

Partnerships

Knowledge

Solutions

Delivering sustainable water supply solutions through high quality polyethylene pipes in Kenya

In Nairobi, Kenya's capital city, it is estimated that 60% of its 4 million residents are living in informal settlements and most are poorly served with water and sanitation. The majority of the residents buy water from water vendors and are paying much higher prices than those receiving piped supplies. Although the local water provider, Nairobi City Water and Sewerage Company (NCWSC), are organised to supply these communities, high water losses from poor infrastructure and illegal connections reduce their overall revenue, making it difficult for them to make the necessary investment.

Four partners have joined forces to plan, fund, and implement the programme: Water & Sanitation for the Urban Poor (WSUP); Borealis and Borouge under the umbrella of their corporate social responsibility programme Water for the World™; and the OPEC Fund for International Development (OFID).

The Mukuru Sinai and Korogocho settlements have been initially targeted and WSUP will lead the project supporting the NCWSC to develop both the physical infrastructure and the commercial framework that will underpin the new water supply system. The new infrastructure will be produced from high quality PE100 material provided by Borouge to ensure a long maintenance free life.



It is estimated that 60% of the 4 million residents of Nairobi in Kenya are living in informal settlements, on just 5% of the land. Most are poorly served with water and are forced to buy from street vendors.

Water & Sanitation for the Urban Poor plan to work with the local water provider, Nairobi City Water and Sewerage Company to deliver safe and reliable water to over 50,000 residents for a tenth of the price they currently pay street vendors. Co-funded by the OPEC Fund for International Development (OFID), Borouge and Borealis with implementation and project management from WSUP, the programme will run over the next two years.

Kenya is undergoing rapid urbanisation, with most migrants from rural areas moving into informal settlements around the major cities. In the capital Nairobi, 60% of its 4 million population are currently living in informal settlements and this is expected to grow to 75% over the next 15 years. These settlements offer only basic housing with few, if any, water, sanitation and power utilities. The local utilities often lack the resources and expertise to equip and serve settlements with reliable and safe drinking water. As a result, fewer than one in five households have piped water connections, so often the only source of safe drinking water is from high-priced street vendors.

Supporting the local utility to provide improved water services to the settlements

Although the local water provider, Nairobi City Water and Sewerage Company is organised to supply clean water to these communities, high water losses from poor infrastructure and illegal connections reduce their overall revenue, making it difficult for them to make the necessary investment. WSUP works with local water utilities to strengthen their capacity and help them to develop a commercially viable approach to deliver water services to communities and they have had considerable success using this model in Bangladesh, Ghana, Kenya, Madagascar, Mozambique and Zambia. In this project WSUP plans to work with NCWSC to deliver safe and reliable water to over 50,000 residents of the settlements of Mukuru Sinai and Korogocho for a tenth of the price they currently pay street vendors.

Borouge and Borealis became members of WSUP in 2007 as part of their "Water for the World" initiative and in addition to co-funding this project will support WSUP by training the local water utility on the use of polyethylene pipes for water distribution and advising them on system design and ensuring that the locally produced pipes and fittings are manufactured to a

high quality standard. This follows an earlier WSUP water project in Lusaka, Zambia, where Borouge trained the local water utility and undertook a site inspection to advise them on material selection.

Improving the quality of the plastic pipe industry in Kenya

Borouge has been actively working in Kenya for a number of years encouraging the local plastic pipe producers and the Kenya Bureau of Standards (KEBS) to raise product standards. Partly this has been supporting the KEBS Annual Plastic Pipes Conference since its inception in 2009, with sponsorship and technical presentations. In 2012 Borouge also organised a Plastic Pipes Training Day prior to the KEBS event together with the European pipe producer Wavin. This provided the conference delegates including local consultants, water utility engineers and government official with a firmer grounding on plastic pipes.

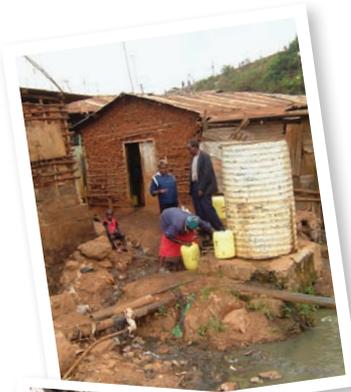
In 2013 Borouge and Borealis and WSUP attended the IWA Development Congress and Exhibition in Nairobi was attended by over 1,000 academics, engineers, scientists and specialists in water and sanitation. It was a good opportunity for WSUP to educate representatives from many different East African utility organisations. From these discussions, it was clear that although they were making use of PE100 pipes and fittings in their networks, their knowledge was very limited.

Funding of the project

The two year programme in Kenya is co-funded by the OPEC Fund for International Development (OFID), Borouge and Borealis with implementation and project management from WSUP. The programme will run over the next two years.

Water & Sanitation for the Urban Poor (WSUP) is a partnership between the private sector, NGOs and research institutions focussed on solving the global problem of inadequate water and sanitation in low income urban communities. Through their work over one million people living in informal settlements have improved water services and more than 750,000 have improved sanitation services.

The OPEC Fund for International Development (OFID) is the development finance institution established by the Member States of OPEC in 1976 as a collective channel of aid to the developing countries. OFID works in cooperation with developing country partners and the international donor community to stimulate economic growth and alleviate poverty in all disadvantaged regions of the world.



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For more information on Borouge PE100 visit: www.borouge.com



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