

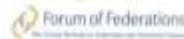


WATER SECURITY, RISK AND SOCIETY

International Water Security Conference

16-18 April 2012, St Hugh's College, Oxford, UK

Lead sponsor:



Plenary speakers

PROFESSOR JERSON KELMAN

CEO of Light S.A., Federal University of Rio de Janeiro



Jerson Kelman is a Civil Engineer and Ph.D. on water resources. He is professor at the engineering graduate school of Rio de Janeiro (COPPE), Brazil. He was the president of two Brazilian governmental authorities: on water and on electric energy. Currently he is the president of Light, the Power Company of Rio de Janeiro (with 4 million consumers). Kelman has been a member of several boards: Brazilian Sustainable Development Foundation; ABENGOA International Advisory Board, UNESCO Institute for Water Education in the Netherlands; Brazilian Councils of Energy, Environment and Water Resources. In 2003, he received the King Hassan II Great World Water Prize.

Session: 16 April 17:30-19:30 A RISK PERSPECTIVE ON WATER SECURITY

Small probability events that could cause water supply collapse – how to deal with them?

We examine two cases where the water shortage probability is low and the severity is high. The first case describes the difficulty decision-makers face in building new infrastructure designed to prevent a low probability catastrophe, when there are so many other investment needs perceived by the population as more important. The second case shows that during a drought spell, the population tends to blame decision-makers for failing to act preventively, no matter how unlikely the occurrence of the event ex-ante. The bottom line is that because the non-expert population is unfamiliar with probabilistic concepts, it is sometimes preferable to make less-than-optimal decisions but which are easy to understand.