Photo credit : Siemens Stiftung

INNOVATE 4 WATER MARKET-PLACE FORUM

Strathmore University, Nairobi, Kenya | 26-27 April 2018

Forum Proceedings Report

QUERCUS GROUP

WATERPRENEURS

Report produced by: Quercus Group Aps & Waterpreneurs

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Nairobi, Kenya, May 2018

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EXECUTIVE SUMMARY

The Challenges

There is an increasing pressure on water resources; borne out of population growth, economic growth, climate change, and pollution, among other factors. This has had and will have a direct impact on our social, economic, and environmental well-being. Failure to address the unsustainable use of water now will mean greater struggles in the future to achieve goals in many other areas.

The "Innovate 4 Water" Forum is an attempt to articulate the challenges facing us, to structure an approach towards their resolution, and an attempt to act as a platform through which various stakeholders can work together towards the resolution of the identified challenges.

The concept of "Innovate 4 Water" Market-Place forum

The objectives of the events are to:

- Consolidate a local ecosystem, building up meaningful relationships;
- Facilitate connections to catalyse collaborations.
- Create visibility for entrepreneurs in the water sector to enable them to reach impact investors;
- Promote the transfer of innovative water technologies and innovative business models in emerging markets and developing countries;

The "Innovate 4 Water" forum is not a traditional conference type event. The forum is designed following the concept of a Market-Place. It happens in one single place with a large auditorium room and a show room next to it. The forum is expected to be **dynamic,** with time allocated to **facilitate connections** between entrepreneurs, potential partners, and investors.

Photo credit: Waterpreneurs

Numerous lively pitching sessions are covering

relevant topics in an **interactive format. There are breaks of 45 minutes in a** Market-Place format (small booth for entrepreneurs and relevant organisations) to facilitate interactions and discussions. The forum is run over 3 days as follows.

1. **Day 0 -** Entrepreneurs coaching sessions (this is closed meeting for entrepreneurs only)
2. **Day 1 -** Pitches (5 to 7min) by public institutions and investors
3. **Day 2 -** Pitches (3 to 5min) by entrepreneurs and solutions providers

Photo credit: Waterpreneurs

Innovate 4 Water marketplace forum bring together a dynamic ecosystem of water & sanitation stakeholders - entrepreneurs, investors, large and small companies, non-governmental organizations, UN agencies, incubators - who are contributing to achieving the Sustainable Development Goal 6.

Geneva, June 2017

In June of 2017, in Geneva, Waterpreneurs co-organised "Innovate 4 water: A matchmaking forum for Sustainable Development" with WaterVent and the United Nations World Intellectual Property Organisation's "WIPO GREEN". The event brought together from all continents 350+ water & sanitation stakeholders over the course of two days. For further insight, check the 60+ challenges shared during the forum.

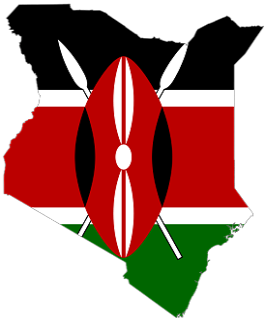
Nairobi, April 2018

Building on the lessons learnt from the Geneva matchmaking forum, Waterpreneurs and Quercus Group co-organized "Innovate 4 water" in Nairobi on 26-27 April 2018. The forum proposed for Kenya was following many of the same principles that were introduced at the inaugural forum in Switzerland.

Series (2018 - 2020)

Waterpreneurs is planning the organisation of similar forum in various leading cities (Cape Town, Lagos, Dakar, Abidjan, Casablanca, Kigali, Lusaka, Tel-Aviv, Amman, Beirut, Shanghai, Singapore, Delhi, Manila, Phnom Penh, Sydney, Toronto, San Francisco, Mexico, São Paulo, Bogota, Budapest, Stockholm, London, Amsterdam, Paris, Geneva).

"Innovate 4 Water" Nairobi - April 2018



The 2nd Innovate 4 Water Forum took place at Strathmore University in Nairobi on 26th and 27th April 2018 under the theme *"A Matchmaking Forum for Sustainable Development"*.

A major challenge which has often hindered positive movement towards the achievement of sustained development has been a disconnect between the various stakeholders that would ideally work together towards its successful achievement. Building on the agenda of the 1st "Innovate 4 Water" Forum, held in Geneva in 2017, the purpose of the "Innovate 4 Water" forum in Nairobi was to provide a platform where various Kenyan stakeholders in the water sector could interact and create partnerships with the aim of supporting Sustainable Development Goal 6 (SDG 6): "*Ensure availability and sustainable management of water and sanitation for all*".

As a sequel to the inaugural forum, the 2nd Innovate 4 Water Forum in Nairobi created an opportunity for participants to discuss the benefits as well as the challenges facing both investors and entrepreneurs in the water sector in Kenya. It brought together various stakeholders and provided a platform for them to:

- Gain an understanding of the policies, programmes, and interventions that the government has in place aimed at fostering positive action in sustainable water management;
- Showcase various innovations in the Eastern African Region market and the value they create within the water sector;
- Facilitate an exchange between the sources and seekers of capital by offering organizations the opportunity to present, in time-limited segments, their mission, their value proposition, and other relevant information;
- Give presentations on the available sources of financing, and requirements;
- Showcase their areas of intervention, for those not directly involved in seeking capital and financing;
- Create partnerships geared towards sustainable water and sanitation management.

In all, there were 130+ participants; 50 challenges shared during 72 pitches/presentations; and 3 panel discussion sessions over the course of the forum.

Innovate 4 Water Nairobi: Facts and figures

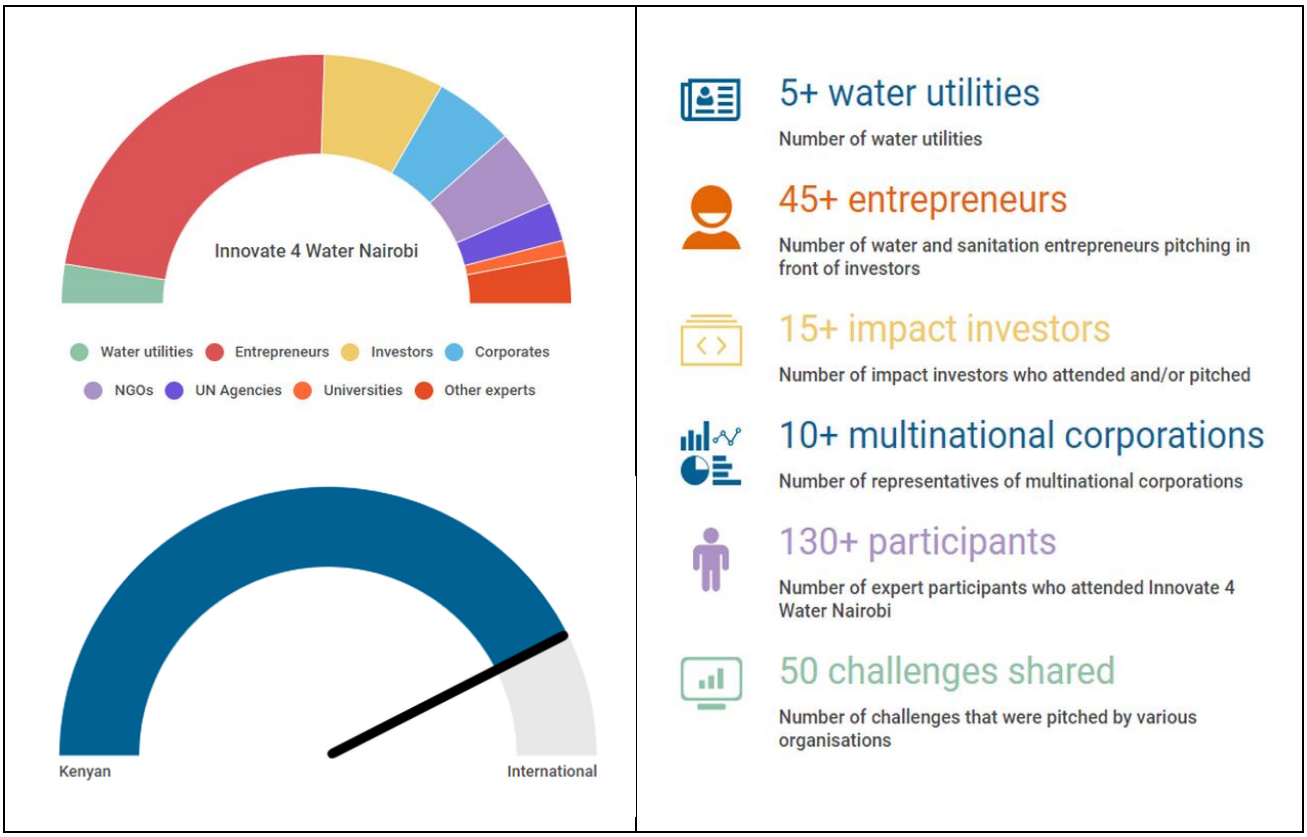


Photo credit : Godfrey Ogilo, KCIC

PARTICIPANTS

PARTICIPANTS FEEDBACK

The Innovate 4 Water Forum accomplished its ultimate objective of being a matchmaking platform for financiers/investors and entrepreneurs/innovators in the water and sanitation sector. Attendees made essential connections and managed to form strategic partnerships aimed at offering diverse solutions in water and sanitation.

Case in point is a deal signed between Sidian Bank and smart metering company, Swissquest that will see the latter benefit from a financial boost by Sidian Bank.

"Issues that hinder the PPP processes need to be addressed, and the PPP act of 2013 should be revised to embrace a private sector incentive component that will encourage them to come on board faster."

Wangeci Mwai - Blue Ribbon Concepts

"Bad governance in some public institutions (both national government and at the devolved units) has proven to be one of the challenges hindering investments in PPPs."

Wario Bonaya - Kenya Markets Trust.

"Entrepreneurs in the water and sanitation sector need to be more efficient in how they package and present their project proposals to potential investors and financiers. The proposals should be packaged in a way that will attract investors."

Japheth Mbuvi – KIWASH

"I think the presentations the first day were too general and took too much time. Then there was not enough time for the entrepreneurs to present the next day. Also, some of the important decision makers that attended this day didn't come the next day thus missed out to meet and see the entrepreneurs pitches. Thus, the entrepreneurs missed possible investors, and the decision makers missed interesting innovations and information. In the future, please have entrepreneurs make pitches on the 1st day too to capture the attention of these decision makers. Also, spend less time on the very generic presentations like the ones that were there in the first day."

Paul Njuguna - Siemens Stiftung

"There is a general lack of strategic partnerships in the water and sanitation sector. To be able to fully utilize the available funds and innovative solutions we need to come together strategically and implement the various ideas and expertise."

Edna Onchiri - Water.org

"In my opinion, it was one of the best forums I have ever attended, and I would like to have more of such opportunities to broaden my market/ client base."

James Mawa -Transform Denmark, Rootzone Africa Limited

ORGANISERS

Kenya Climate Innovation Center provides holistic, country-driven support to accelerate the development, deployment, and transfer of locally relevant climate and clean energy technologies. The KCIC provides incubation, capacity building services, and financing to Kenyan entrepreneurs and new ventures that are developing innovative solutions in energy, water, and agribusiness to address climate change challenges. The Kenya CIC is an initiative supported by the World Bank's infoDev and is the first in a global network of CICs being launched by infoDev's Climate Technology Program (CTP). The Kenya CIC is funded by the United Kingdom's UKaid and the Danish Ministry of Foreign Affairs. Kenya Climate Innovation Center (KCIC) was established in 2012 and currently incubates about 150 SMEs. KCIC is involved in 3 sectors; Water, Renewable Energy, and Agriculture. The water sector has the least number of entrepreneurs compared to the others. KCIC's mission is to ensure availability of clean and safe drinking water by supporting entrepreneurs who are developing innovative solutions in this area. KCIC focuses on supporting the private sector and mostly entrepreneurs with good and innovative business models. It runs two main programmes; i.e., Incubation Programme for one year and an Acceleration Programme for ten months.

Quercus Group is a strategic and advisory firm specialized in sustainable development through project and partnerships development, strategic consulting and capacity building. Quercus Group works with clients and supports them in forming partnerships and developing business cases and collaborative platforms that help them realize their green growth and agribusiness potential. The company does not only provide analysis and advice but also act as partners in the practical implementation of projects and internationalization activities within cleantech, sustainable water solutions, agribusiness and smart cities. Quercus Group has offices in Kenya, Denmark & India.

Blue Ribbon Concepts is an investment advisory firm, committed to providing innovative solutions to the challenges of development in Kenya and the wider East African Region. The firm focuses on the key growth sector particularly water, agriculture, tourism and small and medium enterprises (SMEs). Blue Ribbon Concepts spearheaded the 'Maji ni Ustawi' a private sector led initiative, implemented in partnership with public sector agencies, to advocate for an enhanced private framework supporting the acceleration of private investment in the water sector.

Waterpreneurs fosters interactions between global players from the private sector, the public sector and from civil society to direct finance toward impact projects in the communities, with the main objective to foster local ecosystem consolidation. Waterpreneurs has created the "Innovate 4 Water" forum. "Innovate 4 Water" is not a conference. It is a dynamic and interactive market-place where entrepreneurs, investors, and enablers meet and thrive. Relevant to the discussions of the forum is Waterpreneurs' White Paper on Impact Investing for Water: *Innovative Finance for Scaling-up Water, Sanitation and Hygiene Market-Based Solutions* that Waterpreneurs launched during the 8th World Water Forum held in Brasilia in March 2018. The White Paper, which can be accessed through Waterpreneurs' website (www.waterpreneurs.net) focuses on impacting investing for water and presents case studies and examples of organizations that are successfully undertaking impact investing in the water sector.

PROGRAMME

Structure of the forum

	Thursday 26th April – Day 1	Friday 27th April – Day 2
Morning	Welcome address + key stakeholder general presentations	Pitches and focus discussions by entrepreneurs and water service providers
Afternoon	Pitches and focus discussions by financiers and investors	Case studies
Evening	Social event	Closing cocktail

Detailed programme

Day 1: 26th April 2017		
Time	**Activity**	**Facilitators and speakers**
8:00 – 9.00	Registration	
9:00 – 9:25	• Welcome Address • Introduction • I4W Geneva – Success Stories and Implications for the Kenya Water Sector.	**Strathmore University**, Vincent Ogutu **Blue Ribbon Concepts,** Wangeci Mwai **Waterpreneurs**, Nicolas Lorne, Franck Barroso, Brieux Michoud
9:25 – 9:45	Achieving the Sustainable Development Goals for the Water Sector in Kenya	**Director SDG Unit,** Ministry of Devolution and Planning
9:45 – 10:05	The Role of the African Development Bank in supporting the uptake of innovations in the water sector.	**The African Development Bank**, Water Facility, Jean-Michel Ossete
10:05 – 10:45	• Global Trends – Clustering and best practices in the Water Sector. • The Role of Private Sector and performance based contracting	**CEO Quercus Group,** Nicolai Rottboll **SNV**, David Wanyoike, WASH - Netherlands Development Organisation, *Kenya*
10:45 – 11:30	**Coffee/tea break and networking**	
11:25 – 11:45	**Public Private Partnerships** PPP Case Study: Sosio Teldet Water Project Chief Officer, Trans Nzoia County Government	**Trans Nzoia County Government**, Chief officer.

11:45 – 12:30	Panel discussion – Policy Implications for enabling private sector engagement in the water sector	**Quercus Group**, Nicolai Rottboll, Moderator **(AfDB, SNV, Kenya Market Trust, Trans Nzoia County)**
12:30 – 14:00	**Lunch and networking**	
14:00 – 14:30	Presentation by financiers – 5 Minutes pitch • Commercial financing for Water Sector • De-risking investment in the Water Sector • The Water Credit Approach • Investing in Activities that transform lives • Accelerating Development of the Cleantech Industry	• **Sidian Bank** • **KIFFWA** • **Water.org** • **VEP** • **Kenya Climate Venture**
14:30 – 15:15	Panel discussion – Development Financing: Opportunities and Challenges	**Blue Ribbon Concepts** , Wangeci Mwai, Moderator **(Sidian Bank, KIFFWA, Water.org, VEP, KCV)**
15:15 – 16:00	**Coffee/tea break and networking**	
16:00 – 16:30	Presentation by investors – 5 Minutes pitch • Equipment financing Model – with High Impact. • 3R/social impact investments model. • Financing credit worthy water utilities • Low cost, flexible payment for modern water purification systems	• **Kenya Market Trust** • **Aqua for All**, Netherlands • **USAID WASH-FIN** – USA and Kenya • **Impact Water Limited** – Regional
16:30 – 17:15	Panel discussion – Financing and Investment Opportunities for the Water Sector	**Blue Ribbon Concepts**, Wangeci Mwai, Moderator **(Kenya Market Trust, Aqua for All, USAID WASH-FIN, Impact Water Ltd)**
17:15 – 17:20	Closing words for day 1	**Blue Ribbon Concepts** - Wangeci Mwai
17:20 – 19:00	**Networking and travel time to social event**	
19:00 - onwards	Social event (optional)	

Day 2: 27th April 2017		
Time	**Activity**	**Facilitators and speakers**
8.30 -8.40	Re-cap of previous day events and way forward	**Blue Ribbon Concepts**, Wangeci Mwai
8:40 – 8:50 8:50 – 9:00	• The Role of KCIC in incubating and supporting entrepreneurs in the Water Sector • Innovations in Tech and Business –How it is mitigating Water Security Risks	**KCIC,** Chief Executive Officer, Edward Mungai, **IBM,** Dr. Nathan Wangusi
9:00 – 9.30 9:30 – 10:15	Innovative solutions in the Water Sector - 5 minutes pitch • Urban Water Challenge, Blue Water Group <u>Water Vendor Products/Technologies</u> • Automated water vending machine, **Simatech,** Kenya • Micro financing opportunities for Water kiosks enterprises, **Danone Communities,** France • Water Vendor Product, **Essential Services for All (ESFA)** <u>Smart Metering, billing, and collection</u> • Smart Metering solutions**, Kamstrup Ltd** • Prepaid meters, online management to address NRW, **Maji Milele,** Kenya • Prepaid water management information software, **SwissQuest,** Kenya • **eWaterPay**, United Kingdom, (Tanzania) <u>Waste and Water Treatment</u> • Natural Waste Water Treatment Technology, **Rootzone Africa Ltd,** Denmark & Uganda • Household Water Treatment Products, **Aqua Clara,** Kenya • Solar Water Desalination System, **Boreal light,** Germany • WADI water treatment product, **Helioz GmbH,** Austria • FlouRid Water Filter, **Brian**	**Waterpreneurs**: Facilitator
10:15 – 11:00	**Coffee/tea break and networking**	
11.00 - 11.30	Presentation of business ideas in the water industry – 5 minutes pitch <u>Non - Revenue Water – Water Trunk Infrastructure</u> • **Fundi Fix** – Performance based management of water infrastructure • **KAP Plastics** <u>Staff Productivity</u>	**Waterpreneurs**: Facilitator

	• Staff Productivity and achieving efficiencies **SORT, Ltd,** Kenya **Innovations** • **Solar Water Solutions**, Kenya • **Tech 4 water Solutions**, Kenya	
11:30 – 12:15	Pitching session – Selected water utilities • Briquettes from human waste, **Nakuru Water and Sanitation Services Company** • Specific Investment opportunities, **Solio Teldelt,** Tranzoia County Government. • Maji ni Ustawi PPP Initiative 1) **Muranga Water Utility** 2) **Mathira Water Utility** 3) **Karinde & Kabuthi Water Scheme** • A Case for Conservation of Water Catchment**, MCDI**	**Blue Ribbon Concepts**: Facilitator
11:45 – 12:00	Q & A Session	
12:30 – 14:00	**Lunch and networking**	
14:00 – 14:45	Pitching Session – Smart technologies and innovations • Washmis/Vipimo software, **Upande Limited,** Regional • AQtap -Revenue Collection Platform, **Grundfos,** Kenya • VIA Water**, Aqua for All,** Netherlands • Data Analysis & Water Management technology, **Strategic Water,** Belgium • **Human Needs Project**, Kenya	**Waterpreneurs**: Facilitator
14:45 -15.15	**Coffee/Tea Break**	
15:15 – 15:45	Pitching Session – 5minutes pitch • **Wagtech**, Kenya • **I-drop water**, Kenya • **Nutrifresh**, Kenya • **IWA,** Kenya • **Sanivation,** Kenya	**Waterpreneurs**: Facilitator
15:45 –16:00	**Water Innovation Challenge Finalists – 2016** • Sea Water Desalination system**, Aqua fadhili** • Water Harvesting Technology**, Ukenya Farms** • Water hyacinth to biofuel, **Super Motor, Kenya** • Billing and Collection system, **Wartrack Ltd** • Poseidon Pump System**, Michael Ondoro**	
16:00 – 16-20	Closing & group picture	
16:20 onwards	**Cocktail**	

DAY 0: "CLOSED DOOR MEETING" FOR ENTREPRENEURS

The objective of this "closed door meeting" was primarily for the entrepreneurs to get prepared for the pitching sessions.

It was a special occasion for entrepreneurs to present their pitch and business in front of other entrepreneurs in a relaxed but professional way. The main objective being that during the event, the entrepreneurs will perform convincingly during the pitch and will be using efficiently the 5 minutes given.

We recommend the following four sections for the pitch:

- Company/organisation
- Product/Unique Value Proposition
- Achievements / Level of maturity
- Financing needs / Challenge

Photo credit : Godfrey Ogilo, KCIC

DAY 1: PITCHES BY PUBLIC INSTITUTIONS AND INVESTORS

1- SDG Unit – Transitioning from the MDGs to the SDGs and Achieving SDG 6 through Agenda 2030 - Presented by Isaac G. Kamande

The Director explained that among the mandates of the Ministry of Devolution and Planning was the coordination of the implementation and monitoring of the **Sustainable Development Goals** (SDGs) in Kenya. These SDGs have been agreed upon at the United Nations Sustainable Development Summit 2015, held in New York.

Specific to the water sector, one of the major reforms that brought about changes was separation of policy making from regulation. This led to:

- Creation of a water regulatory framework;
- Water services provision and management;
- Decentralization of key functions from national level to regional level; and
- A pro-poor focus in water sector.

The Ministry of Water has also established structures at grassroots for increased stakeholder and consumer participation in decision making and implementation processes in an effort to combat water and sanitation sector challenges. One major bottleneck hindering successful change in the water sector are the transitional issues between the Central and County Governments. At the same time, under-investing was greatly impeding improved service coverage.

Photo credit : Godfrey Ogilo, KCIC

Detailed presentation in annexes

2. AWF – Supporting Innovations in the Water Sector and Organising Africa Water & Sanitation Investment Forum – Presented by Jean-Michel Ossete

Photo credit : Godfrey Ogilo, KCIC

Africa Water Facility (AWF) is a multilateral fund housed under the African Development Bank (AfDB) that provides grants and technical assistance to enable governments, NGOs and private-public partnerships to secure investments and implement sustainable water projects throughout the African continent. The facility is an initiative of the African Ministers' Council on Water (AMCOW).

Detailed presentation in annexes

AWF Strategy 2017 - 2025

Launched in October 2017, the AWF Strategy 2017 - 2025 shares the innovative approaches that the fund will focus on over the next 10 years in order to deliver on its mandate of mobilising financing for the water and sanitation sector. The new AWF strategy is based on three main pillars:

- ✓ Project Preparation
- ✓ Catalytic Investment
- ✓ Investment promotion

Under this 3rd pillar, AWF will focus on identifying business opportunities to showcase these opportunities to investors and entrepreneurs. A range of investment promotion services will be offered to increase the number of investment opportunities in the water sector and to mobilise higher levels of financing for projects, particularly from the private sector. This pillar is vital since, as experienced by AWF, many entrepreneurs do not know which opportunities and what kind of businesses can be done in the water and sanitation sector.

3- Quercus Group – Clustering and Best Practices in the Water Sector – Presented by Nicolai Rottbøll

Quercus Group is a niche strategy consultancy firm whose mission is to help cities and regions achieve long-term, sustainable growth through targeted projects. The company is driven by a vision to become the go-to consultancy for holistic Green Growth advisory and has projects in more than 25 countries, including Kenya, Ghana, India, Japan, Canada, USA, Germany, Singapore and others spread across the globe.

The company advocates for the Cluster Approach in development projects. This approach entails co-creating the future through clustering and multi-stakeholder engagement. Clusters drive innovation, productivity, and competitiveness through collaboration between business, research institutions, and public authorities.

Photo credit : Godfrey Ogilo, KCIC

Detailed presentation in annexes

4- SNV – The Role of Private Sector and Performance Based Contracting – Presented by David Wanyoike

Photo credit : Godfrey Ogilo, KCIC

SNV is an international NGO that works in 36 countries. The organisation works in 3 main sectors: Renewable Energy; Agriculture; and Water Sanitation and Hygiene. SNV partners with local partners, i.e. Communities, National Governments, County Governments and Civil Society to look for local solutions to global problems that exist within the society. SNV is not a donor organisation. They implement programs on behalf of development partners; bringing in their expertise through their advisers.

SNV has been involved in the PPP space since 2012. They have had partnerships with the Ministry of Water where the organisation assists in capacity building for the ministry to have a better hold of the whole PPPs concept. SNV has also been involved on the demand side where they have worked with some of the water companies by examining their needs and structuring some of their concepts that can fall within the context of a PPP.

Detailed presentation in annexes

Q&A PANEL DISCUSSION

Policy Implications for Enabling Private Sector Engagement in the Water Sector

Moderator: Wangeci Mwai (Principal Director, Blue Ribbon Concepts)

Discussants: John Mengwa (Chief Officer, Trans Nzoia County Government)

David Wanyoike (WASH Programme Manager Kenya, SNV)

Jean-Michel Ossete (Acting Coordinator, Africa Water Facility)

Wario Bonaya (Sector Leader - Water, Kenya Markets Trust)

Several perspectives emerged in the Q&A general discussion. Multiple participants noted the failure of water utilities and country governments in packaging themselves well enough to attract private investors. Mr. Wario Bonaya of Kenya Markets Trust highlighted issues of bad governance as the "elephant in the room" posing fundamental challenges to the progress of PPP initiatives in the water sector. He also pointed out as a challenge the limited capacity of water utilities and county governments to prepare a PPP documentation from start to project closure.

Deputy Chief of Party (DCoP) at USAID Kenya Integrated Water Sanitation and Hygiene Project (KIWASH), Mr. Japheth Mbuvi posed some pertinent questions with regards to projects' eligibility for financing and what were the impeding factors that prevented majority of projects in the water sector from accessing finance. Drawing reference from the Trans Nzoia project, his view on the way forward regarding finding a solution was how to package projects in a way that will look attractive to investors.

In a response to one of the participants, Mr. John Mengwa of Trans Nzoia county sought to clarify that in line with the Sosio Teldet water project, the county government was making efforts to rehabilitate polluted rivers and other natural resources in the county and that a legislation to this effect has already been tabled in the county assembly.

On the question on eligibility, Mr. Jean-Michel Ossete of AWF clarified that for a project to be eligible for financing under the AWF they must first be formally registered in Africa. The project should also meet one of their pillars: Project Preparation, Water Governance or Water Knowledge. AWF does not issue loans, but grants. Grants between 15,000 euros and 500,000 euros are approved by the directors; 500,000 euros up to 2 million euros are approved by the bank's president and 2 million euros to 5 million euros are approved by the board.

Mr. Wanyoike of SNV echoed his earlier sentiments that the turn-around time for PPP projects to reach financial close was too long, very slow and much too elaborate with the number of approvals required. He called for a need to re-look at the PPP act since the delays may end up frustrating the whole process.

The session moderator, Wangeci Mwai of Blue Ribbon Concepts cited the case of a PPP project which took three years to complete the PPP process whereas their initial estimates were 6 - 8 months. These constraints need to be addressed, and the legislation needs to be tweaked to embrace a private sector incentive component that will encourage them to come on board faster. The lively debate and follow-up talks after the session between participants and panellists showed the need to improve understanding of the topics involved.

Photo Credit : Godfrey Ogilo, KCIC

PITCHES BY FINANCIERS

1- Sidian Bank – Commercial Financing for the Water Sector – Presented by Catherine Kisamwa

The main challenge in Water and Sanitation investing is that most financial institutions are often unwilling to support ventures interested in securing funding for water and sanitation projects due to the predicted low profit margins and the customer high risk profiles.

However, Sidian Bank provides both financial and non-financial solutions to water and sanitation; these are advanced through the bank's WASH loan products and in partnership with other stakeholders to ensure provision of clean water to communities in both rural and urban settings.

The bank through their WASH products have been able to reach households, private entrepreneurs in water business, communities providing or intending to provide water services and small and large water utilities.

Achievements

- Enabled availability of clean water
- Enabled communities to generate income through provision of sustainable clean water
- Provided employment opportunities in both rural and urban settings
- General improvement of livelihoods in communities

Question to attendees

Financial inclusion improves water and sanitation. How do we partner to scale up the access to clean water and sanitation?

2- KIFFWA –De-risking Investment in the Water Sector – Presented by Joseph Murabula

Kenya Innovative Finance Facility for Water (KIFFWA) is not a financier but a co-developer of water projects in Kenya. Started in June 2017 KIFFWA saw a niche when they realized that most projects die at the idea stage, no financier or investor would be ready to assist in the form of money, technical assistance, legal support, etc. Mr. Murabula asserted that water is the only resource you will develop and get impact in all spheres of human life. KIFFWA is an organisation that works with entrepreneurs at the development stage.	KIFFWA The organisation provides early-stage capital and finance expertise to projects/concepts. KIFFWA takes the risk with entrepreneurs and supports initiatives across all water sub-sectors to reach financial close. They then seek refunding at financial close in the form of a success fee or an equity stake in the initiative. *For Impact*

3- Water.org – The Water Credit Approach – Presented by Edna Onchiri

water.org® Water.org is an international NGO working in 13 countries including 5 African countries. These are Kenya, Uganda, Tanzania, Ethiopia, and Ghana. The organisation offers market-based solutions for water and sanitation services. Water.org has formed partnerships with microfinance institutions and provides these entities with enough subsidies to enable them to provide loans to those who need access to affordable financing and expert resources to make household water and toilet solutions a reality.	The smart subsidy approach uses philanthropic funds to give financial institutions, and then they develop a loan product for water and sanitation. The subsidy is not capital, but it is used for product development, market research, hiring educated staff, training, monitoring and evaluation. Water.org has reached 10.8 million people globally through 2.2 million loans. In Africa, they have reached 718,000 people and given out 82,000 loans. Listed among the organisation's founder are Hollywood actor Matt Damon and the organisation's CEO Gary White. *Question to attendees* How can we further engage financial institutions, government, the WASH sector, etc. to take up the WaterCredit approach and create an enabling environment for this?

4- VEP – Investing in Activities that Transform Lives – Presented by Alexander Muttundu

	Visionary Empowerment Programme (VEP) is a Kenyan NGO founded in 2006. The organisation has worked with 1,300 women groups, youth groups and community members who are at the base of the pyramid. VEP's core business is empowering communities through microfinance services, training and the promotion of green energy. VEP realized that the communities with whom they worked, had no piped or clean water and spent a lot of time fetching water from rivers and water points. This impacted negatively on the economic well-being of these societies. They offered a solution by delivering good quality water tanks to these households which they pay for at an agreed period. The organization is currently reaching 21 out of the 47 counties in Kenya.

5- Kenya Climate Ventures – Accelerating Development of the Cleantech Industry – Presented by Paul Ohaga

Kenya Climate Ventures is set up to deal with climatic changes from a commercial enterprise perspective. The organisation seeks to accelerate the development of the cleantech industry as a whole by providing much needed tailored and targeted financial and managerial assistance support to innovative early stage businesses. KCV seeks to invest in businesses that have relevant products or services, sustainable competitive advantage, good management teams and ethical business practices.	

Q&A PANEL SESSION

Development Financing - Opportunities and Challenges

Moderator: Nicolai Rottbøll (CEO Quercus Group)

Discussants: Catherine Kisamwa (Head of Microfinance, Sidian Bank)
Joseph Murabula (CEO, KIFFWA)
Paul Ohaga (Chief Investment Officer KCV)
Edna Onchiri (External Relations Manager, water.org)
Alexander Muttundu (BDM, Visionary Empowerment programme)

Session moderator Nicolai Sederberg of Quercus Group reminded the panellists of the immense potential and market size of global water sector financing. With the number standing at 674 billion USD. His initial asks were; if the money was available, if the solutions to various water sector problems were available, if the organisations offering these solutions were there; why do these factors not meet. Water impacts everything, so it should be the most important field to invest in.

Mr. Murabula described the situation as drastic because most people in the water sector can technically handle a project/concept, but the financial engineering bit is what remains missing. There are too many competing interests when you put water as an asset class together with other infrastructure such as roads, telecoms, ICT, etc. In this scenario, water becomes the most difficult to translate into a proper business concept. The first solution according to Mr. Murabula is to convince people that this is the right sector to invest in and to assist them to get to a level of returns that is acceptable. The challenge you find in water in the local scene is not necessarily a shortage of projects but the understanding that there are opportunities within the sector that investors can take advantage of.

Photo credit : Godfrey Oglio, KCIC

Ms. Onchiri of water.org challenged the attendees by saying there is a general lack of strategic partnerships. To be able to fully utilize the money and solutions we need to come together strategically and implement.

From the perspective of Sidian Bank, Ms. Kisamwa described the WASH product at the bank ranges from simple households to communities, parastatals, private entrepreneurs. The bank has done over 19 community water projects for whom the collateral is simply projection on returns.

PITCHES BY INVESTORS

1- Kenya Markets Trust – Innovative Financing Model – Presented by Wario Bonaya

Kenya Markets Trust presented a model based around equipment financing for large scale rural water utilities as a stop gap financing measure for improved service delivery in enhancing financing in the water sector.

Kenya Markets Trust is a Kenyan organization that works in partnership with the private sector; county & national governments; Associations; Local and Internationals Partners to unleash large scale, sustainable market growth by changing the underlying incentives, capacities, and rules that shape how market systems work. KMT lays focus on how they can assist the sector to unlock their financial issues with regards to rural water utilities. With the right support (soft and hard) infrastructure there is business case in large scale rural water services.

To investors

This is a viable opportunity to invest in rural water activities.

To donors

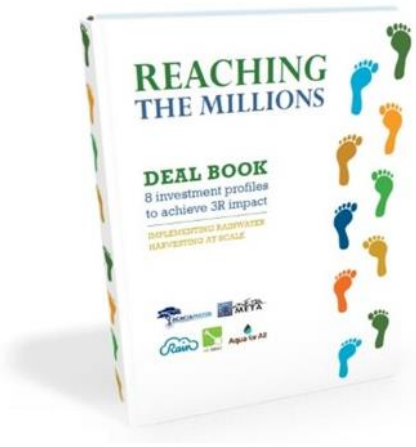
You can bank on KMT if you want your money to be effectively utilized to generate sustainable development in the water and sanitation sector.

2- Aqua for All – 3R Social Impact Investment Model – Presented by Dick Bouman

The Aqua for All investment model for improved water management called 3R; standing for Recharge, Reuse, Retention shows how water harvesting at scale offers a great deal. The 3R Deal book 'Reaching the millions' describes 8 thematic investment profiles to achieve impact through rainwater harvesting at scale.

Socio-economic benefits: more production and income alongside better outcomes (more drinking water, health).

Less losses: less costs related to absence of wash and less losses by droughts and floods and deterioration of ecosystems



3- USAID WASHFIN – Financing Creditworthy Utilities – Presented by Esther Njuguna

USAID's WASH-FIN provides technical assistance and services to help municipalities and utilities track and mobilize greater financial resources for improved service delivery. The organisation has a presence in five countries: Kenya, South Africa, Nepal, Senegal, and Cambodia.

In Kenya, the primary activity carried out by USAID's WASH-FIN is to expand financing for viable utility companies through achieving through achieving three main objectives:

Financial Flows Tracking

USAID's WASH-FIN tracks the expenditures in WASH to ascertain how much is going into WASH activities from government ministries, country governments, and water companies with the aim of engaging policy makers to increase financing for WASH.

Creditworthiness & Investment Planning

This is the core service of USAID's WASH-FIN to Water Service Providers where they offer technical support by helping the WSPs make their various proposals attractive to investors.

Transaction Facilitation

Once the Water Service Provider is assessed as creditworthy, USAID's WASH-FIN arranges for a transaction facilitation. If not creditworthy they offer training to address the issues that are making the Water Service Provider not creditworthy.

Among the interests, USAID's WASH-FIN had for the I4W forum was access to finance for their client WSPs and Small Water Utilities.

4- Impact Water – Low cost, flexible payment for modern water purification systems – Presented by Mark Turgesen

Impact Water Ltd is a Social Impact business that specializes in water purification systems as well as credit financing, primarily for schools. Every Impact Water sale includes the cost of delivery, installation and two years of preventive maintenance. After two years, schools can purchase additional two-year maintenance plans from Impact Water at very affordable prices. Case study of Unity Primary School in Eastlands Nairobi: Impact Water installed a residual point treatment device in the school which currently serves over 3,000 litres of water to the 2,300 pupils in the school.	IMPACT WATER™ Safe Drinking Water Solutions *Results to Date in Kenya:* • 162 schools installed in Kenya; • Over 2,000 schools in East Africa received an IW system; • In 2018, nearly 500 schools have signed up to receive a water purification system.

Q&A PANEL DISCUSSION

Financing and Investment Opportunities for the Water Sector

Moderator: Wangeci Mwai (Principal Director, Blue Ribbon Concepts)

Discussants: Wario Bonaya (Sector Leader - Water, Kenya Markets Trust)

Dick Bouman (Sr. Program Manager & Fund Manager VIA Water)

Esther Njuguna (Team Leader, WASHFIN)

Mark Turgesen (Country Director Kenya, Impact Water Ltd)

To set off the Q&A session, Milton Lore who oversees Business Development at Mashariki Utilities, was curious to know if the KMT equipment financing model which is from a rural water supply standpoint had been experimented with urban water utilities. With the presumption being that urban utilities had more compelling investment propositions. Mr. Wario from KMT clarified that the organisation was currently working with 9 urban water utilities and with KCB bank to upscale this innovation and broaden the model to have urban water utilities access this kind of financing. This will be mostly built within the Non-Renewable Water strategies they are working with the 9 utilities.

Attendees also wanted to find out if Water Service Providers were creditworthy and what does USAID'S WASHFIN do to make WSPs commercially viable. In response, Ms. Njuguna shared her organisation's experience stating that they have worked with 19 WSPs spread around the country and out of these they have had a chance to look at the creditworthiness of 10. Out of these ten only three were ready for commercial financing.

Photo credit: Godfrey Ogilo, KCIC

Other than the full commercial financing from banks there are other projects that have got a grant element. For example; AOD (Aid on Delivery) by WSTF and PPF by World Bank through WASREP. USAID'S WASHFIN is also supporting Water Service Providers to access these types of grants. Those WSPs which are not certified creditworthy benefit from a training tailormade for WSPs to help them identify the various issues that are making them not be creditworthy.

Ms. Njuguna observed that the Kenyan market was not entirely ready for commercial financing. This is because we are just transitioning from the Water Act of 2002 where the water service boards were the ones who did asset development to the Water Act 2016 where the counties and WSPs are supposed to become asset developers; it will take a bit of time for them to get there.

DAY 2 - PITCHES BY ENTREPRENEURS AND SOLUTIONS PROVIDERS

1- IBM – Innovations in Tech and Business –How it is mitigating Water Security Risks - Presented by Nathan Wangusi

There is a gap and opportunity in the market to address the issue of data, monitoring, and financing through a technology platform that enables stakeholders at the national & local governments, utility company, citizen and donor level to have access:

Data

- Provide unprecedented access current and future insights into water markets
- Provide access to data and performance on (funded) water related projects and enable decision-support for designing interventions and project structure

Monitoring

- Improve water monitoring and mapping through aggregation of IoT, human-relayed, online and Weather Company data

Analytics

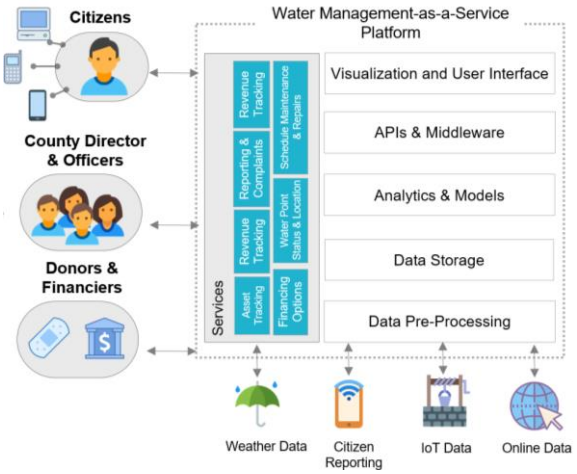
- Application of AI to identify and project water-related events and incidents and support planning and monitoring, e.g. Flood risk

Financing

- Locate and share global public and private sector financing information
- Provide access and analytics of water financing options from financial institutions, donors, etc. to expand access to water

Open Platform for Community and Partnership

- Create open and accessible APIs to community to access data and analytics
- Connect donors, financiers, and utilities via a water information system to improve linkages and water delivery and quality of service



Water Management as a Service Platform

For citizens:

- Reporting, ticketing, and feedback
- Social media network of the water ecosystem

For the County Director and Officers:

- Asset inventory
- Track and decide on revenue improvement
- Business process optimization of water service processes

For donors & financial institutions:

- Track and monitor the status of water projects
- Decision support in financing water sector

2- Urban Drinking Water Challenge / Bluewater - Presented by James Steere

Bluewater, a world leading drinking water technologies innovator in partnership with Imagine H20 and 11th Hour Racing set to launch the Urban Drinking Water Challenge on 9th May 2018. Bluewater invites local entrepreneurs to participate in courses aimed at providing scalable solutions to water scarcity challenges. The Urban Drinking Water Challenge aligns with U.N. Sustainable Development Goal 6, or SDG6, which calls for universal access to safe and affordable drinking water for all by 2030.	2018 URBAN DRINKING WATER SCARCITY CHALLENGE The three winning start-ups will be honoured at a special event held in Stockholm, Sweden, on August 27, during World Water Week, August 26-31, 2018.

WATER VENDOR TECHNOLOGIES

1- Simatech Integrated Solutions - Presented by Natalie Olang

	Simatech have developed a fully automated vending machine that runs on mobile money for use in the sale of clean water and other low viscosity liquids. Simatech currently is focused on partnerships towards enhancing efficiency in the water value chain while exploring ways of increasing access to water in the medium term.

3- Danone Communities - Presented by Corinne Bazina

Danone Communities empowers innovative social entrepreneurs to achieve sustainable social impact. They do so by investing in social businesses, providing capital, technical and managerial expertise and networking.

Focusing on 2 major issues where they can bring expertise:

- Provide access to safe drinking water.
- Reduce malnutrition.

"We have consistently invested in a similar model in 5 ventures – 8 countries - impacting 800.000 people daily with Decentralized Water Enterprises."

4- Essential Services for All (ESFA) - Presented by Bradley Hiller

A for-profit social business with a goal to become the largest provider of decentralized essential services in developing and emerging markets. ESFA's model is centred around a 'service-based virtuous development cycle.' "Pay-as-you-consume" low ongoing fee financing structure establishes a provider-customer relationship; promotes ownership & accountability. The virtuous cycle reinforces itself in a feedback loop premised on a "family of essential services", with profit-sharing enabling: Customers to invest in additional ESFA essential service systems, and ESFA to serve additional customers. Seeking grants or blended financiers for pilot testing in Kenya (and in Cameroon). Following piloting, we will seek investors to scale nationally & regionally. Also seeking communities & organizations in Kenya interested in partnering.

5- Siemens Stiftung - Presented by Paul Njuguna

The Safe Water Enterprises (SWE) are community water kiosks funded by Siemens Stiftung. They are social enterprises committed to a sustainable supply of safe drinking water in rural regions in Kenya.

The water kiosks are equipped with an Ultra-filtration system called the SkyHydrant, which removes suspended solids, bacteria, and viruses from water. The filtration process operates via gravity pressure and hence without need for electricity and thus can operate in areas with no grid connectivity.

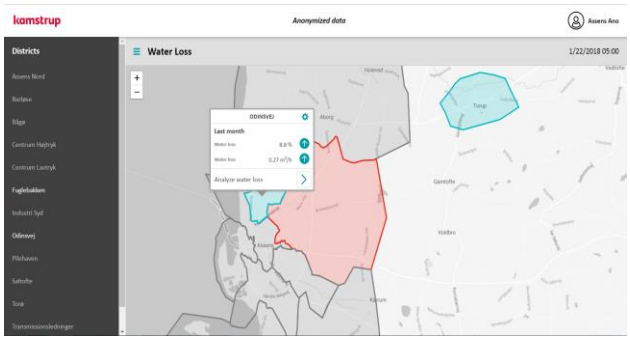
The purified water at the kiosk is sold at an affordable/fair price; the earnings cover operational costs, and thus the kiosks are financially self-sustainable. In addition to expanding the supply of drinking water, Safe Water Enterprises create income opportunities for local community members who also receive technical and business training. Social marketing activities ensure the uptake of the community. Hygiene promotion and training, as well as social marketing, is also offered to households (through local community health volunteers) and in local public schools.

SMART METERING & PAYMENT

6- Kamstrup - Presented by Lena Warming

Kamstrup is a world-leading supplier of intelligent energy and water metering solutions. We define success by the progress we create for others.

"Our superior technology and expertise have been the foundation from which to transform businesses and markets, by creating more efficient ways of working, ever since the company was founded by Olaf Kamstrup in Denmark in 1946."



7- Maji Milele - Presented by Marcel Schreurs

Maji Milele Ltd. is the first subsidiary company of Water Forever. They are based in Nairobi but aim to provide our services all over Kenya. Like the Dutch mother organization, we are a for-profit social enterprise. Our mission is safe water for all Kenyan people and not only for a few years, but 'forever', meaning 'Maji Milele'.

All-in-one solutions

- Prepaid meters for communal use
- Prepaid meters for individual connections
- Franchise business for purified water ATMs

8- Swissquest - Presented by Steve Muema

What Swissquest does:

- Bring intelligence to Water Management Practices
- Provide Water Service Providers a more efficient and reliable Billing Information Management System Software that cuts down their revenue losses (average 45% revenue loss)
- Provide water customers the most convenient mode of mobile payment through different channels such as Mobile Money (Mpesa), USSD (unstructured Supplementary Service Data), Mobile App, SMS, Voice.

How Swissquest does it:

- Providing Smart Metering Technology for Individual Households, and the reach of the mobile communication to automate water payments collection using mobile money
- Getting Water Customers to increasingly embrace self – service technology.
- Collecting Water Payments from water customers on behalf of WSP's through their platform and remitting the collections to the WSP's

9 - eWater Pay - Presented by Emmanuel Kenagise

Affordable smart water for everyone, every day, serving 2.1 billion people currently without access to safely managed drinking water services.

For customers (Utility, Water Authority, Private Operator) eWater Pay ensures:

- All revenue is tracked and accountable and transparently used by governments, or private organisations, to pay for maintenance.
- The water system is monitored in real time to identify any faults using the eWATER care App immediately, live text alerts to water operators and KPI dashboard to report to regulators.

Leading to a more reliable systems so they can provide:

- Less wastage of money and water;
- Reduced corruption;
- Increased sustainability; and
- A more satisfied water consumer.

WASTE AND WATER TREATMENT

10- Solar Water Solutions - Presented by Antti Pohjola

Drinking water from sea, brackish, surface waters and boreholes using 100% solar energy. Game-changing solution for eco-friendly and economically efficient decentralized water purification Lowest operational and life-cycle costs Our vision is to provide sustainable quality drinking water on remote islands, in desert locations, and in small communities

11 - Rootzone Africa - Presented by James Mawa

Rootzone is a natural Bio-technology for treatment of sludge and wastewater. It involves manipulating and control nature to optimize treatment function. Transform have set up several projects for different industries, including oil-and petrochemical sector, mining, sewage, and sludge.

Services:

- Bio Fertilizer - Waste to Value
- Greening the Desert - ROOTZONE Technology
- Sewage/Waste/Sludge Treatment - Natural Technology

12- Greenergia - Presented by Reena Shah

The demand for clean cooking fuels and cookstoves has increased. Consequently, degradation of forest and hyacinth invasion on water bodies has necessitated the need for prudent management of the environment through sustainable solutions. Transforming water hyacinth from Lake Victoria into fuel pellets can be adopted as a clean, green energy source.

Bio-organic briquettes made from all organic waste which will cater to fast growing industries of East Africa region as an idel substitute against petroleum products/fossil fuels.

Greenergia

Turning Waste to Wealth

Features of formula 5 briquettes

- The minimum calorific value is 4000 per kg-Cal
- Minimum ash content of 5%
- Minimum moisture content of 2%
- Introducing briquetting for domestic market/pellets/cook stoves

13- Aqua Clara Kenya - Presented by John Nyagwencha

Aqua Clara Kenya is a non-profit company working in Kenya since 2010. They design & assemble water filters which we sell at a 20-40% mark-up. Aqua Clara Kenya products mainly use low-cost local materials, making them cost less than half the cost of the competition. The products mainly target low-income households and schools. Aqua Clara partners with Micro Finance Institutions which provide loans to customers to pay for products in 6-12 months

14- Boreal Light - Presented by Hamed Behsheti

Boreal Light GmbH is a Berlin based renewable energy engineering company located in Adlershof Science and Technology Park, Center for Photovoltaic and Renewable Energy. Boreal Light GmbH deals with a wide variety of renewable energy projects around the world. Being specialized in micro solar and wind applications leads the company to move toward solution-based projects for markets with less access to the grid. ¨WINTURE® Plant-Cube is our solar water desalination system, designed for urban and rural applications. ¨ Providing Affordable, Sustainable, Water solutions for off-grid communities.

15- WADI by Helioz - Presented by Hubert Rothmayer

WADI is an ingenious device for solar water disinfection, helps NGOs, governments, and institutions in their fight against waterborne diseases. WADI is a solar powered UV measurement device that visualizes the process of solar water disinfection (SODIS) in PET bottles. It is placed alongside bottles that are filled with contaminated water and exposed to the sun.

Once the process is completed, a smiley face on the WADI confirms that the water is safe to drink. WADI is endorsed by the WHO, meeting its microbiological performance criteria and is classified for providing targeted protection.

Application:

- Fill PET-bottles with water.
- Expose the PET-bottles and WADI to the sun and press its reset button.
- Wait for some hours while the sun disinfects the water.
- Watch a happy smiley face appear on the WADI display.
- Water is ready for consumption.

16- Flourid Ltd - Presented by Brian Chunza

Flourid Ltd is a Social Impact enterprise aimed at ensuring access to clean fluoride free water for low and mid income households through providing affordable fluoride water filters. Fluoride has adverse effects on people, animals, and plants. In people, fluoride leads to deformation of bones Skeletal fluorosis and browning of teeth Dental fluorosis. Fluoride can also lead to brain damage in children under the age of 12 years. The fluoride water filter removes fluoride and microbes from water making it safe for human consumption animal consumption and plant irrigation.	

17- CUBO - Presented by Rui Gomes

 *Main Features:* ● Plug-and- Play units ● Fully automated process ● Final water quality control ● Simple operation ● Low maintenance ● Can be operated remotely ● Easy integration with renewable energy sources	CUBO drinking water treatment plants are constructed in a containerised modular structure and works according to standard processes, of worldwide reference for the treatment of drinking water, in accordance with national and international standards and directives of the WHO (World Health Organization). The basis of the treatment consists of processes of oxidation, flocculation, sedimentation, filtration, disinfection, activated carbon adsorption, storage, and distribution of treated water under pressure. Can adapt and modularize the processes necessary to achieve specific goals of treatment, such as desalination modules, chemical precipitation, ion exchange, etc. The D models are assembled in 20' containers, with drinking water production up to 300 m 3 /d (approx. 2000 inhabitants eq.), and can be used for supply of populations, hospitals, construction sites, hotels, industry, agriculture, etc.

NON-REVENUE WATER

18- Fundi Fix - Presented by Jacob Katuva

The FundiFix model focuses exclusively on the maintenance of existing water infrastructure for communities, schools, clinics and other rural facilities. The business rationale is 'scale reduces risk'. If all rural waterpoints are networked in one system economies of scale can improve service delivery and lower costs. Essentially, it's insurance logic applied to rural water infrastructure.	FundiFIX

19- Kap Plastics - Presented by Kush Nathwani

"The purpose of our Group is to create sustainable solutions for a worldwide building and construction industry."

Build something great

- For customers, this means high performing, sustainable product and service solution
- For shareholders, this means sector best returns.
- For Apex people this means a safe, challenging and rewarding workplace.
- For communities, this means a socially responsible approach to all our activities.

Drinking Water Products - Polypropylene Random (PPR) pipes and fittings are most reliable in plumbing and water supply pipelines inside the building, due to their chemical features and fusion welding, which ensures the plumber has a perfect seal tight system.

- UPVC pressure pipes are manufactured to KS - ISO 1452 and EN 1452 standards incorporating the traditional design stress of 10 and 12.5 Mpa respectively. The pipes are manufactured with a socketed-end and supplied complete with a pressure lock rubber seal for a superior joint. The product is ideally suited for applications in both pumping and gravity design.
- We manufacture high quality HDPE pipes which are available in various sizes. These are suitable to work under different working pressure for both residential and industrial purposes.

- Hep2O is the professional polybutylene (PB) push-fit plumbing system for hot and cold water and central heating. It offers a fully comprehensive range of white fittings and unique features designed to reduce installation time and improve operating performance:
- Wavin Tigris K1 is the complete press fit system for metal plastic (multilayer) pipes. The system can be used for sanitary (including potable water) and heating applications. Tigris K1 are blue press fittings with a fixed stainless-steel sleeve. The press fitting is made of PPSU (polyphenylene sulphone) and guarantees corrosion resistance for the entire pipe system including the connections. The Defined Leak Function (DLF) brings extra safety where it identifies unpressed fittings during the pressure test. Standard ISO 21003
- UPVC borehole casings are manufactured to standard KS-2210 and DIN 4925 with trapezoidal threads and female belled-ends. The male threaded ends can also be fitted with a rubber O-ring for a superior leak-free joint if required to ensure that every drop of ground water that enters the well has been extracted at the greatest possible depth.

Photo credit : Godfrey Ogilo, KCIC

STAFF PRODUCTIVITY

20 - SORT Enterprise - Presented by Elizabeth Were

SORT Transforming Operations SORT help leaders build high performance teams while maximizing the resources at their fingertips through Continuous Improvement Principles/Kaizen. First locally based six sigma and Toyota kata specialized company in Kenya.	¨We help business, Water Service Providers, and NGOs deliver high quality services with fewer resources and the right culture. SORT approach entails engaging the right people across the organization to work in a disciplined and in the most purposeful way to identify gaps between how work is done and how it should be done. ¨We tap into a large pool of continuous improvement tools to empower staff to increase customer satisfaction and reduce business risks. ¨

INNOVATION

21- Mobitech Water Solutions - Presented by Kelvin Gacheru

Imagine if you could monitor water in Any Tank or Reservoir, in Any Location on your Phone or Computer? No hustle, just use your phone to monitor water in your Tank/Reservoir. That's Mobi-Water, a convenient, real-time Water Monitoring, and Management solution. 'Maji Mkononi' short for 'Water in your Hand' is our flagship initiative meant to increase water consistency at Community Water Points through Real-Time Monitoring and sharing of Water availability information between Water Providers and the Community.	

WATER UTILITIES

22- MakaaDotcom - Nakuru Water & Sanitation Company - Presented by Zaituni Kanenje

MAKAA DOTCOM moto bora	Can you use poo to cook? Haphazard disposal of human waste is a challenge leading to increased disease burden in Kenya. We work towards commercially viable large-scale production of round shaped briquettes. Sanitation and environment conditions will improve through proper management of waste. The briquettes (MakaaDotcom) are a popular alternative source of cooking and heating fuel.

23- Maji Ni Ustawi: Blue Ribbon Concepts - Presented by Phillip Kariuki

The Maji ni Ustawi initiative is a private sector led initiative driven by Blue Ribbon Concepts Ltd (BRC) that seeks to promote and facilitate private sector investment in the Kenyan water sector. It is an outcome of a programme that sought to highlight the investment needs of water service providers and advocate for a PPP framework to enhance private sector involvement in the sector.	BLUE RIBBON CONCEPTS

24- MCDI - Presented by Violet Matiru

MCDI	For WASH, there is limited understanding of importance of catchment conservation/protection and therefore limited investment in rehabilitation, protection, and avoidance of pollution of water sources. Focus and investment is mainly on water supply.

SMART TECHNOLOGIES

25- Upande, Wash MIS - Presented by Mark Dubois

WaSHMIS (Water Sanitation Hygiene Management Information System) is a cost effective, scalable, interoperable system aimed at improving service delivery by Water Service Providers (WSPs) in Kenya and beyond by providing a low cost modular tool for monitoring and managing Non-Revenue Water (NRW). WaSHMIS works with remote monitoring data (flow, pressure, level) and billing data to calculate water balance at zonal levels and after that to link the output with a central asset database (GIS).	WaSHMIS.com Upande has been working in the WASH (Water, Sanitation, Health) sector since it started back in 2009. This started with the building of water/sanitation benchmarking tools for our client GWOPA. This tool was extended with GRUBS (Geo Referenced Utility Benchmarking System), with pilot data for Nairobi Water and Sewerage Company (NCWSC) and IFRA data being key components.

26- AQtap – Grundfos - Presented by John Oketch

Grundfos AQtap is an intelligent water ATM that addresses some of the main challenges of providing reliable and sustainable water supply in the developing world. Through an integrated platform for revenue collection and online management of water kiosks, Grundfos AQtap supports the financial viability and accountability of water service operations. Grundfos AQtap is a single product that combines three elements essential to smarter water management:

- Smart cards – where water credits are stored on WaterCards
- AQtap water ATM unit – where water is tapped, and credits managed
- Water management system – where data from transactions and operations are processed and published

27- Aqua for All / VIA Water - Presented by Shabana Abbas

Aqua for All's vision is a world in which every human being has structural, sustainable access to clean water and good sanitation. VIA Water is program of Aqua for All that focuses on co-creation of innovative ideas and solutions to address the most pressing urban water and sanitation challenges in Benin, Ghana, Kenya, Mali, Mozambique, Rwanda and South Sudan. The program is one of the five knowledge platforms set up by the Dutch government and currently supports over 60 innovations in the focus countries. Aqua for All manages the program and program fund of VIA Water.

28- Strategic Water - Presented by Stephen Andersen

Strategic Water is a Belgian start-up, aimed at water technology providers, merging cutting-edge data science with water treatment technologies, to optimize performance and increase sales. Mission is to bring advanced data analysis and machine learning solutions to the water sector, optimizing facilities, lowering costs and driving investments into new markets across the globe.	

29- The Kibera Town Center - Human Needs Project - Presented by Felix Osumo

	Working towards a world where the poorest can access prosperity through local centralized centres offering solid basic services (Clean water, education, communications, and credit). Close to 600-800 people access their services on a daily basis. ¨We intend to open more water kiosk to all the remaining 12 villages in Kibera slums. This will increase the numbers of clients that we intend to serve to 10,400 people a day. For them to reach the goal of reaching all the villages we intend to start small by creating 12 more water kiosks fully equipped at a cost of $30,000.

30- Aqua Rating (International Water Association) - Presented by Rui Malheiro

AquaRating focuses the challenges water and sanitation utilities face comprehensively, evaluating their performance through indicators and management practices, establishing an international standard; and relying on information verified by independent auditors accredited by AquaRating. It is a system for improvement, as it builds a complete map of the Key aspects that characterize and determine the management of water and sanitation services.	

31- Sanivation – Presented by Catherine Berner

 Sanivation is a social enterprise dedicated to improving the overall dignity, health, and environment of urbanizing communities in East Africa by providing cost-effective sanitation services.	*"We see sanitation as the missing piece. Initially, we thought innovative technologies could solve the problem. However, to tackle the total addressable problem, we needed to think differently. We partner with municipalities to prioritize sanitation service delivery over infrastructure, build the capacity of local institutions, and train students to be future practitioners. We also recognized that we can't do this alone. Therefore, we use our brand and credibility to bring together stakeholders to ensure a sustainable world, where safe and dignified sanitation is a reality for everyone, every day."*

32- AKVO - Presented by Walter van Opzeeland

Akvo is a not-for-profit foundation that creates open source, internet based, mobile software and sensors to help improve public service delivery. In more than 100 countries around the world, they have helped more than 1500 partners act to improve the management of water, sanitation, health, education, and energy. Akvo Caddisfly™ is a simple, low cost, open source, smartphone-based drinking water testing system connected to an online data platform.	

33- Majikwater - Presented by Beth Wanjiku

	Harvesting drinking water from the air. Majikwater are creating a new source of affordable, clean drinking water for scarce water communities. If you have air, you can have drinking water. There is 6x as much water in the air as in all rivers in the world. *"We are using hydrophilic materials to capture this water. If you have air, you can have clean, safe drinking water."*

34- The Water Shop Naivasha; PureFresh - Presented by Anthony Kamotho

The Water Shop sources water from a leased central borehole and treats it in an attached water treatment facility, with subsequent distribution by truck to 4 water shops located in different areas of Naivasha. Water is sold under the PureFresh brand and can be purchased in bottles and/or sealed tanks (size ranges from 0,5 to 20 litres) or ii) in refills: customers bring their own tanks and purchase water at a flat price per litre. The Company plans to expand through a Vending Machines model: the machines will be installed into already existing shops, whose owners will act as Agents for the Water Shop: this innovation will allow to increase efficiency and - as a consequence - to increase affordability of safe water for low income groups, also in the neighbouring town of Nakuru.

35- WAGTECH - Presented by Ruth Wambui and Neil Durham

Manufacturers & suppliers of innovative water technologies to the WASH Sector. Wagtech Projects is one of the UK's largest independent manufacturers and suppliers of scientific testing and laboratory equipment.

From small orders for urgently required consumables through to complete laboratory installations, we regularly ship products to customers in more than 90 countries worldwide.

Seeking

- Individuals/ Groups to finance/invest in an expanding business
- Technical partner to develop next generation of water testing kits which are of lower cost and using more rapid methods
- NGO/company with CSR to co-finance on development & commercial exploitation of the water testing kits.
- Manufacturing /business entities who can work with us to expand our WASH supply capability within the WASH sector, e.g. water treatment chemicals, distribution & storage

WICA FINALISTS - Water Sector Trust Fund Innovation Challenge

36- Aqua Fadhil Desalination System - Presented by Halima Fadhil

AquaFadhil is a portable solar desalination system locally fabricated using simple materials. It is meant to transform oceanic water to fresh water for safe human consumption. The rationale: ● Approximately 120,000 households along the coast have no access to clean drinking water ● Targeting 67% of these households ● Projecting to broaden the invention to affordable levels locally and regionally.	

37- WATRACK - Presented by Mukeli Matei

WATRACK	Watrack is an online and mobile platform that improves operations within water utilities by ensuring that meter reading, mapping, reading verification, billing and payment reconciliation happens as seamlessly as possible. ● Meter reading: Field officers can request new readings assignments from their phone, make the readings and submit them to be verified. ● Locate meters: Increase the productivity of field officers by locating meters and planning execution of assigned tasks in a well-informed way. ● Mapping: Map meter locations when taking readings and save the cost of hiring more people to do it for you. It's faster and accurate. ● Real-time data: Field officers receive real time notifications on tasks they have been assigned or anything they need to be notified about.

Outcomes: Ecosystem consolidation

"Innovate 4 Water" Market Place Forum in Nairobi fostered interactions between Kenyan and global players from the private sector, the public sector and from civil society to direct finance toward impact projects in the communities, with the main objective to foster local Kenyan ecosystem consolidation.

Photo credit: Godfrey Ogilo, KCIC

WATER HUB ACCELERATORS: "Innovate 4 Water" Market-Place forum in Nairobi is currently contributing to the strengthening of the Kenyan enabling environment that support and channel investments into impactful WASH entrepreneurial projects in the field. The creation/acceleration of innovation "reactors" ("go-to Market-Places"), is anticipated in the form of physical/virtual platforms that connect WASH stakeholders from different sectors to contribute to the achievements of the SDG6. The organizers are currently reaching-out to strategic potential interested WASH stakeholders in the fields of 1/ Innovation; 2/ Entrepreneurship; 3/ Finance; 4/ Corporate Supply Chains; 5/ Smart IT Technologies; 6/ WASH regional Expert Hubs

Conclusion and next steps

Presentations from the Central and County Governments stressed the importance of private sector stakeholder involvement in successful action towards the achievement of SDG 6. The government had provided a conducive atmosphere and clear roadmap for investments in sustainable development initiatives. The private sector was therefore challenged to come up with initiatives on how they shall work both independently and together with the government to come up with lasting solutions.

The forum was successful in meeting its objectives; representatives from the various clusters of stakeholders were allowed an opportunity to showcase the activities in which they are involved, and their relevance in achieving SDG 6. This provided a conducive environment for the stakeholders to

then engage each other with a clear knowledge and understanding of the part that each would play in achieving the goal a success.

We are optimistic that the result of this two-day forum, shall be the creation of symbiotic relationships between various the stakeholder, which will culminate in better water and sanitation management. The organizers have already developed trust relationships with key stakeholders interested in the sector, looking for entrepreneurial projects, and that have an interest in making sure these entrepreneurs can grow. It does reflect well our work specifically on water, connecting specialised water hubs and accelerating innovations and social enterprises contributing to the realisation of SDG6.

Photo credit: Godfrey Ogilo, KCIC

ANNEXES

Detailed presentations - Day 1 (SDG Unit, African Water Facility, Quercus Group, SNV)

SDG Unit – Transitioning from the MDGs to the SDGs and Achieving SDG 6 through Agenda 2030 - Presented by Isaac G. Kamande

Mr. Isaac G. Kamande, the Director of Programmes at the SDG Unit made the opening presentation. The Director thanked the event organizers for creating a forum that would enable stakeholder engagement in the Water and Sanitation Sector to come up with a coordinated effort towards meeting sustainable development. The Director explained that among the mandates of the Ministry of Devolution and Planning was the coordination of the implementation and monitoring of the **Sustainable Development Goals** (SDGs) in Kenya. These SDGs have been agreed upon at the United Nations Sustainable Development Summit 2015, held in New York.

The SDGs replace the eight **Millennium Development Goals** (MDGs), which had been set to be achieved by 2015 to respond to the world's main development challenges, especially in developing countries. These 17 Sustainable Development Goals are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity; these apply to all countries. Specific to the theme of the forum, Mr. Kamande pointed out that Ministry of Water and Irrigation was responsible for nurturing the achievements of SDG 6 - *"Ensure availability and sustainable management of water and sanitation for all."*

Photo credit: Godfrey Ogilo, KCIC

He further explained that in response to the United Nations Sustainable Development Summit 2015 held in New York, the government set out to launch the transition process in the country. With this in mind, the government has resolved to mainstream the SDGs into its private contracts as well as in the implementation of the transition process. The SDG Unit came up with a roadmap (transition strategy) to help in the transition, for the country to be able to realize **Agenda 2030**. Since the country had already formulated her Vision 2030 back in 2007, it would not face a huge

challenge in aligning its local programmes with Agenda 2030. Each of the 17 SDGs was mapped with Vision 2030 Second Medium Term Plan (MTP) objectives to ensure the global development framework and its implementation is directly linked towards achieving both Vision 2030 and SDGs.

Transition Strategy

Seven strategies were identified to position the country on the fastest and most reliable trajectory to realise the SDGs:

1. **Establishing Partnerships:** With institutions, including Strathmore University to help pursue various partnerships that have been created.
2. **Advocacy and Sensitization:** Senior management in the civil service and key staff in regional development authorities have been sensitized to the SDGs.
3. **Localizing/Domestication:** SDGs have been factored into strategic plans and performance contracts in government agencies. Priority projects and programmes have been identified and incorporated in the central government's mid-term plans.
4. **Developing Resources:** By bringing in the private sector and other non-state actors to take up roles towards development of SDGs.
5. **Institutional Framework:** An inter-agency technical committee, comprising the public sector, private sector, civil society and developmental partners, has been set up to discuss matters of joint programming and joint missions.
6. **Monitoring and Reporting:** Oversight of all SDGs activities, through the SDGs coordinating department.
7. **Capacity Building:** Training of all actors in the SDG agenda to help leverage the collective strengths in the development process.

He challenged the private sector participants in the forum to work closely with the government to develop and implement Private Public Partnerships (PPPs), more so in the water and sanitation sector, to bring the country closer to achieving SDG 6.

Overview of the PPP framework - Role of Government

The government of Kenya has put in place various efforts and engagements in encouraging reforms in the Water and Sanitation sector; they have built an enabling environment for the private sector to take up PPP projects that will improve water sustainability. To coordinate these efforts, there is a directorate of PPP in the National Treasury and at the Ministry of Planning.

At the inception of Vision 2030, the perspective of government was to formulate a vision for the country that identifies critical sectors under the three pillars of the economy. These are - Economic Pillar; Social Pillar (under which water is one of the key components); and the Political Pillar.

The government realized that with the reality of scarcity in resources, it was unable to meet developmental objectives single-handedly. Hence it was necessary to come up with an elaborate blueprint for development, where the various programmes that would be necessary for achievement of Kenya's vision 2030 would be co-financed by the private sector.

Kenya has been and remains a top advocate of Agenda 2030 and the SDGs. In the water and sanitation sector, there has been a need to identify specific mechanisms, tools, and processes to effectively translate the SDG agenda. The current focus of the government moving forward is on SDG 6 which calls for clean water and sanitation for all people.

The Ministry of Water has identified specific targets to be achieved based on the SDG Agenda and looked at key indicators in the WASH sector. The Ministry has mainstreamed this within the mandate of key institutions that fall under it. All the institutions have been assigned goals and targets in line with the Agenda.

The key challenge facing the success of this initiative are the reforms that must be put into effect within the government when, in the era of scarce resources, the government had no option but to open up the space to allow the private sector in. A National Steering Committee was created that draws its membership from public sector, private sector, civil society and development partners. Within the framework of the SDGs and the framework of Vision 2030, the government has embraced the PPP framework to guide future developments.

Specific to the water sector, one of the major reforms that brought about changes was separation of policy making from regulation. This led to:

- Creation of a water regulatory framework;
- Water services provision and management;
- Decentralization of key functions from national level to regional level; and
- A pro-poor focus in water sector.

The Ministry of Water has also established structures at grassroots for increased stakeholder and consumer participation in decision making and implementation processes to combat water and sanitation sector challenges. One major bottleneck hindering successful change in the water sector are the transitional issues between the Central and County Governments. At the same time, under-investing was greatly impeding improved service coverage.

AWF – Supporting Innovations in the Water Sector and Organising Africa Water & Sanitation Investment Forum – Presented by Jean-Michel Ossete

Africa Water Facility (AWF) is a multilateral fund housed under the African Development Bank (AfDB) that provides grants and technical assistance to enable governments, NGOs and private-public partnerships to secure investments and implement sustainable water projects throughout the African continent. The facility is an initiative of the African Ministers' Council on Water (AMCOW).

AWF provides different credit facilities to entrepreneurs and innovators. AfDB's revised water policy is aimed at improving water resource management, water security, and green growth. The policy's central objective is to promote efficient, equitable, and sustainable development through integrated water resources management. Water activity at the bank is coordinated under the water development and sanitation department; under which AWF is one of the trust funds.

AWF was created in 2004 and started its operations in 2006. Its Mission is to assist African countries to mobilize and apply resources for the Water and Sanitation sector to help enable them to successfully implement the Africa Water Vision (2025) and meet the SDGs (2030). During the period AWF has been operational, it has approved 170 projects for a total amount of 155 million USD. The facility is working at targeting all African countries.

In terms of reach, working through national and multinational projects, all African countries have benefitted through AWF operations. A survey conducted at the close of 2017 to ascertain AWF leverage effect shows that on average each 1 euro contributed by AWF has attracted 32 euro in additional follow up investments. Jean-Michel further stated that AWF targets at increasing the leveraging ratio to 1 to 60 from the current level of 1 to 32.

Photo credit: Godfrey Ogilo, KCIC

AWF Strategy 2017 - 2025

Launched in October 2017, the AWF Strategy 2017 - 2025 shares the innovative approaches that the fund will focus on over the next 10 years to deliver on its mandate of mobilising financing for the water and sanitation sector. The new AWF strategy is based on three main pillars:

Project Preparation

This is the main pillar and will use 75% of the overall program budget. The core activity will consist of feasibility studies and designs that validate and develop a project concept to an investment-ready stage, along with project structuring and transactional advisory activities as needed to make a project bankable, ready to secure public and/or private financing.

Catalytic Investment

Under this pillar, AWF will deploy small but catalytic investments or seed funding, that will enable project owners to implement their projects. This pillar will be allocated up to 15% of the overall program budget.

Investment Promotion

Under this pillar, AWF will focus on identifying business opportunities to showcase these opportunities to investors and entrepreneurs. A range of investment promotion services will be offered to increase the number of investment opportunities in the water sector and to mobilise higher levels of financing for projects, particularly from the private sector. This pillar is vital since, as experienced by AWF, many entrepreneurs do not know which opportunities and what kind of businesses can be done in the water and sanitation sector.

AWF as a priority, analyses various business opportunities in the Water and Sanitation value chain to organise meetings and forums that present an opportunity to link water sector investors to water sector entrepreneurs. In a nutshell, with this strategic priority, AWF directly undertakes the following: investment opportunity diagnostics; networking platform; and guarantee brokerage, where they raise awareness for risk mitigation instruments.

The African Water and Sanitation Investment Forum (AWSIF), organised by AWF is currently in the planning stages, with Waterpreneurs, USAID's WASHFIN, African National Investment Promotion Agencies and Investment Promotion networks being among the stakeholders involved in the planning. It will be the first time a forum is held in Africa fully dedicated to the water and sanitation sector.

Quercus Group – Clustering and Best Practices in the Water Sector – Presented by Nicolai Rottbøll

Quercus Group is a niche strategy consultancy firm whose mission is to help cities and regions achieve long-term, sustainable growth through targeted projects. The company is driven by a vision to become the go-to consultancy for holistic Green Growth advisory and has plans in more than 25 countries, including Kenya, Ghana, India, Japan, Canada, USA, Germany, Singapore and others spread across the globe. The company advocates for the Cluster Approach in development projects.

Photo credit: Godfrey Ogilo, KCIC

Cluster Approach

This approach entails co-creating the future through clustering and multi-stakeholder engagement. As defined by Michael Porter of Harvard University:

"*Clusters are geographic concentrations of inter-connected enterprises, specialized suppliers, service providers, firms in related industries, and associated institutions in particular fields that compete but also cooperate.*"

Clusters drive innovation, productivity, and competitiveness through collaboration between business, research institutions, and public authorities.

The Value of Clustering and Multi-Stakeholder Engagement

- Tomorrows challenges are not solved by any single source of solutions
- Serve as neutral platform/intermediator
- One-stop shop, knowledge centre, and disseminator
- Better and more long-term solutions
- International branding platform
- Business development platform
- Matchmaking platform
- Driver of innovation
- Start-up supporter
- Export driver
- Fundraiser
- Job creator

Below are case studies where the cluster approach has had significant positive impact on economic growth, and other direct and indirect benefits:

Development of A Triple Helix Cluster – Copenhagen Cleantech Cluster

Engaged 120,000 employees, 748 companies, 46 knowledge institutions and 29 public authorities.

Tangible benefits experienced from the Copenhagen Cleantech Cluster in 5 years:

- Created 1.000+ new jobs
- Attracted 25 foreign companies
- Established 60+ new research and innovation collaborations
- Established 30+ new business collaborations
- Established 6 new public-private partnerships
- Collaboration with 15 international clusters
- Nurtured 120+ entrepreneurs
- Denmark positioned and recognised as world's leading cleantech country

CPH 2025 CLIMATE PLAN – How to Make Copenhagen the First Carbon Neutral Capital in the World?

This cluster is focused on the following areas and stakeholders; Government, Energy Production, Academia, Green Mobility, Energy Consumption, Businesses, City Administration and Copenhagen Citizens.

Focus areas and stakeholders contributing to the CPH 2025 Climate Plan.

Turning Informal Settlements Smart (Kisumu)

This cluster involved establishing a local multi-stakeholder platform for developing, testing and scaling circular economy and sustainable business models for inclusive slum upgrading. The partnership will work to:

- Increase private sector investments in slum upgrading, e.g. through reconceiving products and business models.
- Ensure that the application of private sector solutions to slum upgrading (e.g., water/sanitation (SDG-6) and waste management (SDG-12)) is based on community needs and interest.
- Connect existing informal value chains associated with basic services and infrastructures to those existing in the formal city and hence build resilient infrastructure (SDG-9) and create decent local employment (SDG-8).

Key success indicators

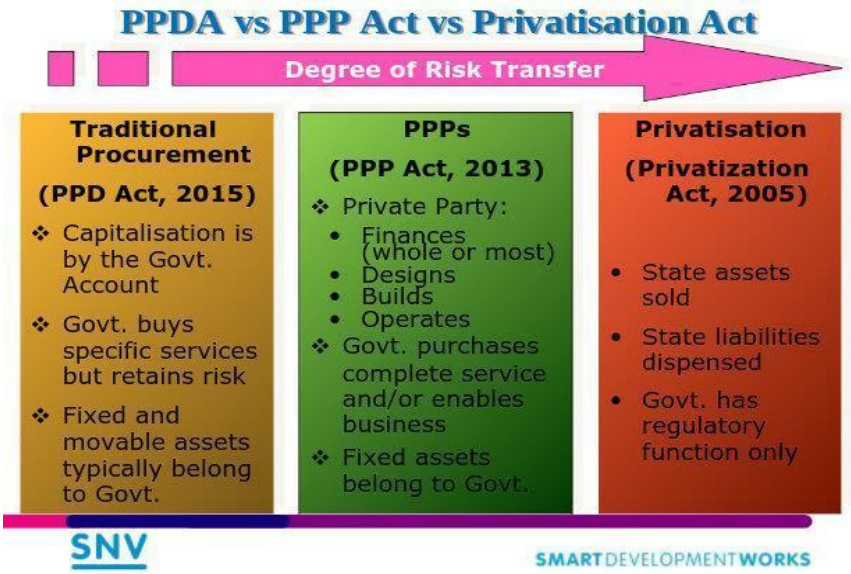
- Number of concrete partnership with the goal to test and scale specific slum upgrading solutions through innovative business models;
- Residents of slums and informal settlements in selected cities who report improved service delivery, living conditions and influence in urban governance;
- Increase in private capital invested in slum upgrading, infrastructure and basic services targeting residents of slums and informal settlements in each locality.

SNV – The Role of Private Sector and Performance Based Contracting – Presented by David Wanyoike

SNV is an international NGO that works in 36 countries. The organisation works in 3 main sectors: Renewable Energy; Agriculture; and Water Sanitation and Hygiene. SNV partners with local partners, i.e. Communities, National Governments, County Governments and Civil Society to look for local solutions to global problems that exist within the society. SNV is not a donor organisation. They implement programs on behalf of development partners; bringing in their expertise through their advisers.

The Water Sector in Kenya has 11 water service providers serving an estimated 11% of the population. Amongst these WSPs are large ones that serve around 16% and small utilities that cater for 4%. This in perspective means approximately 80% are either underserved or unserved. In this respect, SNV through Kenya Markets Trust looked for innovative solutions to address some of the issues.

A distinction must be made between PPPs and the traditional public procurements governed under the Public Procurement and Disposal (PPD) Act. The spectrum of the traditional procurement governed under the PPD act we have capitalization as a function of the government. Here the government buys specific services from private sector but retains the risks. When the assets do not transfer to the government, they still belong to them. On the other hand, is the privatization process which is governed by the privatization act; whereby when state assets are sold the only role government plays is to provide a regulatory function. PPP involves a contract between a public-sector authority and a private party, in which the private party provides a public service or project and assumes substantial financial, technical and operational risk in the project.



PPP's looks at scenarios where the solutions that would generally have been offered by the public (government), but private sector comes in to provide those services. The distinction is that private sector will come in to finance, build or operate but the assets and liabilities still belong to the government.

SNV has been involved in the PPP space since 2012. They have had partnerships with the Ministry of Water where the organisation assists in capacity building for the ministry to have a better hold of the whole PPPs concept. SNV has also been involved on the demand side where they have worked

with some of the water companies by examining their needs and structuring some of their concepts that can fall within the context of a PPP.

SNV Experiences

On the Urban Front, SNV received 25 concept/project ideas from several water companies. Out of these only 3 were formally submitted to the PPP unit at National Treasury. One out of the three was listed as a priority project that was ready for the PPP process. However, the process is quite long. It is quite elaborate with several approvals that are required up to the cabinet level. When you want to engage water companies, you need to look at how viable the project is and what is its timeline, because in some cases, the expectations are not met. Only one project, from the ones initially fronted, had completed feasibility study, is ready to move to the next stage.

On the Rural Front, SNV worked with 31 community projects and partnered with Lake Victoria Water Service Board. They received 31 communities that were decreed as potentially viable for a PPP arrangement. SNV linked up these communities with six operator contracts. There are case studies in Western Kenya where SNV were able to pilot the PPP concept. Some of these domestic private investors/funds end up working as social entrepreneurs, as they are looking to attain some of the social targets, over and above profit.

Many of the projects still required a lot of technical assistance and capital investment. Some required small triggers or enhancements to push them to viability status. He also, however, noted that revenues are quite weak because it is a rural context.

Public Private Community Partnerships

SNV partnered with the Water Sector Trust Fund and WASPREP (regulator) to develop these concepts under five models. These are management models that address the issue of professionalizing how they run their services.

- Lease operator
- Private operator
- Professional manager
- Services Contract
- Delegated manager

Results:

- 74,646 beneficiaries
- NRW reduction 60% to 48%
- Total Beneficiaries -18,317 HHs. Performance dipped due to Ahogo Sinaga & Muhanda exits
- Revenue-Cost Performance shows improvements towards Break-even

Why non-revenue water?

According to data from IB net (International Benchmarking Data by World Bank) non-revenue water costs Kenya (from large water utilities) close to 40% - 51% of what is being released in the system; which amounts to approximately 134 million USD. With this SNV strives to address the issues of

non-revenue water and how they can be able to trigger some of these companies to achieve cost efficiency.

PPP Case Study - Sosio Teldet Water Project

The Sosio –Teldet Gravity Scheme water supply project is expected to serve Saboti and Kiminini and parts of Bungoma County, with an estimated population of more than 300,000 people, at a cost of Kshs 1.76 billion. The Trans-Nzoia County Government is looking for strategic partners under the PPP framework to enable realization of the project. Water Demand in the area is estimated at 11,751m3/day and is expected to be 13,781m3, 21624m3 and 39332m3/day by the years 2020, 2030 and 2040 respectively.

The project was begun by Nzoia Water Services Company Limited (Nzowasco), which is mandated to provide water and sewerage services within the County Governments of Bungoma (Bungoma, Webuye, and Kimilili) and Trans Nzoia (Kitale). Nowasco is fully owned by the county Governments of Bungoma and Trans Nzoia. The gravity scheme water supply scheme which will abstract its water from perennial Sosio River in Kaboywo Forest in Bungoma County is intended to serve a total area of 433km2. On completion, the project will benefit over 300,000 people and 30 primary schools, 20 secondary schools, 24 market centres and 20 health facilities that lie within the supply area.

One of the innovations projected is the generation of hydroelectric power by use of turbines in the 400m elevation that will be effective in enhancing security through lighting and provision of electricity to serve surrounding communities along the pipelines. Wind power generation at Cheprangut hill can be explored to run the backwash units and lighting at the treatment works. In corporation of solar energy will be used to provide lighting and running of backwash within the same point.

The project is expected to abstract 12,306m3/day from Sosio River which will be able to satisfy the current water demand of 11,751m3/day. To meet the future demand by year 2040, there will be need for construction of a dam with a capacity of at least 4 million m3, with a safe yield of 27,581m3/day at an estimated cost of Kshs 2.5 Billion. Besides effectively meeting the demand of water supply, the dam will also act as a check to flooding downstream in River Nzoia.

Role of the County Government

The County Government of Trans Nzoia is currently working in partnership with SNV to incorporate a private operator model to manage some of the community facilities. They have also facilitated and done the Feasibility Study and Detailed Design of the proposed project. Environmental Impact Assessments (EIA) as well as Environmental & Social Impact Assessment has been carried out, with acquisition of a NEMA licence currently in process. Resettlement Action plan (RAP) issues have been identified and compensation planned for in the County Integrated Development Plan 2018 - 2022.

The Role of Strategic Partners

Under this PPP initiative, the role of the private investor in executing the contract is review of the project design proposal; procurement of works and contract execution; and project financing arrangement.

Two key challenges currently hindering realization of the project are budgetary constraints and inadequate water infrastructure. Despite these challenges, there are several opportunities which include:

- Devolved government system;
- Policies and Regulations exist on PPP, inter -governmental relations;
- Availability of natural resources;
- Established County water service utilities; and
- Development of waste water disposal facilities.

Pictures


INNOVATE
4 WATER
NAIROBI
APEX STEEL
POWER
WATER
UPANDE
HUMAN NEEDS PROJECT




End of Report