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International cooperation: goals, constraints and means (2)

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CONTRIBUTIONS OF SERVIR IN PROMOTING THE USE OF SPACE DATA IN CLIMATE
CHANGE AND DISASTER MANAGEMENT

Abstract

The Regional Visualization and Monitoring System (SERVIR) began operations in 2004 as a joint venture by NASA, USAID and other partners. SERVIR provides Earth observations and predictive models to scientists, decision-makers and end-users, originally from countries in Mesoamerica and Dominican Republic. The success of SERVIR has permitted the program's expansion to East Africa and the Himalayas, regions that are also disproportionately affected by disasters and climate change and that also face similar kinds of challenges in satellite data acquisition.

SERVIR promotes and strengthens the use of space data to support climate change and disaster management by using different mechanisms and approaches. These include rapid response during disasters, promoting open access to space data and geospatial products, building capacity through training workshops and pilot projects, and stimulating international collaboration on applications of space data.

At the request of end users, SERVIR provides rapid response during disasters in the form of expedited satellite images and value added products. These and other space-based products useful for longer term climate change and disaster mitigation are made available in a geospatial portal. Entries are cataloged with adequate documentation and metadata standards that allow for integration with other systems.

Experience gained through SERVIR has shown that the mere availability of space-based data and products does not ensure their proper uptake or adequate usage. Hence, training programs on data access, tools and analysis techniques form an integral part of SERVIR's activities. Examples of training courses include using space data for disaster management and modeling regional climate change impacts, among others. This capacity building enables end users to take complete advantage of space data and add value to any product generated by SERVIR or other space organizations. In this vein, SERVIR has also awarded grants to support pilot projects, which promote initiatives that use space data to address priorities in climate change and disaster management at the local, national and international levels. Such projects have covered topics ranging from forest fires and harmful algal blooms to tourism.

These initiatives have aroused so much interest in and usage of space data that numerous regional symposia on the applications of geospatial technologies in climate, disasters and environment, have been held in Central America with the support of SERVIR.

This paper discusses the successes and lessons learned from each of these approaches, which should form integral components of an effective space data policy in support of climate change and disaster management.