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Calling Planet Earth - Space Outreach to the General Public (6)

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INCLUSION OF RURAL AND INDIGENOUS COMMUNITIES IN SPACE TECHNOLOGY DEVELOPMENT, THE CASE OF MORAZÁN-SATELLITE.

Abstract

Inclusion of indigenous and rural communities is important to economic and human development in emerging countries. For the case of Climate Change resilience, in most cases, technology cooperation programs limit their activities to try to adapt existing technology to different user cases. The experience of the Women Geospatial Rallies developed by the School of Geography of the University of Costa Rica with the support of the Interamerican Institute for Cooperation in Agriculture has proven successful technology transfer through rapid prototyping while working with women in rural communities and developing geospatial applications. New ways of leadership have been promoted using space technologies, such as global navigation satellite systems (GNSS) and Earth Observation Satellite data, combined with Unmanned Aerial Vehicles (UAV) and Geographic Information Systems. The rally methodology has both, theoretical and practical approaches, various areas of interest are studied, such as: Disaster Risk Management, Climate Change, Water Resources, Environmental Management, Innovation, UAV, and Geospatial Technology. Additionally, practice sessions take place on the use of open-source geospatial applications. The main goal is that the participants acquire the knowledge needed to prototype a solution for a chosen problem on their daily basis and then present it to a panel of experts for final validation. In the case of Morazán satellite (awarded of Kibo Cubes 5th round), scientific mission related to technology development for Climate Change resilience, the Women Geospatial Rallies methodology is being implemented to closely work with different communities in the study areas where the satellite services are going to be tested. The rally methodology has proven that horizontal collaboration is key for successful local technology implementation. The incorporation of a community/end-user vision during the conceptual design of a solution allows for a successful adaptation, opposed to simultaneously adapting a technology conceived in developed countries to the reality of the developing world, and try to convince the end-users not only of its potential but make them eager to go through a steep learning curve.