.

The questions that guide the assessment on this criterion are the following:

- *Has the project built constructive and lasting partnerships?*
- *Is the project cooperating with the right partners to achieve the best results?*

Sustainability

The review examined whether there is a reasonable belief that the PAs generate continued long-term development benefits for the target groups beyond the project and the actions of the implementing organisations. It focused on whether local partners are likely to be in a position to continue the programme activities self-sufficiently once the financial and technical support has ended, and whether the institutional set-up supports sustainability, including financial sustainability.

The following was the main question guiding this evaluation criterion:

- *Are the problems that the project intends to address of relevance in the target region and for the target group?*

Lessons learned, good practices and recommendations

The review finally served to identify good practices and weaknesses to provide lessons learned for project planning and implementation. Recommendations are made for improvement and in view of a potential new phase of each PA.

3 Methodology

The review was carried out by a review team, consisting of Annika Kramer, Paola Adriázola, Lukas Ruettinger, and Dr Sabine Blumstein (Schulze), each providing input with their specific methodological, regional and thematic expertise in transboundary water management, IWRM, and water diplomacy. The evaluation process followed a **qualitative assessment based on primary document analysis and interviews conducted with relevant stakeholders**.

With regard to the primary document analysis, the consultant team reviewed project documents provided by SDC, including the programme credit proposal for the current phase, progress reports as well as concept notes of the 5 PAs. Furthermore, the logical frameworks of each component were used as an instrument to review the progress of each PA. Beyond this, the consultant team reviewed additional available information provided by the project partners (on legal, technical and institutional aspects) and in some instances consulted further documents.

The data collection process furthermore included the following four field missions to key project sites of PAs 1, 2 and 3 in order to conduct interviews and undertake field visits. The individual reviews of partial actions focused on the projects implemented in East Africa by CDE, the components of the UNESCO partial action which are implemented in Central America and Central Asia; and the IUCN projects implemented in the Mekong Basin and Central America. The following missions were undertaken:

Mission to Central Asia (Uzbekistan, Kazakhstan) by Lukas Rüttinger	8.-15.7.2015
Mission to East Africa (Ethiopia and Kenya) by Sabine Blumstein (Schulze)	18.-25.7.2015
Mission to Mekong Region (Laos, Vietnam, Cambodia) by Lukas Rüttinger	26.7.-1.8. 2015
Mission to Central America (Guatemala, Honduras, El Salvador, Costa Rica) by Paola Adriázola	23.-31.7.2015

The missions were prepared with the assistance of the three relevant project partners, the University of Bern (CDE), the respective IUCN programme, UNESCO and the Swiss Cooperation Offices. The priorities on the interview partners and field visits in each region were identified by the relevant project partners.

Semi-structured interviews were carried out in person during the field mission and through telephone or skype conversations. For all telephone and in-person interviews notes were taken during the interview conversations. The information from the various interviews were then systematically compared and analysed, with a focus on similarities and differences. Based on this process, typical and more generalizable statements were identified to derive valid conclusions with regard to the evaluation criteria and guiding questions. To ensure the validity of the findings, the results and implications of the analysis were discussed in an internal workshop of the adelphi review team. The outlined data analysis and internal discussions formed the basis for the overall assessment of the PAs and this report.

Due to the limited timeframe for the review, only selected case study basins of the IUCN and UNESCO partial actions could be visited and covered by the review. Considering the fact that framework conditions and human resources differ considerably from one case basin to the other, this implies that findings for the overall PA could only be drawn to a limited extent.

4 Review of PA 1: Water and Land Resources Centres

Partial Action 1 focuses on two Water and Land Resource Centres (WLRC) in two African transboundary river basins, including the Blue Nile Basin (Ethiopia) and the Ewaso Ng'iro Basin (Kenya and Somalia) which have been established in cooperation with the Centre for Development and Environment (CDE) at the University of Bern. **The aim of both WLRCs is to improve the generation, processing, and dissemination of data and information** on issues such as hydro-sedimentology, meteorology and land management **and to use this knowledge for improved policy making**. Both projects therefore contribute to line three of the overall KTBHS Programme – the improvement of data and information management to support information based policy making in water resources management. As such, this project has a primarily national dimension, which, nonetheless aims to provide knowledge to facilitate and support regional cooperation.[1]

WLRC's work in Ethiopia focusses on land degradation of. The centre has established so called "learning watersheds" in the Ethiopian parts of the Blue Nile Basin to generate empirical evidence and experiences on issues of landscape restorations. It furthermore operates different hydrological and meteorological measuring stations to produce relevant data on hydro-sedimentology and climate conditions.

The work of the Kenyan WLRC focuses on the **establishment of Water Resources User Associations (WRUAs) in order to better manage and coordinate water use activities** between different actors and to avoid and/or peacefully resolve conflicts. Additionally, the WLRC, which is run as a project under the Centre for Training and Integrated Research in ASAL Development (CETRAD), has **established hydro-meteorological measuring stations** to improve knowledge about water resources and climatic developments and to monitor water resources developments.

4.1 Findings

4.1.1 Ethiopia Component

Relevance – Are the problems that the project intends to address of relevance in the target region and for the target group?

The Ethiopian component of the project focuses on the Blue Nile (also called Abbay) Basin which Ethiopia shares with neighbouring Sudan and Egypt and which itself is a sub-basin of the larger Nile River that unites 11 Eastern, Central and Northern African states.

With its focus on studying land degradation, the WLRC addresses a topic that is of high relevance in the Blue Nile Basin. A **major problem of national (Ethiopia) and regional magnitude within the Blue Nile Basin is land degradation**. A range of factors, including population growth, extensive livestock farming (free grazing), deforestation and poor governance structures have contributed to these detrimental developments. Land degradation in Ethiopia

[1] This needs to be emphasized again as it differentiates Partial Action 1 from the other components which have an exclusively transboundary/regional focus.

occurs in different forms, such as gully erosion or loss of top soil, which are difficult to reverse. There are many impacts on land and water resources resulting from land degradation: They contribute to decreasing productivity of agriculture which is a major source of income for the country and provides the livelihood bases for the majority of Ethiopians; increase of sediment loads which harm water resources infrastructures such as dams and irrigation schemes; and furthermore lead to changes in flow regime which influence the seasonal availability of water resources and has implications for ecosystem functions. **These implications of land degradation are also of transboundary significance**. For example, major dams, such as the Sennar and Roseires Dams in Sudan which provide water for irrigation agriculture as well as hydropower have lost storage capacities and require supplementary investments for cleaning and repair works.

The work of the Ethiopian WLRC, focusing on the improvement of data on hydro-sedimentology and knowledge generation on land degradation, is therefore of high national and regional significance. For instance, better knowledge on effective ways of decreasing land degradation will help to increase land productivity and the livelihood of Ethiopian farmers. These activities also contribute to decreasing the countries' need to shift to irrigation agriculture (which to date is very low) which is a major concern to downstream Egypt that fears such development could significantly reduce the water inflow into its own territory.

Stakeholders interviewed for the review generally considered land erosion a major problem for agricultural development, and to some degree also mentioned the regional implications of river siltation. While for farmers and other land users land erosion and connected loss of land productivity is a very big challenge for livelihood development, policy makers emphasize the larger economic and regional implications.

The relevance of the WLRC programme is also underlined by its **contributions to national policy approaches**, such as the national Strategic Investment Framework for Sustainable Land Management (SLM) and the national SLM Programme implemented by the Ministry of Agriculture (MoA).

Despite the transboundary implications of land degradation and attempts by WLRC to address the problem at this level, **two politically contested issues make it difficult to influence transboundary cooperation** at this point: the conflict around the construction of the Grand Ethiopian Renaissance Dam (GERD) as well as negotiations over the Corporate Framework Agreement (CFA) which are both opposed by downstream Egypt and have caused significant political tensions between Nile Basin riparians. It is mainly due to these two issues that Egypt and Sudan discontinued cooperation within the Nile Basin Initiative (NBI). While Sudan has meanwhile resumed participation, the situation with Egypt remains difficult. Because of these external difficulties, it is virtually impossible for the WLRC (as a primarily research focused organization) to directly influence the difficult political regional negotiations on the Nile Basin aspects. Nonetheless, the centre has engaged in a number of activities with a regional dimension (see next section).

Effectiveness – Is the project on track to reach its objectives? What are main achievements and gaps of implementation? What are the reasons for the achievement or non-achievement of objectives?

WLRC's main strengths are its strong links with and capacities to mobilize local actors (farm communities) while at the same time being well networked at the national research and policy level. The centre is hence an important connective link between local and national actors.

Another **innovative part of the project is the fact that government, scientific institutions, local people and development community are jointly working together to implement activities within the LWs** – which is hard to realize, particularly in a centralized state like Ethiopia.

Looking at the project's achievements, measured along its overall objective and outcomes envisaged in the project design (logframe), it was found that phase two of the project has been designed much more realistically than in phase one. Most outcomes and activities defined in the logframe could be realized or are likely to be realized by the end of the year.

To contribute to **knowledge generation** WLRC Ethiopia has **introduced new observatories** and extended its collection of hydro-sedimentology data. Based on this data collection, the centre has started to produce first studies to contribute towards a better knowledge base on hydro-sedimentology. Amongst them a study on "Economics of Land Degradation", "Chefa Wetlands Dynamics Study", "Landscape Transformation", and a "Socio-economic Impact Assessment Report of Debre-Mewi".

The **work on the six learning-watersheds has been continued and consolidated** – including further rehabilitation measures (gully rehabilitation, plantations etc.), training of stakeholders, and the production of guidelines and learning materials for further training and upscaling activities. Local stakeholders positively highlighted the integrated approach within these learning watersheds, combining land restauration and income-generation as well as capacity building activities which have significantly improved the lives of local people.

To support knowledge production for cross-scale dialogue, the six existing **learning watersheds have furthermore been used to inform and transfer knowledge to relevant stakeholders** such as land users from neighbouring watersheds, researchers or regional policy-makers through field visits and trainings. Upscaling of these activities is increasingly happening through transfer of knowledge to adjacent watersheds which is supported by government activities as well as through documentations that are shared within global platforms (e.g. through global World Overview of Conservation Approaches and Technologies (WOCAT) network).

During phase two the WLRC has put a lot of work into **updating the Water and Land Resources Information System (WALRIS)**. The data is available for free and accessible to every (registered) user.[2] Main users of the provided data have so far been research institutions and international cooperation partners. Datasets provided through WALRIS are however less useful for policy makers which require more comprehensive summaries with specified policy recommendations.

Another field of knowledge production includes the **geospatial information which has been highlighted by several stakeholders as unique in the country**. It has been underlined that there are no other research institutions or ministries offering similar information although such geospatial data is a crucial tool for different planning purposes – for example for the Ministry of Water, Irrigation and Energy (MoWIE) or the Ministry of Agriculture (MoA).

With the support of CDE, the centre has also **developed a number of additional geospatial tools** to make data more accessible to users groups. Among others, a watershed-based interactive desktop mapping and reporting tool was developed. This tool was requested by institutions working in the field of watershed planning, and makes it possible to provide spatial statistics in report form for any selected pour point on a stream.

Despite a number of activities on knowledge production and activities to share knowledge at the national level, **WLRC's transboundary influence is to date limited and primarily of indirect nature**. As outlined in the previous section on the relevance of the project, the difficult regional context makes it virtually impossible for the centre to influence regional policy-making on the Nile Basin issues. Nonetheless, as emphasized by numerous stakeholders, WLRC's work has contributed towards raising awareness of sedimentation problems and its

[2] However, due to deficencies in Ehtiopia's internet connectivity, the information system is not always accessible online.

downstream implications at the national government level of Ethiopia. For instance, as a **member of the national Nile Research Team**, established by the Government of Ethiopia to coordinate research activities around GERD, the centre is able to use its knowledge on sedimentation issues to influence national policies (that have clear regional implications). The working group could also gain in transboundary significance once political relations with Egypt continue to improve.[3]

Through increasing **cooperation with regional research institutions,** such as the University of Khartoum (joint Nile Research Team), WLRC is also engaging in knowledge exchange and joint research on land degradation and sedimentation issues at a transboundary level.

WLRC has furthermore developed a first **concept note on securing investments on watershed services (IWS)**. The idea is to charge a levy on electricity produced by GERD (which would be paid for by electricity users including from neighbouring countries). Money generated through such a levy should then be used for IWS management activities upstream (such as land rehabilitation activities) which would help to improve livelihoods of basin communities as well as also to minimize costs of dam cleaning as well as elongation of dams lives downstream.[4] In August 2015 WLRC has therefore conducted a study tour with Ethiopian government officials to China, which has experience in restoring degraded landscapes through different (mainly government-led) systems for payment for watershed services, to learn and sensitise them about IWS.

While the mission to China is one first step, it could also prove beneficial to look into examples of IWS/PES that are more market based and financed by beneficiaries and/or users (such as electricity companies or electricity consumers) – such as the Venezuelan power producer CVG-Edelca which invests a portion of its revenues in the preservation of the Río Caroní watershed.

The review team would like to stress that activities on **transboundary cooperation and policy influence should be continued and reinforced** in order to strengthen the hydro-diplomacy component of the project. In particular attempts should be made to include Egypt researchers in forums such as the Nile Research Team. Furthermore, it could be beneficial to develop a clear strategy on transboundary knowledge exchange and possibilities to reach out to the policy level. Such a strategy should first of all identify policy subjects that the WLRC could contribute to (such as issues around GERD), set realistic objectives on transboundary water cooperation, outline the different steps and activities that have to be taken and reflect on the capacities that are necessary to implement this.

Despite the absence of a specifically outlined gender approach, staff is aware of this issue and tries to include equal numbers of women and men within the LWs activities. However, the WLRC team itself is almost entirely composed of men, raising the question of how the presence of women within WLRC could be strengthened over the long-run.

[3] Trilateral negotiations (Tripartite National Committee (TNC) Meetings) between Sudan, Egypt and Ethiopia are ongoing and currently awaiting the results of two commissioned studies, including a socio-economic impact assessment and a hydro-simulation model. Although this cooperation has recently experienced a setback as one of the consultant companies withdrew from the mandate, it is expected that both studies will be finalized in the near future. In an agreement signed in March 2015 the three countries furthermore expressed their will to develop guidelines and rules on the filling as well as its annual operation of GERD.

[4] There is neither much practical experience nor research conducted on payment for ecosystem services (PES) in transboundary water contexts. However, the Dutch company Deltares, which just withdrew from its part of the Nile Basin studies around GERD, has some experiences on PES in transboundary water management (although not focusing on hydropower). It might be valuable to look into the research conducted by Deltares (available online) which could also help to provide a door-opener to get Egypt interested in the subject (Deltares being the company favored by Egypt).

Strategic partnerships – Has the project built constructive and lasting partnerships? Is the project cooperating with the right partners to achieve the best results?

WLRC Ethiopia was established in previous SDC funded programmes and over its long-term involvement in the region has developed strong partnerships with a broad range of local and national actors, including government agencies, donors and research institutions. These partnerships have supported its applied research activities. Amongst them CDE from the University of Bern is a key implementing partner that has supported WLRC in many ways – such as in technical backstopping on the development of geospatial data or WALRIS (see section on effectiveness).

In phase two, WLRC has also increasingly **created synergies with other donor-funded programmes** which are continuously growing. Through different assignments it has provided its expertise to the multi-donor "Soil and Land Management Programme" (SLMP) which is implemented by the Ministry of Agriculture. In this context it has for instance developed an exit strategy and performance assessment of watershed development and provided training for trainers to implement this strategy. For phase two of the SLMP, WLRC has been approved to implement the knowledge management component of the overall programme. The signing of the contract has however been delayed because WLRC does not fulfil World Bank (WB) contractibility requirements (see next section). If final approval of the World Bank is granted, the programme will be one of WLRC's major activities over the coming years, providing a substantial amount of financing (4 Mio. USD).

There are furthermore first discussions with the SLM Morocco on activities to transfer knowledge from WLRC's experience on soil rehabilitation in Ethiopia which would provide an additional opportunity for upscaling knowledge generated through the LWs. These discussions are however at a very early stage.

Other international cooperation partners include the SDC Horn of Africa Programme, which is interested in directly contracting WLRC, the German Gesellschaft für Internationale Zusammenarbeit (GIZ) and Forrest Trends.

Moreover, since 2014, WLRC has **hosted the secretariat of the Ethiopia Country Water Partnership (ECWP)**.[5] In this role as a national coordinator on IWRM activities in Ethiopia, the centre is responsible for managing different Integrated Water and Land Management (IWLM) activities, creating forums for exchange and to mobilize funding. In the long run this will provide an opportunity to exercise more influence on national policies on issues of IWRM and possibly to tap additional resources through participation in global projects.

Sustainability – Is it likely that the positive results of the project will be lasting?

During the second phase of the programme, the Ethiopian WLRC has made **significant advancements towards ensuring its long-term financial and institutional sustainability**.

Institutionally, the centre is currently in an important stage of transition from being a bilateral project between the Government of Ethiopia and SDC towards becoming an integrated institution of Addis Ababa University (AAU).[6] The decision to link its activities closer to AAU is based on WLRC's objective to strengthen its research component while at the same time maintaining a strong link to the national policy level (the latter being reflected in the institutional structure outlined below). A **MoU has been signed between AAU and the University**

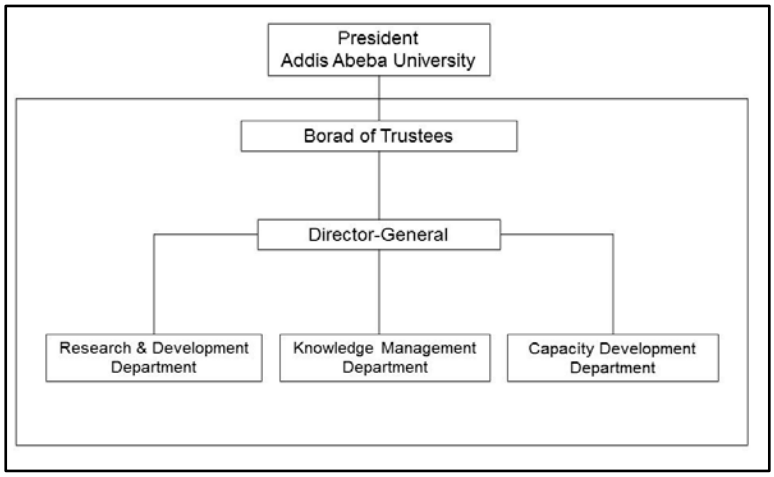
[5] The hosting is based on a MoU with MoWIE.

[6] AAU currently comprises twelve research centres, including the Institute of Ethiopian Water Resources (IEWR). The long-term objective is to eventually merge WLRC with IEWR.

of Bern to jointly manage the WLRC. Based on this memorandum the **"Addis Ababa University Statutes on the Establishment of the Water and Land Resources Centre"** have been prepared and approved by the Universities' legal departments (see Annex 7). The Statutes are currently awaiting final approval from the AAU Senate.

Once the Statutes have been approved by the Senate, WLRC will be an institution of AAU with some independence in financial matters. As such WLRC will have its own bank account and be able to apply for research grants and accept research grants from organizations as well as individuals and other sources (Statues, Art. 11). The proposed institutional set-up will comprise a Board of Trustees as the main decision-making body which is accountable to the president of AAU. The Board will be chaired by the AAU's Vice President of Research and Technology Transfer[7] and furthermore comprise the director of CDE/University of Bern, state ministers from the MoA, MoWIE, Ministry of Science and Technology (MoST) and the Ministry of Finance and Economic Development (MoFED), one representative of a collaborating donor organization, the WLRC's Director General and one further member to be appointed by the AAU President (see Figure 2).

Figure 2: WLRC future organizational structure



The centre will be headed by a Director-General who is appointed by the President of the University and accountable to the Board of Trustees.

In order to physically host the new institute, negotiations are currently ongoing between AAU/WLRC and different local administrative unites around Addis Ababa to rent an adequate size of land. However these negotiations are likely to continue for some time as potential land is difficult to acquire.

Beyond the provision of office space, **AAU furthermore expressed its commitment to contribute some funding to the newly established centre**. However, as to date there are no specifications on exact amounts or timeframes for this funding.

Regarding its long-term financial sustainability WLRC Ethiopia has significantly diversified its sources of funding. While SDC-funding still remains important, the centre has been approached by a steadily increasing number of donors for different assignments. Amongst others, WLRC provides its expertise to the World Food Programme (WFP), GIZ, Hilfswerk der

[7] While some documents and also representatives from WLRC reported that the Board will be co-chaired together with the director of CDE, the Statutes only mention one chair.

evangelischen Kirchen Schweiz (HEKS) and the United States Agency for International Development (USAID). **Overall current co-funding is above 40 percent**. Furthermore, a number of additional projects are currently in the pipeline – for example a seven-year project on water security for poor communities which will be supported by DFID through the University of Oxford.

4.1.2 Kenya Component

Relevance – Are the problems that the project intends to address of relevance in the target region and for the target group?

The Kenyan component of the global water programme concentrates on the Ewaso Ng'iro River Basin. The river originates from Mount Kenya area and the Aberdare ranges from where it disappears in the Lorian swamps and flows underneath in a north-eastern direction into Somalia. There the waters eventually join the Juba River before terminating in the Indian Ocean. The Ewaso Ng'iro is hence part of the larger Juba-Shebelle Basin which Kenya and Somalia share with neighbouring Ethiopia.

The Ewaso Ng'iro Basin is a climatically and ecologically very diverse basin and home to large livestock and wildlife population. **The main challenge within the basin are decreasing water resources and resulting conflicts between different user groups**. The decrease in available water resources are caused by population growth (natural as well as immigration of farmers from neighbouring districts), changes in land-use management (intensification of land use) and increase of water demand for wildlife and livestock populations. As most stakeholders interviewed (from local to national levels) outlined, this growing demand for water resources has increasingly **lead to conflicts between different actors** within the basin, particularly between upstream and downstream communities.

By supporting the establishment of WRUAs as well as the rehabilitation and modernization of hydrometeorological stations WLRC/CETRAD **also contributes to the 2002 Water Act as well as the Kenyan National Water Master Plan 2030** which require the establishment of WARUAs to manage water resources at the local level and, amongst others, to help prevent and solve water-related conflicts.

CETRAD's work is furthermore of regional relevance. As the Ewaso Ng'iro provides significant amounts of water flow for the Somali Juba basin and furthermore feeds the shared Merti groundwater aquifer. The Merti aquifer is an important source of water for Somali refugee camps in Kenya.

Effectiveness – Is the project on track to reach its objectives? What are main achievements and gaps of implementation? What are the reasons for the achievement or non-achievement of objectives?

With regard to CETRAD overall effectiveness it was found, that particular its work with the WRUAs has been very relevant and successful with regard to reducing water resources user conflicts in the Ewaso Ng'iro basin – an achievement that different stakeholders would like to see replicated in other basins. At the same time and similar to the Ethiopian project, the centre is well connected at national and sub-national government levels and hence able to build a link between local basin stakeholders and policy makers.

However, a number outcomes and activities defined in the logframe could not (yet) be realized. Several reasons account for this: First of all, **overall project objectives and outcomes for Phase II of the programme have been formulated too ambitiously**. Furthermore, some activities delayed in Phase one were still implemented at the beginning of Phase 2. Besides that, some external factors such as staff turnover and a long term-illness of

CETRAD's director caused further delays. Most of the activities that won't be realized in the current phase, however, have been outlined in the logframe under the condition of additional funding (e.g. the introduction of the IMoMo approach in pilot sub-catchments).

Furthermore, the Kenyan constitutional reform (2010) and subsequent **devolution of authority to subnational government levels caused some challenges** for the implementation of the project. While CETRAD successfully established new networks at the county level which from then on became a key partner on water issues (as some water management and development functions moved from national to county level), the major challenge became the disbursement of funding provided by Kenyan government (see also point on sustainability).

CETRAD has continued to generate hydrological data through the **expansion of hydro-meteorological monitoring to the lower Ewaso Ng'iro basin**. Three automated stations allow real-time data streaming (via telecommunication network) on river flow data which is directly streamed to CETRAD and WRUAs. Within the WRUAs the data is used, amongst others, for early warning purposes (when flow reaches certain threshold members are informed and required to reduce abstraction). Local stakeholders reported that the establishment of this system in combination with conflict resolution trainings provided by WLRC/CETRAD **have significantly helped to decrease the level of conflicts** that previously existed between different user groups. Furthermore, the WRUA-Forum that has been established as a platform of exchange between different WRUAs has been outlined as a success factor in preventing and solving upstream-downstream water user conflicts.

To make socio-hydrological data and information available to other researches and support broader dialogue, CETRAD is currently **in the process of establishing a socio-hydrological information and knowledge platform (SHIP)**. It is planned to finalize work on SHIP by October/November this year. In line with SDC's funding policy, data provided via SHIP will be free of charge, however fees are charged for different products generated from this data. Accessibility of the data will be managed along three different user groups – public domain, protected data (e.g. data from partner institutions which restrict use) and highly protected data (such as data generated by ongoing research). CETRAD's key partners, including CDE, WRMA, Ewaso Ng'iro North Development Authority (ENNDA), and Laikipia Wildlife Forum (LWF), will have unlimited access.

Datasets provided by CETRAD have been used by various actors, among them researchers as well as government agencies. In particular WRMA, which itself has little research expertise and mainly focuses on monitoring and technical backstopping for WRUAs, has relied on different time series datasets provided by CETRAD.

Beyond this, CETRAD has prepared several knowledge products, including, for example, a **Socio-Economic Atlas of Kenya**, which several interviewees highlighted as particularly valuable. The atlas, which combines national census data with geographic information, has also attracted the interest of different government agencies and ministries that use it for different planning purposes.

CETRAD has furthermore been **actively engaged in channelling its knowledge into policy-processes** at the subnational and national levels within Kenya. The WLRC Team for instance participated in formulation of the Laikipia County Environment Action Plan and was more recently involved in the development of the new Kenyan Water Bill.

Despite these advancements, **a number of activities foreseen during project planning (see logframe) have not been implemented**, amongst them, the establishment of an exchange and learning platform at national level which will eventually be integrated in SHIP. Activities regarding payments for environmental services have been elaborated (at a joint workshop with WLRC Ethiopia and Forrest Trends) but been identified as unfeasible at present. Furthermore, the **identification of hot-spots of water resources dependencies in Ewaso Ng'iro** Basin has not yet been approached. It is recommended to still start imple-

mentation of this activity during phase two as it is of high relevance with regard to the overall project objective of minimizing conflicts within the basin.

CETRAD's activities with regard to transboundary water cooperation along the Ewaso Ng'iro have been very limited, mainly because of the deteriorating security situation within the lower basin and in Somalia itself. Advancements to focus on the Somali parts of the basin through discussions with IGAD have not materialized yet. CETRAD's focus has therefore (as during phase one) once more moved away from transboundary to inter-basin cooperation with the **Pangani River in Tanzania**. It has followed up on capacity building activities with WRUAs through the Pangani Basin Water Board and in partnership with Tanzania Forest Research Institute, Tanzania, under the support of the Eastern and Southern Partnership Programme. CETRAD has expressed interest to include a programme component which foresees the collaboration with the Pangani Basin again under phase three.

Similarly to the Ethiopia component, CETRAD does not have a specifically defined gender approach but nonetheless is very aware of the subject. The mobilization of women and men alike to participate in WRUAs activities and to reach a balanced composition of team members has been a focus of CETRAD's work.

Strategic partnerships – Has the project built constructive and lasting partnerships? Is the project cooperating with the right partners to achieve the best results?

CETRAD and the WLRC project work with a series of local, national as well as regional partners which have been crucial for CETRAD to reach its programmatic objectives. As in the case of the Ethiopian WLRC, the Kenyan counterpart's **main cooperation partner remains CDE** which provides important conceptual as well as technical support. The collaboration with CDE has been described by interviewees as significantly important for most of the conducted activities under phase two. Currently, for example, CDE supports the centre in its activities to extract information from the socio-economic atlas into sub-catchment-level directories. CDE and CETRAD furthermore engage in regular student exchange activities, benefiting both research institutes.

CETRAD's **engagement with key stakeholders**, including national and local governments and agencies such as WRMA has generally been described as very good and as being of mutual benefits. Cooperation with local basin stakeholders like WRUAs is very close and it became apparent during the interviews that CETRAD is very successful in mobilizing local actors as well as in addressing their needs.

During the second phase of the programme, CETRAD has furthermore **started establishing synergies through increasing collaboration with the SDC Horn of Africa Programme** for which it has taken up different assignments. While the link with SDC's regional programme is relatively strong, cooperation with other projects under GPWI have been weak (mainly limited to IUCN BRIDGE activities in the Pangani River Basin). In particular synergies with IUCN's new Horn of Africa project, which focuses on supporting IGAD's capacities to coordinate member states' efforts in the water sector, should be elaborated for phase three.

Sustainability – Is it likely that the positive results of the project will be lasting?

Although financial diversification has slightly improved, the **long-term sustainability of funding remains challenging** as CETRAD/WLRC still receives only limited direct financial contributions from other sources besides SDC. Nonetheless, in-kind contributions from different partners have been growing over the last phase.

A **major part of co-funding, in form of in-kind contribution, comes from the Government of Kenya through the Ministry of Water** (MoW). This co-funding is provided in form

of seconded staff, including the deputy director, drivers and accountants which are hired and paid by the ministry. Other contributions come from cooperation partners WRMA, ENNDA and LWF (technical and professional field staff) as well as equipment provided by the Mpala Research Centre (MRC) (water level data loggers). Overall, in-kind contributions to total budget amount to approximately 35 percent in the time between April 2013 and December 2015.

As mentioned earlier, the **co-funding from the Government through CETRAD's annual budget remains challenging** as the disbursement of funds could not be realized over the last three years because modalities of financial disbursement of funds to institutions like CETRAD are not yet clarified under the new laws Interviewees' estimate was that the disbursement of funds through county-level structures is also unlikely to happen in the near future. CETRAD therefore considers continuing direct payments from government levels through specific assignments.

Regarding its long-term institutional set-up, CETRAD decided to remain a bilateral institution.[8] The CETRAD board has however recently discussed the possibility to petition for a bilateral agreement that is not limited in time once the current bilateral agreement expires in 2017. Furthermore, CETRAD Board is planning to **introduce two additional members into the Project Steering Committee (PSC)**, including one from the Nairobi University as well as one representative from IGAD. As many of CETRAD's activities today already include the University of Nairobi, the idea to integrate the university in the PSC is to facilitate and further develop this relationship. The inclusion of IGAD into the PSC aims at further expanding CETRAD's links at the regional level.

4.2 Lessons learned and recommendations

Considering the progress of both project components (Kenya and Ethiopia) within the second phase of the programme, the review team positively **recommends considering the continuation of SDC's support to both WLRCs and to provide funding of a third phase**. Both organizations' main strengths are their experiences in applied watershed research as well as their strong links with and capacities to mobilize local communities while at the same time being well networked at the national research and policy level. The centres therefore constitute an important connective link between local and national actors. Nonetheless, room for improvement of both country components remains as summarized in the recommendations below.

- **CDE component should stay within the hydro-diplomacy portfolio of SDC.** Despite the imperfect fit of the WLRCs in the hydro-diplomacy portfolio of the GPWI, and in light of the great appreciation paid by regional stakeholders to both WLRCs' work and past achievements in applied watershed research, the reviewers suggest maintaining the CDE component within the global water programme. The time remaining for phase two as well as the next phase should however be used to better position the project within the GPWI and strengthen synergies with other partial actions of the Water Diplomacy and Governance in Key Transboundary Hot Spots programme.
- **It is recommended to broaden the portfolio of knowledge products to include summaries, policy briefs and similar products that summarize main research findings**

[8] The Kenyan WLRC is run under CETRAD's bilateral agreement between Kenya and Switzerland.

and include clear cut recommendations on potential lines of political action. The distribution of knowledge generated by both country components is to date mainly focused on the scientific community and less so on policy makers (despite the fact that both centres are very well networked within the policy field). For instance, both WLRCs have recently put a lot of work in developing and updating online information systems (WALRIS and SHIP) to share their data with the broader public. Although very useful for research institutions, datasets provided through these systems are less tangible for policy makers which require more comprehensive summaries with specific policy recommendations. In order to strengthen the link between data/information generation and information based policy making, which is the ultimate objective of the programme, it is therefore recommended to broaden the portfolio of knowledge products to include summaries, policy briefs and similar products that summarize main research findings and include clear cut recommendations on potential lines of political action. Subjects addressed could for example include the influence of sedimentation on dam infrastructures, payments for ecosystem services or lessons learned from WRUAs for the resolution of water conflicts. To realize this, it might be helpful for both WLRCs to seek support from additional partners, including other projects of the GPWI that have experience in developing such policy publications.

- **Phase three should put greater focus on transboundary water policy issues.** An important challenge for both WLRCs remains the **link between national data and information management and transboundary water policies**. While the research conducted and the activities implemented in both countries are clearly of transboundary significance, the question remains how these national research activities can effectively and systematically be used to influence regional policies around the Blue Nile and the Ewaso Ng'iro Basins. Considering that this aspect has received limited attention so far, it is recommended that both WLRCs put greater focus on transboundary water policy issues in phase three. This could first of all include the development of a strategy, outlining realistic objectives with regard to contributing to transboundary cooperation and policy dialogue while considering the external political and security difficulties as well as limited funding available in both project components. If direct influence of water policies at this level are impossible, then the strategy should at least clearly outline the intended indirect contributions the projects can deliver (hence moving away from "transboundary" being a by-product only) and formulate objectives and activities on how this can be realized.
- Particularly in the Blue Nile the ongoing political negotiations require that each of the three countries have a shared understanding of technical and environmental issues surrounding the construction of GERD and its downstream impacts – including dam safety, salinization control and sedimentation. As a member of the national Nile Research Team, WLRC Ethiopia can play an important role in influencing these technical negotiations.
- That being said, however, the **WLRCs should continue to focus on their core competencies** which are conducting applied research in watershed management and working with local communities. The above suggested strategy for engaging in transboundary hydro-diplomacy should therefore be realistic in a sense that it considers the WLRCs' capacities and expertise and primarily focuses on building upon existing projects and potential synergies with, for example, other partial actions of the global water programme and regional organizations like IGAD.
- Engaging at the transboundary water policy level will nonetheless require some additional expertise and institutional capacities that need to be developed within both project components. In this context, **opportunities for cooperation with the BRIDGE component and the Horn of Africa Program should be explored**. Workshops on water diplomacy for WLRCs' staff might be one such activity to strengthen this component. If the BRIDGE Horn of Africa programme decides to select the Juba-Shebelle as a pilot basin, which is currently under discussion, then cooperation between WLRC Kenya/CETRAD and the

BRIDGE programme becomes even more relevant. CETRAD's expertise in the Ewaso Ng'iro Sub-Basin could then, for example, be used to identify relevant project activities and could also become a key stakeholder for project implementation. Hence possibilities for cooperation and the establishment of synergies between the two components of the Water Diplomacy and Governance in Key Transboundary Hot Spots programme should be explored and ideally be facilitated by SDC.

- **Furthermore, for the Kenyan project component, the formulation of objectives, outcomes and related activities for phase two has been too ambitious and needs to be formulated more realistically for the next phase**. As it is likewise apparent that it will not be able to deliver all activities originally outlined in the project planning documents, it needs to communicate to SDC which outputs it is still able to deliver within the remaining time of phase two, which ones it will not be able to fulfil and which might no longer be relevant. It is furthermore recommended to start **identification of hot-spots of water resources dependencies in Ewaso Ng'iro Basin** as this activity is of high relevance with regard to the overall project objective of minimizing conflicts within the basin. This activity will furthermore be built upon CETRAD's work with the WRUAs which has been very successful with regard to reducing water resources user conflicts in parts of the Ewaso Ng'iro basin – an achievement that different stakeholders would like to see replicated in other basins of the country.
- **Regarding financial and institutional sustainability it is highly recommended to WLRC Kenya (and CETRAD more generally) to diversify its funding structure and attract co-funding** (beyond the in-kind contributions it receives from the government) to ensure its long-term financial sustainability. In this context CETRAD could engage in knowledge exchange with the Ethiopian component to learn from their experiences. For WLRC Ethiopia, the **finalization of its institutional restructuring and integration into AAU structures** is of high relevance. There is **high urgency to finalize this process as soon as possible to provide the WLRC with a legal personality** that allows it to become an independent actor that is authorized to enter into contracts. The current situation of WLRC being a joint project "only" has already proven to delay activities on possible funding opportunities.[9] The review team therefore recommends remaining in continuous discussion with AAU in order to ensure that the statutes are approved by the Universities' Senate as soon as possible. It is furthermore suggested to discuss whether the Board of Trustees should be co-chaired together with the director of CDE as there seem to be different opinions on the issue.
- Finally, the Ethiopian WLRC as well as CETRAD depends heavily on the competencies, leadership and networking capabilities of their directorates. The success of both institutions hence very much relies on the presence of their respective directors. In the long run it is **important to expand the management team of both organizations and to distribute management responsibilities** between a broader number of people. It is recommended to continue this process within WLRC Ethiopia and learn from their experiences.

[9] As outlined above, the multi-donor and GIZ-led Ethiopian SLM programme wanted WLRC to implement a knowledge management component of project which, however, has been delayed because WLRC does not fulfill institutional WB standards regarding contractibility.

5 Review of PA 2: Building River Dialogue and Governance

Based on the view that water diplomacy takes into account different viewpoints and competing needs, the IUCN partial action aims to **stimulate incremental steps towards transboundary cooperation**, complementing high-level water negotiations. Its overall goal for the second phase is to secure sustainable management of water resources for poverty reduction, nature conservation and economic growth through effective governance.

To achieve this, the project relies on **various parallel technical and non-technical activities to foster cooperation** at different levels and between levels. An underlying assumption of the project is that **the agreement of users on water governance and rules of the game is central** for these to be implemented on the ground. Thus BRIDGE **facilitates dialogue between multiple levels and stakeholder engagement** aiming to build trust and consequently cooperation in the management of water resources. Aiming to improve understanding and awareness on benefit sharing, it carries out capacity building on water governance and law both at the national level and with municipal and community actors. IUCN's support facilities provide the training, as well as advice on demand on legal and policy issues and outreach to the global level. The project also aims to create linkages between the different basins through a network of local champions.

BRIDGE is currently approaching the end of its second phase, during which it has been **active in 13 basins worldwide**: In South America, the Zarumilla river (Ecuador-Peru), Catamayo-Chira river (Ecuador-Peru), and the Lake Titicaca basin (Peru-Bolivia); in Central America, the Coatan river (Mexico-Guatemala), Goascoran river (Honduras-El Salvador), and the Sixaola river (Costa Rica-Panama); in the Mekong region the Sekong (Vietnam-Lao PDR-Cambodia), Sre Pok (Vietnam-Cambodia), and the Sesan river (Vietnam-Cambodia). Since 2014, four basins have been added to the BRIDGE portfolio in West, Central and Eastern Africa.

This review focusses on the second phase of IUCN BRIDGE activities in two regions: Central America and South East Asia. The review is based on interviews carried out during field missions conducted in July 2015. The assessment is structured along the evaluation criteria and followed by general recommendations and specific recommendations for each region.

5.1 Findings

5.1.1 Central America Component

Relevance – Are the problems that the project intends to address of relevance in the target region and for the target group?

With its focus on water governance and transboundary cooperation, the project addresses topics that are very relevant in the region. The project's focus on poverty and vulnerability is well placed, as near-border areas in Central American countries have often been neglected. The project is carried out in hotspots where poverty, marginalisation and environmental stress converge. The majority of interviewees in these areas named climate change and environmental stress as one of the biggest challenges to their community's and country's wellbeing. Most of the actors on the ground raised the issue of weather variability, changes in rainy seasons and water shortages, which at times have raised tensions between

water users. Beneficiaries from all levels expressed **demand and willingness to work on the issue** and there is a sense of urgency to do something now.

This part of the evaluation focuses mainly on two basins of implementation in Central America: **Goascoran** (shared between El Salvador and Honduras), and **Sixaola** (shared by Panama and Costa Rica). In these two basins the legal and institutional frameworks vary widely, thus BRIDGE has **adequately focused its work on different intervention levels**. While in Goascoran a bottom-up process is implemented that should as a next step move to a higher level of implementation, the work in Sixaola is mostly carried out at the national level and will benefit from moving down involvement to municipal and community levels, as appropriate.

While in Honduras legislation on water exists, El Salvador has not yet been able to pass its proposed water law. No bilateral agreement governing water resources shared between the two countries is in place and water cooperation is not actively promoted by the highest political levels. Thus, in Goascoran, the focus on municipal-communal engagement and multi-stakeholder approaches **fits well with the existing institutional and cultural context**, where grassroots participation is prevalent and the government as well as people push for decentralisation.

By contrast, project activities in the Sixaola basin take place in the framework of the Bilateral High-level agreement for Transboundary Cooperation in the basin between Costa Rica and Panama and its governing institution. Thus BRIDGE **focuses on institutional building supporting the existing high-level agreement**. The success of the BRIDGE approach in this and a potential third phase will lie in the integration of the different levels into a coherent whole.

Effectiveness – Is the project on track to reach its objectives? What are main achievements and gaps of implementation? What are the reasons for the achievement or non-achievement of objectives?

The approach IUCN uses in the BRIDGE project is appropriate to the region and flexible to be adapted to case basin specific conditions. The **project in Central America has different levels of effectiveness in each basin**, due to various reasons:

In Goascoran and Sixaola, the project is **on track for achieving the outputs of phase 2** and its **effectiveness thus far has been high**. Trainings on national water governance have been carried out and complemented by advisory services of the support facilities (outputs 4.1 and 4.2). The continued development of the champions network has been good and champions from the region have participated in global fora (Stockholm water week and 7th World Water Forum in Korea in 2015) and an interregional learning and exchange visit between BRIDGE Central America and South America in Ecuador in the summer of 2015 (output 4.3). In addition, the BRIDGE-wide exchange of practices and learning between all BRIDGE regions was carried out in Honduras (output 4.4).

Based on the limited interviews on the Coatan basin, the **effectiveness of implementation in Coatan seems medium to low**, as it has been hindered by the Guatemalan national policy based on water sovereignty opposed to transboundary cooperation. The risk of "resistance to engage in regional cooperation because of political reasons" was assessed as "medium" in the BRIDGE-2 proposal, which seems to have reflected the reality back then. Since then, the political landscape has changed and **water sovereignty has become a central pillar of the work of Guatemala's Foreign Ministry.** The MFA, led by the Minister himself, has established in the past years a **strict policy of disavowing any work promoting transboundary cooperation and joint management of shared resources**. IUCN has been working in the basin building partnerships for several years and has managed to keep a positive relationship with the Ministry in the context of the GGRETA Trifinio project. How-

ever, **the implementation of the project in this basin could, similarly to the case of Trifinio, be hampered in the next phase**.

Stakeholder involvement is one of the biggest strengths of the work of IUCN Central America. IUCN has a strong modality of work based on promoting dialogue, building capacities and partnerships and raising awareness at multiple levels, aiming to join them up into a coherent whole. In the current phase, **local and community water institutions** in Honduras (microwatershed committees) have been supported through leadership trainings to allow them to engage with national and provincial government. This has allowed strengthening **actors** (i.e. water users) **at the bottom levels at which transboundary water management is actually implemented**. During this phase, **water governance has been fostered** through the solidification of the Honduran Goascoran Basin Committee and its linkages with microwatershed committees. The ownership of the project was significant within the communities and municipalities visited in the Honduran side. However, the work on the Salvadoran side has not yet reached this level of progress. In order to support transboundary cooperation, the **Salvadoran counterpart** (the Mesa Técnica), **needs to be strengthened in parallel.**

An important step towards effective governance of shared basins in the region was achieved in Goascoran, where the **binational multi-level governance institution** (Goascoran Binational Management Group) **has been revitalized and restructured** after a period of institutional weakness. The associations of local producers, associations of municipalities, NGOs, microwatershed committees and other institutions that are now represented in this group have had a series of meetings outlining a strategic route for water cooperation, which was supported by the support facilities. However, an important limitation is that the Management Group does not yet have legal personality.

Trainings on international water law principles and cooperative water governance have taken place with several **participants of the Foreign Ministries and Environment Ministries of both countries**. In El Salvador, a major achievement consisted in capacity strengthening and targeted advice by the IUCN support facilities that helped the Salvadoran Environment Ministry to present a **national water bill to be considered by the parliament**. In addition, as a result of the trainings, Ministry staff see themselves **better prepared to advocate** the priority of water cooperation to higher levels within the Ministry, with other ministries **and clearly articulate a position to negotiate** with other countries.

However, lacking time resources, reduced human resources and capacities at the Ministries of Foreign Affairs (especially Honduras) limit the ability to engage on the topic of transboundary cooperation. At the same time, ministry staff shows a lack of empowerment and agenda-setting power with superiors (this is the case in Honduras and El Salvador). Often, the responsible unit at the Ministry only carries out activities reacting to actions by other countries.

Transboundary cooperation has been strengthened at the municipal and community level through a participative approach involving the joint construction of a physical basin model (a miniature scaled representation of the Goascoran basin). This approach achieved visibility and attracted attention from the national level and **was effective to raise awareness and build trust among local actors**. Ministry delegates were present at one of the workshops. At the time of the evaluation, the workshop to present the final model was being prepared and representatives from higher government levels were invited. The involvement of the different levels in this type of activities will be a crucial step in order to integrate their actions into a coherent whole.

BRIDGE has a **certain degree of flexibility, which allows it to respond to the conditions in each basin and work effectively**. For example, in Sixaola**, a need was expressed to change direction** and focus on the corporate identity and organisational development of the Permanent Binational Commission for transboundary development between Panama and

Costa Rica. Recognising that the further organisational development of the Commission would be a prerequisite for its institutional strength, the project decided to support this activity, which originally had not been foreseen as part of the project.

The **development and involvement of the champions in Central America has been positive**. Several of them come from municipalities, local producers' associations and other local organizations and **have been empowered to advocate the importance of transboundary water cooperation** and integrated water resource management **at national, interregional and global levels**. The champions network in the region has been effective, driving processes and multiplying knowledge.

Strategic partnerships – Has the project built constructive and lasting partnerships? Is the project cooperating with the right partners to achieve the best results?

IUCN has been working in the region for many years, even before the implementation of the BRIDGE project, and was able to establish long standing partnerships that support project effectiveness. Moreover, based on analyses of past and ongoing projects in the region, IUCN has strategically built its activities so as to **seize synergies with and harness resources from initiatives that exist in the basins**. In doing so, IUCN has **successfully identified its own niche.** In Sixaola, for example, BRIDGE has carried out an analysis of existing donor projects, and informed and involved them to build upon their achievements (e.g. an Inter-American Development Bank project funded by GEF and the ECADERT project). Building partnerships with other projects also allowed the different actors to **build trust in the BRIDGE project**.

In the Sixaola basin as well as in the Honduran part of the Goascoran basin, IUCN works with **implementers on the ground that can push activities, foster dialogues and carry out regular advocacy** with different actors. In Honduras, this role is played by the local partner Fundación Vida. In Sixaola, a part-time co-worker is located in an office in one of the local municipalities near the border of the two countries. However, a limitation arises for the Goascoran basin because the engagement with local institutions in El Salvador is not as closely carried out by a partner in the field as in Honduras.

Sustainability – Is it likely that the positive results of the project will be lasting?

The BRIDGE approach overall contributes to the sustainability of the project's achievements because it involves a large number of different state and non-state sectors, raising lasting awareness and building knowledge and capacities on the ground. In Central America IUCN BRIDGE has created considerable ownership of the project: The work of the microwatershed committees and sub-basin committees are led by local actors that are rooted in their communities, share the interest to continue the work and can be expected to persist beyond the BRIDGE project.

Although the champions network brings important benefits in terms of catalysing processes and disseminating what they learn in their exchanges and capacity building sessions**, the sustainability of the network component is unclear**. The network relies on large travel budgets to bring together champions from different basins and world regions. Once BRIDGE phases out, the champions themselves – individuals who engage in the project due to own interests and on a volunteer basis – have neither the institutional presence nor the financial support to continue these activities.

In addition, **IUCN has achieved a long-standing institutional presence in the region** through implementation of a number of small and large projects. **This allows the organisation to provide a level of continuity that can support sustainability**. In the BRIDGE basins, IUCN has built upon its work funded by SDC and by other donors to create and contin-

ue a portfolio of projects with complementarities and potential synergies. The organisation plans to continue this strategy, e.g. through the new phase of a project supported by the German Environment Ministry (BMUB) through its International Climate Initiative (IKI) and synergies achieved with the relatively new SDC project “Nuestra Cuenca” in Honduras.

The extremely high fluctuation of personnel in the relevant units of national ministries, particularly in Honduras, is a major challenge in terms of sustainability. Every time there is an internal reshuffling of staff, the project is set back, as the engaged individuals leave and acquire other mandates. During the mission it was clear that this has happened several times and is still likely to happen in the future.

5.1.2 South East Asia Component

Relevance – Are the problems that the project intends to address of relevance in the target region and for the target group?

IUCN managed to adapt its focus to a changing context and thus to stay relevant, especially by regularly conducting internal reviews using an external expert. Nevertheless, overall relevance of the project was partly hindered by its lacking effectiveness.

In the beginning the **relevance of the project was hindered by lacking stakeholder communication and engagement**. The original design was flawed and described as unrealistic and showing a lack of understanding of the regional institutional set-up and complex political economy of transboundary cooperation. In addition, the theory of change of the project was not well defined and unclear. As a result, the logframe was re-adjusted towards the end of phase 1 and the goals for transboundary cooperation scaled back. A larger focus was put on Laos and Cambodia in terms of building national capacities and institutions, on technical outputs mainly in form of an information platform and analysis reports, and on establishing a champions network and providing trainings on hydro-diplomacy.

At the same time (during the remaining phase 1 and phase 2), **the context of the project changed radically – in particular the willingness of Vietnam, Laos and Cambodia to cooperate**. In the beginning of the project Vietnam was less willing and Laos more willing to cooperate. Since then Laos took a step back from transboundary cooperation as it started to advance its development of hydropower projects. This made engagement with Laos very difficult and in essence led to a stop of national activities in Laos. Other donors had similar experiences and described especially the Laotian Department of Water Resources as an unreliable partner.

In May 2014, in a very surprising move that has been described by a number of interview partners as a **game changer, Vietnam ratified the UN Watercourses convention** (UNWC) and became the 35th contracting state. As a result the convention went into force. This move seems to be a sign of Vietnam trying to become a more pro-active force in water security and transboundary water cooperation in South East Asia. Even more promising, parts of the Cambodian government have also expressed interest in also moving towards a ratification of the convention. This is a major window of opportunity for IUCN BRIDGE in South East Asia and has increased its relevance, especially through its renewed focus on hydro-diplomacy activities.

Effectiveness – Is the project on track to reach its objectives? What are main achievements and gaps of implementation? What are the reasons for the achievement or non-achievement of objectives?

Overall, the effectiveness of the IUCN BRIDGE intervention in the 3S Basin was low in terms of progress towards stated goals. The lacking delivery of outputs hindered the achievement

of programme objectives. However, **the effectiveness of the project improved significantly towards the end of phase 2**.

The **project faced a number of significant challenges in terms of project management on different levels**. The question what the main problems in this regard were could not be answered during the review mission since interviews with the old project management could not be conducted and information from different interview partners did not add up to a coherent picture. However, it seems to be undisputed that there were significant problems in project management including two management changes and a management gap during the last change. This impeded the efficiency of the project and the delivery of outputs. An internal review in phase 2 identified internal structural problems between the project management and other IUCN units as a major challenge for effective project implementation – especially the delivery of the knowledge products. This could not be confirmed in the current review.

Since a new (third) project manager was hired it seems that **the effectiveness of the project increased significantly**. This included improving the website in terms of branding, usability and content, and developing a communication strategy that is underpinned by a thorough stakeholder analysis, and sets out specific goals, communication tools, and ways to develop the website towards a more interactive platform. In addition, a number of national and regional workshops and events were held, including a regional technical forum with around 60 participants from 26 organisations. The events were described as successful by beneficiaries.

In addition, **almost all planned knowledge products** including for example the basin profiles were **finished and published**. These products were elaborated before as part of a participative process. However, because of their quick and simultaneous delivery at the end of phase 2, there was not enough time to focus on the dialogue process that should accompany them to make sure that they are taken up and disseminated widely. This accompanying process should be continued in a potential phase 3.

The recent **success of the hydro-diplomacy activities** has to be underscored. It is **an indication of what the project might achieve in a potential next phase**. One success story in this regard is the change of Cambodian stakeholders' perspectives on the UNWC. Some Cambodian stakeholders were sceptical whether the Mekong agreement and the UNWC were compatible. A national seminar specifically on this topic was successful in convincing key stakeholders in the Cambodian National Mekong Committee (CNMC) that the UNWC strengthens and complements the Mekong agreement as it reflects its principles and adds important procedural provisions in particular a binding dispute resolution mechanism. The Co-chair of the CNMC became an advocate for the UNWC.

In addition, in Vietnam a partnership with the national diplomatic academy was established (facilitated by the US embassy) and **BRIDGE has been engaging more actively with the Foreign Ministries of the different countries**. Partners and other donors confirmed the uniqueness and high quality of the hydro-diplomacy trainings of IUCN and the increasing interest for the topic in the region. Also because the WWF has stopped its activities on hydro-diplomacy, IUCN seems to be well positioned to meet this increasing need.

No gender specific activities or the use of gender sensitive approaches could be found during phase 1 or 2. However, the new project management is aware of the issue and started to include more women in the champions network.

Close guidance and support by the support facilities helped to facilitate the change of project management and the new project management to increase the effectiveness of the project. The new project manager underlined the very open relationship, good conceptual support, and the willingness to listen and learn of the support facility staff.

Strategic partnerships – Has the project built constructive and lasting partnerships? Is the project cooperating with the right partners to achieve the best results?

One decisive factor for increasing the delivery of outputs is that the new project manager, who was IUCN staff in Laos for four years before, was **successful in engaging a broader range of stakeholders and in using the IUCN regional and national offices and their staff and networks**. This built on the good networks established before, but also succeeded to go beyond it. The strong regional and country offices of IUCN are a major strength of the organisation but had only been minimally involved before, leading to some of the challenges described above. At the same time the new project management was also more successful in linking BRIDGE activities to other IUCN programmes and make use of IUCN's regional resources such as the communication team.

Inspired by the role that the champions network play in Honduras[10] and building upon the Mekong River Dialogue that ended because of discontinued funding, the **3S basin champions network was re-started successfully**. This involved expanding the membership to include a more **mixed and diverse set of stakeholders that are committed and active** and transforming the champions network towards a co-governing body of the project**.** Furthermore, a better working culture was established that allows the participants to act as individuals without institutional hats. **These efforts seem to have been successfu**l. The number of individuals in the network grew, in particular from civil society. In addition, the past meetings were not only used to inform about the project and present products, but to involve the champions more in strategic decisions. For example, a SWOT analysis of the past BRIDGE phases was carried out during a network meeting to identify lessons learned and identify recommendations for a potential phase 3.

Looking at the **engagement with key stakeholders**, it seems that the **engagement with national governments and in particular their ministries** of natural resources and water, departments of water resources and National Mekong River commissions **was successful throughout the project**. In contrast, the **engagement with local stakeholders and civil society and to regional actors** such as the Mekong River Commission (MRC), ASEAN and Cambodia Laos Vietnam Development triangle **was lacking or unsuccessful**. Most surprisingly, during a meeting with MRC's senior management as part of the evaluation mission, it became apparent that it was completely unaware of IUCN BRIDGE even though there was engagement with different MRC programmes on the working level. Moreover, **coordination with other donors and SDC** during the first two phases can only be described as **non-existent**.

Sustainability – Is it likely that the positive results of the project will be lasting?

The sustainability of the results achieved was hard to judge since most of the outputs had only been delivered shortly before the evaluation mission. The late delivery of many of the knowledge products also meant that there remains little time for effective dissemination and for using them to influence policies and institutions. **The sustainability of results**, in particular the knowledge products (including the website) and the champion's network**, will be a significant challenge for the next phase, though not impossible to manage**.

[10] The project manager took part in the IUCN BRIDGE annual learning meeting in Honduras.

5.2 Lessons learned and recommendations

The concept note emphasises the flexible and region-specific approach to identify stakeholder priorities and facilitate concrete steps towards cooperation by fostering the development of transboundary multi-level governance in the form of partnerships, basin councils, binational groups and transboundary commissions. It identifies scaling-up as one of the priorities for a third phase. **The general direction of the concept note seems sound and in line with the evaluation findings**. In addition, the reviewers recommend to:

5.2.1 General recommendations

- **Clearly spell out the theory of change[11] of how the set of activities in each basin contribute to the expected outcomes, the IUCN partial action and the GPWI strategic goals.** IUCN was able to gain experience and better define its overall theory of change during the last two phases. However, this clarity of concept was better explained during interviews than it is reflected in the project documents. For the third phase, it is important that, while keeping room for necessary changes, IUCN remains focused and clearly defines its activities for each specific basin and how they support transboundary cooperation. There should be flexibility and leeway in the design to adapt to changes, but this should also be specifically explained and spelled out where necessary.
- **Address the increasing demands on the support facilities.** BRIDGE seems to be approaching the point where organizational structures have to be adapted to the size of the portfolio of different basins. The large and increasing numbers of basins is challenging the capacities of the support facility. Possible options for how to address this challenge should be outlined for the next phase.
- **Address the limited sustainability of the champions network.** The sustainability of the champion's networks is a major challenge and should be discussed at the outset of or before a third phase. While as individuals the champions contributed significantly in terms of catalysing processes and disseminating what they have learned in their exchanges and capacity building sessions[12], the sustainability of the global and to some extent the regional networking events are questionable because of the lacking institutional structure and financial resources that could sustain it beyond the project. Once BRIDGE phases out, the champions themselves do not have the capacity nor the institutional presence to continue organising network meetings. This refers even more to the global network.

5.2.2 Recommendations for Central America Component

- **Consider discontinuing the activities in the Coatan basin.** As explained above, because of the obstacles presented by the Guatemalan government policy of none cooperation on transboundary waters, the potential success of implementation in the Coatan basin is significantly limited. Based on the limited number of interviews on the Coatan region we cannot conclude that discontinuing the work in Coatan in phase 3 of BRIDGE is the best way to further the project in the region, but we recommend carefully weighing pros and cons. In case of a discontinuation of activities in the Coatan basin, we recommend

[11] A Theory of Change explains the process of change by outlining causal linkages in an initiative, i.e., its shorter-term, intermediate, and longer-term outcomes. The identified changes are mapped –as the "outcomes pathway" – showing each outcome in logical relationship to all the others, as well as chronological flow. The links between outcomes are explained by "rationales" or statements of why one outcome is thought to be a prerequisite for another. (https://en.wikipedia.org/wiki/Theory_of_change)

[12] Interestingly, while the champions network were considered one of the main success factors of IUCN BRIDGE in Central America and South East Asia, they were not considered very relevant for BRIDGE Africa.

developing first an exit strategy that specifically considers support for long-time partners and champions in the basin.

- **Complement hydro-diplomacy with strengthening leadership at the national level.** At the ministry level, hydro-diplomacy and water governance trainings have been carried out and actors at higher levels are gaining awareness of the topic. However, staff from the units in charge of transboundary issues at the Foreign Ministries show a lack of agenda-setting power with their superiors and of empowerment to make decisions on water cooperation with other countries. Thus, hydro-diplomacy trainings should be complemented with leadership trainings to provide participants with the capacities to engage others on the topic within the ministry, across ministries and bilaterally and to reinforce a more proactive and positive approach. In the next phase it would be worth exploring whether champions can be identified and supported at the national level and not only drawn from the local level, as they currently are.
- **Focus efforts to impact higher political levels in Goascoran.** In the basin, the very different national conditions hamper the institutionalisation of water cooperation at the highest political levels. While Honduras has a water law in place, El Salvador does not have similar legislation, making it extremely difficult to establish a bilateral agreement at this stage. In the next phase, IUCN BRIDGE should thus focus its efforts in the Goascoran basin on permeating higher political levels in order to have an impact on bilateral policy, including pushing for discussion of the Salvadoran water bill and for putting it into effect. Impact at higher levels can be promoted by making the results of the project more visible to ministries and parliamentarians. A specific area of work proposed during the evaluation mission was the engagement with the parliament's commission in charge of reviewing the water bill and the private sector to increase awareness and importance of a water law for all the sectors concerned, including the agricultural and industrial sectors.
- **In the Sixaola basin, focus on efforts at the local level.** In order to integrate the different levels of action of the BRIDGE project, a potential third phase should focus on the engagement of the mayors of Talamanca (Costa Rica) and Changuinola (Panama) or other relevant local leaders that can bring visibility of the project and push processes at lower levels.
- **Continue to explore the possibilities to strengthen the regional institutional framework.** In order to increase the sustainability of the project and the institutions developed during BRIDGE, continue to explore how the Central American Integration System (SICA) and its competent units can be strengthened to pick up the work after BRIDGE ends.
- **Explore how to better harness the involvement of women champions.** A clear strength of the project's approach is the presence of important champions (both within the network of champions and outside) that are women. This allows taking into account their concerns and experiences into the project design and implementation. For example, several of the women working in communities have achieved a level of empowerment that would allow them to inform or be twinned with other women at higher levels (within ministries). An exchange on the characteristics of the basin, the importance of institutional arrangements for joint water management and attention to climate change could be an effective bottom-up advocacy tool to increase women's empowerment and the visibility of local needs among higher political levels.
- **Continue efforts to support donor coordination in the Goascoran area.** By focusing its Central America work on hotspot regions of engagement, IUCN is strong in terms of sustainability and successful in finding complementarities with other projects. However the hotspot approach also brings about limitations, as the project is competing with other donors, in the case of Honduras many of them in the same area. This produces significant risks of fragmentation, overlap and doubling efforts. SDC and IUCN should thus con-

tinue the work of mapping all the existing efforts and create a platform for donor coordination and joint monitoring in the Goascoran area.

- **Carefully monitor changing conditions in the Goascoran basin**. Honduras has ongoing large-level infrastructure developments (a dam project and the *Canal Seco* highway that links the Pacific and Atlantic coasts) that can present new opportunities and challenges for the project in the Goascoran area. On the one hand, they can result in significant socio-environmental changes, bringing in new actors, potentially reshaping existing power relations, and introducing a new set of security threats and interests to the municipalities. On the other hand they can also present opportunities, as in the case of the dam project that has brought together the municipalities of the two countries. IUCN should closely observe these changes by engaging the different actors in conversations about risks and opportunities. The assumption that the framework conditions will stay the same could be risky for the project in this changing environment.
- **Increase the engagement on the Salvadoran side of the Goascoran basin.** Currently, IUCN relies on its local partner Fundación Vida, which implements the project and carries out regular engagement with local actors mainly on Honduran territory. The success of a potential third phase will partly depend on the possibility to complement these activities through increased involvement on the Salvadoran side. A local implementing partner or a project officer placed at the local level would be possible options. Specifically, IUCN should continue to support the institutional development of the Salvadoran counterpart to the Honduran Basin Committee (the Mesa Técnica in El Salvador). In order for both countries to engage at the basin committee level, both institutions need to be strengthened to carry out engagement on equal footing.
- **Address basin imbalances presented by large SDC projects in only one of the riparian countries.** SDC has a large portfolio in Honduras, but less so in El Salvador. With the kick-off of the large Nuestra Cuenca bilateral project this year to strengthen Honduran river basin institutions, a risk of imbalance between the capacities and support from SDC to Honduras vis-à-vis El Salvador is significant. SDC and IUCN should explore whether the national project can bolster its transboundary component in order to find synergies with IUCN BRIDGE and thus better contribute to SDC's water cooperation goals.
- **Strengthen the institutional setup in the Goascoran and Sixaola basins**. In Goascoran, several interview partners called for intensified attention to the issue of obtaining legal personality and legal status for the basin and sub-basin committees, in order to achieve sustainability past the duration of the project and after changes in government. In the long-run the exit strategy of BRIDGE will be strongly dependent on the capacity of self-sustaining and self-financing of these institutions. In Sixaola, explore the possibility of securing legal status for the binational commission, so that it can carry out own fundraising and self-sustaining activities, perhaps with support from the support facilities.

5.2.3 Recommendations for South East Asia Component

For the BRIDGE component in the Mekong basin a lot of activities and outputs are still to be finished until the end of the year. **IUCN and SDC should realistically assess if the delivery of all outputs for phase 2 is possible** or if some activities can be merged. This is in particularly the case for events that target the same audience and participants. A cost-neutral extension into the first months of 2015 could also be a possibility.

In order to make up for the weaknesses that were identified in phase 1 and 2, **BRIDGE will have to build upon and expand the changes started at the end of phase 2**. This includes:

- **The design of phase 3 has to be based on a thorough and deep stakeholder communication and engagement process**. Fortunately, the project management has already started this process, but the timeframe to finish this process within in time for the design of the third phase. It will be just as important to keep stakeholder engagement at a high level during project implementation
- **Phase 3 should put a major focus on hydro-diplomacy and the UNWC**. This would include supporting the effective implementation of the UNWC in Vietnam and supporting the move towards the ratification in Cambodia. It also opens up the possibility to engage with Thailand and Myanmar who both have informally indicated interest in capacity building regarding the UNWC. Sensibilisation of Thailand and Myanmar would form part of a longer term strategy to move the whole region towards the UNWC and we recommend expanding the reach of the hydro-diplomacy component to these countries. The main risk regarding the UNWC activities is that higher political levels in Cambodia will not see the merit in ratifying the UNWC since it would limit its possibility to develop hydropower unilaterally. This risk will have to be reflected in the proposal.
- **The focus on hydro-diplomacy and the UNWC will also mean to engage on a different and higher political level**. For this to be successful, IUCN BRIDGE will need to closely coordinate with and receive diplomatic support from SDC and Swiss embassies. In addition, it will need to engage closer with the development partner group of the MRC and engage beyond the NMCs on the national level to reach parliamentarians, and ministerial and prime ministerial levels. CNMC has already expressed its willingness to convene all important agencies and ministries including Ministry of Foreign Affairs, Ministry of Environment, Ministry of Mines and Energy Tonle Sap Authority, Fisheries Administration and civil society representatives. Following up on the recommendation of the last internal review to establish a regional coordination mechanism, it might also be helpful to form an advisory group of high level individuals (vice-minister, DG level) or a group of friends of the UNWC that includes regional actors and donors and that supports the project in reaching higher political levels. The need for establishing national coordination mechanisms seems to have decreased since the close involvement of IUCN's national offices in the implementation of the project. They are well positioned to engage with all national actors on a regular basis.
- **There is also a clear opportunity to upscale BRIDGE's hydro-diplomacy approaches** by partnering with national and regional institutions and using Trainings-of-Trainers and capacity building to enable actors to not only apply the approaches, but also adapt and disseminate them. In Vietnam the diplomatic academy which is part of the Ministry of Foreign Affairs provides not only trainings for Vietnamese, but also Laotian and Cambodian diplomats. In Cambodia, the champion network member and CNMC deputy chairman is a lecturer at the royal administrative academy and gives courses on water cooperation. On the regional level, the MRC would be a natural partner for upscaling. Part of these joint efforts could be the development of specific regional training modules or modules that target specific actors such as NGOs, provincial representatives, or diplomats.
- **Phase 3 should also focus even more on the champions network as a central pillar of the project**. Since the Mekong Water Dialogue ended, there is a gap regarding a regional multi-stakeholder platform on transboundary water cooperation. Its functions as a sounding board for project decisions and discussion space for idea development, to comment on the different knowledge products and support dissemination, and as an advocacy tool should also be further explored. One central gap that needs to be filled is its gender balance. A first exploratory meeting with the Australian funded Inclusion Project showed that there is also potential to cooperate with other donors regarding this topic. In addition, the champions network could also start to take on young leaders and support them through mentoring.

- **Take BRIDGE to the local level, involves more provincial and local actors, and become more action oriented**. This was a need expressed by all 3S country government partners and many civil society representatives. One way forward would be to **support the development of RBOs on the local level in the three riparian countries respectively**. There have been changes in this regard in the regulatory context in the 3S countries, and Laos and Vietnam have an interest to work on setting up national RBOs in the 3S. However, based on IUCN's negative experiences from supporting RBO development (especially in Lao) during the first two phases, IUCN should prevent being pushed in the role of leading the development of RBOs since this would go beyond the capacities of the project. Instead, IUCN BRIDGE should primarily focus on supporting the development of RBOs through very specific activities and providing lessons learned and good practices. Based on ownership of the respective countries, **IUCN BRIDGE could focus on its comparative advantage as neutral convener ensuring that the RBO development process is inclusive** (and extends to the private sector and civil society). In all three countries, but especially in Laos, there remains the risk of lacking ownership and commitment. Nevertheless based on the needs and willingness expressed during meetings with government partners and NGOs as well as the changes in the regulatory context, there is a potential for providing specific support.
- **Complement national activities to support establishment of RBOs with transboundary components.** National activities could be complemented by setting up a 3S basin working group that could provide an informal forum for exchange and a first step towards a transboundary RBO, e.g. by working on a common vision, goals or development plan for the basin. Furthermore, both Vietnam and Cambodia have indicated a willingness in starting to share data and will develop a joint water resource monitoring plan as part of a World Bank project, which could provide an opportunity to link efforts.
- **BRIDGE needs to map the full donor landscape, build upon existing and past experiences, and coordinate closely with existing and planned projects**, especially for its local activities. This includes but is not limited to -the Mekong Integrated Water Resource Management Project of the World Bank that has national and transboundary components that both cover parts of the 3S basin. This project is in the beginning and first exploratory conversations with the World Bank showed the potential for cooperation. In addition, close cooperation with other IUCN projects such as Critical Ecosystems Partnership Fund could also provide significant co-benefits. Another interesting opportunity for BRIDGE would be to function as a convener for different transboundary donor project and provide some kind of exchange forum for donors in this field – without creating duplications with the MRC development partners group.
- **The component on *technical* dialogue and cooperation should be scaled back**. The strong focus on technical knowledge products made sense at the early stages of the project, but the change in context opened up new opportunities for a broader range of activities. In the next phase, the technical part of the project should provide only very specific and targeted knowledge products such as studies to support the activities in the 3S basin and highlight specific issues. This could include for example benefit sharing case studies, data on land use changes, gender-specific analysis, and lessons learned from RBO development. The planned activities regarding the water ecology framework are very ambitious and it should be realistically assessed how many resources would be needed to have an impact in this area and if IUCN BRIDGE should fill this methodological niche. **More focus should be put on the accompanying process and making sure knowledge products are fed into relevant policy processes**. Moreover, more communication products need to be translated in all 3S basin languages. The 3S basin website should be continued and better communicated. The move towards an information and sharing platform is the right direction.

- **Renewed effort should also be put into (re)connecting to regional organisations** – foremost the MRC, but also ASEAN and CLV development triangle. The champions network and the Diplomatic Academy of Vietnam which is part of the Network of (ASEAN) Network of East Asian Think Tanks could provide entry points to ASEAN. The CLV development triangle is harder to engage with, but it might be possible via reaching out to private sector actors.

6 Review of PA 3: UNESCO Groundwater Resources Governance in Transboundary Aquifers

In recent years, the importance of transboundary groundwater resources has increasingly been recognized. The sustainable management of these resources, however, is challenged by a lack of knowledge about many aquifers, particularly in comparison with surface water resources. The UNESCO partial action therefore aims to **address this knowledge** gap by generating data and information on the physical and socioeconomic characteristics of groundwater resources **and facilitate the establishment of joint governance mechanisms between countries**. The project is currently ending its first phase and its overall objective is to contribute to governance capacities and arrangements that support the long-term and sustainable management of selected groundwater aquifers.

The project is implemented by UNESCO and based on UNESCO's methodology for the assessment of Transboundary Aquifers (TBAs) developed through the global Transboundary Water Assessment Programme (TWAP). The **project focuses on three groundwater aquifers**, the Trifinio Aquifer in Central America, shared by El Salvador, Guatemala and Honduras; the Pretashkent Aquifer, which falls between Kazakhstan and Uzbekistan; and the Stampriet Aquifer in Southern Africa shared by Botswana, Namibia and South Africa.

While one of UNESCO's overall objectives is to replicate the TBA assessment worldwide, the SDC-funded activities are implemented in three pilot regions and aim at enhancing transboundary cooperation around aquifers in order to reduce conflicts and improve overall environmental sustainability. It follows a **very technical approach based on the assessment methodology**. Through a joint assessment of the aquifer the countries involved recognize the transboundary nature and high vulnerability of the resource. This includes a joint detailed, indicator based assessments and uploading and sharing the data via a web-based information management system (IMS). Based on this recognition and the dialogue and trust building that happened during the assessment steps are taken towards a political commitment to cooperate and implement priority actions. This includes the establishment of multi-country consultative bodies.

The following evaluation focuses in detail on the two regions that were visited as part of the evaluation missions (Central Asia and Central America). In addition, some overall conclusions based on the interviews conducted with UNESCO headquarter staff and during the mission are drawn about the activities in Southern Africa.

6.1 Findings

6.1.1 Central Asia Component

Relevance – Are the problems that the project intends to address of relevance in the target region and for the target group?

With its focus on groundwater resources, the GGRETA project tackles a very relevant issue that is acknowledged as strategically important by both riparians. By focusing on data sharing, it did, however, not reflect national priorities and was therefore not perceived as an entirely pertinent initiative.

Groundwater remains an important issue for Kazakhstan and Uzbekistan: according to a nation-wide assessment by Kazakhstan, the Pretashkent aquifer was identified as one of

two aquifers with a high risk and potential for transboundary conflict and problems. The assessments done as part of the GGRETA project indicate that it is practically non-renewable and its water levels are declining. **Kazak government officials have acknowledged this and are very open for cooperation**. **However, there remains a certain level of mistrust towards Uzbekistan** based on negative experiences in the past when Uzbekistan did not fulfil commitments to cooperate.

The **main challenge of the project is the lacking willingness of Uzbekistan** for transboundary cooperation and to share data (this includes but is not limited to sharing data on groundwater). In addition, Uzbekistan has declared groundwater a strategic national resource making it even harder to engage on this issue. The government structures in Uzbekistan are extremely centralized and hierarchical, and are characterized by fear and nervousness that decrease willingness to engage on politically sensitive topics at a technical level without high-level political support. Nevertheless**, the Uzbek government is open for cooperation and activities as long as they are carefully communicated** and do not directly touch upon politically sensitive topics such as transboundary cooperation on groundwater.

Effectiveness – Is the project on track to reach its objectives? What are main achievements and gaps of implementation? What are the reasons for the achievement or non-achievement of objectives?

The overall effectiveness of the programme was medium with a higher effectiveness in terms of results achieved in Kazakhstan than in Uzbekistan. The risk analysis that was done as part of the proposal and project design underestimated the risk of Uzbekistan being unwilling to engage. Based on these false assumptions, the GGRTA project could only be of limited effectiveness in regard to fostering transboundary cooperation during the past phase. Main achievements consist in the full technical assessment of the Kazakh part of the aquifer as well as successful trainings on hydro-diplomacy in both countries.

It seems that the position of the Uzbek government partners towards transboundary cooperation on aquifers changed: During the design phase of the project the consulted Uzbek partners did not express any reservation. Only after the project had started they became less willing to cooperate. An analysis of the region and Uzbekistan's past behaviour regarding transboundary cooperation, however, should have underlined this risk. It also seems that the **stakeholder engagement during the design phase was not deep enough** as the risks were not raised, not identified or ignored during that process.

This led to a flawed design of the project. Because of the obstacles and political sensitivities **the project should not have started with a technical assessment and data sharing**, but with a deep stakeholder engagement and dialogue process to slowly move towards data sharing and more cooperation. This problem was compounded by the fact that the project proposals and log frames were very specific regarding the technical assessment, but very vague regarding the stakeholder engagement process, dialogue and trust building.

The project reacted by implementing in essence **two national projects** and tried to link those activities in both countries by facilitating exchange. Although this meant in essence to significantly cut back the transboundary component of the work, there seems to not have been an alternative – except stopping the whole project. This approach of putting more focus on the national level if the conditions for transboundary cooperation are not given has been used by many donors (including the SDC) to deal with changing political contexts. This shift in focus allowed GGRETA to stay relevant and achieve the following results.

The project successfully finished a full technical assessment in **Kazakhstan** that was uploaded to the IMS. The implementing partners showed a very high level of skill and the capacity building activities on the expert level were very successful. Especially the involvement of young experts and students was a key strength. A challenge in Kazakhstan was that gov-

ernment officials and ministries changed quickly making it hard to sustain commitment from and relationships with individuals which is key for working on politically sensitive topics like transboundary water cooperation.

In **Uzbekistan** a partial technical assessment was done, but not uploaded to the IMS and shared. The option of uploading data to the IMS and not sharing it was not used by Uzbekistan indicating that a web-based solution – even if it allows countries to control their own data – will likely be perceived as problematic if a country is not willing to share data.

Despite, the unwillingness to share data on the aquifer, **expert exchange took place to a limited extent**: Uzbek experts participated in some trainings and parts of the assessment work in Kazakhstan. In general, it seems that there is regular exchange on the technical and expert level across the border among older experts who often share common experiences from Soviet times. The challenge is unwillingness to cooperate on the higher political levels which prevented the approach of using the technical assessment to foster cooperation to work.

The legal and gender components of the assessments were done in both countries and it is planned to harmonize and share them. The gender component is very innovative, but was met by severe data limitations in both countries as gender-disaggregated data was very hard to find.

The **hydro-diplomacy** part of the project, consisting of capacity building measures mainly for government institutions, was not foreseen in the initial planning and added later. This part of the project was in addition to the technical assessment on the Kazakh side the second major achievement of the project and the one with more potential to actually foster transboundary cooperation in the current political situation. The following results stand out and exemplify the potential of this approach: One young hydrology expert in Kazakhstan who participated in the hydro-diplomacy training underlined the change of perspective the training provided and organized on her own a small introductory training for other undergraduate students that she was asked to repeat the following year. Another Kazak participant of the training is now assistant to the Foreign minister and also underlined the value of the training for his work. During the review mission a hydro-diplomacy training took place in Uzbekistan that had broad government participation from different ministries and was conducted by an impressive range of leading international experts. The training was very well received and used an innovative approach of linking domestic and international law also covering groundwater.

Strategic partnerships – Has the project built constructive and lasting partnerships? Is the project cooperating with the right partners to achieve the best results?

UNESCO was able to identify and engage the necessary government institutions (from Ministries of Foreign Affairs to State Geological Committees). Its universal membership and established relationships with governments through for example national UNESCO commission is a comparative advantage when dealing with the centralized post-soviet political systems of Central Asia

Despite the design flaws and a very challenging and complex context, **the project succeeded in building trust and constructive relationships with Uzbek partners**. This was a slow and step-by-step process, but led to the government partners slowly opening up. One positive sign in this regard is the participation of Uzbek officials in trainings in Delft which they were not willing to do before.

UNESCO as an organization and partner is well received in the region and it can pull in staff that has a broad network and experience. However, a challenge is its centralized organization. The communication lines between staff that works on the ground via UNESCO headquarter project management to SDC are very long and raise the question if all information is

effectively communicated. In addition, the SDC in Uzbekistan and the Swiss embassy in Kazakhstan were not well informed about the project and its implementation. Their involvement (also in the design process) would probably have helped to prevent some of the design and implementation problems by providing valuable insights and support.

6.1.2 Central America Component

The implementation of GGRETA in Central America has the particularity of being managed by UNESCO but implemented on the ground by the IUCN Regional Office for Mexico, Central America and The Caribbean.

Relevance – Are the problems that the project intends to address of relevance in the target region and for the target group?

The project speaks to the conditions and addresses the problems in the region. Near-border areas like Trifinio have traditionally been neglected by centralised governments and often poverty, marginalisation and environmental stress converge there. There is agreement across ministerial, municipal and community levels in Honduras and El Salvador that **the project is highly relevant**. The consensus stems largely from the fact that **actors at all levels see water resources as a central topic.** In Guatemala, the government shares the view that sustainable management of water resources and the Trifinio aquifer complex are extremely relevant for the country. However, the project is seen by the Ministry only as a conduit to communicate its policy on water sovereignty (see more details under Effectiveness).

Only limited data and information exists about the aquifers in the region, their size and capacity. In the region, there are concerns across the countries and across all levels that **climate change impacts, compounded by the inattention to the conservation and sound management of water resources, are already affecting** the region and are expected to worsen. In absence of an adequate legal framework for managing groundwater in the region, different water users dig wells in an unregulated manner. During the review mission, actors from all levels recognise the importance of conserving the aquifer for the sustainable development of the communities around it and to build an institutional and legal framework for it.

Representatives of the **Trilateral Commission for Plan Trifinio** (short form: Plan Trifinio)**,** a key partner and target beneficiary of GGRETA Central America, also **rated the project as highly relevant**. Plan Trifinio is an intergovernmental organisation headed by the Vice Presidents of El Salvador, Honduras and Guatemala, which was established in 1987 to work on development issues in the tripartite area and has been working on the aquifer for the past 10 years. Plan Trifinio representatives and technical staff in all three countries have expressed significant interest in the project as it is in line with Plan Trifinio's strategic goals. In addition, **the aquifer assessment supports Plan Trifinio's work on technical issues as well as efforts in gathering and publication of data.** Plan Trifinio representatives further stated that **GGRETA serve as a basis on which they can engage with the Foreign Ministries of the riparian countries**.

The project's capacity building on GIS, the IMS and the assessment methodology was well received by the target group. The existing capacities in the three countries vary widely and thus both technical and political stakeholders expressed high interest in learning how to implement UNESCO's methodology and the innovative assessment techniques.

The **project is perceived as the necessary piece of the puzzle** that continues work on the aquifer started by other donors. After a series of unfinished projects of the international development cooperation on the Trifinio aquifer system (by the International Atomic Energy Agency, IAEA, and the European Union), GGRETA's timing of intervention was favourable.

By building upon these other projects and drawing tangible scientific conclusions about the shape and location of the aquifer system in the Trifinio area, the project was able to **bring to an end what had been started by other donors**. This gave **continuity to the related institutional processes and dialogue**.

Effectiveness – Is the project on track to reach its objectives? What are main achievements and gaps of implementation? What are the reasons for the achievement or non-achievement of objectives?

The **effectiveness of the GGRETA project in terms of the achievement of outputs during the first phase in Trifinio is medium to high**. In spite of important limitations, the GGRETA project has completed most of the steps for component 1 (the technical assessment, establishment of the National Technical Groups, adjustment of the methodology and definition of indicators, gathering and harmonising data and the completion of the aquifer assessment). Phase 1 had a **strong emphasis on the technical** assessment and capacity strengthening in each riparian country. The technical experts underlined the importance of exchange and dialogue between the technical experts of the three countries for capacity building and a shared understanding of the resources. However, so far, this phase **has not shown the same level of progress in building transboundary agreement and cooperation at the political level** (included in component 2). While the Mayor of Esquipulas, one of the main cities in the Trifinio Area in Guatemala, has actively engaged in local dialogue accompanying the aquifer assessment, engagement with municipalities or with the Foreign Ministries of Honduras and El Salvador has not taken place yet.

By providing new information and knowledge on the aquifer and its capacity, **GGRETA established the basis for technical actors to become aware of the resources and the need to protect them**. Several stakeholders underlined that the project was able to achieve important steps in an efficient way and in a brief period of time. At the time of the evaluation, the **assessment of the Trifinio aquifer complex had recently reached one of its final steps**. The study found that the groundwater resources in the area are in fact divided into two aquifers: (1) Ocotepeque-Citalá (shared by Honduras and El Salvador) and (2) Esquipulas (in Guatemalan territory). During the evaluation, stakeholders from Plan Trifinio and national technical agencies recognized the importance of these findings but **underscored the need to confirm them.** Thus, activities for building consensus on these facts and building cooperation on this basis are the next outputs to be achieved.

The **most important limitation to effectiveness has been the new position of the Guatemalan Ministry of Foreign Affairs** (MFA). This has caused significant delays in implementation, especially at the beginning of the project. The Ministry is open to engage with IUCN and UNESCO, as long as the project does not directly touch upon politically sensitive topics such as transboundary water cooperation. In an unexpected turn of policy, the MFA sees the Trifinio area and the management of shared basins as a matter of national security. Armed with the argument that Guatemala is an upstream country, the MFA, led by the Minister himself, has established in the past years a strict policy of sovereignty in water resources following national interests and disavowing (at times censuring) any work and even mentioning of transboundary cooperation and shared resources. **The MFA is a powerful actor and regularly monitors** the work of Plan Trifinio, national ministries, technical agencies and local government **to ensure they follow MFA policy**. As an example of the level of MFA control, the MFA has gone as far as changing the name of the project that the partners are allowed to use. Thus, the implementing partners were not free to engage actors at different levels and needed to invest resources in establishing trust with the MFA. The implementing partners have managed to continue a positive and cordial relationship with the Guatemalan MFA. Nevertheless, during the evaluation mission, the MFA clearly stated that it has no intention of changing its policy and that **it is only starting to envisage how to roll it out**, considering for example the implementation of a scheme of payments by neighbouring coun-

tries for the ecosystem services that Guatemala maintains in its territory through the conservation of water resources.

The GGRETA project **increased effectiveness by building on existing knowledge and data from previous projects** of international cooperation, as well as university resources and local dissertations by students. Nevertheless, **the availability of data required for the TWAP methodology is still limited in the Trifinio area**. Thus, the data-gathering phase took longer than it was foreseen originally.

Internal project partnership and communication was rated as effective. Both UNESCO headquarters and the IUCN Regional Office have highlighted their collaboration and interest in continuing to work together. However, the **project's institutional arrangement has presented some obstacles**. The combination of the structure of financial flows from SDC in allotments on the one hand, and on the other hand UNESCO's audit and Contract Committee requirements and somewhat long procedures **have contributed to limitations on the time actually available for project implementation during phase 1.** UNESCO and IUCN cooperated closely to find a solution, speed up the process and achieve the planned outputs. Nevertheless, a similar problem could occur in the next phase if an administrative solution is not found.

The availability of gender-disaggregated data is severely lacking in the region. Positive steps to gather disaggregated data have been taken by the project in collaboration with the Women's Office of the Esquipulas municipality in Guatemala.

Strategic partnerships – Has the project built constructive and lasting partnerships? Is the project cooperating with the right partners to achieve the best results?

The project partners are well positioned to implement the project in the Central America region and bring in two complementary sets of skills. UNESCO has important expertise in the assessment methodology, an important pool of international experts and finding solutions for technical challenges, while IUCN brings in strong partnerships with actors like the Plan Trifinio and expertise in carrying out dialogues, sustaining trust and building coalitions. In addition, IUCN managed to recruit a project officer in charge of implementing the project in Guatemala that has a good combination of expertise, both on technical and dialogue functions.

One of the most important success factors for GGRETA in the region has been the partnership with an existing regional organisation, Plan Trifinio, which provided since the beginning a framework for effective cooperation at the technical and executive levels. **Plan Trifinio's commitment to support GGRETA was facilitated by the long standing relationship** with IUCN. In addition to an existing Memorandum of Understanding concluded by IUCN and Plan Trifinio, IUCN has maintained close relationships with the organisation at the level of the Executive Director as well as at working and technical levels. Interviewees from all these levels confirm that Plan Trifinio sees IUCN as a key ally.

The project has also invested significant resources in sustaining a positive relationship with the Guatemalan Foreign Ministry. Considering the circumstances, the partners have been successful in keeping a productive relationship. This included repeated meetings and outreach by IUCN's main technical officer and Guatemala national coordinator.

Sustainability – Is it likely that the positive results of the project will be lasting?

GGRETA's partnership with Plan Trifinio supports the likelihood that project results will be taken up by relevant actors and last beyond the project lifetime. The project is well grounded in Plan Trifinio's work and the institution is interested in bringing the issue forward. Plan Trifinio is a **long-standing institution with political support and a long-term strategic**

vision for the region and is embedded in the Central American Integration System (SICA). The institution is the regional partner and anchor of a series of development projects supported by the Inter-American Development Bank and several other funders and donors, increasing the likelihood that funds for work on transboundary aquifers will also be available in the future.

Plan Trifinio has been developing own capacities in groundwater issue for a few years and the capacity building to carry on the TWAP methodology and using GIS tools enables the institution to continue the work. Plan Trifinio also hosts the IMS and is elaborating a management structure to maintain it. Building capacities at Plan Trifinio also provides **good opportunities for replication of the project's lessons in other aquifers in the area** such as Ostua-Metapán.

IUCN's long-standing institutional presence in the region through a patchwork of small and large projects further supports sustainability of GGRETA results. Moreover IUCN has created **ownership of the project by communities, municipalities and NGOs in all three countries**. These stakeholders have been empowered to carry out the assessment work and push it forward. This approach contributes to building sustainability, as the coalitions that remain are in the place to continue the work beyond the GGRETA project.

6.1.3 Southern Africa Component

The focus of this evaluation was on the project components in Central Asia and Central America and missions were conducted in both regions. Nevertheless, based on the interviews conducted with UNESCO staff and the project documents provided we can draw some overall conclusions regarding the component in Southern Africa:

Relevance

In the region, the existence of severe drought contributed to the possibility of opening a dialogue between the three partner countries. The political ownership and willingness to cooperate was, among all the regions, the highest in Southern Africa. This was reflected among other things in the willingness of participating governments to provide dedicated staff and resources for the GGRETA assessment.

Effectiveness

The willingness and ownership translated into higher effectiveness with regard to implementing project activities and achieving the foreseen outputs, as compared to the other regions. This refers especially to activities that aim at identification of common challenges, joint activities, and possible options for a multi-country consultation mechanism. Another important factor supporting the effectiveness of the project was the strong operational support provided by the UNESCO country office in Namibia.

The main challenges for implementation in the region consisted in lacking capacities of local experts and difficulties to harmonize collected data.

6.2 Lessons learned and recommendations

The concept note provided by UNESCO puts the focus of the next phase on transboundary dialogue and cooperation in particular the multi-country consultation mechanisms and building capacities for international law on transboundary aquifers, and replicating the approach in another basin. While this general focus points towards the right direction, the concept note is based on an analysis that is too positive in terms of what could be achieved in the first phase and identifies the challenges as being mainly lacking knowledge, capacities and transboundary dialogue mechanisms. Therefore the following recommendations are made to strengthen GGRETA's effectiveness in the next phase:

6.2.1 General Recommendations

- **Establish realistic goals and intermediate objectives to monitor implementation.** The expected outcome "Political commitment reached among countries to cooperate and implement priority actions for the protection and equitable utilization of the aquifers" as formulated in the Logframe of phase 1 of GGRETA is very ambitious. The work that this outcome would entail includes lengthy processes to build trust and partnerships between actors that in some cases have seldom communicated with each other before or where relationships are strained. These goals do not adequately match the relatively short time frame of each phase (32 months). The conceptualization of the next phase and its coherence could be aided by establishing clear intermediate objectives and expected outcomes. This can be done in discussion between SDC and UNESCO.
- **Be specific in the description of the process of building trust and commitment.** Activities of the current phase were hampered by the riparian countries' unwillingness to share data (Uzbekistan) and agree to the tenet of transboundary cooperation (Guatemala). The proposal for the next phase should clearly spell out how political commitment and trust will be built by outlining the main obstacles for transboundary cooperation, defining a theory of change and assumptions, and linking those to specific actions. Considering the diverging preconditions in the three case study aquifers, specific intervention strategies should be developed and clearly defined for each of the three case studies.
- **Base potential replication in additional case study aquifers on a thorough analysis of lessons learned from existing case studies.** The concept note proposes replication of the GGRETA approach in other regions. While the progress in the first phase is promising, any replication activities should be preceded or accompanied by a cross-project learning phase on the main limitations and success factors of the first phase. These aspects should inform the selection of new aquifers before expanding.

6.2.2 Recommendations for Central Asia Component

- **Move away from the focus on technical cooperation towards dialogue and trust building activities** to create the basis for transboundary cooperation. This is a key recommendation for GGRETA Central Asia and is already reflected in the general direction of the concept note. This could lead to important lessons learned for GGRETA in terms of what to do if the context is not ready for starting the transboundary cooperation process with technical assessments. This does not mean that national and technical activities should stop completely, but they have to be very well designed in order to be an instrument for fostering cooperation while also fulfilling the needs of the Uzbek and Kazakh partners and their different levels of willingness to engage.
- **Focus on the broader topic of local water governance as a topic of common interest to both countries**. Since data sharing seem to be a topic that is perceived as too sensitive, other topics could be more suitable to initiate cooperation between the two countries.

Both countries have expressed the need for support to build capacities, especially on implementing water laws and fostering interagency cooperation, and they share a similar institutional set-up. The goal would be to build capacities and support some small pilot activities that create lessons learned on the local level. This should include, if possible, cross-border cooperation by facilitating a dialogue on lessons learned across the border on the local level for example between municipalities. If successful, lessons learned and examples from the municipal level can be used to convince the national level of the value of transboundary cooperation.

- **Capacity development on hydro-diplomacy issues should become the central pillar of the project in the region**. Capacity building in Kazakhstan and Uzbekistan on hydro-diplomacy should continue and the targeted group of participants be broadened to include younger government staff and students. By including the local and domestic context as done during the training in Uzbekistan this component could also be linked to the national aquifer assessment activities of the project. A series of national workshops could slowly build towards a regional event that could also include other countries. A step-by-step approach would also allow moving from fictional examples used during the trainings to use real world examples from the region and more contentious issues. In addition, other possibilities of providing fora for informal and unofficial cross-border exchange should be explored.
- **Explore opportunities to strengthen GGRETA's local project management structures**. In the past phase, UNESCO has followed a rather centralized approach of project management with long communication lines. It has tried to engage on different levels with local UNESCO offices and on the ambassador level in Paris. However, UNESCO should also explore new opportunities and outline additional modes and processes of engagement with local UNESCO and SDC offices, other stakeholders and donors.

In order for this approach to be successful the following factors will be decisive:

- **Put more strategic focus on communication and trust building**. The design of the project should clearly spell out the communication and trust building parts and not just the technical parts of the project. This includes a communication and stakeholder engagement strategy and plan. It should also be clearly outlined as part of the concept and design of the next phase what communication, deeper engagement and hydro-diplomacy entails in particular regarding specific activities.
- **Increase involvement of stakeholders, local UNESCO and SDC offices in design and implementation of the project**. This has to go beyond the stakeholders that were involved in the design of the first phase of the project. Structures in both countries are very hierarchical and young experts and women will mostly not express their opinions if their superiors are present. There is a need to have specific meetings in which they can speak openly. In order to engage more closely with local UNESCO and SDC offices regular communication structures should be established for example by sharing progress reports.
- **Increase diplomatic and communication capacities**: A shift of the projects focus towards hydro-diplomacy implies a need for high diplomatic skills and communication skills of project staff. In addition, these efforts could be complemented by diplomatic support from UNESCO, SDC and Swiss embassies for example in helping to ensure participation of high level government staff in capacity building activities.
- **A focus on hydro-diplomacy and a potential local component focused on water governance would necessitate closer coordination with other donors**, for example UNDP and the EU in Uzbekistan or the Center for Preventative Diplomacy in Turkmenistan in order to avoid duplications and realize synergies.

- **Offer hosting the IMS in a country-owned server.** Considering the reluctance of riparian countries to share data, options to host the information management system on a country-owned server should be explored, to open up the possibilities for countries that do not trust that a web-based system protects their data sufficiently.

6.2.3 Recommendations for Central America Component

- **Continue the engagement in Trifinio in a potential next phase.** In spite of the difficulties in engaging Guatemalan actors, the achievements of the project so far were supported by all the interview partners in the three countries. The achievement of a better knowledge base of the transboundary aquifer's conditions and dynamic has been a significant achievement. Honduran and Salvadoran stakeholders have significant interest in continuing the engagement and can benefit from interlinkages with IUCN BRIDGE.
- **Limit or discontinue the transboundary engagement with Guatemala at this stage.** Given the difficult political circumstances for water cooperation with its Ministry of Foreign Affairs, it should be considered to **limit, or even discontinue, transboundary activities with Guatemala in a potential next project phase.** The preliminary results of the Trifinio aquifer assessment show that **the aquifer complex is divided in two independent aquifers** and is not tripartite as initially believed. This **provides a good context and justification to focus transboundary activities in Honduras and El Salvador,** which can also benefit from interlinkages with IUCN BRIDGE. Continuing to push the Guatemalan government to support a project in which it does not share the basic tenet of transboundary water cooperation would go against the principles of national ownership and could prove extremely difficult. However, **an effort should be made to keep this arrangement open for Guatemala to join at a later stage if they decide to do so**.
- **Intensify efforts to make the transition from the technical level to political and community levels.** So far, the project has focused heavily on the components around data gathering, development of methodology, IMS and aquifer assessment. The project results thus far are promising and are perceived as very positive by the main stakeholders. At this stage, the project would benefit from moving to activities that build on these achievements but **focus more on transferring the technical knowledge acquired in the project to decision makers and building transboundary trust and cooperation at political levels.** Several interview partners have also recommended to also disseminate knowledge on the aquifer to vulnerable communities near the aquifer, and raise awareness on the ground on the importance to protect the resources.
- **Use technical data and experts as a springboard to advance to the policy level**. In terms of policy influence, this will include a focus on **demonstration and visibility of the results for politicians and policy-makers**. The technical levels that have acquired and developed knowledge of the aquifer do not yet communicate to policy makers as part of the project. During the next phase, the **assessment findings should be used as an advocacy tool to communicate to higher political levels** in order to gain support for transboundary efforts. A particularly successful strategy could rely on using **national technical experts who were involved in the aquifer assessment as the vehicle** for the project's messages to ministers and high political levels. In Central America, technical experts have the necessary legitimacy and local knowledge to be able to successfully advocate the issue at top levels. Also in cases in which politicians oppose transboundary cooperation (for instance in Guatemala), experts' legitimacy could help debunk political views that attempt to block transboundary efforts.

- **Continue to engage the political spheres at the municipal level.** On the community and municipality side, work has started to raise awareness around the characteristics of the aquifer and importance of joint and responsible management of groundwater resources. Efforts to foster cooperation between the neighbouring countries can also benefit from political levels other than national ministries, as local actors can open spaces to discuss the importance of transboundary cooperation and establishment of agreements. For example, the mayor of Esquipulas in the Guatemalan region of Trifinio has already made policy decisions to protect the resources in his municipality based on the assessment results. This type of **successes can be spread to other municipalities across the border and to upper political levels**. Thus far, the findings of the assessment have only been communicated to one mayor. This line of work is very promising for the next phase.
- **Explore a different institutional arrangement between SDC, UNESCO and IUCN.** SDC could prompt **a discussion with UNESCO and IUCN regarding the options to create a more sustainable arrangement**, for example in the form or a consortium agreement between UNESCO and IUCN. This would have the benefit of a partnership on equal footing. In addition, the release of funds in one allotment instead of two separate allotments – which could be managed in one instead of two separate contracts per phase between UNESCO and IUCN – could simplify the arrangements and thus allow for more continuity.

7 Review of Overall Programme

7.1 Relevance and coherence of the overall programme

Beyond the above outlined review of three of the five PAs, the review team was asked to assess the relevance and coherence of the overall KTBHS programme, including the five PAs, with respect to the GPWI's strategy. This is outlined below along the strategies' three envisioned outcomes and GPWIs basic value of gender equity and mainstreaming.

Expected outcome 2.1: ***Global commitments, concepts and platforms on water & security lead to more cooperation and less conflicts over water resources.***

While achievement of this outcome is hard to measure and ambitious considering the relatively short timeframes of the projects, several of the PAs funded under the KTBHS programme develop and test concepts that have a potential to contribute to more cooperation and less conflicts over water resources. In the following examples of major achievements in this regard are highlighted:

- Within the **UNECE** partial action, a **methodology for assessing the Water- Food- Energy-Ecosystems-Nexus in transboundary basins was developed and tested** that allows a) to identify intersectoral synergies within a basin that could be further explored and utilized to support cooperative management; and b) to determine policy measures and actions that could alleviate negative consequences of the nexus and help optimize the use of available resources within transboundary basins. Also the **policy guidance note on identifying, assessing and communicating the benefits of transboundary water cooperation** developed by UNECE provides a useful framework to identify and discuss benefits and to foster cooperation. Both approaches – the nexus and the benefits assessment – could be replicated in other basins, keeping in mind that such assessments need to be embedded in a consultative political process and based on an approved data base if it is to support cooperation.
- **Within IUCN BRIDGE, existing concepts and approaches** to support transboundary cooperation that had been developed by IUCN in earlier programmes, such as IUCN SHARE and IUCN NEGOTIATE, have been **tested in practice, further developed, improved and disseminated**. Furthermore, new approaches, such as the champions network have been developed and tested in various basins. The approach fills a gap and is **innovative by building a supportive context for formalized high-level political processes**. However, sustainability of the champions networks is not ensured.
- Within the **UNESCO** partial action, attempts are made to **develop and pilot new approaches for the management of transboundary aquifers**, which represents a very relevant topic on the global agenda, especially in light of climate change. Considering that there are not many experiences regarding the joint management of shared transboundary aquifers to date, the project can generate important knowledge and experiences that can be useful for the governance of transboundary groundwater resources worldwide and feed knowledge into global discourse around the topic.
- The **CDE** component has established **Water Resources User Associations (WRUAs) and fora for cooperation between different WRUAs and accompanied this process with conflict management activities** which contributed towards decreasing water conflicts between upstream and downstream communities within the Ewaso Ng'iro basin in Kenya. Although **at a sub-national, not transboundary, level** this approach has great

potential to contribute to more cooperation and less conflicts over water resources, particularly with regard to the fact that local level water distributes show a higher risk of turning violent than transboundary disputes.

Expected outcome 2.2: *Transboundary water management frameworks and cooperation are in place in hot spot regions*.

This expected outcome seems very ambitious, as putting legal and management frameworks in place is a process that takes many years. Nevertheless, several achievements of the PAs can be expected to facilitate transboundary water management frameworks, including:

- **IUCN supported the establishment of joint management entities at different levels**, e.g. in the Goascoran basin, the **binational governance institution (Goascoran Binational Management Group) has been revitalized and restructured** after a period of institutional weakness through the involvement of new actors from civil society, small producer organisations and the State. Transboundary engagement has been supported through a series of innovative workshops that built a physical miniature model of the Goascoran basin. In the Sixaola basin, IUCN supported the **organisational development of the Permanent Binational Commission for transboundary development between Panama and Costa Rica through organisational development activities** that reinvigorated the Commission after a period of passivity.
- The **UNESCO GGRETA Project** has worked towards the establishment of a multi-country consultative body in Southern Africa. Until now, legal and institutional assessments have been undertaken in order to formulate **recommendations for the establishment of a trilateral consultation mechanism on the Stampriet Aquifer**.
- **Hydro-diplomacy trainings have been carried out by IUCN and UNESCO, which have strengthened the capacities of stakeholders at various levels on legal frameworks and institutional mechanisms for transboundary water management.** These trainings received positive feedback from participants and tangible results, e.g. IUCN's hydro-diplomacy trainings in the Mekong basin was successful in convincing key stakeholders in the Cambodian National Mekong Committee that the UNWC strengthens and complements the Mekong agreement. In Central Asia, a participant from Kazakhstan reported to use the gained knowledge on hydro-diplomacy in his work as assistant to the Foreign minister. In El Salvador, the Environment Ministry has worked on a Water Bill that is being considered by parliament. In this process, the Ministry staff specifically put to use the knowledge on legal principles for water cooperation gained in the trainings and the strategic support by the BRIDGE support facilities while drafting the bill.
- **UNITAR's partial action provided successful online training on different aspects of international water law**, reaching more than 200 participants from all around the world. Around 40 per cent of the participants were affiliated to national government organisations, increasing the likelihood that their increased skills feed into national water management framework and position towards transboundary cooperation.
- **UNECE through its activities on opening of the UNECE Water Convention to non-member states has developed capacities and provided guidance on concepts of international water law**, especially in the Arab region. This has created awareness and interest of several countries to further explore the opportunities that this legal framework provides for transboundary cooperation.

Expected outcome 2.3: ***Data, information and knowledge management is effectual and backs evidence-based dialogue and decision making in water resources management.***

Several of the PAs contribute to strengthening the overall information base in selected river basins and aquifers. Challenges however remain in ensuring that knowledge products are used for and linked to **decision-making in a transboundary context**. Some of the main achievements were:

- The **WLRCs in Kenya and Ethiopia provide data and information** on issues of hydro-sedimentology, meteorology and land management which is **well perceived and used by various national stakeholders, including government authorities to inform their decisions in water resources management**.
- Within the **UNESCO GGRETA project, key data was collected on transboundary aquifers in Southern Africa, Central America and Central Asia**, which was welcomed by relevant stakeholders from State institutions with whom interviews took place. While this data will serve as a basis for transboundary dialogue in the three regions, in some cases data was not shared among riparians due to political concerns. Nevertheless, in Central America, the work of GGRETA is highly appreciated by the Trilateral Commission for Plan Trifinio between El Salvador, Honduras and Guatemala, as it allows Plan Trifinio to engage and advocate the issues around aquifers with Foreign Ministries and other important decision-makers for water cooperation.
- **IUCN prepared several knowledge products that reach out to a variety of stakeholders**, such as a tridimensional model for the Goascoran basin, an atlas and GIS database for the 3S basin. In Goascoran, the process of building the basin model was iterative and participative and communities joined decision-makers from the municipal and national levels in a process of evidence-based dialogue. For the next phase, attention should be placed on assessing to what extent IUCN BRIDGE knowledge products will also back evidence-based decision-making and policy influence at various levels.

Is the programme supporting GPWI's basic value of gender equity and mainstreaming?

Gender aspects are addressed in several ways within the KTBHS programme. These starting points provide opportunities to further strengthen gender equity and mainstreaming in the partial actions (see recommendations chapter 9):

- The two WLRCs are very well aware of gender issues and successfully balance the number of women and men in activities around the LWs and WRUAs. However, there is room for improvement with regard to including women in the Ethiopian WLRC team.
- The IUCN champions network provides good opportunities to involve women and to make their voices heard. This is already successfully done in Central America, and efforts are underway in the Mekong region.
- The UNESCO methodology for assessing TBA includes a very innovative gender component, but was met by severe data limitations as gender-disaggregated data was very hard to find.
- UNITAR was successful in reaching women as participants for their training courses. In general, capacity development activities of all PAs should ensure that women are encouraged to participate.

The partial actions are clearly overall in line with the GPWI's strategy for water diplomacy. However, there are some aspects that limit the effectiveness of the overall KTBHS pro-

gramme in regard to the GPWI's strategic goals. These are taken up in the overall recommendations (Chapter 9).

7.2 Effectiveness of programme coordination

Programme coordination by GWPI is perceived very positively by project partners of the various PAs. In interviews, the keen interest of the GWPI programme coordinators in the outcomes of the PAs were especially highlighted as well as the flexibility provided to respond to changing circumstances. Moreover, professional support in project planning and implementation provided either through the GWPI team or external experts was highly appreciated by the PA project managers.

However the external review identified some challenges for overall effectiveness that are grounded in programme coordination by GWPI. Recommendations for addressing these are taken up in chapter 9 below.

- Project managers at the implementing level in the basins are not sufficiently aware of GPWI's overall goals, as GPWI communicates mainly with PA coordinators at UNESCO, and CDE headquarters, and IUCN Regional Office.
- There seems to be a structural problem of lacking information flows from SDC headquarters to their regional and country offices regarding the activities under GPWI and how they relate to the overall strategy of the SDC in the region/country. Furthermore, important communication documents, such as review reports, have not always been shared with regional projects, limiting their potential to react to review findings and learn from them.
- The local and regional structures of SDC and the implementing organisations (such as IUCN and UNESCO) have not always been fully informed and included in project design and implementation. This has contributed to flaws in the design of partial action case studies and subsequently to problems in implementation.
- While, in general, the focus and expertise of the PAs complement each other well, synergies need to be better exploited to increase impact and avoid duplication of efforts. This issue is taken up in the recommendations below.

8 Lessons Learned

The review of the three partial actions allows to draw some important general lessons on fostering transboundary water cooperation that could have implications for the future of the KTBHS programme or may be relevant for wider application.

- **There is no "one-size-fits-all approach": Each basin is different and needs a basin-specific intervention approach, based and designed on a thorough baseline and risk assessment. Stakeholder involvement in the design phase of an initiative can further help to ensure appropriateness, avoid risks and create ownership for the initiative.** While standard approaches, such as the methodology developed by UNESCO or the BRIDGE project, provide a good toolbox to draw on and allow for cross-basin learning, they need to be adapted to local conditions and accompanied by a well-designed process. Otherwise their effectiveness can be severely limited. This was the case, for example for UNESCO in Central Asia, where regional specificities did not support the GGRETA approach (whereas the approach was relatively effective in Southern Africa), or for IUCN in the Mekong region as compared to IUCN Bridge's rather successful intervention in Central America. How different basin conditions can differ even within relatively small geographic regions is exemplified by the case of Central America where the Sixaola and Goascoran basins required very different approaches.
- **Spill-over from technical to political water cooperation is not automatic.** It is often believed that technical cooperation provides an easy entry point to promote water cooperation on a higher political level. Indeed, in some cases, such as the UNESCO GGRETA project in the Stampriet aquifer, cooperation on technical issues can provide a basis to build cooperative mechanisms and agreements. However, in this particular case, the political willingness of governments to cooperate was already high at the outset of the programme. In more difficult political situations, such as Guatemala or the Nile Basin, this approach faces severe limitations. **Where political will is lacking, technical cooperation has to be complemented with a process targeting higher political as well as technical levels, which focusses on communication, advocacy and trust building.** Even if this is done, it is important to recognize the limitations when a country does not agree with the basic tenets of the project (such as the tenets of joint water management or data sharing).

  If technical experts are to lobby for water cooperation within their institutions and governments, **their capacities in terms of leadership and hydro-diplomacy, not just their technical abilities, have to be strengthened accordingly.** In addition, the strategies for their engagement with the political level should be devised in advance and supported. In general, projects that focus on technical cooperation tend to be implemented by experts that have good technical expertise but lack the knowledge and skills to influence political processes, exert advocacy, and support communication and trust building. This in turn often leads to neglecting these "soft" parts of fostering transboundary cooperation. Theories of change in this regard are often not spelled out and goals and activities remain vague.
- **Process is key to ensure that data and information is used for decision making in transboundary water cooperation.** In order for data, information and knowledge to contribute to evidence-based dialogue and decision-making, appropriate knowledge products need to be developed and communicated. This requires, first of all, that relevant topics and related policy processes are identified into which the generated knowledge could feed into. In a next step, data and research results need to be translated into targeted knowledge and information products for decision making, and a strategy for their dissemination needs to be developed. In politically sensitive settings such as conflicting water

uses it is furthermore important to ensure approval from the different parties of the data and information that knowledge products are based on. .

- **Multi-level approaches can support transboundary water cooperation that is grounded at the local level,** where decisions on water resources management are implemented. **These approaches also provide flexibility to choose appropriate entry points to foster cooperation.** Expanding hydro-diplomacy initiatives beyond the highest political levels by engaging communities and municipalities provides two benefits. On the one hand, building capacities and partnerships at multiple levels and joining up different levels strengthens ownership of transboundary cooperation at the level in which water management decisions are actually implemented. On the other hand, it allows flexibility to choose the most appropriate entry points. In Central America, for instance, IUCN found a useful entry point at the local level and then scaled-up to join efforts bottom-up in the Goascoran basin, while in Sixaola, it found an entry point at the highest levels. Again, as with technical cooperation, water cooperation at the local level does not *per se* contribute to cooperation at higher political levels, and processes to promote spill-over have to be identified and clearly designed.
- **Fostering water cooperation needs representatives on the ground that engage actors constantly.** The intermediate and final objectives of fostering water cooperation and building trust necessitate staff on the ground in constant contact with government representatives, basin committee representatives and community leaders. An important factor that contributes to sustainability is an implementer on the ground that can push activities, foster dialogues and carry out regular advocacy with different actors. In order to support this local partner organisations (such as Fundación Vida in Honduras) can be identified where the implementing organisations themselves cannot provide for local staff.

9 Conclusion and Recommendations

The review showed that the KTBHS PAs are generally relevant and coherent with GPWI strategic goals: The partial actions involve the development of new concepts and innovative methodologies that can demonstrate potential solutions in transboundary basins and thus could serve as vehicles for policy negotiation if they are embedded in appropriate political processes. Furthermore, the PAs address globally relevant topics, such as transboundary aquifers, that have to date not received sufficient attention. Through capacity development and institutional support, the PAs have contributed to building up the basis for transboundary water management frameworks in selected river basins. Moreover in supporting long-term initiatives, such as those of IUCN, UNESCO, CDE, and UNECE, the KTBHS can provide globally relevant long-term learning processes and lessons relevant for other development cooperation initiatives on this topic.

In conclusion, the reviewers find that the continued funding of the five partial actions is well-justifiable. The following recommendations could support increased effectiveness and impact of the KTBHS programme in the next phase.

9.1 Recommendations for the KTBHS strategy

- **Formulate clear and achievable intermediary goals towards GPWI's strategic objectives.** The objectives and expected outcomes as formulated in the GPWI strategy are highly ambitious. In order to ensure that the KTBHS and its PAs are relevant and to allow for monitoring of their effectiveness towards achieving GPWI's overall strategy, these goals should be broken down into realistic and measurable intermediate objectives. A clearer formulation of GPWI / KTBHS goals would also facilitate communication of these goals to different partners and stakeholders (see recommendation to strengthen communication below)
- **Request the elaboration of clear theories of change[13] towards GPWI's/ KTBHS's overall objectives**. PAs should provide project proposals that clearly articulate theories of change and concrete activities to put them into practice for each basin. While initiatives that aim to initiate dialogue processes, foster cooperation and building trust in transboundary basins surely need flexible approaches (and we emphasise the importance of flexibility elsewhere in this report), this should not imply that action plans are overly vague. Instead, objectives, expected outcomes, activities as well as indicators for monitoring effectiveness should be clearly spelled-out in project logframes. Lessons learnt from peacebuilding programmes could help to inform results-based project planning and monitoring. Usually, monitoring the PAs' contribution to transboundary cooperation will have to be based on surveys with key actors involved[14]. Where uncertainties regarding project activi-

[13] See footnote 11

[14] A comprehensive manual has been prepared, for example, by the Organisation Search for Common Ground: Designing For Results: Integrating Monitoring and Evaluation in Conflict Transformation Programs" https://www.sfcg.org/wp-content/uploads/2014/02/designing-for-results.pdf.

A handbook especially for practitioners in the field of environmental cooperation has recently been prepared by adelphi. It provides practical tools for planning and evaluation, incl. indicators: 'From conflict to collaboration in natural resource management: A handbook and toolkit for practitioners working in aquatic resource systems.' http://pubs.iclarm.net/resource_centre/Ruttinger.et.al.2014.From.conflict.to.collaboration.manual.pdf.

ties remain, these should be acknowledged and analysed and different options should be elaborated. Leeway for adaptation can then be provided during implementation as appropriate.

- **Focus on limited basins, instead of expanding further**. Fostering cooperation in transboundary basins usually requires long-term processes and comprehensive stakeholder involvement. In order to increase its impact in selected basins, the KTBHS should focus its activities on a limited number of basins instead of spreading resources to an even larger number of case basins (unless the programmes budget is increased). If decisions are taken towards expanding to other basins, a thorough analysis of lessons learned from existing interventions through an internal learning and monitoring reflexion process is indispensable in order to inform expanding activities, harness the best practices and avoid mistakes in past implementation.
- **Ensure coordination with other donors and programmes to achieve maximum impact in hot spot basins**. In river basins where many donors have already been active for many years and initiatives to promote transboundary water cooperation have been going on for a long time (for example in the Mekong and Nile basins), it is difficult for rather small projects (such as those funded under the KTBHS) to achieve visible outcomes. In order to have an impact in these basins, the KTBHS programme needs to identify its niche, analyse how activities fit in with other existing programmes, and develop a strategy of how they can link with ongoing activities and feed into ongoing processes. This should include a careful risk assessment and stakeholder mapping in each basin and better coordination with other SDC programmes and those of other donors. Alternatively, KTBHS could make more of a difference in basins that receive less international attention.
- **Strengthen communication and coordination between and across GPWI, implementing organisations of the KTBHS programme, and other SDC programmes.** The imperfect communication has impacted effectiveness of the PAs towards GPWI goals. Project managers and implementing partners of the PAs, such as WLRCs, IUCN regional offices are not always fully aware of the overall goals of the KTBHS programme and therefore do not set priorities accordingly. In order to achieve this, the coordinators of the PAs should be urged to better communicate GPWI interests to their project officers and partners – or GPWI could establish direct communication with them. Within SDC, better communication could increase awareness of GPWI goals in the regions and improve coordination and synergies with other SDC programmes. Closer coordination with country and regional programmes could also support the design phase of projects and ensure their appropriateness to local conditions. GPWI should therefore establish regular communication structures with relevant SDC country offices, for example by sharing progress reports. Another option would be to clearly define how PAs involve relevant SDC programmes.

9.2 Recommendations for the strategic direction of PAs under review

- **Partial action 1: Water and Land Resources Centres (WLRC) implemented by CDE: Strengthen transboundary relevance of WLRCs**. The work of the WLRCs in Kenya and Ethiopia is highly appreciated by national and regional stakeholders. The research of the centres further addresses issues that are very relevant not only in light of national but also transboundary concerns. While the SDC Horn of Africa programme has expressed interest to fund WLRC activities, only part of the activities could be funded in under their portfolio. The reviewers therefore suggest to continue funding of the CDE component within the KTBHS programme. In order to further strengthen the relevance of the CDE component for the GPWI strategic objectives, a next phase of the CDE partial action should put more emphasis on knowledge products that are targeted towards political decision makers,

identify relevant transboundary issues and develop strategies for feeding into related policy processes. In addition, considering the high relevance that local water conflicts play in the Horn of Africa and globally, GPWI could consider to broaden their scope beyond transboundary water management to include sub-national frameworks for water cooperation.

- **Partial action 2: Building River Dialogue and Governance (BRIDGE) implemented by IUCN: Clearly spell out basin-specific intervention strategies and adapt project management for an increasing river basin portfolio.** Considering the fact that IUCN BRIDGE is active in a number of very diverse basins worldwide, IUCN project coordination has to ensure that specific intervention strategies are formulated for each basin based on thorough stakeholder consultation. The increasing number and diversity of basins furthermore requires that local project management capacities are strengthened and backed by sufficient human resources at the IUCN BRIDGE internal support facilities based in Europe. Alternatively, and considering the complexity of engaging in transboundary water cooperation, deeper involvement in a limited number might provide better results than further diversification.
- **Partial action 3: Groundwater Resources Governance in Transboundary Aquifers (GGRETA) implemented by UNESCO: Strengthen project components on hydro-diplomacy**. While the past phase of the GGRETA project focused on the in-depth technical assessment of the case study aquifers, the next phase should focus on activities to ensure that this information is used to support transboundary dialogue. The preconditions for transboundary water cooperation are very different in the three basins, ranging from high political commitment for cooperation in Southern Africa to unwillingness in Central America and Central Asia. Therefore, for each aquifer, a specific strategy needs to be clearly spelled out, which explains how the project is going to foster transboundary cooperation. This should encompass hydro-diplomacy activities of different kinds, ranging from building trust and political commitment, to capacity development in support of transboundary management mechanisms.

9.3 Recommendations to strengthen synergies between PAs

As mentioned above, the focus of the five PAs of the KTBHS programme as well as the respective fields of expertise of the project partners complement each other well. However, the reviewers identified several potential synergies that should be exploited in order to increase impact and avoid duplication.

- **Coordinate capacity development and training on hydro-diplomacy and international water law**. Several of the PAs have developed and carried out trainings on hydro-diplomacy and international water law, especially IUCN, UNESCO, and UNITAR. In order to ensure that SDC funds are used in the most efficient manner, it should be ensured that these efforts do not duplicate each other. While the three organisations cooperate to some extent at the institutional level, synergies need to be further strengthened in the implementation of concrete capacity development activities, e.g. by exchange training materials, curricula, and lessons learned. Furthermore, stakeholders from the PAs case study basins could be directly invited and actively encouraged to participate in UNITAR e-learning courses.
- **Support targeted activities to facilitate cross-PA learning and synthesizing overall lessons learned of the programme**. While the peer-review meetings can be helpful in this regard, their scope seems to be too broad to look into shared lessons on specific topics. A challenge shared by several PAs consists, for example, in the difficulty of ensuring that data and knowledge generated in the projects actually feeds into evidence based de-

cision-making in the basins. A potential topic for targeted knowledge exchange could thus be, for example, bridging the science-policy-practice gap in transboundary cooperation. Focussed knowledge exchange events could take place back-to-back with the GWPI peer review meetings.

- **Explore the possibilities to test and/or adapt concepts and approaches developed by one PA in case study basins of the other PAs.** UNECE, for example, has developed guidance documents and assessment frameworks for several topics. Most recently the policy guidance on assessing benefits of cooperation could provide a useful approach to promote cooperation in transboundary basins. Case study basins, for instance in the IUCN and UNESCO partial actions, could provide for case studies and lessons learned from implementing the approach in practice in basins with diverse framework conditions. As mentioned before, such assessments need to be embedded in consultative processes in order to support approval and ownership of the results by riparian countries. In the same line, the IUCN BRIDGE approach to support transboundary water governance at various administrative levels could well complement the UNESCO activities in e.g. Central Asia.
- **Foster gender relevance by further strengthening knowledge exchange on existing gender sensitive approaches in the PAs.** Similarly to the recommendation above, UNESCO's experience in gender sensitive water monitoring and collection of sex-disaggregated data should be actively shared with other PAs to strengthen gender relevance of the overall programme. Moreover, the WLRC's work in learning watersheds and with WRUAs as well as IUCNs work with champions network provide important starting points to empower women in water resources management even beyond the direct project activities. This aspect could be further strengthened through knowledge exchange on and /or a joint training for all PAs on the role of women in watershed management and as agents of change.
- **Facilitate partnerships between partial actions taking place in the same region.** Where different PAs implement activities in the same region, partnerships should be actively promoted by SDC. This has already been the case in Central America, where IUCN is the implementing partner of the UNESCO GGRETA project. Building on this experience, lessons learned on administrative hurdles for partnerships should be identified. Asking organizations with different expertise to build consortia to implement activities in the same basin could be an option to explore. In addition to the collaboration between IUCN and UNESCO in Central America, the two organizations could also complement each other in Central Asia. In regard to IUCN's planned activities in the Horn of Africa, starting points for collaboration between IUCN and CETRAD should be explored and could include IUCN strengthening CETRAD's capacities in water diplomacy issues and CETRAD facilitating implementation of IUCN activities in the Juba-Shebelle basin.

Annex

Annex 1 Terms of Reference

See separate pdf file

Annex 2 List of Interviewees for WLRC

Name	Organisation/Position	Date
Mr. Manfred Kaufmann	Water Policy Advisor, Swiss Agency for Development and Cooperation (SDC)	07.07.2015, 18.07.2015
Ms. Isabelle Providoli	Project Coordinator, Centre for Development and Environment (CDE), University of Bern	13.07.2015
Olivier Cogels	External Expert	15.07.2015
Mr. Gete Zeleke	Director of WLRC, WLRC Project Manager	18.07.2015
Mr. Gizaw Desta Gessesse	Director Knowledge Management, WLRC	18.07.2015
Mr. Shumeye	Deputy Head of Bureau of Agriculture, Bahir Dar	20.07.2015
Mr. Tilaye	Deputy Director General, Amhara Regional Agricultural Research Institute (ARARI)	20.07.2015
Mr. Tesfaye	Director for SWC research	20.07.2015
Mr. Tassew Woldahanna	Vice President of Research and Technology Transfer, Addis Ababa University	20.07.2015
Mr. Manuel Flury	Counsellor Development, Director of Cooperation, Swiss Agency for Development and Cooperation (SDC)	21.07.2015
Mr. Habtramu Hailu	Coordinator Sustainable Land Management (SLM), Ministry of Agriculture	21.07.2015
Mr. Abiti Getaneh Gebremeskel	Director, Research and Development Directorate, Ministry of Water, Irrigation and Energy (MoWIE)	21.07.2015
Mr. Boris Büchler	Capacity Building Advisor, Gesellschaft für Internationale Zusammenarbeit (GIZ)	21.07.2015
Mr. David Jakaiti	Director of Administration, Ministry of Water and Irrigation (MoWI)	22.07.2015
Mr. Joseph Kinyua	Technical Coordination Manger, Water Resources Management Authority (WRMA)	22.07.2015
Mr. John Phillip Olum	Director, Water Resources Management Authority (WRMA)	22.07.2015

Ms. Ines Islamsha	Swiss Agency for Development and Cooperation (SDC)	22.07.2015
Mr. Dominik Langenbacher	Ambassador, Swiss Embassy in Ethiopia	22.07.2015
Mr. Boniface Kiteme	Director Centre for Training and Integrated Research in ASAL Development (CETRAD)	22.07.2015, 23.07.2015
Mr. Evans Njuguna	Centre for Training and Integrated Research in ASAL Development (CETRAD)	23.07.2015
Mr. Jeremiah Njeru	Centre for Training and Integrated Research in ASAL Development (CETRAD)	23.07.2015
Mr. Peter Hetz	Executive Director, Laikipia Wildlife Forum (LWF)	23.07.2015
Mr. Matthias Fries	Research Scientist, Centre for Development and Environment (CDE), University of Bern	31.07.2015

Additional information was required during field visits and conversations with members of the Ngusishi and Naro Moru WRUAs (Kenya) and staff from the Debre Mewi and Abagerima LWs (Ethiopia).

Annex 3 List of Interviewees GGRETA Central Asia

Surname	Name	Organisation	Position	Date
Pikkat	K.	UNESCO Office in Tashkent	Head	08.07.2015
Movilanov	T.	Uzbek State Committee on Geology	Head of Laboratory	08.07.2015
Dukhovny	V.	Scientific Information Centre of Interstate Water Coordination Commission (SIC-ICWC)	Director	08.07.2015
Ziganshina	D.	Scientific Information Centre of Interstate Water Coordination Commission (SIC-ICWC)	Legal Advisor	08.07.2015
Ikramov	A.	National Commission of Uzbekistan for UNESCO	Secretary General	09.07.2015
Islamov	U.	UNDP - Integrated Water Resources Management Programme	Project Manager	09.07.2015
Rudenko	I.	Khorezm Rural Advisory Support Service	Senior Researcher	09.07.2015
Wolf	A.	Oregon State University	Professor of Geography	09.07.2015
Shubber	Z.	UNESCO Institute for Water Education	Lecturer in Law and Water Diplomacy	09.07.2015
Eckstein	G.	Texas A&M University - School of Law	Professor of Law	09.07.2015
Burchi	S.	International Association for Water Law	Exectuive Chairman	09.07.2015
Myagkov	S.	IHP National Committee of Uzbekistan	Executive Secretary	09.07.2015
Tureav	M.	Ministry of Foreign Affairs of Uzbekistan	Third Secretary	09.07.2015
Lazarev	S.	UNESCO Regional Office in Almaty	Head of Office	10.07.2015
Kim	N.	UNESCO Regional Office in Almaty	Natural Sciences Assistant	10.07.2015

Tovmasyan	K.	UNESCO Regional Office in Almaty	Natural Sciences Officer	telephone
Medev	A.	Kazakh Institute of Geography	Director	10.07.2015
Podolny	O.	KazHYDEC	Director of Department of Geoecology and Mathematical Modelling	10.07.2015
Seversky	I.	Kazakh Institute of Geography	Honorary Director and Scientific Head of Laboratory of Galciology	10.07.2015
Skorintseva	I.	Kazakh Institute of Geography	Head of Laboratory of Landscape Science and Nature Management Problems	10.07.2015
Salibekova	V.	Kazakh Institute of Geography		10.07.2015
Kuderin	A.	Kazakh Institute of Geography	Student	10.07.2015
Omarov	A.	Kazakh Institute of Geography	Student	10.07.2015
Toletayev	A.	Kazakh Institute of Geography	Student	10.07.2015
Sotinkov	E.	Kazakh National Technical University	Student	10.07.2015
Ibrahimov	V.	Kazakh National Technical University	Student	10.07.2015
Reina	M.	Embassy of Switzerland to Kazakhstan and Tadjikistan	Ambassador	13.07.2015
Aebi	L.	Embassy of Switzerland to Kazakhstan and Tadjikistan	Secretary	13.07.2015
Zaridina	N.	OSCE Office Almaty	Ambassador and Head of Office	13.07.2015
Japaridze	R.	OSCE Office Almaty	Economic and Environment Officer	13.07.2015
Alexeeva	N.	UNEP Sub-Regional Office for Central Asia	Head of Office	13.07.2015
Dali-Bernasconi	I.	Swiss Cooperation Office Tashkent	Director of Cooperation	telephone

Annex 4 List of Interviewees GGRETA Central America

Name	Organisation/Position	Date
Julián Muñoz	Secretario Nacional Plan Trifinio	23.07.2015
Damaris Moscoso	Coordinadora oficina municipal de la mujer Esquipulas	24.07.2015
Fulgencio Garavito	Agrometeórologo INSIVUMEH	23.07.2015
Jorám Gil	Cátedra UNESCO, University San Carlos	23.07.2015
Juan Montufar	Gerente Técnico Plan Trifinio	24.07.2015
Leila Villatoro	Foreign Ministry Sudirectora Cooperación bilateral	23.07.2015
Marta García	Encargada Monitoreo y Evaluación Plan Trifinio	24.07.2015
Miriam Hirezi's delegates	Delegates of the Secretaria Ejecutiva Trinacional Plan Trifinio	27.07.2015
Cristian Acosta	Secretario Nacional Plan Trifinio	27.07.2015
Julio Carranza	UNESCO country director	23.07.2015
Celina Mena	Gerente Hidrología Observatorio Ambiental	27.07.2015
Mario Guevara	Encargado proyecto OIEA	27.07.2015
Ivan Cerón	Coordinador SIG Trifinio	24.07.2015
Rocío Córdoba	IUCN Livelihood and CC Unit Coordinator	24./27.07.2015
Carlos Rosal	GGRETA Trifinio Project Coordinator	24./27.07.2015

Annex 5 List of Interviewees BRIDGE Central America

Name	Organisation/Position	Date
Luis Maier	Implementation Partner in Goascoran, Fundacion Vida, Honduras	27.07.2015
Flora Hernández	President of Honduras´ Goascoran Basin Council	28.07.2015
Jesy Barralaga	Vice-President of Honduras´ Goascoran Basin Council / BRIDGE champion	28.07.2015
Rony Funez	Municipality Mayor of Aramecina, Honduras	28.07.2015
Álvaro Moreno	BRIDGE champion, Goascoran Basin, Honduras	28.07.2015
Nora Valdez	Member of Aguanqueterique Microwatershed Council, Goascoran Basin, Honduras	28.07.2015
Rosendo Zavalla	Technical manager of MAMSURPAZ, Honduras	28.07.2015
Oscar Everardo Chicas	Unidad de temas transfronterizos Foreign Affairs Ministry, El Salvador	27.07.2015
Cecilia Carranza	Specialist at Environment Ministry, El Salvador	27.07.2015
Jose Luis Rodríguez	Legal advisor at Environment Ministry, El Salvador	27.07.2015
Silvia Larios	Specialist at Environment Ministry, El Salvador	27.07.2015
Leonidas Pérez	President of the Association of basins from Fonseca Gulf (ACUGOLFO), El Salvador	27.07.2015
Nelson Damian Vanegas	Municipality of Concepción de Oriente, Goascoran Basin, El Salvador	27.07.2015
Oscar Godoy	Unidad de temas transfronterizos Foreign Affairs Ministry, Costa Rica	29.07.2015
Xenia Irias	Adviser Foreign Affairs Ministry, Honduras	29.07.2015
Luis Velasquez	Ambassador, Foreign Affairs Ministry	29.07.2015
Gisela Cabrera	Adviser for Water Resources Environment	29.07.2015

	Ministry, Honduras	
Óscar Méndez	Executive Secretariat from Costa Rica of the Binational Permanent Commission Costa Rica-Panama (Sixaola Basin)	30.07.2015
Jeanina Gutierrez	Sub Secretariat from Costa Rica of the Binational Permanent Commission Costa Rica-Panama (Sixaola Basin)	30.07.2015
Mitzela Dávila	BRIDGE Champion, Sixaola Basin, Panama	31.07.2015
Georgina Osorio	Executive Secretariat from Panama of the Binational Permanent Commission Costa Rica-Panama (Sixaola Basin)	30.07.2015
Juan Carlos Barrantes	Sixaola Binational Commission Coordinator	31.07.2015
Jerónimo Navarro	BRIDGE Champion, Coatán Basin, Guatemala	30.07.2015
Rocío Córdoba	IUCN Livelihood and Climate Change Unit Coordinator	24./27.07.2015
Nazareth Porras	BRIDGE Project Coordinator, IUCN	28.07.2015
Grethel Aguilar	IUCN regional director	31.07.2015
Ottoniel Rivera	IUCN Coordinator project "Nuestra Cuenca"	28.07.2015

Annex 6 List of Interviewees BRIDGE South East Asia

Surname	Name	Organisation	Position	Date
Glemet	Raphael	IUCN ARO Office	Senior programme officer and BRIDGE manager	27.07.2015
Sinha	Vishwa	IUCN ARO Office	Project officer	27.07.2015
Perkin	Scott	IUCN ARO Office	Head of the Natural Resources Group	27.07.2015
Lawton	Jane	IUCN ARO Office	Head of Communication Unit	27.07.2015
Guerreiro	Lea	IUCN ARO Office	Communication Unit	27.07.2015
Mather	Robert	IUCN ARO Office	Head of South East Asia Group and Manager of the Mekong Water Dialogue	27.07.2015
Brunner	Jake	IUCN Vietnam Office	Country manager for Vietnam and Cambodia	27.07.2015
Dore	John	Australian Embassy Bangkok - Department of Foreign Affairs and Trade	Senior Regional Water Resources Specialist	27.07.2015
Chatikavanij	Vansa	World Bank - Integrated Water Resources Management Project	water specialist, deputy M-IWRM proejct manager	27.07.2015
Phousavanh	Lan	Department of Water Resources - Ministry of Natural Resources and Environment Laos	Deputy director/ BRIDGE champion	28.07.2015
Vannalath	Vilavong	Provincial Office of Natural Resources and Environment of Champassak	Senior officer, water sector	28.07.2015
Joly	Rachel	Australian Embassy Vientiane - Department of Foreign Affairs and Trade	First Secretary (Development Cooperation)	28.07.2015
Someth	Paradis	Mekong River Com-	Water Utilisation Specia-	28.07.2015

		mission	list	
Chea	Piseth	Mekong River Commission	Sustainable Hydropower Initiative	28.07.2015
Sukumasavin	Naruepon	Mekong River Commission	Director of Planning Division	28.07.2015
Uraiwong	Piriya	Mekong River Commission	Water Utilization Specialist, Basin Development Planning Programme	28.07.2015
Edmundo	Federico	Mekong River Commission	Donor Coordination Officer	28.07.2015
Duong	Nhu	Mekong River Commission	Programme Officer for Donor Coordination	28.07.2015
Sayavong	Aloune	Mekong River Commission	Director of Environment Division	28.07.2015
Siliphong	Phothong	SDC Laos	National Program Officer	28.07.2015
Muziol	Christoph	SDC Laos	Senior Regional Advisor Natural Resource Governance	28.07.2015
Starr	Adam	IUCN Office Laos	Country Manager for Laos	29.07.2015
Phuong	Chau	Department of Water Resource Management, Ministry of Natural Resources and Environment Vietnam	DWRM officer	29.07.2015
LeViet	Hoa	Department of Water Resource Management, Ministry of Natural Resources and Environment Vietnam	Head of Basin Management division	29.07.2015
Nguyen	Tu	IUCN Office Vietnam	Water and wetlands programme coordinator	29.07.2015
Lethithan	Thuy	IUCN Office Vietnam	Programme assistant	
O'Neill	Douglas	Embassy of the USA	Environment, Science, Technology and Health Unit Chief	29.07.2015
Nam Duong -	Nguyen	Ministry of Foreign Affairs - Diplomatic	Deputy Director General, Institute for Foreign Poli-	29.07.2015

		Academy of Vietnam	cy and Strategic Studies	
Hong Hanh	Ho	Ministry of Foreign Affairs - Diplomatic Academy of Vietnam	Deputy Head of International Cooperation	29.07.2015
Thi Thanh Tu	Vu	Ministry of Foreign Affairs - Diplomatic Academy of Vietnam	Research Fellow, Institute for Foreign Policy and Strategic Studies	29.07.2015
Trong Tu	Dao	Centre for Sustainable Water Resources Development and Adaptation to Climate Change- (CEWAREC)	Senior Advisor to VRN, Director of Centre for Sustainable Water Resources Development and Adaptation to Climate Change- (CEWAREC)	29.07.2015
Thi Khanh	Nguy	Green Innovation and Development Centre	Executive Director	29.07.2015
Thi Hong Van	Nguyen	Water Resource Conservation and Development (WARECOD)	Vietnam River Network Coordinator	29.07.2015
Duc Cuong	Tran	Vietnam National Mekong River Committee	Deputy General Secretary	30.07.2015
Thi Huong	Le	Vietnam National Mekong River Committee	Head of Information and Document Unit,	30.07.2015
Tan Ha	Pham	Consultant for Vietnam National Mekong River Committee	freelance GIS/Water Resources BRIDGE champion	30.07.2015
Pheakdey	Sorn	IUCN Office Vietnam	Water and Wetlands Coordinator	29.07.2015
Botkosal	Watt	Cambodia National Mekong Committee	Deputy Secretary General/BRIDGE campion	31.07.2015
Socheat	Hak	Cambodia National Mekong Committee	Director of planning and international cooperation department	31.07.2015
Vannara	Tek	NGO Forum	Executive Director/BRIDGE champion	31.07.2015
Senglong,	Yourk	FACT	Programm Manager /BRIDGE champion	31.07.2015
Vorsak	Bou	Birdlife International	Programme Mana-	31.07.2015

			ger/BRIDGE champion	
Taylor-McKeown	Pauline	Oxfam	Mekong Regional Program Manager	31.07.2015

Annex 7 List of additional Interviews

Interviewpartner	Date	Focus	Evaluation team
Nathalie Rizotti, SDC	08.06.2015	briefing UNESCO and Central America	LUR, PAA
Olivier Cogels, External Expert	25.06.2015	overall programme and Mekong region activities	ANK, LUR
UNESCO GGRETA team and other project partners such as IGRAC, IUCN, Stefano Burchi (on-line meeting)	03.07.2015	Briefing on UNESCO PA	LUR, PAA, ANK
Mark Smith and Alejandro Iza, IUCN	22.07.2015	review of overall IUCN programme synergies	LUR, PAA, ANK
Francesca Bernardini, Sonja Koeppels, Annukka Lipponen, Chantal Demillecamps, UNECE	13.07.2015	review of UNECE activities, overall programme and synergies	ANK
Dejan Komatina, Secretary, International Sava River Basin Commission	19.08.2015	review of UNECE activities on nexus assessment	ANK
Ebenizario Chonguica, Executive Secretary OKACOM Secretariat	31.08.2015	review of UNECE activities on benefits of cooperation	ANK
Monica Nunez, UNITAR Mara Tignino, University of Geneva	03.09.2015	review of UNITAR activities, overall programme and synergies	ANK

Annex 8 Addis Ababa University Statues on the WLRC

ADDIS ABABA UNIVERSITY STATUTES ON THE ESTABLISHMENT OF THE WATER AND LAND RESOURCE CENTRE

Cognizant of the increasing pressures on the uses of water, soil and biodiversity resources and of persistent environmental degradation in Ethiopia and its neighbouring countries, which is being exacerbated by rapid population growth, increasing intensity and expansion of land use for agricultural and other purposes, and persistent climatic variability and change that are challenging the peoples and institutions in the region, sometimes leading to tensions between different population groups and institutional interests on access to the remaining natural resources;

Understanding the significance of putting into effect programmes on improved natural resources management and on conservation of important biodiversity reserves, habitats and ecosystems as well as programmes to promote sustainable use of water for agriculture and energy as well as land for agriculture and infrastructure for sustainably producing goods and services;

Realizing the positive and constructive role the University can play in addressing these problems and in contributing to sustainable development and environmental conservation, and thereby to the prevention of conflicts that may emerge around access to natural resources;

Noting the contribution such endeavour may have in enhancing the knowledge generation and knowledge management mission of the university and in building its own and its partners' capacity in the area of, hydro-sedimentology, climatology, sustainable land management and sustainable development; and

Being aware of the long-standing engagement, since 1973, of the University of Bern in Ethiopia, namely through research and management assistance in the Simen Mountains National Park since 1973, the initiation, implementation and backstopping of the Soil Conservation Research Programme (SCRP) since 1981, the implementation of the Eastern and Southern Africa Partnership Programme (ESAPP) since 1999, the Swiss National Centre of Competence in Research (NCCR) North-South since 2001, and supported by the Ethiopian-Swiss Framework Agreement on Research and Technical Cooperation since 2008, a Memorandum of Understanding has been concluded between the Addis Ababa University and the University of Bern, specifying the special role the University of Bern has through its Centre for Development and Environment (CDE) for joint management and implementation of the Water and Land Resource Centre (WLRC) with Addis Ababa University;

The Senate of the Addis Ababa University has hereby adopted these Statutes of the Water and Land Resource Centre in accordance with the powers vested in it under Article 5.14 of the Senate Legislation of the Addis Ababa University of 2007.

Article One

Short title

These Statutes may be cited as the "Statutes of the Water and Land Resource Centre (WLRC)".

Article Two

Definitions

Unless the context provides otherwise, in these Statutes:

1. Board means the Board of Trustees of the WLRC established under these Statutes;
2. Centre means the Water and Land Resource Centre (WLRC);
3. Director-General means the Director-General of the Centre;
4. President means the President of the University;
5. Statutes mean the Statutes;
6. University means the Addis Ababa University.

Article Three

Establishment

A unit of the University officially designated as The Water and Land Resource Centre (WLRC) is hereby established as an autonomous organ of the University, whose functions and responsibilities are outlined in these Statutes.

Article Four

Objectives of the Centre

1. To enhance capacity of key stakeholder at all levels on Integrated Water and Land Resources Management (IWLRM) governance by generating and managing knowledge, information and data in order to improve IWLRM in major basins of Ethiopia, and thereby contributing to better informed, water- and land-related, negotiations about benefit sharing relating to hydro-sedimentology and watershed services of national and international significance;
2. To develop knowledge on hydro-sedimentology, including soil degradation (soil erosion as well as physical, chemical and biological soil degradation), on water degradation (runoff, quality, quantity and off-site damages), on the de-

pletion of vegetation, and on the deterioration of wildlife habitats by backstopping networks of observatories that are monitoring processes in these fields, and by jointly analysing, synthesising and storing the data in a geospatial manner for use at multiple scales and levels of detail;

3. To develop, maintain and monitor 'learning watersheds' as pilot areas for testing technologies and approaches in sustainable land management in cooperation with line ministries at the federal and bureaus at the regional levels, as well as with international, bilateral and non-governmental agencies and maintain/use them as live learning platforms for all;
4. To manage information and knowledge and making it available for further studies and analyses inside and outside the University; to summarize the results and information and prepare them for stakeholders at all levels from farmers, technicians and specialists to researchers, administrators and key policy makers at national and international levels;
5. To undertake research works in the fields of sustainable water and land management, hydro-sedimentology and climatology in close cooperation with pertinent organs within and outside the University system and to coordinate research activities on the same;
6. To produce and distribute relevant information in the sphere of hydro-sedimentology and sustainable water and land management, mainly via joint ventures with other organizations and institutions;
7. To facilitate and/or conduct relevant capacity building programmes that complement the other activities of the Centre; and
8. To perform such other tasks as it may be deemed appropriate to advance its objectives as set forth in these Statutes.

Article Five

Functions and Responsibilities of the Centre

The Centre shall, *inter alia*, have the following functions and responsibilities:

1. Initiate, propose and acquire autonomous funding for strengthening and implementing programmes destined for the improved management of land and water resources in major basins of Ethiopia;
2. Provide backstopping services to institutions being active in sustainable water and land management by providing advice and carrying out components of their programmes, such as monitoring and evaluation;
3. Cooperating with line ministries (e.g., Water, Irrigation and Energy, Agriculture, Tourism and Culture, Education, Science and Technology) and other institutions by acquiring mandates for monitoring and backstopping their programmes and initiatives in sustainable water and land management in Ethiopia and beyond and serve as an outreach venue for AAU;

4. Stimulate the development of new value chains for producing sustainable goods and services in agriculture and related sectors, including the development of water and land for energy and other development purposes;
5. Enhance and maintain, through different means of information generation, collection and dissemination, the existing geospatial data base and documentation system WALRIS (Water and Land Resources Information System) that can be accessed and used by students of AAU and other universities, its associate organizations and the general public according to current rules and regulations of the Government of Ethiopia and the data-providing institutions;
6. Conduct research programmes on hydro-sedimentology, climatology and sustainable water and land management in cooperation with other University organs and associated organizations at national and international levels;
7. Initiate and/or facilitate the formulation and implementation of transdisciplinary partnership programmes with associated organizations, government agencies, other universities, research institutions and groups that conduct works in related areas;
8. Support advocacy groups campaigning to preserve essential land functions and ecosystem services as well as habitats for wild animals;
9. Conduct and promote programmes designed to build the capacity of associated organizations and governmental institutions working in similar spheres;
10. Run a website, including the WALRIS, and initiate and/or facilitate the production of relevant publications and other resource materials;
11. Support graduate and post-graduate studies and use its observat6ories and learning watersheds as live learning platforms for research, development and policy making;
12. Perform such other activities related to its objectives as defined in these Statutes that may, from time to time, be determined by the Board in consultation with its associated organizations in the Horn of Africa Region.

Article Six

Organizational Structure

The Centre shall have the following organs.

1. The Board of Trustees
2. Permanent and/or ad-hoc committees as the Board may from time to time establish
3. The Director-General
4. Divisions and sections under the Director-General

Article Seven

Governance

1. The Centre shall be governed by a Board of Trustees that is accountable to the President;
2. Notwithstanding the provision of sub-Article 1 hereof, the following shall be the members of the Board:
    a. The Vice President of Research and Technology Transfer, who shall serve as the Chairperson of the Board ex-officio;
    b. State Ministers of major ministries related to water and land management, cooperation and research, including the Ministry of Science and Technology, the Ministry of Agriculture, the Ministry of Water, Irrigation and Energy, and the Ministry of Finance and Economic Development;
    c. The Director of the Centre for Development and Environment (CDE) of the University of Bern;
    d. A representative of any other major donor or partner institution providing a full- or part-time secondment of the Director-General, ex-officio (optional);
    e. One member to be appointed by the President;
    f. The Director-General, who shall also serve as the Board's secretary ex-officio.
3. The Board shall have a maximum of nine members, during even voting the group supported with the chairperson will win;
4. The term of office of Board members, other than the ex-officio ones, shall be 4 years with a possibility of reappointment;
5. The Centre shall be managed by the Director-General and his or her delegates.

Article Eight

Powers and Responsibilities of the Board

1. Subject to pertinent rules and regulations of the University, the Board shall be the highest decision making organ in all matters pertaining to the Centre and shall be responsible for the overall direction and control of the activities of the Centre;
2. Without prejudice to the generality of the provision of sub-Article 1 hereof, the Board shall in particular:
    a. Formulate or cause the formulation of policies on the works and research priorities of the Centre;

b. Encourage and promote research works and their dissemination thereof in the areas for which the Centre has been established;
c. Review and approve the annual work plans and programmes of the Centre;
d. Consider and approve the research, data, information sharing, knowledge management and publication policy of the Centre;
e. Set qualification requirements on the person to be appointed as the Director-General and fix his or her remuneration and other benefit packages. Alternatively, the Director-General may be seconded by CDE as per the MOU with AAU, or by another major donor, provided that qualification requirements are fulfilled and approval by the Board is obtained;
f. Recommend to the President the person to be appointed, or seconded, as the Director-General of the Centre;
g. Establish permanent or ad-hoc committees, with the relevant terms of reference if need be, that would support the activities of the Centre as and when the need arises;
h. Examine and approve periodic activity reports of the Centre to be presented by the Director-General;
i. Consider and approve annual budget of the Centre to be prepared by the Director-General;
j. Receive, review and approve annual accounting and audit reports to be made on the financial activities of the Centre;

3. The Board shall possibly meet every six months, but at least once every year.

Article 9

Powers and Responsibilities of the Director-General

1. The Centre shall be headed by the Director-General who is accountable to the Board.
2. The Director-General shall be responsible for the overall management of the Centre, including the implementation of the policies, directives and decisions of the Board.
3. The Director-General shall in particular:
   a. Represent the Centre in all its dealings with its parties;
   b. Prepare or cause to be prepared all the work plans, programmes, progress reports, budgets, accountings and audits of the Centre;
   c. Subject to relevant Federal and/or city laws and pertinent rules and regulations of the University, and personnel manual of the WLRC, employ, appoint, administer and dismiss the employees of the Centre;

d. Draw up or cause to be drawn up internal bylaws and directives of the Centre;
e. Conclude contracts, sign memoranda of understanding and project agreements with third parties, and inform the Board of all thereof;
f. Maintain or cause to be maintained proper books of accounts of the Centre;
g. Open and operate the bank accounts of the Centre in accordance with guidelines to be approved by the Board on the same;
h. Submit periodic reports to the Board;
i. To the extent desirable for smooth operation of the business of the Centre, delegate some of his/her powers to another officer of the Centre; and
j. Perform such other functions as may be assigned to him/her by the Board and /or the President.

Article Eleven

Sources of Funds

1. The funds of the Centre comprise of, *inter alia*, block grants to be allocated by the University, research grants, incomes generated from mandates to be made available by organizations and individuals sponsoring specific projects, donations and bequests, and other sources as appropriate;
2. The funds of the Centre shall be deposited in a bank account to be opened in the name of the Centre in accordance with the guidelines to be issued by the Board and shall only be expended for the activities of the Centre.
3. Subject to mandatory laws on financial administration, the Centre shall have a full autonomy in managing its funds.

Article Twelve

Financial Administration

1. The finances and other property interests of the Centre shall be administered in compliance with nationally and internationally accepted principles and rules on the same.
2. The Centre shall close and cause the auditing of its accounts once a year.
3. The External Auditor of the Centre shall be appointed by the Board.

Article Thirteen

Power to Issue Guidelines

The Board may issue general guidelines for the implementation of the objectives of the Centre.

Article Fourteen

Entry into Force

These Statutes shall enter into force as of the date of approval by the University Senate.

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