34th IAA SYMPOSIUM ON SPACE AND SOCIETY (E5) Is Space R&D Truly Fostering A Better World For Our Future? (2)

TECHNOLOGY TRANSFER FROM CENTERS FOR SPACE STUDIES TO RURAL VILLAGES: CASE STUDY OF THE JICAMARCA RADIO OBSERVATORY RADARS IN THE PERUVIAN HIGHLANDS AND JUNGLE

Abstract

Technology transfer from technology innovation centers to rural villages is an increasingly relevant topic due to its potential to improve the quality of life of people in these regions. In this paper, a case study of technology transfer is presented in the context of the installation of Jicamarca Radio Observatory radars in the Peruvian highlands and jungle.

The Jicamarca Radio Observatory radars are an important tool for the study of the ionosphere and upper atmosphere. The same technology can be used to study other phenomena that directly affect people's lives such as weather or landslides. However, its implementation in rural villages poses unique challenges. In particular, it requires the training of local personnel for its operation and maintenance, as well as the adaptation of the technology to local conditions.

In this paper, we describe the technology transfer process used in the installation of radars in the Peruvian highlands and jungle, including the training of local personnel and the adaptation of the technology to local conditions. The challenges encountered during the process are discussed and solutions implemented to overcome them are presented.

The results indicate that technology transfer from technology innovation centers to rural villages is possible and could have a positive impact on the local community. In addition, the importance of collaboration between innovation centers and the local community for successful technology implementation is highlighted.