

EARTH OBSERVATION SYMPOSIUM (B1)
International Cooperation in Earth Observation Missions (1)

Author: Dr. Elizabeth Newton
University of Alabama in Huntsville, United States

Dr. Maudood Khan
UAH's Earth System Science Center (ESSC), United States

INTERNATIONAL COOPERATION FOR THE NEXT GENERATION DECISION AND POLICY
ANALYSIS SYSTEM

Abstract

In a world that is undergoing rapid demographic and climatic changes, adequate development planning will be critically important for ensuring continued economic prosperity. Today's technologies offer new possibilities for revealing synergies, trade-offs and unintended consequences that might be of concern to policy-makers. Combining airborne and satellite earth observation platforms with models of local and regional climate, weather, air quality, transportation, energy demand, land use change, and agriculture has the potential to transform the development planning process in developing countries. Also of importance is our understanding of how diverse socio-political and administrative systems respond to socio-economic and environmental stressors. The economic benefits of earth-observations systems will be fully realized once a more comprehensive understanding of complex human-natural system interaction emerges, and institutions are able to accommodate this information within the existing decision-analysis frameworks and operations.

As a first step toward developing the next generation decision and policy analysis system, we conducted a workshop that brought together a diverse group of experts from the U.S., Turkey, and Europe. The aim of the workshop was to facilitate a conversation among policy-makers and scientists of diverse backgrounds to identify existing capability gaps and key requirements for the system under consideration, against the backdrop of current (2010-2020) and future (2030-2050) public policy challenges facing developed and developing countries. Participants discussed in detail the inter-related nature of the challenges, the un-intended consequences of potential solutions, the availability and readiness level of key enabling technologies, and the role of international partnerships in this endeavor.