
University of Pennsylvania
Institute for Environmental Studies
Presents



Solomon H. Katz

University of Pennsylvania and the Metanexus Institute

World Water and Food Problems:
Scientific and Moral Dimensions

Throughout human evolutionary history, water has always been a critical resource. However, with the advent of agriculture over the last 10,000 years, the role of fresh water in raising the productivity of the human food chain has increased dramatically along with immense increases in population size. Since adequate water resources were essential for this agricultural success, many secular controls and sacred rituals to conserve water became deeply embedded in most agricultural societies. When water ran low over the last 10,000 years due to climate changes, most civilizations either solved their water problems and survived, or collapsed due to water shortages.

Today humanity faces large and looming water crises in many areas of the world, possibly precipitated or certainly exacerbated by human-induced global warming. Overall these problems are probably collectively larger than at any other time in human history. By 2025, when another nearly 1.5 billion people will be living on Earth, potable water supplies will be in much worse condition than they are now. There will be serious shortages for about two-thirds of these new people and overall water demands will exceed available supplies by 56% using today's standards of use. With the green revolution, world food production per capita during the last 30 years has increased, but it is not clear if this level of production will be sustainable given very rapid climate changes now occurring throughout the world.

How we address these problems at a global level is critical. This presentation will first explore the scientific basis of water and food problems and then assess the degree to which the rapidly expanding worldwide 'religion and science' dialog has the potential to address and help solve these problems.

Date: March 30, 2005

Time: NOON - 1:30 pm

Place: Carolyn Hoff Lynch Auditorium

On the Penn campus: Chemistry Building:
34 & Spruce Sts. (enter on 34 St)

NO REGISTRATION REQUIRED

Direct questions to: 215-573-3164

ies_penn@sas.upenn.edu

<http://www.sas.upenn.edu/earth/ies>

NO FOOD OR DRINK PERMITTED IN THE AUDITORIUM
