

# News Release from the International Salinity Forum

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## INCREASED SALT IN SOIL POSES WORLDWIDE THREAT TO SOCIETY

Many nations are coming to grips with the realization that soil salinity, the measure of total salt in soil, is robbing them of precious natural resources that sustain life. Scientists and water resource managers have gathered in Riverside, California, for the first International Salinity Forum to address solutions to this growing menace.

The lead keynote speaker, Daniel Hillel of Ben-Gurion University in Israel, noted this problem began as early as the third millennia B.C. in southern Mesopotamia where the diversion of water from the Tigris and Euphrates Rivers created both sedimentation and salt loading in what was once some of the most productive farm land in the world. Other areas of the world—Egypt, India, Pakistan, central Asia, Australia, and California's Central Valley—have each experienced degradation of their basis life-giving soil to increased soil salinity.

Hillel reminded the scientific community in attendance that the practice of land and water management is not simply a series of mechanical tasks, but a communal occupation and social enterprise by communities and families needing to live healthy lives. The long-term need for regional management of land and water resources will impact the welfare of future generations. He said we now have the knowledge and techniques to prevent what could not be prevented in the past. "But, above all," Hillel said, "we need the imperative to do what is right."

Another keynote speaker, Julian Martinez Beltran, with the Food and Agriculture Organization (FAO) in Italy, said soil salinity limits crop production and consequently has negative effects on food security worldwide. In 2002, FAO estimated that about 20-30 million hectares of irrigated land were seriously damaged by the build-up of salts and 0.25-0.50 million hectares were to be lost from production every year as a result of salt build-up.

Eduardo Blumwald, a researcher with the University of California, told the 350 attendees that there is no doubt that the gains in food production during the recent "green revolution" have reached the ceiling. Therefore, he said, increasing the yield of crops in all types of soils, including salinized lands, is essential for feeding the world. His genetic research is evaluating the potential for creating salt-tolerant crops.

A large delegation of researchers from Australia are attending the conference. R.W. Fitzpatrick with the Land and Water Cooperative Research Center in South Australia, said the salinity problem in Australia is so serious that it is taking nearly one football field of soil productivity every three minutes. The Australian scientists have developed an effective network with producers, which include the development of illustrated, easy-to-use manuals, on ways to control soil salinity.

The opening plenary session ended with an address from Pete Silva with the California State Water Resources Control Board in Sacramento. With California's population expected to grow 60 percent over the next 30 years, he said the state will need an additional two million acre feet of water per year to keep up with demand. Some of that water will likely come through desalination, which appears to be a more economical option.

The Forum sponsors are hopeful the meeting will improve the sharing of ideas and research, and develop networking opportunities that will foster greater regional, national and international collaboration on solving this international menace.

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