



BUSINESS FORUM

Scaling-up solutions in partnership with business

The business community showed a harmonized position vis-à-vis the post-2015 development agenda at the Budapest Water Summit, stating that “businesses must drive sustainable solutions at scale while linking development goals to core business interests, identifying and managing their impact and collaborating with governments and civil society” (Budapest Water Statement, 2013). The Business Forum was an opportunity to further explore these business solutions in the context of the African continent, with increased and efficient collaboration at their core. With water being placed as a top 3 global risks of greatest concern by the World Economic Forum 2014 Global Risk Report, businesses are indeed developing new models of partnerships to find solutions to the sustainable water stewardship challenge. Given the African context, where as much as 85 per cent of all water withdrawals for economic activity goes to agriculture (FAO 2009 cited in Woodhouse & Ganho 2011), business solutions to increase water use efficiency across key points of the agricultural value chain were given particular prominence during the discussions.

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Executive Summary

The business community showed a harmonized position vis-à-vis the post-2015 development agenda at the Budapest Water Summit, stating that “Businesses must drive sustainable solutions at scale while linking development goals to core business interests, identifying and managing their impact and collaborating with governments and civil society” (Budapest Water Statement, 2013). This can translate into immediate business actions, in particular in the following areas:

- Increase water use efficiency, especially in water stressed areas, across key points of the agricultural value chain;
- Eliminate direct untreated industrial wastewater discharge across direct operations and strongly reduce it across supply chains;
- Increase the provision of equitable and sustainable access to safe water, sanitation and hygiene (WASH) through cross-sectoral business action;
- Increase business participation in reducing shared water risks;
- Increase sustainability and improve transparency of infrastructure investments.

All these business actions must be implemented in partnerships with all relevant watershed stakeholders including governments, communities, local business associations, engagement platforms and others.

The Business Forum was an opportunity to further explore these different solutions in the context of the African continent. Given the specificity of the African water challenges, two of the above mentioned areas had been selected for the Business Day: reducing shared water risks (panel discussion 1) and water and agriculture (panel discussion 2). Much emphasis was placed on partnerships, and the day was in fact taken as an opportunity to bring to the table business leaders from both Multi-National Enterprises (MNEs) and African companies, along with representatives from the public sector and civil society partners.

Panel discussion 1: Scaling-up existing partnerships for reducing shared water risks at the watershed level

The dynamics of water resources globally are undergoing significant change as they come under pressure from a variety of sources from population growth to changing climate patterns. The 2030 Water Resources Group for example currently estimates that there will be a shortfall of some 40% between demand and supply if we continue to develop on our current trajectory. This is further reinforced by the World Economic Forum 2014 Global Risk Report which placed water as a top 3 global risks of greatest concern.

Businesses increasingly perceive water scarcity, quality degradation and extreme water-related events such as floods and draughts as risks to both their direct operations and their value chains as a whole. In response to this, businesses are developing new models of co-operation to find solutions to the sustainable water stewardship challenge.

The aim of this session was to explore how successful examples of such innovative partnerships can be scaled-up and replicated at a larger scale. Specific case studies from different African countries and various industry sectors were presented, in an attempt to draw lessons from existing experience and to identify enablers of scale. Issues such as access to sustainable finance, the need for adequate regulations, and the policy environment requirements more broadly speaking were addressed. The

discussion also allowed to further explore new models of partnerships, including business-to-business collaboration (esp. between companies from different sectors operating within the same watershed – horizontal dimension) and governance issues (e.g. need for a central coordinating body, central financial vehicle, etc. – vertical dimension).

Panel discussion 2: Water efficiency in agriculture in a context of climate change and growing water demand in Sub-Saharan Africa

Agriculture is the greatest user of water in Africa: while globally agriculture accounts for 70 per cent of water consumption (UNEP 2008), in Africa, as much as 85 per cent of all water withdrawals for economic activity in Africa goes to agriculture (FAO 2009 cited in Woodhouse & Ganho 2011). On the other hand, agriculture is vital for the development goals of promoting growth and reducing poverty in Africa, as it constitutes approximately 30% of Africa's GDP and contributes about 50% of the total export value (Water for Agriculture and Energy Ministerial Conference 2008), with 80% of the continent's population depending on the sector for their livelihood (AfDB 2010). Improving water efficiency in agriculture is therefore of primary importance in the post-2015 development framework context.

Businesses have a key role to play in this space, either as direct players in the agricultural sector (e.g. the sugar cane industry) or further down the agri-value chain (e.g. brewer industry). Moreover, given the fact that Africa is one of the most vulnerable continents to climate change and climate variability, there is a lot of opportunities for innovation from businesses in this space, especially in adjusting traditional adaptation mechanisms that people have historically developed to cope with inter-annual rainfall variability in arid and semi-arid lands.

The session allowed to explore the solutions that businesses from different industry sectors are currently developing to improve water efficiency in agriculture. While these include technological innovations, the collaboration dimension is not to be forgotten and this session was really an attempt to apply the previous one (scaling up existing partnerships) to one specific sector – agriculture. The need for a better understanding of the interactions between land-use changes and water resources in the climate change context were also featured, especially the issue of data and models.

Key learnings and outcomes

Overall, this first edition of a Business Forum at the Africa Water Week was an opportunity to explore the maturity of business involvement in water stewardship challenges in Africa. In this regard, the main finding of the event, given the difficulty to bring African business partners to the table of discussions, is that there is great scope for enhanced contribution of the African business community to the local water challenges in the coming years. We hope that this Forum will have given a meaningful impulse for such an involvement. Yet the discussions also demonstrated that many successful partnerships between public, private (including business-to-business partnerships), and civil society representatives are already in place to reduce shared water risks at the watershed level. A continuing challenge, however, is to achieve balance between centralized government planning, management of water resources and meeting local needs. No clear model has yet been established for achieving this balance, but the formation and active engagement of local Water Users Associations is a step in the right direction.

The point of convergence of public sector and private sector goals is around the sustainability of water resource management actions: government sectors and their funding partners are increasingly demanding that projects deliver measurable and lasting improvement, while the private sector is increasingly concerned about maintaining business continuity and supply-chain integrity. Also, private sector activities are shifting toward more integrated and holistic solutions, where water resource management practices are viewed in the context of community health, education, and workforce stability.

In order for these public-private-civil society partnerships to be scaled up:

- It is time to link water to the socio-economic development of countries, i.e. jobs, economic growth, etc. This should allow to put water higher on the political agenda and to mobilize more investment.
- Platforms for action/governance structures are essential to ensure smooth and fruitful collaboration between local and global partners. They are essential in enabling a partnership to evolve from its pilot phase to scale.
- Other enablers of scale include: thematic alignment and common geographic priorities.
- Other key stakeholders need to be involved in this scaling-up phase of existing partnerships, namely the academic sector (research and capacity development), and the African informal economy (especially informal small-scale providers of sanitation services, whose essential role in urban and peri-urban sanitation is increasingly recognized).
- Issues such as transparency, integrity and accountability are key in making such partnerships a success. These allow for a better balance of power between the different partners.
- Economic instruments to improve water management also need to be further developed.

When it comes down to the agricultural value chain, the above mentioned challenges still apply, but are reinforced by:

- The fact that the agricultural sector is the biggest water user, with as much as 85% of all water withdrawals for economic activity in Africa going to agriculture. The issue of competing water demands, e.g. hydropower, drinking water supply and sanitation, and agriculture – is therefore exacerbated at the watershed level.
- The key role that the private sector has to play in this space, either as direct players in the agricultural sector (e.g. the sugar cane industry) or further down the agri-value chain (e.g. brewer industry), and whatever the scale (from the local entrepreneur to the multinational companies).
- The availability of data and models, even though, despite the common beliefs, modelling of land-use changes on water resources is possible in data-scarce environment such as the African continent as a whole.
- The exacerbated role of communities and self-organized community committees in addressing such a challenge as the one of the production of more food with less water – in a context where family farming is dominant, communities are indeed the key stakeholder to consider.

Overall, the meeting concluded on a positive note, with this nice quote from the X-Files TV series: “I want to believe”. We believe that successful bricks are already in place in Africa and that all it will take for these to constitute a strong edifice is the involvement of all players in the existing platforms for actions.

I. Background

Africa Water Week

The Africa Water Week (AWW) is convened by the African Ministers Council on Water (AMCOW) in conjunction with the African Union Commission (AUC) and organized with other development partners. It is held biennially to build momentum on achieving the Millennium Development Goals (MDGs) water and sanitation targets by 2015, and the 2025 Africa Water Vision. This is in line with AMCOW's belief that effective and integrated management of water resources, and adequate and equitable access to safe water and sanitation makes a critical contribution to Africa's progress towards sustainable growth and development.

The 5th Africa Water Week (AWW-5), held in Dakar, Senegal, on May 26th – 31st, focused on the Africa Water Vision 2025 of "An Africa where there is an equitable and sustainable use and management of water resources for poverty alleviation, socio economic development, regional cooperation and environment" and the need to further advocate for a distinct water goal in the post 2015 development framework. The theme for AWW-5 was therefore "Placing Water at the heart of the post-2015 Development Agenda".

The first edition of a Business Leaders Forum

The WBCSD and its Water Leadership Group members were pleased to be given the opportunity to help setting up a Business Forum during the 5th African Water Week organized in May 2014 by AMCOW and AUC, putting forward a harmonized business voice in its commitment to addressing water challenges on the African continent and bringing to the table business leaders / organizations from different parts of Africa, with the contribution of WBCSD's Regional Network partners.

The business community showed a harmonized position vis-à-vis the post-2015 development agenda at the Budapest Water Summit, stating that "Businesses must drive sustainable solutions at scale while linking development goals to core business interests, identifying and managing their impact and collaborating with governments and civil society" (Budapest Water Statement, 2013). The Business Forum was an opportunity to further explore some of these solutions in the context of the African continent. Given the specificity of the African water challenges, two thematic areas had been selected for the Business Day: reducing shared water risks (panel discussion 1) and water and agriculture (panel discussion 2). Moreover, much emphasis was placed on partnerships, and the day was in fact taken as an opportunity to bring to the table business leaders from both MNEs and African companies, along with representatives from the public sector and civil society partners.

II. Opening Session – Business role in the African post-2015 development agenda

Introduction: Chair opening remarks and keynote by AMCOW Executive Secretary

*Hon. Pape Diouf, Minister for Water Resources, Senegal, Host Minister
Bai-Mass Taal, Executive Secretary, AMCOW*

Hon. Minister for Water, Senegal, opened the Forum and welcomed all the participants to this first edition of a Business Forum at the Africa Water Week. Bai-Mass Taal, Executive Secretary of AMCOW, then introduced the theme of the Forum into more details by recalling how closely linked water and development are. He then mentioned the importance of partnerships in enhancing this water and development linkages, and called for a greater involvement of the private sector in these partnerships.

The Business voice within the post-2015 Development framework

Joppe Cramwinckel, Water Director, WBCSD

Joppe Cramwinckel, Director of the Water Program, WBCSD – co-convenor of the Business Forum – delivered a keynote on the business voice within the post-2015 development agenda. He explained that the WBCSD Water Leadership Group provided strong input into the post-2015 process through Peter Brabeck, Chairman and President of Nestlé Group, for the attention of the High Level Panel. The key messages were that we should have one set of global post 2015 goals covering both development and sustainability (post MDGs and post-Rio+20 combined), and that we should aim for three targets under one stand-alone water security goal:

- More needs to be done in relation to access to safe water and improved sanitation before 2015, even where MDGs seem to have been reached.
- The issue of water quality and waste water must be part of the new targets.
- Goals for water resource management must become operational and water overuse must be addressed without delay.

Mr. Cramwinckel then recalled how the business community showed a harmonized position vis-à-vis the post-2015 development agenda at the Budapest Water Summit, stating in essence that businesses must drive sustainable solutions at scale and further collaborate with governments and civil society. He explained that the business community shows its specific role in the post-2015 agenda in Actions, esp. in the fields of Water stewardship, Access to Water and Sanitation, Water efficiency in agriculture, Water treatment and reuse. All these business actions must be implemented in partnerships with all relevant watershed stakeholders including governments, communities, local business associations, engagement platforms and others.

The WBCSD Action2020 Framework for Action very much aligns with the above-mentioned process. As a reminder, the WBCSD published its Vision 2050 report in 2010, which set out a pathway leading to a global population of some 9 billion people living well, within the resource limits of the planet by 2050. Taking Vision 2050 one step further to deliver tangible outcomes, Action2020 aims to rally the efforts of business to deliver on the economic, environmental and social promises made in Vision 2050. Action2020 is mobilizing the global business community to address the urgent needs of the planet and its people. The Action2020 Water Business Solutions aim to reach the following “Societal Must-have”: “by 2020, water of adequate quality and quantity is shared among all users and is in a more sustainable balance with the limits of renewable water resources and ecosystems requirements”. The four main areas of action identified in order to do so are:

- Increase business participation in reducing shared water risk
- In water stressed areas, increase water efficiency across key points of the agricultural value chain
- Eliminate untreated industrial wastewater discharge across direct operations and strongly reduce it across supply chains through increased water reuse and investment in natural water infrastructure

- Increase the provision of equitable and sustainable access to safe water and sanitation (WASH) through cross-sector business action.

Again, it is important to note that all these business solutions must be implemented in partnerships with the relevant watershed stakeholders, as explained in the next keynote below.

Innovative partnerships as scalable solutions to the post-2015 water challenges

Anders Berntell, Executive Director, 2030 Water Resources Group / IFC

The issue of innovative partnerships, such as 2030 Water Resources Group (WRG), was indeed at the heart of the keynote that Anders Berntell, Executive Director of 2030 WRG, delivered to close the Opening session. Mr. Berntell first reminded that 2030 WRG was established when companies started to realize that water scarcity and pollution would have effects on the countries' economies, growth and prospects for development. "A business cannot survive in a society that fails" (Bjorn Etigsson) is the belief at the center of the creation of such a partnership as 2030 WRG.

The innovative aspect of 2030 WRG, compared to many other partnerships already existing in the water field, is that it involves the private sector. This is based on the acknowledgement that the private sector is an important consumer of water resources. It is often said that on average 70% of the water withdrawals are aimed at agriculture while 10% are for the industrial use. This formulation may be misleading and lead to believe that the private sector – "industry" – is only involved in 10% of the water withdrawals. But it is important to bear in mind that companies are also key players of the agri-value chain, and as such are key players to be considered when competing water demands are addressed.

The partnership has already reached its scaling-up phase: while it started in South Africa, new partnerships are now being put in place in Tanzania, Kenya, Peru, Mexico, Lebanon, India, Bangladesh and Mongolia.

III. Panel Discussion 1 – Scaling-up existing partnerships for reducing shared water risks at the watershed level

Opening remarks by session Chair

Joppe Cramwinckel, Water Director, WBCSD

Joppe Cramwinckel, Director of the WBCSD Water Program, opened the session by mentioning that:

- For business, local participation in the collective management of water will be key to ensuring long-term access to the resource in the context of competing demands (water for people, energy, food, ecosystems etc.).
- Business has a critical role to play in applying its expertise and experience in developing, implementing and scaling-up, through partnerships, watershed focused solutions.
- Business leaders call for a better dialogue with governments: the food, energy and water nexus affects companies' strategies and there are lessons that businesses can bring to policy-makers in governments. A stronger voice from business is needed in the governance and policy debate.
- Consistent regulations are needed in the water, energy and food sectors, as well as new and better indicators to inform the policy debate.

- Effective governance models are needed to address competition for the resource in a regulated and consensual way.
- New business models must be developed, targeted at low income consumers, at an ever growing urban population and changing dietary habits, all requiring larger quantities of water.
- Implementing adequate drinking water, sanitation and hygiene for own employees at the workplace is a direct business contribution to global water and sanitation goals, and a first step towards stepped up engagement.
- There are potential conflicts between companies, the population, farmers, and governments etc. who bear the costs. If nobody takes responsibility it's the environment that will pay, and future generations will pay for the consequences. Cooperation is key for a different scenario.

International Water Stewardship Programme

André Lammerding, Head of International Water Stewardship Programme, GIZ

André Lammerding presented the program he is responsible for, namely GIZ's International Water Stewardship Programme. The Programme is commissioned by BMZ, with support from DfID, and planned to be during for 6 years (2013-2018) so as to reach the following targets:

- 1 million people benefitting from improved water security
- EUR 8 M leverage from private companies
- Strengthened public sector and institutional framework.

It currently mainly focuses on Africa, with seven on-going partnerships (Uganda, South Africa, Kenya, Tanzania, Zambia + 2 countries outside of Africa), and involves 23 public institutions, 22 companies, 3 associations, 7 NGOs and numerous community representatives.

After deep diving into the Mbarara case study (Uganda), Mr. Lammerding drew some lessons and challenges learnt from the different partnerships:

- A sound water risk assessment and collective business case for action helps to build consensus and prioritise action;
- Trust and capacity are big barriers, and there is a need for a trusted honest broker and a competent coordinator for the partnership to become a success;
- The private sector needs to engage with the public sector
- Guidelines on integrity and transparency are essential;
- **Last but not least, water security needs to be understood as a limiting factor for socio-economic development:** it is time to link water to the socio-economic development of countries, i.e. jobs, economic growth, etc. This should allow to put water higher on the political agenda and to mobilize more investment.

Water Futures Partnership scaling-up

André Lammerding, Head of International Water Stewardship Programme, GIZ

André Lammerding then moved to the presentation of another partnership success story GIZ is very closely involved in: the Water Futures Partnership. The WFP was founded by SABMiller, GIZ and WWF at the global level and is now translated into a growing network of organizations consisting of businesses (.com), civil society (.org) and public sector (.gov) committed to address threats to water security on the watershed level through multi-stakeholder partnerships at the local level. The objective of the partnership is triple:

- Implement innovative cost-efficient solutions – and implement measurable improvements to water security that create shared benefits
- Strengthen water governance – through the promotion of institutional change among others
- Improve water security – namely identify, quantify and mitigate exposures to water related risks through collective action with key donors and actors

After presenting into more details the Peruvian case study, Mr. Lammerding then explained into more detailed the business case attached to the WFP, namely:

- Cost savings – through enhanced long-term sustainability of business; reduced transaction costs and more efficient water performance
- Demonstration of leading practices in water stewardship.

He concluded his presentation by recalling that The Nature Conservancy and Edeka joined the 3 founding partners in 2014, and that there are still opportunities for engagement, as the WFP is currently in its scaling-up phase as well, seeking for new partners from other sectors and opening its geographical focus (Columbia and Egypt). For more information & join the WFP, contact Robin Farrington (robin.farrington@giz.de) and/or Astrid Michels (astrid.michels@giz.de).

Strategic Water Partners Network South Africa (SWPN-SA)

Nick Tandi, SWPN-SA Programme Manager, The NEPAD Business Foundation

The third example of a tripartite partnership – the Strategic Water Partners Network-South Africa (SWPN-SA) – was presented by its manager, Nick Tandi. Mr. Tandi started his presentation by recalling that under current efficiency levels, South Africa could face a 17% demand-supply gap by 2030. This is what gave rise to the SWPN value proposition, a multi-stakeholder group (private-public-civil society) catalysed by 2030 WRG and including companies from various sectors (Mines, Food and beverage, Power and Energy). [The three focus areas](#) identified by the partnership as strategic to close the water gap are: (1) Effluent and Wastewater management (Project example: Sustainable Mine Water Management); (2) Water use Efficiency and Leakage Reduction (Project example: No Drop program); (3) Agricultural Supply Chain water (Project example. Business case for up-grading Vaalharts irrigation scheme).

After presenting briefly each of the three projects, Mr. Tandi drew some common lessons on challenges and opportunities for scaling them up. The main conclusions are:

- Broadening the scale of problem and opportunity analysis
- Making use of relation capital, e.g. through Political and business leadership at the highest level; policy or regulatory instruments to incentivise the partnership; partnership knowledge management; avoiding the mistake to think that trust is an input when it is in fact an outcome of the partnership. ^
- Overcoming collective action problems, i.e. the lack of incentive for private sector users to invest outside of the fence (non-excludability barrier¹). Overcoming such problems can happen through shareholder pressure, especially financial institutions ratings.

¹ Non-excludable - any good or service that someone cannot be prevented from accessing because of non-payment (or it is extremely expensive to exclude). Source: <https://www.education.psu.edu/geog432/node/277>

Replenish Africa Initiative (RAIN)

Kyle Sucher, Program Manager, Replenish Africa Initiative (RAIN)

The last example of partnership was presented by Kyle Sucher, Program Manager of the Replenish Africa Initiative (RAIN). RAIN is an initiative launched by The Coca-Cola Africa Foundation and implemented by the Global Environment & Technology Foundation (GETF) with the support of a network of over 40 implementing partners and 50 donor partners. The initiative is on-track to reach at least 2 million people with sustainable clean water by the end of 2015 and over 400,000 people with improved sanitation in Africa (objective is to have at least one project in EVERY African country), through three main types of programmed projects:

- **Water for Health (Water, Sanitation & Hygiene):** Improved water and sanitation service delivery through innovative partnerships that improve infrastructure and operating environments
- **Water for Productive Use:** More efficient use through improved technology and methods (e.g. sustainable agriculture) as well as increased access to markets, production and income
- **Water for Environment (Watershed Protection):** Watershed resiliency and future access to ecosystem services improved through risk reduction and watershed management.

The *Safe Water for Africa Partnership*, a RAIN program that focuses on Western Africa (Ghana, Nigeria, Liberia, Sierra Leone), features business-to-business collaboration between Diageo and Coca-Cola. The partnership is scaling an innovative, market-oriented water service delivery model, and has the potential to reach as many as 500,000 people with improved water access. Mr. Sucher concluded his presentation by presenting the three pillars that are essential to drive scalable impact: thematic alignment; geographic priorities; and platforms for action.

Panel discussion: facilitated by Joppe Cramwinckel, Water Director, WBSCD

The main issues raised during the discussions are the following:

- **Power imbalance and transparency:** the issue of power imbalances between the different partners of the above mentioned partnerships – esp. between big private sector players and civil society – was raised. The presenters acknowledged that this issue of power gaps is one they are indeed very aware of, and that they try to address it through working on higher quality standards, accountability mechanisms, enhanced transparency and integrity, inclusivity, and improved capacity building.
- **Transfer of Money:** the above mentioned issues of transparency and accountability are also key when it comes to funds management and financial instruments for Water Resources Management overall. The latter need to be developed further and innovation in this space is highly needed.
- **The role of the academic community:** a NEPAD business foundation representative recalled that while the partnerships presented during the session were composed of business partners, NGOs and government representatives (.com/.org/.gov), the academic side of things (.ac) often tends to be forgotten. It is important to include academic partners in such partnerships, esp. for inputs & skills in research and capacity development.
- **Informal economy:** a representative from the Africa Water Facility pointed out that small social entrepreneurs in Africa, esp. in sanitation, are a key players of the private sector and as such need to be involved as well in the above mentioned partnerships. Further than that, there is in fact a big opportunity in creating an enabling environment to allow and move from an informal economy to more formal business models.

IV. Panel Discussion 2 : Water efficiency in agriculture in a context of climate change and growing water demand in Sub-Saharan Africa

Opening remarks by session Chair

Joppe Cramwinckel, water Director, WBCSD

This second panel discussion as presented by Mr. Cramwinckel, who chaired the session, aimed to propose concrete solutions to improve water efficiency in agriculture, as it uses much water, but also because of its vital role for the development goals of promoting growth and reducing poverty in Africa.

As an introduction to the session, Mr. Cramwinckel reminded the audience that the WBCSD new report “Co-optimizing Solutions: Water and Energy for Food, Feed and Fiber” was launched at the “Sustainability in the Water-Energy-Food Nexus Conference” which took place on May 19-20 in Bonn, Germany. The report, now available on our [website](#) together with an executive summary, is based on advanced research with a sophisticated quantitative analysis of global linkages compiled by MetaMeta and Resourcematics Ltd, and case studies of techniques that forward-thinking companies are using. It presents some of the most promising, innovative and scalable solutions to the world’s interconnected water, energy, and food, feed, and fiber challenges, and it reveals how these solutions can be integrated to become even more impactful. Moreover, it highlights how co-optimization solutions can go a long way towards addressing climate change mitigation and adaptation, since several solutions do not just improve the productivity of scarce water and energy but also reduce greenhouse gas emissions. The issue of climate variability impacts on water resources is the theme of the first keynote delivered by Bob Dykes of RTI International.

Understanding the impact of agricultural land use on watersheds

Bob Dykes, RTI International

Mr. Dykes delivered a keynote on the ‘Impact of Agricultural Land Use Conversion on Surface Water Hydrology’. Overall, agricultural land-use conversion can potentially impact surface waters through four main drivers:

- Increasing withdrawals for irrigation
- Accelerating run-off
- Decreasing base flow
- Altering aquifer re-charge

Land-use modeling allows to:

- Quantify magnitude of potential impacts *before* the impacts have occurred. As such, it allows for a more balanced evaluation of relative costs and benefits of alternative land use options and for optimizing site selection and land use development patterns.
- Simulate the effectiveness of mitigation or adaptation techniques through: Crop selection/tilling practices; Installation of “rain gardens” or similar rainfall retention systems; Preservation of riparian buffers to reduce sediment inflows; Expansion of reservoir capacity to accommodate fluctuating inflows.

It is generally acknowledged that the lack of data may hinder such type of modelization in some of the lower-income countries, including in Africa. Interestingly enough, RTI has successfully developed an

Analytical Hydrography Dataset for the entire Latin America and the Caribbean (LAC) region and ran its hydrological model successfully there. The same type of dataset could be prepared for Africa (or any other continent/country), which gives a lot of hope in terms of progress in mitigation and adaptation to climate change or agricultural land-use changes. This is well captured by a quote from the chief hydrologist of RTI who said that “we are starting with something and taking a giant step forward, even if this is not perfect”.

CDKN Africa Projects

Shehnaaz Moosa, Director Research Programme in the Africa Region, SouthSouthNorth (SSN)

The presentation by Shehnaaz Moosa, SouthSouthNorth’s Director Research Programme in the Africa Region, discussed the research supported by the Climate and Development Knowledge Network (CDKN) on the interactions between changes in water supply, the impact of rainfall on agricultural yields, demand for irrigation, and the importance of trade in the tourism industry. A special focus was made on the project “Climate Change Adaptation for Rural Communities Dependent on Agriculture and Tourism in Marginal Farming Areas of the Hwange District, Zimbabwe”.

Mrs. Moosa started by setting the scene: rural communities in northwest Zimbabwe derive their livelihoods from rain-fed agriculture and from tourism associated with Victoria Falls and the Hwange National Park. But given future projections of climate change, farming systems are expected to undergo profound changes in order to adapt. In this context, communities identified several current and desired adaptation options, the majority of which focused on agricultural crop activities (increased diversification and protection of sensitive growth stages to avoid mid-season drought). Overall, the project considered adaptation in marginal farming areas that were co-dependent on agriculture and the tourism industry, and how these two key livelihood resources could interact under future climate change.

Burkina Faso farmers’ experience

Saidou Ouédraogo, President of the National Chamber of Agriculture, Burkina Faso

Mr. Saidou Ouedraogo, who is the President of the National Chamber of Agriculture of Burkina Faso and farmer himself, shared his own experience in terms of partnerships in agriculture to address shared water risks.

The Center-Northern region of Burkina Faso, where Mr. Ouedraogo is exploiting his farm, is known for, besides being a cotton production zone in the sixties, producing vegetable crops (potatoes, tomatoes, lettuce, onions, green beans essentially) since the colonial period. The latter production concentrated around three of the biggest lakes of the region: Bam, Dém and Sian. Yet, in 2010, the National Office for Water (ONEA) started to pump water in the Lake Dem for the supply of drinking water to Kaya, the greatest city in the region. Or, in case of water shortage, the national regulations in place stipulate that drinking water uses take priority over agricultural water usage. In the current context of increased pollution of the Lake and of the rarefaction of water resources in the region (the region is now classified as being arid), the riverine population – which includes more than 25 000 farmers – had to find solutions. In order to do so, they set up CLÉs (Water Management Committees), which came-up with different practical solutions among which the plantation of specific tree/plant species to fight against the silting of the Lake. The same committees have since then been established all over the country due to the proliferation of dam projects (more than 150 have been constructed so far).

This success story is an excellent example of how partnerships are starting to emerge locally to address competing water demands and shared water risks at the watershed level, and can be replicated at the national level. Linking such partnership type to “scaling-up vehicles” such as GIZ’s International Water Stewardship Programme, WFP, RAIN, SWP-SA, or SWPN-SA, would enable replication at a larger scale. Moreover, it would enable to increase linkages between local farmers and bigger players further down the agri-value chain, generating a pulling-effect between the leading industries and the lagging ones.

Panel discussion: facilitated by Joppe Cramwinckel, Water Director, WBCSD

The main points addressed during this second round of discussions were:

- **Dakar’s water challenges:** Dakar main issues in terms of water management, according to one of the Forum’s participants, include surface water pollution and flood management. To address these, the speakers explained that models indeed exist both to link pollution to the source and to assess flood-related risks, but that funding is key in this regard. Moreover, it was mentioned that it is key to combine these technical GIS tools with decision-making tools, so as to provide the most accurate solutions to policy makers.
- **The Burkina Faso’s case study:** More details were asked regarding the presentation that Mr. Ouedraogo gave, especially concerning the level of functionality of the CLEs (see above). Overall, the case study really impressed the audience, especially the fact that the community organized itself without external intervention.

V. Closing Panel and Conclusion - Taking action

Chair opening remarks

Joppe Cramwinckel, water Director, WBCSD

Mr. Cramwinckel opened the session by thanking everyone for the richness of the respective presentations. He then apologized that one of the guest speakers E-Thekwini municipality – the winner of the 2014 Stockholm Industrial Water Award (SIWA), whom had been announced officially on Wednesday May 28th 2014 at the Teaser Plenary Session of the Africa Water Week – of the closing session had had to cancel its participation due to visa issues. The choice of this South-African municipality as the SIWA winner is based on “the open approach to experimenting and piloting new solutions across both technical and social aspects of service delivery [which] has made eThekwini a forerunner in the world of utility-run services” (see [SIWI website](#)).

Mr. Cramwinckel then introduced the rapporteur for the session discussions, Ms. Michele Okala, World Youth Parliament for Water (WYPW)’s Cameroun representative, who is also actively involved in the Youth advisory group of AMCOW, and in [Youths Volunteers for the environment](#).

Reporting back

Michele Okala, WYPW

Ms. Okala briefly summarized the discussions, and concluded that “this business session of the WBCSD contributed in his way to encourage all the stakeholders present [t]here to engage as soon as possible

in one of the present solution, which will have serious social and political implications and strongly impact countries plans for economic growth. Those solutions can enable African countries to access best practice projects and policies in water management from public, private and civil society sectors around the world, enabling officials to field-test and replicate actions for implementation domestically”. Ms. Okala also pitched the current Youth mainstreaming in programs, projects and policies around ensuring sustainable development; and the enhanced Youth involvement in AMCOW policy and strategy. “Because of the demographic number, African youth should be seen as partners who can also contribute to Africa water vision 2015”.

Keynote – “Taking action – what is next?”

Vangelis Constantianos, Executive Secretary, Global Water Partnership (GWP) Mediterranean

Mr. Constantianos chose to close the session in an original way, by taking the audience back to the future, on May 29th of 2029, exactly fifteen years after the Forum. He identified the following three elements, out of the different panel discussions, as having ideally been resolved on 29 May 2029:

- First, sectoral silos’ challenges are long back in the past: the Water, Energy and Food sectors are now integrated at a workable level; IWRM and the Nexus approaches have found their way through to mutual understanding and complementarity.
- Second, in year 2029, new partnerships have practically emerged and are widely applied: challenges and bottlenecks faced in the public-private partnerships have found their practical way through; the concerns of the users, the vulnerable groups and the civil society at large, have been heard and responded to.
- Third, in 2029, innovation has prevailed and is an everyday business, both in agriculture and urban water management, especially in the field of wastewater management.

Each of the above mentioned items allowed Mr. Constantianos to outline the essential steps to take in order to achieve such a future, highlighting especially the role of the private sector in this:

- The private sector has a key role to play in silo-breaking, both the big players and the smaller ones, as in the water and sanitation agenda, we need both ‘more from the few’ and ‘more from the many’.
- The private sector needs stability, security, and perspective – especially when it comes to institutional, legal and regulatory frameworks – in order to get involved in long-lasting partnerships.
- The private sector is a key player in driving the innovation agenda, since by definition, the business translates science and edge technology to everyday and widely used practice.

This return to the future was also the occasion for Mr. Constantianos to present different projects and programs the GWP is currently leading in the Mediterranean region:

- The GWP-Mediterranean and the OECD completed through structured multi-stakeholder dialogue, the detailed identification and analysis of the Private Sector participation status, bottlenecks and opportunities in Tunisia and Jordan, previously delivered in Egypt and Lebanon. These dialogues are continued in more countries in the Mediterranean, and with regional dialogue in the framework of the Union for the Mediterranean.
- Since 2008, GWP-Mediterranean has partnered with Coca-Cola and the Ministries and/or local authorities in small island communities in Greece, Malta, Cyprus (plans in Italy as well), in pilot application of water-reuse innovations.

Mr. Constantianos concluded his speech on a positive note, by quoting the moto of the ‘X-Files’, a popular American TV series back in 2000, when the MDGs were launched: ‘I want to believe’. “Today”, he said, “I want to believe in the SDGs and in what we aim for 2030”.

VI. Annexes

List of speakers

Name	Function	Session
Bai-Mass Taal	Executive Secretary, AMCOW	Opening
Anders Berntell,	Executive Director, 2030 Water Resources Group / IFC	Opening
André Lammerding	Head of International Water Stewardship Programme, GIZ	Panel 1
Nick Tandi	SWPN-SA Programme Manager, The NEPAD Business Foundation	Panel 1
Kyle Sucher	Program Manager, Replenish Africa Initiative (RAIN)	Panel 1
Bob Dykes	RTI International	Panel 2
Waghmare Haribhau*	Sr. manager overseas projects Africa, Jain Irrigation Systems Ltd.	Panel 2
Shehnaaz Moosa	Director Research Programme in the Africa Region, SouthSouthNorth (SSN)	Panel 2
Saidou Ouédraogo	President of the National Chamber of Agriculture, Burkina Faso	Panel 2
Michèle Désirée OKALA ABEGA	HR and communication assistant / WYPW representative, Cameroun	Closing
Vangelis Constantianos,	Executive Secretary, Global Water Partnership (GWP) Mediterranean	Closing
Neil Macleod *	Head of eThekwin Water and Sanitation	Closing

*Unable to attend