



**Harvard Kennedy School Energy Policy Seminar Series, Spring 2014**

## **The Water-Energy Nexus in Oman and Abu Dhabi**

**Monday, March 24, 2014**

**By Louisa Lund, Program Director, Consortium for Energy Policy Research**

“Why have agriculture in the desert?” asked post-doctoral fellow Mattijs van Maasakkers in his talk in the energy policy seminar on Monday, in a talk which shed light on the kinds of obstacles that may stand in the way of greater energy efficiency, even when efficiency measures might be economically rational.

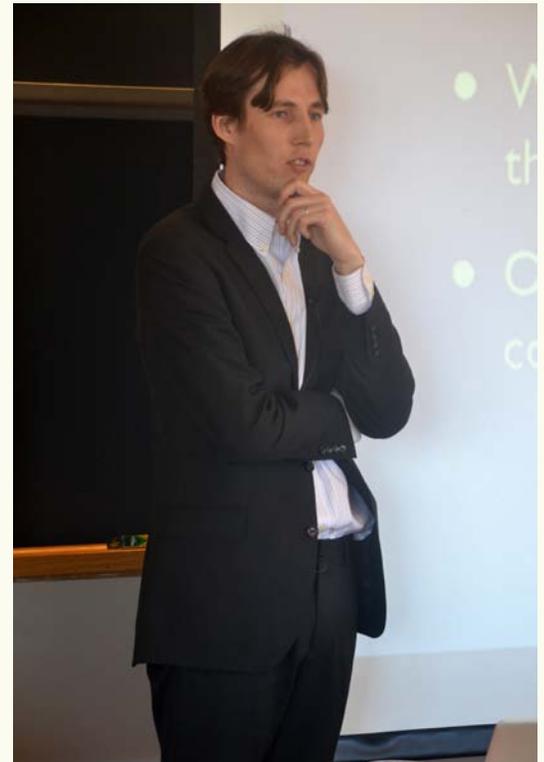
The puzzle of why two arid countries support agriculture has emerged as a central research question for Van Maasakkers, who gave an overview of his ongoing comparative study of the agricultural sector in Oman and Abu Dhabi, two of the most water-scarce countries in the world. Both countries devote a significant share of their water to maintaining agriculture, a practice which increases energy consumption as well, due to increased need for water desalination and water pumping. In both countries, water use for agriculture is causing groundwater depletion, and in both countries, the agricultural sector accounts for 1% or less of the GDP. The economics only work for individual farmers because of massive water and energy subsidies. So why do governments in both countries continue to support the agricultural sector?

Van Maasakkers is approaching the problem in terms of understanding the relevant “socio-technical imaginaries” in each country, a conceptual framework developed by HKS professor Sheila Jasanoff to focus on how collectively shared ideas may shape national policies in ways that might not be predicted by a straightforward cost-benefit analysis.

To do this, Van Maasakkers traced the origins of agricultural policies in the two countries. In Abu Dhabi, a tradition of land grants began as a policy to help settle the population, and continues to this day as an entitlement program for qualifying citizens (an elite group). In Oman, in contrast, Van Maasakkers found a long tradition of community agriculture and shared traditional irrigation systems.

Based on his research (consisting of interviews, policy and document analysis, and participatory observation) Van Maasakkers sees some differences in the policy visions related to agriculture in Oman and Abu Dhabi. Where Abu Dhabi conversations tend to discuss the role of agriculture in terms of stability, individuality, and food security, Van Maasakkers’s research in Oman found themes of collaboration, economic resilience, and “Omanization,” (strengthening Omani industries and high-level employment).

What are the policy implications of these different agricultural visions? In both countries, the intention seems to be to continue to support agriculture, though steps have been taken to reduce water use (cutting subsidies for water-intensive crops, for example). In Abu Dhabi, however, the emphasis going forward may be more on seeking new water sources (other than groundwater), which seems to leave the way open for unlimited spending and energy use dedicated to techniques like desalination. In Oman, in contrast, the emphasis seems to lie more with demand management, with a clearer connection to the costs of water usage. In both countries, the availability of cheap energy seems to be crucial to the feasibility of agriculture policies.



Van Maasackers spoke as part of the Kennedy School's Energy Policy Seminar Series, which is jointly sponsored by the Energy Technology Innovation Policy research group of the Belfer Center on Science and International Affairs and by the Consortium for Energy Policy Research of the Mossavar-Rahmani Center on Business and Government.