

Supplying of Safe Drinking Water to Ethiopia People with Excellent Water Technologies of Korea

• CONTENTS •

1. Overview	1
2. Background	2
3. Major Aspects	2
4. Source	4

1. Overview

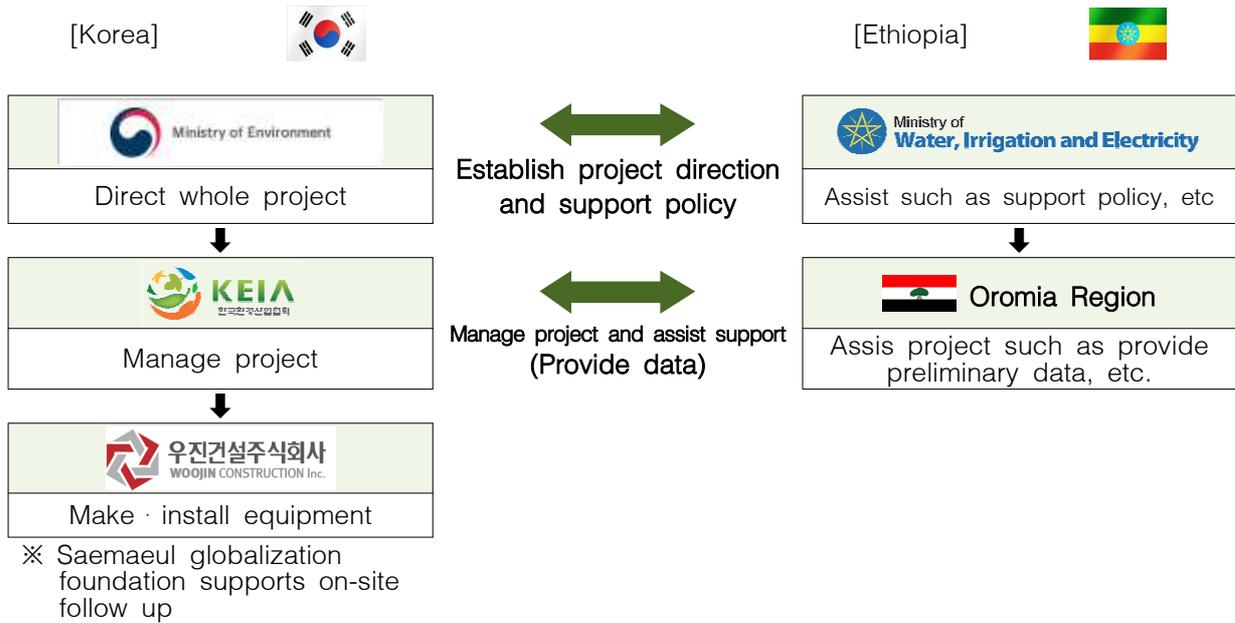
- The Ministry of Environment held the completion ceremony of 'Ethiopia's small-scale village waterworks installation project'* in April, 2017 at Kentary, Oromia Region near Adis Ababa, Ethiopia to provide clear and clean drinking water to the people of Africa.

* Location of installation : Kentary village in Oromia Region, Ethiopia is Located 110km south from Adia Ababa, capital of Athiopia.

- The MOE's Africa small-scale village waterworks installation project is being carrying forward to one African country each year such as Nigeria in 2012, Kenya in 2013, Tanzania in 2014 and Mozambique in 2015 starting from Ghana in 2011.

2. Background

- Installs the customizing small-scale waterworks facilities and builds up the entry base to overseas of domestic environmental enterprises by carrying forward the environmental (water · sanitation) cooperation pilot project at Ethiopia where is short of clean and safe water.



3. Major Aspects

- The construction of 'Ethiopia small-scale village waterworks project' was started with the budget of 400 million won from March, 2016.
 - Aims at supplying clean and safe drinking water to about 5,000 people by installing the container type filtration system at Kentary village in Ethiopia through the cooperation of MOE with the Ministry of Water, Irrigation and Electric Power in Ethiopia.
 - Details of project

Main item	Details
Install waterworks facilities	Container type mobile water treatment facility(daily capacity 150m ³ /day)
Dispatch experts and strengthen capability	Design and install applying water treatment technology suiting the local
	Train the site-operating personnel(operation and maintenance)
	Provide training on operation-maintenance of water facility and develop teaching material
	Contribute to the improvement of life environment by supply of safe drinking water
Follow-up	Monitoring and follow-up operation for continuous usage of facilities

- Progress of project promotion

- Signing minutes agreement of Korea-Ethiopia for project promotion (Apr, 2016)
- Woojin E&C was selected as project executing contractor (Aug, 2016)
- In-site survey and final decision of installation site (Aug, 2016)
- In-depth investigation of installation site and technical working-level meeting of two nations of Korea-Ethiopia (Dec, 2016)
- Design · supplementation and manufacturing equipment (Sep, 2016~Jan, 2017)
- Shipment and transport, commissioning (Jan, 2017 ~ Apr, 2017)
- Completion ceremony (Apr, 2017)

<Container type water treatment facility>



<Replacement of water tank and additional installation of support fixture>



- Follow-up

- Water treatment facility is operated under the jurisdiction of village's Water Committee by the exclusive personnel who received the training for facility management from Woojin E&C, and the village collects the water fee and autonomously comes up with the finance to operate the water treatment facility through separate management account
 - Consumables · replacement for water treatment facility are provided with the quantity available for next 2 years in addition to first batch.
 - Since the installed equipment includes the compatible components so far as possible, consumables and replacement can be available in the field without difficulty.
- The MOE expects the customizing small-scale village waterworks installation project matching the African real state to help the domestic environmental enterprises create the base to enter the African water market.

- Woojin E&C, an executing company of this project not only installed container type water treatment facility applying reverse osmosis technology but also provided the new ancillary facility such as shower, wash basin, wash place, etc which villagers can use together.
- Also, Korea Environmental Industry Association, an executing agency presented water bottles, school supplies, etc which about 200 person can use for Kentary village people.
- Expected effect of 'Ethiopia small-scale village waterworks installation project'
 - In the underground water at the region contained fluorine(10.mg/L), salt, other E.Coli, total coliform group, Fecal Coliforms, etc which far exceed the acceptable standard of World Health Organization (WHO).
 - The residents had suffered from tooth discoloration, poor growth of frame, backache, arthritis, osteoporosis, etc due to overdose of fluorine as well as various kinds of water borne diseases.
 - It is expected to prove the effectiveness of project by supplying the safe and sanitary drinking water to the demonstration village and based on this, it is expected to provide the opportunity for the domestic environmental enterprises to enter the local market.
- The MOE said, "The successful performance of this project can supply healthy water to Ethiopia and thanks to it, excellent technology of the domestic water industry will be able to be connected to various succeeding projects in Africa."

4. Source

- Ministry of Environment (www.me.go.kr)