

by Mark Lazell

mark.lazell@traderabia.net

**T**HERE is an old, if rather obvious, Arab proverb that says 'in the desert, water is worth more than gold'. But in the Gulf states with their tree-lined highways and championship grass golf courses, little effort is being made at water conservation.

UK risk analysis firm Maplecroft, which in May published its latest Water Security Risk Index, a measure of 'water stress' in 168 countries around the world, labelled Bahrain, Qatar, Kuwait and Saudi Arabia as the world's most 'water stressed' countries.

Gulf states, which meet nearly all their water needs by desalinating seawater, are facing growing warnings over their unsustainable water consumption levels.

Despite the yawning gap between water demand and naturally replenished supplies in the Gulf, the region's rapidly growing populations are among the world's biggest per capita water consumers. Each person in Kuwait, for example, consumes a 530 litres per day on average, compared to 330 in Canada and 120 in the UK.

Like most Middle East countries, the Gulf Co-operation Council (GCC) countries are also well below the 'water poverty line' of 1,000 cubic metres (cu m) of naturally available water to each person every year. Each person in Qatar, for example, has less than 200 cu m of naturally available water every year.

Analysts agree that not enough is being done to address water shortages in the region; few are confident about the sincerity of Gulf governments when

## WATER SHORTAGES

# When the taps run dry

As the Gulf swelters under the blazing summer sun, the region's governments need to do more to address critical water shortages which threaten growth and stability

it comes to stated goals of conservation and sustainability.

"In most cases regional governments have no strategies [to address water shortages]," says Najib Saab, secretary general of the Arab Forum for Environment and Development (AFED) based in Lebanon. "They mostly behave as if they have unlimited water."

However, last month Saudi Arabia's deputy water minister Mohammed al Saud announced that water was "the most constraining factor in the growth of Arab countries." Loay al Musallam, head of the kingdom's state-owned National Water Company, also admitted the kingdom would be unable to meet

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its water needs by 2025.

Part of the problem is the generous state subsidies in the GCC that make water virtually free. Yet removing or reducing water subsidies, especially as the Arab Spring turns to summer, would be politically risky in some Gulf countries which have seen unrest or





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**Najib Saab, Arab Forum for Environment and Development**

tion," he argues. "Elsewhere, fiscal measures are imposed to ensure fair water pricing."

In poorer Arab states, the water crisis cannot wait for debates over tariffs and public awareness campaigns to bear fruit. The taps have already run dry in Yemen. Geert Cappelaere, UNICEF's Yemen representative, says 60 per cent of the residents of the capital Sana'a receive water by truck, not via a mains network. Agencies warn it could be the world's first capital city to run completely dry within 14 years, a dangerous humanitarian prospect for an already politically volatile country.

Despite phasing out its disastrous 30-year wheat production effort, which sucked most of Saudi Arabia's un-replenishable groundwater in a bid to achieve self-sufficiency, the kingdom has established a highly successful dairy industry. It has done this against the climatic odds, but it has come at a high cost environmentally.

"Saudi Arabia cannot continue to be the region's biggest exporter of dairy products," says Saab, who points to the kingdom's depleting aquifers. "For every litre of fresh Saudi milk produced, 1,000 litres of underground water is needed to grow fodder. Do they think this water can be replaced? Dairy exports from Saudi Arabia should only be permitted if fodder is imported."

One tried and increasingly favoured solution for some Gulf states in recent years has been to grow food in regions of the world where water is more plentiful, such as the Far East, effectively importing 'virtual water' through crops. Indeed, water shortages at home have provided the hidden impulse behind many land deals.

However Saab suggests some



brewing discontent this year.

Deutsche Bank analyst Nabil Ahmed says the burden of subsidies on national budgets is unsustainable in the long-term.

"This calls for tariffs hikes, more emphasis on efficiency and creates a perfect case for privatisation, which we believe will take time to materialise," he observes in a research note.

Al Musallam also argued at the recent Gulf Environment Forum in Jeddah that eliminating water subsidies is "the only way to control ever increasing demand."

However as Kimberlee Myers, Maplecroft's principal environmental analyst explains, conserving water

without intensifying poverty is a difficult balance to strike.

"Governments have to balance putting a price on water without exacerbating poverty," she tells *The Gulf*. "What is really important is education about water stress and how serious the problem is. Nobody wants to pay more, but it is fundamental for people to understand why they need to and why this will be good for their country."

AFEB's Saab says fair water prices should lie at the heart of better water management.

"Lack of fair pricing is the main reason Gulf countries have among the world's highest water consump-

► solutions to the Arab world's water and food security problems could lie closer to home, rather than in the distant fields of the Far East.

"Little is done to invest in agricultural programmes in Arab countries such as Sudan, which has fertile land and water but which also has the region's lowest agricultural production per hectare," he says.

A lack of consensus among Arab countries to pursue a common water policy is also a source of frustration.

"Region-wide policies would be ideal if governments could agree and implement them accordingly," says Maplecroft's Myers. "One of the biggest problems is that water is a trans-boundary issue between states that might not get along, which is why in a lot of cases, people are trying to decentralise the basic undertaking of using less water."

"In a lot of countries there are so many different agencies that deal with water, which makes it more difficult to manage," she continues. "So you have not only water going from country to country, but from district to district and without wider state and regional co-operation it is a very difficult issue to address."

Saab says to achieve truly regional water co-operation would require a dramatic overhaul of the way political blocs operate.

"Arabs should forget the notion of the Arab Nation – which over the years has got us nowhere but only some nice poetry – and think of developing the Arab League into something practical like the European Union, an economic coalition which can think about how to share water and land resources," he explains.

Until this happens, policymakers and environmentalists are faced with finding local solutions to local water issues, increasingly with private sector involvement. US firm, DuPont, which develops water management technologies, says Middle East governments spend more than \$130 billion on water and wastewater management solutions every year, the bulk of which is channelled into water treatment, desalination and recycling.

"The Gulf region remains the world's



Photo: Mohammed

## Middle East governments spend more than \$130 billion on water and wastewater management solutions every year

largest market for water desalination and local municipalities are seriously examining ways to double existing capacity to meet regional demand," says Fady Juez, managing director of Metito, a UAE-based water solutions specialist.

Desalinated water may meet demand for now, but deep concerns remain about the depletion of natural underground water stocks.

Maplecroft presents a case for underground water shortages pushing oil prices up, possibly to the detriment of the global economy. It highlights that

six of Opec's 12 members – Algeria, Iraq, Kuwait, Libya, Saudi Arabia and the UAE – are in the highest water risk category in its Water Stress Index, while Iran and Qatar are rated 'high risk'. It notes that these countries, which collectively produced 45 per cent of all oil in the world in 2009, use large volumes of ground water to boost oilfield production.

"If sufficient water is not available productivity will decrease, which could significantly affect global oil supply and prices," the study warns.

Saab, meanwhile, believes trans-boundary water issues will continue to play a role. One regional example environmentalists point to is the Arab-Israeli conflict, which they say is not just about land, but just as crucially about the water which flows through it. The 1967 Six Day War, had its origins in a water dispute over moves to divert the River Jordan, Israel's main source of fresh water.

"Will water be a source of conflict? Certainly. But we shouldn't limit it to Israel," Saab concludes. ■