Benin Water Sector

Opportunities for the Dutch Water Sector

Dutch Government asked Aidenvironment to advice on potential Product Market Combinations for the Dutch Water Sector in 12 developing countries, Benin being one of them, and how the Dutch Water Sector can position itself in order to get a better access to the market.

These reports describe the physical 'water situation', how the water sector is being organized, the legal and policy framework, trends and entry barriers in a simple way as well. Finance and climate change are special topics in each report. These reports are available on the aidenvironment website.

Demand:
The need in Benin focuses on three main sectors: WASH, IWRM (including flooding), and institutional strengthening of (governmental) agencies. In the WASH sector there is a need for fairer distribution and access to clean water and sanitation, especially in semi-urban areas. Operating faecal sludge treatment plants are not present which results in environmental pollution. There is an increasing need for improved water management, erosion prevention and water storage. The last need is related to functioning of governmental organizations or other executing agencies. Tasks of the central government have been decentralized to local governments, however the tasks and responsibilities of these governments for management and implementation is not clear.

Current interest and activities of Dutch organizations:
There are not many companies, NGOs and public service organizations (PSOs) active in Benin. The sectors in which the organizations are involved are water supply and sanitation, IWRM and the cross over with ICT. Most promising areas as indicated by the Dutch water sector players are drinking water supply & treatment, IWRM, urban water management and irrigation. Companies and PSOs are mainly active in advice and support of products, while NGOs are involved in capacity building. Client of the Dutch water sector players are mainly the public sector, local knowledge institutions and international NGOs.

Breakdown of Dutch exports in the water sector to the 13 OS-countries, in % of turnover, source: Web survey Ponteis, 2014/2015

Potential product market combinations:
Based on the situation and the needs (demand) of Benin and the supply of the Netherlands a number of Product-Market Combinations (PMCs) have been defined in the areas of WASH, IWRM and maritime. The following are a small selection of the PMCs:

- Delta planning: airport relocation, flood dikes, real estate development, port development, and wetlands restoration.
- Faecal sludge management: training, capacity building, stakeholder collaboration and development of technologies. This could be done by knowledge institutes, NGOs and companies.
- Institutional support of INE. Dutch Water Boards, water companies, consultancy companies, and knowledge institutes can support INE in the introduction of ICT and provide management and business support for adaptation to the labor market.
- Port and logistics in Cotonou, including services and advice to support logistics and quay development by
large companies or consultancies. Dredging of the port can be done by dredging companies.
- Solid waste treatment.

**Suggestions on positioning strategies for future activities:**
To enter the country, Dutch organizations can make use of PPEAII of the Dutch government. IFIs can be a means for entering the country through specific projects (WB for faecal sludge management or support of INE) and PPEAII of the Dutch government. The Water Partnership Benin or the Netherlands-Benin Platform could offer insights in the market and opportunities.

**Successes and lessons learnt: examples**
Based on expert’s opinions, three organizations and their activities in Benin are highlighted because of their experience in the country.

Boskalis has over thirty years of experience through their involvement in port development and coastal erosion protection. The company has worked closely together with the government and has a good understanding of the situation and way of working in Benin.

Royal Eijkelskamp Foundation has just entered Benin through its cooperation with the INE with financial support of FDW and funding from sponsors. Because of the ANBI status, the foundation has some tax advantages. This cooperation is a good example of how the country can be explored for possibilities to enter the Beninese market for groundwater monitoring equipment.

One organization active in Benin indicated that the services provided focus on large and complex projects that require high-end technologies, in order to create and enter a niche market. The organization continuously broadens its services to maintain its position as leader in the sector and to be able to grow, even when the market stagnates. The office in the Netherlands is responsible for tendering and also for project execution. The organization works with regional and local representatives for business development and support for acquisition and project execution.

Brabant Water has worked closely with local companies such as SONEB for water provision of Parakou. Brabant Water has much practical experience in working with those types of private companies. Other successes mentioned by the survey respondents are PPEA II, the involvement of UNICEF in the country and the NICHE program.

### Facts and Figures

<table>
<thead>
<tr>
<th>Government type</th>
<th>Democratic republic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>French is the national language of the country. Other languages are Fon and Yoruba in the south, and some tribal languages in the north (CIA, 2014).</td>
</tr>
<tr>
<td>Population</td>
<td>10,160,556, which ranks 88 on the world list (CIA, 2014 est.)</td>
</tr>
<tr>
<td>Population growth</td>
<td>2.81% (CIA, 2014)</td>
</tr>
<tr>
<td>Economic growth (GDP)</td>
<td>5%, world comparison ranking: 59</td>
</tr>
<tr>
<td>Expected growth (GDP)</td>
<td>2015: 4.4%, 2016: 4.3%</td>
</tr>
<tr>
<td>GDP (PPP)</td>
<td>€7,084 billion</td>
</tr>
<tr>
<td>GDP (PPP) per capita</td>
<td>€1,356 world comparison ranking: 202</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>1%</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>2.4% 2015: -1.7%, 2020: 0.6%</td>
</tr>
<tr>
<td>Foreign direct investments</td>
<td>3.9% of GDP</td>
</tr>
<tr>
<td>ODA in % of GNI</td>
<td>6.8% (2012)</td>
</tr>
<tr>
<td>Imports</td>
<td>€1,555 billion</td>
</tr>
<tr>
<td>Import partners</td>
<td>China (37%), USA (69%), France (65%), Malaysia (5%)</td>
</tr>
<tr>
<td>Doing business index</td>
<td>2014: 167 (out of 189)</td>
</tr>
<tr>
<td>WEF Global competitive index</td>
<td>130 out of 148</td>
</tr>
</tbody>
</table>

### Trade and Aid strategies
Aidenvironment advises Water Sector players how to combine goals on Trade and Aid. Our advice strengthens the reputation and licence to operate of businesses, opens new windows for finance, and enhances growth while contributing to development goals.

Our team performs market research and advises on effective Public Private Partnerships and engagement strategies, and facilitates organizations in tapping into local networks and finance.

### Interested?
Contact Frederik Claesen to find out what we can do for you.

Aidenvironment, Barentszplein 7
1013 NJ Amsterdam, The Netherlands
+31 (0)20 686 81 11
frederik@aidenvironment.org
www.aidenvironment.org

aidenvironment October 2015
Ethiopian Water Sector

Opportunities for the Dutch Water Sector

Dutch Government asked Aidenvironment to advice on potential Product Market Combinations for the Dutch Water Sector in 12 developing countries, Ethiopia being one of them, and how the Dutch Water Sector can position itself in order to get a better access to the market.

These reports describe the physical ‘water situation’, how the water sector is being organized, the legal and policy framework, trends and entry barriers in a simple way as well. Finance and climate change are special topics in each report. These reports are available on the Aidenvironment website.

Demand:
Water has been relatively low on the political agenda of the Government of Ethiopia, which has implications for resource allocation to the sector. The major challenge in the water sector lies on sustainable water infrastructure development and sustainable management of water resources. Currently there are many small and large-scale infrastructural development activities for increasing water supply for WASH, agriculture and hydropower. The main challenge in this aspect is failure of physical and institutional infrastructure, which is often related to insufficient assessment of existing water resource and how to ensure the availability of these water resources on a longer-term. There is often a gap between plans for projects and the actual construction or delivery of these projects. Conflict over water (also trans-boundary) is increasing due to less predictable rainfall patterns, water pollution or contamination and limited access to water sources.

Current interest and activities of Dutch organizations:
There are many Dutch organizations active on water in Ethiopia, although water is not directly included in the current strategy of the Dutch Embassy (EKN). There is a differentiation in NGOs and knowledge institutes, mainly active in the field of WASH in general, versus companies who are focus largely on the agricultural sector in Ethiopia. Most potential is therefore seen in combining these activities through sustainable water resources management for both WASH and agriculture.

Potential product market combinations:
Product market combinations are mainly seen in integrated water resources management (IWRM) and water governance as well as in water for irrigation purposes. Given the large need on sustainable WASH services, this will remain important. Through the current organizations active in Ethiopia as well as the embassy program (focusing on food security), synergy and linkages should be sought to combine the currently differentiated efforts from Dutch organizations. Many donors and investors are still focusing on Ethiopia, with a focus on climate change adaptation and private sector development.
Suggestions on positioning strategies for future activities:
In order to have access to local as well as Dutch-oriented opportunities, organizations could work through the existing agricultural private sector platforms of the EKN as well the water boards and other Dutch organizations already active in this field in Ethiopia. Focus should be on strategic linking of current activities on water management and agriculture.

Successes and lessons learnt: examples
Direct relations with key decision makers and providing evidence through existing projects as well as national or international seminars and workshops promote success and its dissemination.

For example, ITC-University of Twente has been supporting universities and government in collecting geographical data, like information on land-use, water resources etc. They work on strengthening local capacity on using and analyzing geo-data. Due to this project, the Ethiopian ambassador has shown interest to continue the collaboration with ITC to boost the agricultural sector in Ethiopia, which relies on better data (management). ITC is working in a G4AW program in Ethiopia. This is also mentioned by VETI that indicates that visibility in the country through existing projects is crucial. The Dutch water boards are successful through their direct relations between people working at the government in these countries through programs through GTG (Government to Government) programs.

Addressing the full range of stakeholders and activities can ensure a more secured market. For example WASTE is working according to the Diamond approach, which involves engaging and setting up local companies and attracting local finance. Through this, they are creating a market in developing countries for the poorest of the poor, by assessing what is already in place (private sector companies, activities) and strengthening their activities through trainings and creating linkages with crucial partners. Next to this, WASTE mobilizes local banks that can financially support these strengthening private sector players.

Facts and figures

<table>
<thead>
<tr>
<th>Government type:</th>
<th>Federal Republic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language:</td>
<td>Amharic (official national language) 29.3%, Oromo 33.8%, Somali 6.2%, Tigrinya 5.6% and at least 10 other languages cover the remaining 24.8 %</td>
</tr>
<tr>
<td>Population:</td>
<td>96,633,455</td>
</tr>
<tr>
<td>Population growth:</td>
<td>3.89%, which ranks 14th globally</td>
</tr>
<tr>
<td>Economic growth (GDP growth):</td>
<td>7%, which ranks 24th globally</td>
</tr>
<tr>
<td>Expected growth (growth in % till 2016):</td>
<td>2015: 7.0%, 2016: 6.6%</td>
</tr>
<tr>
<td>GDP (PPP):</td>
<td>4734 billion</td>
</tr>
<tr>
<td>GDP (PPP) per capita:</td>
<td>1,300</td>
</tr>
<tr>
<td>Unemployment rate (in %):</td>
<td>17.5%</td>
</tr>
<tr>
<td>Inflation rate (in %):</td>
<td>8.4%</td>
</tr>
<tr>
<td>Foreign direct investments (in % of GDP):</td>
<td>2.0</td>
</tr>
<tr>
<td>ODA in % of GNI:</td>
<td>7.6</td>
</tr>
<tr>
<td>Imports:</td>
<td>10.68 billion</td>
</tr>
<tr>
<td>Import partners:</td>
<td>China 31.3%, US 11%, Saudi Arabia 8.4%, India 5.4% (2012)</td>
</tr>
<tr>
<td>Doing business index:</td>
<td>132 (out of 189)</td>
</tr>
<tr>
<td>WEF Global competitive index:</td>
<td>rank = 118 (out of 144), score = 3.6</td>
</tr>
</tbody>
</table>

Trade and Aid strategies
Aidenvironment advises Water Sector players how to combine goals on Trade and Aid. Our advice strengthens the reputation and license to operate of businesses, opens new windows for finance, and enhances growth while contributing to development goals.

Our team performs market research and advises on effective Public Private Partnerships and engagement strategies, and facilitates organizations in tapping into local networks and finance.

Interested?
Contact Frederik Claesen to find out what we can do for you.

Aidenvironment, Barentspol 7
1013 NJ Amsterdam, The Netherlands
+31 (0)20 686 81 11
claesen@aidenvironment.org
www.aidenvironment.org

aidenvironment
Ghana Water Sector

Opportunities for the Dutch Water Sector

Dutch Government asked Aidenvironment to advice on potential Product Market Combinations for the Dutch Water Sector in 12 developing countries, Ghana being one of them, and how the Dutch Water Sector can position itself in order to get a better access to the market.

These reports describe the physical ‘water situation’, how the water sector is being organized, the legal and policy framework, trends and entry barriers in a simple way as well. Finance and climate change are special topics in each report. These reports are available on the aidenvironment website.

Demand:
The impacts of climate change in Ghana are expected to significantly aggravate water stress. Sustainable and secured water provision will in addition to water availability, depend on the effectiveness of water governance. There is a need to increase institutional capacity in order to ensure effective management of local water resources and create the connection between information flow, knowledge acquisition and decision making. For WASH service delivery, although institutional improvements have been made, quality and sustainability of services need to be improved. Large investments are needed for waste water treatment, as urban areas are rapidly growing. There is a high inequality in coverage between urban, peri-urban, low-income urban and rural areas and, with the economy developing, solid waste problems have increased.

Current interest and activities of Dutch organizations:
There are many Dutch organizations active in Ghana, which is also related directly to the regional hub function of the Dutch embassy, the fact that Ghana is a fast-track country and funding opportunities (like the Ghana WASH Window Program (GNWP)). Dutch activities at the moment include WASH (and to a more limited extend on waste treatment), irrigation and port development. There are also projects in the field early warning systems and flood prevention (dredging). Dutch organizations are interested in the areas of water for food production, water management and in WASH service delivery.

Breakdown of Dutch exports in the water sector to the 12 OS-countries, in % of turnover, source: Web survey Panteia, 2014/2015

Potential product market combinations:
Product market combinations are seen in climate resilient planning to ensure sustainable access to water resources and food security, as well as flood management and improving institutional capacity on (local) water governance. These relate to the large need for building capacity on water governance and water management. Innovative waste management solutions have a large potential.

Suggestions on positioning strategies for future activities:
Dutch organizations could work jointly through a business platform or hub, through the Dutch embassy, in order to gain access to programs, partners and funds related to EU Joint programming, World Bank or governmental budgets. Organizations can make use of the GNWP- Ghana WASH Window through RVO and the Dutch embassy. However, the GNWP has become a popular instrument and it is therefore not clear if this
offers opportunities for "new-comers". Last but not less important, local capacity and strong partners are seen as key for starting up activities in Ghana.

**Successes and lessons learnt: examples**

Significant investment in local capacity of partners is needed in order to be prepared and identify strong partners for consortium building. Organizations should have a partnership policy with criteria to select both local and international partners. Another crucial success factor is the investment in relations with local and national governments in order to be a known ‘player’, create awareness and ensure budget for activities.

The team interviewed a company mentioning their activities first started with a pilot project. The company worked together with a local representative in order to gain better understanding of the local market and players. The project started with funding from Partners for Water, which ensured that initial activities could take place. The process to come from a pilot to a larger program was long and could only be continued with help of a private investor, who supported the project. The company learned that they should have done a more in-depth market assessment in the pilot phase in order to identify qualified local partners instead of setting-up their own company.

Another company developed a positioning strategy which is focusing on large complicated projects that require high end technology in order to minimize competition. The company focused on broadening the range of services in order to realize growth in a stagnating market, working through local and regional representatives who are responsible for business development and acquisition.

An evaluation was done on the business cases financed under the GNWP. The evaluation concluded investments financed through a loan component need to be clearly identified and better defined, with clear revenue streams associated to them. This is a key justification for engaging in a "Master Planning/preparatory phase", which will enable defining in more detail the nature of the hardware investment projects that can be financed through the proposed commercial loan.

<table>
<thead>
<tr>
<th>Facts and Figures</th>
<th>Constitutional Democracy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government type</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td>The national language is English. Other languages are Agni, (15%), Ewe (15%) Fante (10%), and many other local languages</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>25,755,108 (2014 est.)</td>
</tr>
<tr>
<td><strong>Population growth</strong></td>
<td>2.19% (2014)</td>
</tr>
<tr>
<td><strong>Economic growth (GDP growth in %)</strong></td>
<td>7.9% (2019), which ranks 15th on the world list</td>
</tr>
<tr>
<td><strong>Expected growth (GDP growth in % till 2016)</strong></td>
<td>2015: 7.3%, 2016: 7.5%</td>
</tr>
<tr>
<td><strong>GDP (PPP)</strong></td>
<td>USD 90.41 billion (2013 est.)</td>
</tr>
<tr>
<td><strong>GDP (PPP) per capita</strong></td>
<td>USD 3,300 (2013 est.)</td>
</tr>
<tr>
<td><strong>Unemployment rate</strong></td>
<td>10% (2000)</td>
</tr>
<tr>
<td><strong>Inflation rate (in %)</strong></td>
<td>17% (2014), 2015: 18%, 2020: 17%</td>
</tr>
<tr>
<td><strong>Foreign direct investments (in % GDP)</strong></td>
<td>6.7% (2013)</td>
</tr>
<tr>
<td><strong>ODA in % of GNI</strong></td>
<td>4.6% (2010-2014)</td>
</tr>
<tr>
<td><strong>Imports</strong></td>
<td>USD 18.49 billion (2013 est.)</td>
</tr>
<tr>
<td><strong>Import partners</strong></td>
<td>China (25.6%), Nigeria (11%), Netherlands (6.2%), Singapore (4.3%), UK (4.1%), India (4%) (2012 est.)</td>
</tr>
<tr>
<td><strong>Doing business index</strong></td>
<td>70 out of 189</td>
</tr>
<tr>
<td><strong>WEF Global competitive index</strong></td>
<td>111 out of 148</td>
</tr>
</tbody>
</table>

**Trade and Aid strategies**

Aidenvironment advises Water Sector players how to combine goals on Trade and Aid. Our advice strengthens the reputation and license to operate of businesses, opens new windows for finance, and enhances growth while contributing to development goals.

Our team performs market research and advises on effective Public Private Partnerships and engagement strategies, and facilitates organizations in tapping into local networks and finance.

**Interested?**

Contact Frederik Claasen to find out what we can do for you.

Aidenvironment, Barentsplein 7
1013 NJ Amsterdam, The Netherlands
+31 (0)20 686 81 11
claasen@aidenvironment.org
www.aidenvironment.org

aidenvironment  
October 2015
Kenya Water Sector

Opportunities for the Dutch Water Sector

Dutch Government asked Aidenvironment to advise on potential Product Market Combinations for the Dutch Water Sector in 12 developing countries, Kenya being one of them, and how the Dutch Water Sector can position itself in order to get a better access to the market.

These reports describe the physical ‘water situation’, how the water sector is being organized, the legal and policy framework, trends and entry barriers in a simple way as well. Finance and climate change are special topics in each report. These reports are available on the aidenvironment website.

Demand:
Kenya is a water scarce country with almost 80% of the lands being classified as arid to semi arid. Compared to other water OS countries, the water sector in Kenya is quite developed and the government actively pursues a number of development goals related to water. Many of the new modes of development collaboration have been tried and tested in Kenya, such as PPP alliances with local companies, governments and organizations, additionally, consortia in Kenya pioneered innovative finance for WASH. On the downside, many NGOs operate in Kenya on a project basis and while this has had a positive effect on service provision for many people, there also exists competition over water users’ participation, project fatigue and disinterest in operation and maintenance.

Current interest and activities of Dutch organizations:
Kenya ranks first in the activities of Dutch NGOs in the water sector, leading to a well-established network and knowledge base of Dutch organizations in the country. Interest of Dutch organization also includes the agricultural and particularly horticultural sector, where water demands and water treatment continues to be an issue, particularly with the foreseen expansion of irrigated agriculture. The larger infrastructural developments in the harbors and along the coast also provide engages some of the larger Dutch Civil engineering companies.

Potential product market combinations:
Product market combinations are seen in innovative financial instruments in the WASH sector where blended finance and private equity can be explored for service provision. Opportunities for the water sector in connection with agriculture exist in irrigation or water management or in connection with climate change. Other PMCs include climate smart agriculture or climate resilient agriculture/pastoralism. With 80% arid to semi arid lands it makes sense to focus on water provision for climate resilience.

Suggestions on positioning strategies for future activities:
Even though Kenya still lags behind in the provision of safe drinking water and sanitation (MDG achievement), many international and local NGOs and PSOs are represented in Kenya. Organizations without their own project funds need to be aware that program niches are few and competition is fierce. Further development of nexus links (WASH and Food security, WASH and
Innovative finance, WASH and ICT) provides new opportunities since Kenya is known to be a relatively stable environment for piloting and innovation. PPPs stand out as the best way to engage in the WASH market.

Successes and lessons learnt: examples
Kenya stands out as a country with many successes, possibly also because it is the testing ground of so many innovations. The list of successes includes several smaller organizations that piloted innovative water purification systems. Reaching scale with these systems continues to be a challenge.

Producing purified water on an industrial scale now is the Dutch Water Ltd in Mombasa which has managed to conquer the local market: "Dutch Water Limited was set up with the objective of producing as cheap as possible healthy drinking water to the Kenyan population living in the major cities (...). Due to fact that DWL is the only company that produces good quality drinking water at 10 to 20 times less than is usual within this sector, it has seen a spectacular growth in sales since 2009."

At the level of IWRM two programs stand out as successful approaches towards water management. Particularly for Dutch organizations and made possible by the EKN is the Naivasha Basin program. It entailed an assessment of the watershed and a research into the potential for Payment for Ecosystem Services or, in this case, payment for watershed services to improve the quality of lake Naivasha.

One of the most pioneering programs was the The Upper Tana Program led by ISRIC. The idea was that smallholder farmers improve green water management by enhancing rainwater management at smallholder level: "Green Water Credits (GWC) is a financial mechanism that supports upstream farmers to invest in improved green water management practices. To achieve this, a GWC fund needs to be created by downstream private and public water use beneficiaries. Initially, public funds may be required to bridge the gap between investments upstream and the realization of the benefits downstream." This would help the blue water resource management of larger industrial users such as Delmonte.

The program was funded by IFAD. Unfortunately there was no follow up from the study, one of the key issues mentioned by the report (although this was not marked as the reason which it was not taken further) was the large number of stakeholders involved in the Tana as well as from the government.

Facts and Figures

<table>
<thead>
<tr>
<th>Government type:</th>
<th>Democratic republic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language:</td>
<td>English, Kiswahili, local native</td>
</tr>
<tr>
<td>Population:</td>
<td>45,010,056</td>
</tr>
<tr>
<td>Population growth:</td>
<td>2.11%</td>
</tr>
<tr>
<td>Economic growth (GDP growth in %):</td>
<td>5% (2014), 4.7% (2013), 4% (2016)</td>
</tr>
<tr>
<td>GDP (PPP):</td>
<td>USD 79.9 billion (2013) comparison to the world: 82</td>
</tr>
<tr>
<td>GDP (PPP) per capita:</td>
<td>USD 1,800 (2013)</td>
</tr>
<tr>
<td>Unemployment rate (in %):</td>
<td>40%</td>
</tr>
<tr>
<td>Foreign direct investments (in % of GDP):</td>
<td>0.9%</td>
</tr>
<tr>
<td>ODA in % of GNI:</td>
<td>5.3%</td>
</tr>
<tr>
<td>Imports:</td>
<td>USD 15,86 billion (2013)</td>
</tr>
<tr>
<td>Import partners:</td>
<td>India (20.9%), China (15.4%), UAE (9.8%), Saudi Arabia (6.6%)</td>
</tr>
<tr>
<td>ETV Index on banking system:</td>
<td>7</td>
</tr>
<tr>
<td>In Kenya the informal sector is large, because it is expensive to start a formal business. In the year 2013 a new Micro and Small Enterprise Development Act came into force, which should ease the access to credit and should regulate the formal sector better.</td>
<td></td>
</tr>
<tr>
<td>Doing business index:</td>
<td>137 out of 189</td>
</tr>
<tr>
<td>WEF Global competitive index:</td>
<td>90 out of 144</td>
</tr>
</tbody>
</table>

Trade and Aid strategies
Aidenvironment advises Water Sector players how to combine goals on Trade and Aid. Our advice strengthens the reputation and license to operate of businesses, opens new windows for finance, and enhances growth while contributing to development goals.

Our team performs market research and advices on effective Public Private Partnerships and engagement strategies, and facilitates organizations in tapping into local networks and finance.

Interested?
Contact Frederik Claesen to find out what we can do for you.

Aidenvironment, Barentszplein 7
1013 NJ Amsterdam, The Netherlands
+31 (0)20 686 81 11
frederik@aidenvironment.org
www.aidenvironment.org

aidenvironment

October 2015
Rwanda Water Market

Opportunities for the Dutch Water Sector

Dutch Government asked Aidenvironment to advice on potential Product Market Combinations for the Dutch Water Sector in 12 developing countries, Rwanda being one of them, and how the Dutch Water Sector can position itself in order to get a better access to the market.

These reports describe the physical ‘water situation’, how the water sector is being organized, the legal and policy framework, trends and entry barriers in a simple way as well. Finance and climate change are special topics in each report. These reports are available on the aidenvironment website.

Demand:
The IMF identifies climatic vulnerability, such as flooding and droughts, as the main internal risk to growth and poverty reduction in Rwanda. Creating opportunities for more climate-resilient agriculture, for example through the construction of extensive irrigation facilities, could lead to more sustainable economic growth, as the agriculture sector employs 90% of the labor force. Losses of fertile soil due to deforestation, especially in upper watersheds, and unplanned land use changes have resulted in serious erosion problems. Lack of adequate budgets, institutional capacities (human resources, insufficient cooperation) and knowledge on IWRM are binding constraints for Rwanda to meet its increasing multiple water demands, while sustaining important economic, environmental and social functions. Although there is a large need, especially in rural areas, for WASH service delivery, budgets from main donors are declining.

Potential product market combinations:
Product market combinations are mainly seen in supporting the current reform of the agricultural sector and further development IWRM sub-sector. This can include technical support on the integration of water and soil conservation measures in agricultural practices, water management and land-use plans. Sustainable WASH service delivery (mainly in rural areas), but more importantly capacity strengthening of local CSO’s is an area which should be build upon.

Current interest and activities of Dutch organizations:
Dutch organizations active in Rwanda focus mainly on WASH, IWRM and agriculture. Water for food production as well as water for other productive purposes are seen as most interesting.

Suggestions on positioning strategies for future activities:
Dutch organizations can assess opportunities in Rwanda through the current contacts of the Dutch Embassy with governmental and private sector players in the agricultural sector. Dutch organizations can assess opportunities for local tenders, supported by the Dutch Embassy through its connections in the Joint Action Development Forum (JADF) which is recognized by Rwanda as the key platform for business integration, as well as opportunities of joint EU programming. Opportunities through instruments like PDOV and G4AW could be assessed, since there is a growing local private sector in the agricultural sector.

Breakdown of Dutch exports in the water sector to the 12 OS-countries, in % of turnover, source: Web survey Pentelis, 2014/2015
**Successes and lessons learnt: examples**

A knowledge institute works through larger Nuffic/NICHE supported programs in Rwanda. They have been successful through partnerships with local knowledge institutes and large network of alumni in the countries they are active in.

This is also reflected in the strategy used by another organization. This organization works through long term relationships with local knowledge institutes and jointly develop and acquire projects in the public and private sector markets, making use of alumni networks. Next to this, the organization learned that their independent status, as being a knowledge institute, is recognized by clients as an important asset.

A consortium won the tender for the Technical Assistance of the Integrated Water Resources Management Project, which is a project between the Dutch Embassy and the Rwanda Government. The strong consortium, the excellent reputation of all organizations involved and the combined track record led to a competitive positioning and eventually in winning the tender.

Another organization works as a trusted engineer for the Government of Rwanda. They worked on the development of the business plan for an investment program with a total value of $2 billion. This program offers many opportunities for SMEs specifically in agribusiness and food processing. The company invested in preparing a business plan themselves, which was a key factor for success. Besides this, to enter the market, the organization follows a step by step approach, which consists of:

- Participating in tenders and be successful in winning and executing projects
- Project based presence, sometimes with Dutch government support, mostly by following private sector clients, such as contractors, water companies or industry
- Multiple projects, building on local presence and experience
- Representative office, stepping up business development and project implementation
- Branch office or local company, as a basis for a permanent local presence

Cooperation with other parties is ‘key’ in this approach, especially to access the international market. The company looks for partners based on complementarities of skills, know-how, geographical presence or capacity.

---

**Facts and Figures**

<table>
<thead>
<tr>
<th>Government type</th>
<th>Democratic republic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>Kinyarwanda, French, English, Swahili</td>
</tr>
<tr>
<td>Population</td>
<td>12,337,158</td>
</tr>
<tr>
<td>Population growth</td>
<td>2.63%</td>
</tr>
<tr>
<td>Economic growth (GDP growth in %):</td>
<td>7.4% (2015), 7.4% (2016)</td>
</tr>
<tr>
<td>GDP (PPP) per capita</td>
<td>USD 1,500 (2013)</td>
</tr>
<tr>
<td>Unemployment rate (in %):</td>
<td>3.4%</td>
</tr>
<tr>
<td>Inflation rate + forecast</td>
<td>-3.1% (2014), -3.59% (2015), 0.19% (2020)</td>
</tr>
<tr>
<td>Foreign direct investments (in % of GDP):</td>
<td>1.5%</td>
</tr>
<tr>
<td>ODA in % of GNI:</td>
<td>12.3%</td>
</tr>
<tr>
<td>Imports:</td>
<td>USD 1.937 billion (2013)</td>
</tr>
<tr>
<td>Import partners:</td>
<td>Kenya (17.3%), Uganda (15.6%), UAE (8.9%), China (7.2%), India (5.5%), Tanzania (5%), Belgium (4.5%), Canada (4.1%)</td>
</tr>
<tr>
<td>Doing business index:</td>
<td>48 out of 189</td>
</tr>
<tr>
<td>WEF Global competitive index:</td>
<td>64 out of 144</td>
</tr>
</tbody>
</table>

**Trade and Aid strategies**

Aidenvironment advises Water Sector players how to combine goals on Trade and Aid. Our advice strengthens the reputation and license to operate of businesses, opens new windows for finance, and enhances growth while contributing to development goals.

Our team performs market research and advice on effective Public Private Partnerships and engagement strategies, and facilitates organizations in tapping into local networks and finance.

---

**Interested?**

Contact Frederik Claesen to find out what we can do for you.

Aidenvironment, Barentsplein 7
1013 NJ Amsterdam, The Netherlands
+31 (0)20 686 81 11
claesen@aidenvironment.org
www.aidenvironment.org

aidenvironment

October 2015
South Sudan Water Sector

Opportunities for the Dutch Water Sector

Dutch Government asked Aidenvironment to advice on potential Product Market Combinations for the Dutch Water Sector in 12 developing countries, South Sudan being one of them, and how the Dutch Water Sector can position itself in order to get a better access to the market.

These reports describe the physical ‘water situation’, how the water sector is being organized, the legal and policy framework, trends and entry barriers in a simple way as well. Finance and climate change are special topics in each report. These reports are available on the Aidenvironment website.

Demand:
The short-term demand in South Sudan is access to improved WASH facilities. The country ranks low in access to improved drinking water sources (57%) and (together with Niger) South Sudan ranks lowest in the indicator ‘access to improved WASH facilities’, with only 9% access. The need for peace and stability overshadows all other short-term needs including the need for water services, but water-related problems and the need for stability overlaps where competition over water resources fuel ethnically motivated strife. In food security, challenges are also many with droughts and flooding contributing to food scarcity. Twenty years ago South Sudan was a food exporting area, should a transition take place and the country will achieve more stability there is an enormous agricultural potential.

Current interest and activities of Dutch organizations:
Amongst the fragile nations in the water OS survey, South Sudan still has a substantial share of the Dutch interest, particularly amongst NGOs. WASH stands out as the main area of interest because of the lack of basic services. At present this interest will have diminished due to the political turmoil but this is likely to be picked up once the situation improves and funding for reconstruction and development will become available again.

Potential product market combinations:
Current product market combinations mainly focus on the provision of basic WASH infrastructure. Additionally, the country has an enormous agricultural potential compared to some of the dryer surrounding countries like Kenya and Ethiopia, particularly for irrigated agriculture. While South Sudan now depends on food import and relief food, it used to be a food-exporting nation. Other opportunities exist around development and maintenance of the navigable waterways.

Suggestions on positioning strategies for future activities:
Organizations interested to work in South Sudan are suggested to work on the development of knowledge on the lay out of the social as well as infrastructural problem around WASH. In the urban areas this could entail a mapping of wastewater flows and possibilities to work with municipal councils and with state level governmental bodies. In rural areas this should include a
risk mapping and a sociological/anthropological base
line study to get a grip on the local tensions and
possibilities. In all cases this will be through the
engagement and capacity development of local expertise.
Dutch water sector engagement in South Sudan would
greatly benefit from the regional expertise and networks
in for instance Kenya and Ethiopia.

Successes and lessons learnt: examples
The projects that the respondents recognized as a
success were financed through the EKN, but these are
few and scattered over the country. This also seems to be
an issue for many organizations in the country. Besides
the obvious setbacks due to absence of rule of law,
innovation and business development does not come in
the picture.

Some organizations described how it was impossible to
work from a business approach since the economy is not
yet at that level and the private sector virtually absent.
Another lesson was that the provision of water facilities
should be connected to the security situation. South
Sudan is still very much on the agenda of many
organizations, since the potential for programs is large, if
only there was a good way to approach it.

Pressing needs
Basic services are missing: Tearfund in 2012 reported
that one-third of the existing water points in South
Sudan are known to be non-functional due to the weak
operation and maintenance capacity, and less than 50%
of existing basic primary schools – and even fewer health
facilities – have access to safe water and sanitary
latrines. Only 20% of the population contributes to
operation and maintenance of their water supply the
past years and this number will further drop. This goes
for rural as well as urban areas. The capital Juba also has
significant water related problems, lack of wastewater
treatment facilities and improves sources of drinking
water for urbanites led to the spread of cholera mid 2014
(1250 victims registered).

Data collection ceased and most monitoring stations
were destroyed. The data gathered is still of great value
and can be used, along with data from new monitoring
stations, to build a new hydrometric record and knowledge
base. The older data is said to be located in the Ministry
of Water Resources and Irrigation in Khartoum; only a
portion is available within the MEDIWR in Juba at the
Water Information Management System.

Facts and Figures

<table>
<thead>
<tr>
<th>Government type:</th>
<th>Presidential republic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political situation:</td>
<td>Formerly an autonomous region of Sudan, in 2011 South Sudan hived off to become independent from the country with which it had longstanding conflicts.</td>
</tr>
<tr>
<td>Language:</td>
<td>English (official), Arabic, local languages</td>
</tr>
<tr>
<td>Population:</td>
<td>11,562,695</td>
</tr>
<tr>
<td>Population growth:</td>
<td>4.12%</td>
</tr>
<tr>
<td>Economic growth (GDP growth in %):</td>
<td>-42.1% (2012), 27% (2013), 8% (2014), 8.5% (2015), 9% (2016)</td>
</tr>
<tr>
<td>GDP (PPP) per capita:</td>
<td>USD 1,400</td>
</tr>
<tr>
<td>Unemployment rate (in %):</td>
<td>12%</td>
</tr>
<tr>
<td>Inflation rate + forecast 2020 (in %):</td>
<td>5.1% (2014), 3.97% (2015), 1.79% (2020)</td>
</tr>
<tr>
<td>Foreign direct investments (in % of GDP):</td>
<td>3.02 as of 2011.</td>
</tr>
<tr>
<td>ODA in % of GNI:</td>
<td>15.9%</td>
</tr>
<tr>
<td>Doing business index:</td>
<td>187 out of 189</td>
</tr>
</tbody>
</table>

Trade and Aid strategies
Aidenvironment advises Water Sector players how to
combine goals on Trade and Aid. Our advice strengthens
the reputation and license to operate of businesses,
opens new windows for finance, and enhances growth
while contributing to development goals.

Our team performs market research and advises on
effective Public Private Partnerships and engagement
strategies, and facilitates organizations in tapping into
local networks and finance.

Interested?
Contact Frederik Claasen to find out what we can
do for you.

Aidenvironment, Barentsplein 7
1013 KJ Amsterdam, The Netherlands
+31 (0)20 686 81 11
claasen@aidenvironment.org
www.aidenvironment.org

aidenvironment

October 2015