

Yemen to launch first desalination project

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Several cities in Yemen are threatened with water shortage. Taiz city is one of the cities suffering from severe water problems especially since the city is one of the most populated areas in Yemen with over two and half million inhabitants. Until recently, desalination was not an option despite the fact that Yemen has the longest sea coast in the Middle East of over 2000 kilometers across the Red Sea and Arabian Gulf. However, since modern technology has helped reduce the cost of desalination, Hayel Saeed Group of Companies has just constructed the first desalination unit in Al-Makha coast to supply their factories and companies with clean water.

Sea water will be desalinated in Al-Makha and fresh water will then be transported to Taiz city using large 50,000 liters water trucks, through this project, fifty trucks will be dedicated to daily transmission of water from the port to Taiz city.

According to Ahmad Abdo, co-director of the Al-Makha Desalination Unit, the unit is now capable of desalinating 4,500 cubic meter per day. Half of the water produced is used by the Hayel Saeed Group of Companies while the other half is sold through a water retail point to residents and businesses in Taiz.

Transportation costs is yet an issue that the unit is working on resolving because by the time fresh water reaches the city, the cost has tripled from YR 400 per cubic meter to YR 1,200. Despite this cost, the water shortage in the city is so severe that citizens are considering buying desalinated sea water favourably.

Ahmad believe that desalinating sea water will soon become the best solution for Yemen's water problems even for cities far away from the sea.

Expansion of the desalination units

General Manager of Desalination Project in government-run National Water and Sanitation Authority (NWSA) Taiz Branch – Hasan Mujahed said that there will be joint cooperation between the government and the private sector to expand the desalination project to supply the whole Taiz City with water.

The work will be with Hayel Saeed Ana'am Group. The existing desalination unit they have in Al-Makha will be expanded.

He said that four units will be constructed in Al-Makha as a joint venture between the government and the business group. He added that for more sustainable transportation, a network of pipelines will be constructed and the costs of constructing the pipelines from Al-Makha to Taiz city will be funded by Saudi Arabia. Last week, prince Crown Prince Sultan bin Abdul-Aziz agreed to support Yemen with USD 220 million for constructing the pipelines.

According to Mujahed, four units will be constructed in Al-Makha, with a total production capacity of 150 thousand cubic meters per day. The project will be implemented in three stages: the production in the first stage will be 50 thousand cubic meters daily, then 100 thousand cubic meters daily in the second and third stages.

The pipeline will be 120 centimeters in diameter to be extended from the desalination units in Makha to Taiz city and then to Ibb city. Then four pumping stations will be constructed across the pipeline in Taiz and another four across the pipeline to Ibb.

As for the consumer end two main water selling points will be built one in Taiz and the second in Ibb. Every one of them will contain 20,000 cubic meters. Several distribution points will be built in the two cities.

Yemen's coast is 2500 km long and has 9 governorates overlooking the Red and Arabian Seas.

However, General Manager of NWSA Fuad Al-Jabery said that Taiz city currently consumes 56,000 cubic meters of water on daily basis. "When the project starts, the individual's share of water in Taiz will raise from 30 liters a day to 60 liters," he anticipated. The expanded capacity also means that by producing 150,000 cubic meters per day water could be distributed to Ibb governorate, according to Mujahed.

Spokesman of Hayel Saeed's Office in Taiz, Abdul-Ghani Abdulrab said the desalination project will be run by Saudis as the Saudi Projects Authority will carry out the pipeline project from Al –Makha to the city of Taiz and the unit will be constructed by Saudi companies.

He said that Hayel Saeed Group will be only a local [partner with the Saudi company. He added that more information about the project will be disclosed to the public soon including details on management of the wole project and its construction phases.

Minister of Water and Environment Abdulrahman El-Iryani said desalinating water from the sea is the most important solution to water crisis in Yemen although transporting desalinated water at a reasonable cost to remote and mountainous areas will remain a challenge.

He explained that people in such areas cannot afford to pay for the water bill as the price one cubic meter already was put as US seven dollars.

Although people in coastal areas and other neighbouring areas like Taiz and Ebb will be able to buy water at a cheaper prices.

Despite the optimism about the newly created water project, Dr. Gerhard Lichtenthaeler, the Manager of Integrated Water Resouces Management In GTZ Yemen says supplying people with desalinated water from the sea will not be fruitful because of bad water network in the country. Most water networks in Yemen cities are leaking and need maintenance.