

Water 'essential' to UAE security

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An adequate supply of clean, fresh water is vital to the security of the UAE and the entire MENA region, according to the director of the Abu Dhabi-based Arab Water Academy.

“Water security means also food security, energy, climate change. It is tightly linked to crucial security issues,” says Dr Asma el Kasmi, the first director of the two-year-old academy. “This region will be the most strongly hit by the effects of climate change on water. If we do nothing, it’s not only the problems of the water manager, it will really affect overall security.”

Yet the UAE, which is one of the world’s most arid countries, holds the dubious distinction of being among the biggest per capita water users and the leading per capita consumer of bottled water.

Both statistics are troubling to Dr el Kasmi, a Moroccan scientist who earned PhDs from French and US universities and was a chemistry professor before applying her intellect to solving regional water problems.

In this latest chapter of a wide-ranging career, she is in charge of teaching officials from the MENA region and industry executives how to implement programmes for using water more efficiently and why it matters.

“It’s not only about being able to take a shower. We have four times the people in the region dying from diarrhoea than in the Caribbean and Latin America,” Dr el Kasmi says.

The UAE’s profligate use of water is linked to the recent construction boom. Mixing cement consumes plenty of expensively desalinated water, as does keeping luxury villas cool and lush gardens green. It is agriculture, however, which consumes two thirds of the water used in Abu Dhabi, the largest emirate.

Farmers whose wells run dry get desalinated water at heavily subsidised rates that do not encourage conservation. Moreover, many farmers here are sceptical about using recycled wastewater for irrigation, fearing the practice could contaminate crops with pathogens or toxic chemicals, or destabilise soil structure.

Such potential problems can be overcome by modern water-treatment systems.

The nation’s officials do not need convincing of this. When it comes to the importance of water conservation, they are supportive. “We need to convince [people] that water here isn’t a free resource. It’s not even a natural resource, it’s man-made. It is costly, and it has a big environmental impact,” Mohammed Daoud of Abu Dhabi’s Environment Agency recently told Reuters.

Dr el Kasmi believes that could hinge on changing social attitudes by talking to the people in charge of household water decisions.

“It is lack of awareness,” she says. “People don’t think it’s up to them. They think water conservation should be up to the government or the companies.

“People can’t be blamed for not following best practices if you don’t show them what is available. We need the knowledge to provide people with the tools with which to act.”

As the chairwoman of a UNESCO committee on water, women and decision power, Dr el Kasmi earlier worked with village women in Morocco and other MENA countries, showing them how their families could benefit from water recycling and conservation programmes. “Many girls don’t go to school because they have to fetch water,” she says. “Therefore women should be associated with power of decision. It is important to get them more into the planning of water allocation.”

Other researchers have reached the same conclusion.

In the remote town of Tannoura in Lebanon’s Bekaa valley, it was the local women who persuaded their husbands to contribute to a fund to meet the town’s 10 per cent share of financing for an International Development Research Centre grey water recycling programme to provide irrigation for vegetable gardens. Grey water is the wastewater from household activities such as washing and laundry.

“The arrival of the grey water treatment-and-use-project in the town, in early 2006, was praised by all the residents and especially the women, since they are in charge of water management in the houses,” wrote Nadine el Hajj in a report on the project. “They felt that the used water could be allocated for irrigation, would improve food security, and most importantly would save them trips for hauling water from the polluted town spring.”

Dr el Kasmi was asked to head the Arab Water Academy after she had taught courses in the UAE on women’s leadership in water management and on water governance.

“We have very high hopes in what the academy could accomplish,” she says. “We are getting involved in a full programme in water diplomacy in co-operation with the Arab League.”

One of her tenets is that if you solve a problem on a small scale, the success can be replicated and eventually adopted at higher levels.

“Recycling technology is not new. The region has been looking into these mechanisms for 10 to 20 years, but the problem is the application and acceptance by the population,” Dr el Kasmi says.

And on drinking bottled water when ultra-pure desalinated water is available from the tap: “This

brings me back to the role of women. The water is in the house, but education still is needed. I drink the tap water in the UAE.”