Development and Effects of Science-Culture Tourism at a Tribal Village: The Atayal Satellite Project

Chih-Li Chang¹, Li-Yu Fu²

¹National Space Organization (NSPO), 8F, 9 Prosperity 1st Road, Hsinchu Science Park, Hsinchu 30078, Taiwan, <u>CLChang@nspo.narl.org.tw</u> ²National Tsing Hua University (NTHU), No. 101, Section 2, Kuang-Fu Road, Hsinchu 30013, Taiwan, lyfu@mx.nthu.edu.tw

Abstract: This study assesses development and effects of science and culture learning through tribal tourism in the Atayal Satellite project. Historically, indigenous peoples have been mostly recognized not good at sciences and at mathematics. However, many studies have identified the significant relation between their culture wisdom and Western science. The authors and villagers organized many science camps and activities for the public under the Atayal Satellite project at an Atayal village, Hsinchu County, Taiwan. The tribal village is an excellent location for the public to learn about science and technology. Satellite technology has recently become increasingly involved in daily life. Indigenous people, like others, need knowledge about satellite science and technology. The research comprises the Atayal Satellite I project for the first year and Atayal Satellite II project for the following three years. A 20-hour training course on satellite application for Atayal villagers and a camp program for parents and children were designed to teach popular science about satellites under the Atayal Satellite I project. The authors and trained villagers then worked together to develop a science-culture tourism model that integrated satellite applications and tribal culture in the Atayal Satellite II project. The purposes of this tourism model are as follows. Use indigenous-culture tourism to develop the tribal economy; promote a leisure activity for learning the science of satellite applications; and develop a sustainable environment for indigenous tourism. The science-culture tourism model developed under the Atayal Satellite project is concrete and feasible in terms of science education and indigenous tourism according to analytical results and those of interviews with tribal villagers who took part in the project and participants of the camps. The quantitative analysis of Test of Science Related Attitudes (TOSRA) and other questionnaires offered before and after the project revealed that the tribal villagers who took part in the project and participants of the camps have positive responses to the activities of the Atayal Satellite project. Effects of science and culture learning in the Atayal Satellite project are significantly positive.

Keywords: Satellite application, Science tourism, Popular Science, Indigenous culture, Indigenous tourism