

# **Cultural Heritage Inventory Using Arches: Case Study of a Rural Community in Taiwan**

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In view of the serious climate change, sustainable development has become the critical issue worldwide. According to the past researches and experiences, the effort of communities is believed to be the most important element toward sustainability. Thus, the “sustainable community” gradually becomes the basic unit when talking about local action and globally sustainable development. Before developing the sustainable community, it is necessary to have an overall understanding of the community. The most direct and effective way to start is to learn the resources that owned by the community. Community resources can, in certain aspects, be regarded as cultural heritages which record the history of certain groups of people. Hence, taking the Nouli community in Hualien County of Taiwan as example, this research uses Arches, a new open-source geospatial software system for cultural heritage inventory and management, to develop the spatial database and web application for community resources. In addition, in order to meet the requirement of visualization, this research also uses the LizardQ system to take panoramic photos of community resources. After the database and web application fully established, they shall be used as references when planning and managing community resources by the community managers and benefit the development of sustainable communities.

**Keywords:** community resources, spatial database, Arches, cultural heritage inventory, open source software