

Jordan

Groundwater to save the capital, for a while

Bundles of massive pipes lay along the 30 kilometre road from Amman's main airport to the city, giving commuters an unusual scene to behold, and the government a tough bargain to quench the thirst for rapid economic development.

A taxi driver explains that these pipes will be installed along a stretch of 350 kilometres to the Disi aquifer in the south of Jordan.

"There is no other solution to provide water," he said, pointing at two high rise buildings towering the city as we approach it. "If you flush the toilets in those buildings at the same time, half the water in Amman would be consumed."

With only 90 litres of water available for use per capita a day, Jordan is reportedly one of the world's 10 poorest countries when it comes to water resources. Almost half of the country's population of 6 million resides currently in and around the capital, Amman, which has witnessed several major immigration waves since the 1960s, adding on a 2.5 per cent growth rate's pressure on its resources and infrastructure.

Speaking to the Stockholm Water Front on a dry Amman winter day, Jordanian Minister of Water and Irrigation Mohammad al Najjar explained that demographic changes continue to decrease water shares per person. This compels the central government to "find non-conventional and expensive new resources to make the best of the situation."

Consequent governments since the 1980s have been working on the terms of pumping water from the Disi groundwater basin across the border with Saudi Arabia in the far south of the country. The project seems to be going on full speed, after two decades of sketch designing, performing feasibility studies, and long halts caused by corruption investigations, stagnant negotiations with Saudi Arabia, alleged radium pollution, and the hard resistance of landowning tribes who have exploited its waters "illegally."

Halts are still causing problems for both the government and the Turkish Build-Operate-Transfer contractor. A few weeks after speaking to the minister in January, deadly demonstrations were taking place near Ma'an, the largest city in the proximity of the aquifer. Residents went as far as burning down local buildings of authorities in protest against the central government's alleged neglect of their needs, and disregard to their right to the water on lands they

maintaining much aspired desalination, nuclear power and other plants.

Local bananas

Jordan applies strict cost-recovery measures through its tariff collection system, in its bid to manage the demand for domestic water use in urban areas. However, rapid, urban, demographic, climate and economic changes require stricter measures as the country tries to find new resources

and use the current resources as effectively as possible. For example, much can be done to avoid waste in other sectors such as agriculture in the Jordan Valley. Some private firms have already moved food production to lands in African countries such as Sudan, but many still bank on the Jordan valley to produce vegetables and fruits closer to potential export and local markets.

Driving towards the valley, a horizon of banana trees stretches over the area north of the Dead Sea, which intake drops one metre per year due to the overuse of water from the Jordan river, and due to evaporation caused by heat.

According to the water ministry's

Jordan Valley Authority chief Saad Abu Hammour, who is the responsible for water allocation in the area, they had to decrease water used for irrigating citrus trees in the area in 2010, as three dams feeding the area ran out of water due to draught. He says rain accumulation has dropped severely due to climate change in the past two decades, while heat waves in winter have been forcing farmers to use scarce water resources to cool off already thirsty farmland.

Asked whether the water ministry should do something about banana production, which consumes more water than many



Water will be pumped from the Disi aquifer along approximately 350 kilometres to Amman

owned, and providing water, jobs and contracts to foreigners instead. However, the minister insists that construction will not be affected by the delays in the southern area.

Once operational, the project will provide the capital with 100 million cubic metres of drinking water per year for about 100 years, before it is depleted. Jordanian authorities have other cards on their planning table, such as desalination in line of a conveyance canal linking the Red Sea in the south of Jordan to the Dead Sea, supplying enough hydro-energy in the process to make up for

other options, Abu Hammour commented that this is not the water ministry's job. "This task should be allocated to the Ministry of Agriculture, not ours." He comments that scientists offer solutions, but offer no definitive expectations on how climate changes will affect the region.

Meanwhile, the authority continues to work on managing the little water resources they have access to.

"But, what shall I do to solve the rain shortage?" he asks himself. "I can only pray that God will send more water".

Rami Abdelrahman, SIWI Communications Officer. Rami has been working as a journalist covering water related issues in the Middle East and elsewhere for the past 10 years.



The Jesus baptism site by the drying Jordan river.