

# Collaborative Planning and Management of Socio-Ecological Production Landscapes: A Case Study of a Rice Paddy Cultural Landscape Conservation in a Indigenous Community, Taiwan

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## SUMMARY

In 2005, the idea of landscape/seascape conservation was introduced into the amended Cultural Heritage Preservation Law as a new legal subject entitled 'Cultural Landscape' in Taiwan. Unlike traditional strict protected areas, namely the IUCN protected area category I-IV, the Cultural Landscape is a new concept to Taiwan which emphasizes the interaction of local people and the land. In order to help stakeholders of governmental authorities and local communities to apply this new instrument, the researcher employs a community-based participatory approach to enhancing partnership among them. The research has especially learnt from the operational guidelines of IUCN protected area category V (the protected landscapes/seascapes) as well as the Satoyama Initiative. A pilot study area of a rice paddy production landscape in the indigenous Cihalaay village, Hualien County was selected as a potential Cultural Landscape site. Participatory action research was conducted by the research team of National Dong Hwa University in light of the collaborative planning theory and methods to enhance partnership among the villagers, the local authorities officers and experts. Various formal and informal forums were conducted in the local village from 2011 to 2013 to achieve consensus on the codes of conduct as well as the management plan. Through intense communication on the forums, stakeholders jointly designated the site as a legal Cultural Landscape, developed a mid-term Cultural Landscape Management Plan and set up a Local Committee for implementation of the Plan. The case study shows that a landscape approach based on the idea of the Satoyama Initiative can be more welcomed by local people and create a new style of 'living' protected landscape into Taiwan's national protected area system.

## Research Project Description/ IPSI Activity Cluster

**Research project description:** This two-year action research project was commissioned by the Hualien County Cultural Affairs Bureau and implemented from May 2011 to June 2013 by the National Dong-Hwa University. The goal is to facilitate a collaborative planning process to help stakeholders to designate a Rice Paddy Cultural Landscape and formulate its Management Plan. Research funding was in total about US\$ 65,000.

**Cluster 2 (Policy Research):** The research aims to explore a landscape and participatory approach to incorporating the Satoyama Initiative framework into a rural Cultural Landscape designated and planned under relevant legal instruments of Taiwan.

**Cluster 5 (On-the-Ground Activities):** An indigenous village and the surrounding production landscape in eastern rural Taiwan was chosen as the case study area (Pic 1). The goal of the empirical study is to explore, first, to what extent the Satoyama Initiative framework can fit into the management plan of the rural cultural landscape. Second, what contribution a collaborative planning approach can make to reach consensus among different stakeholders.



Pic.1 The newly designated Cihalaay Cultural Landscape covers nearly 1000 hectares and comprises mosaic landscapes of a indigenous village, rice terraces and irrigation channels, orchards, secondary forest, nature forests and streams.

## Methodology

The project, first, learnt from the landscape approach of IUCN protected landscape and the Satoyama Initiative and, second, explored opportunities of relevant national legal instruments for application. A collaborative planning process was facilitated to involve multi-stakeholder participation in designation of the Cihalaay Cultural Landscape and formulation of its Management Plan (Fig 1). Drawing on a theory of collaborative planning advanced by Healey (1997), this research sees a planning and management process as a social process that helps to build up knowledge resources, relational resources and mobilization capacity among all stakeholders (Fig 2). A pilot study area of a rice paddy production landscape in the indigenous Cihalaay village, Hualien County in east part of rural Taiwan was selected as a potential Cultural Landscape site. The study employed a watershed-based approach to assisting stakeholders to designate a protected landscape which covers nearly 1000 hectares and comprises mosaic landscapes of a indigenous village of 25 households, 20 hectare rice terraces, 6 irrigation channels, orchards, secondary forest, nature forests and streams (Fig 3). Four steps of a participatory planning process (including preparation, discussion, consensus-building, action planning, implementation and monitoring) was facilitated by the research team of National Dong Hwa University in light of the collaborative planning theory and qualitative methods (participant observation, interviewing and group discussions) from May 2011 to Jun 2013 to enhance partnership among stakeholders (Fig 4).



Fig.1 Research Flow Chart

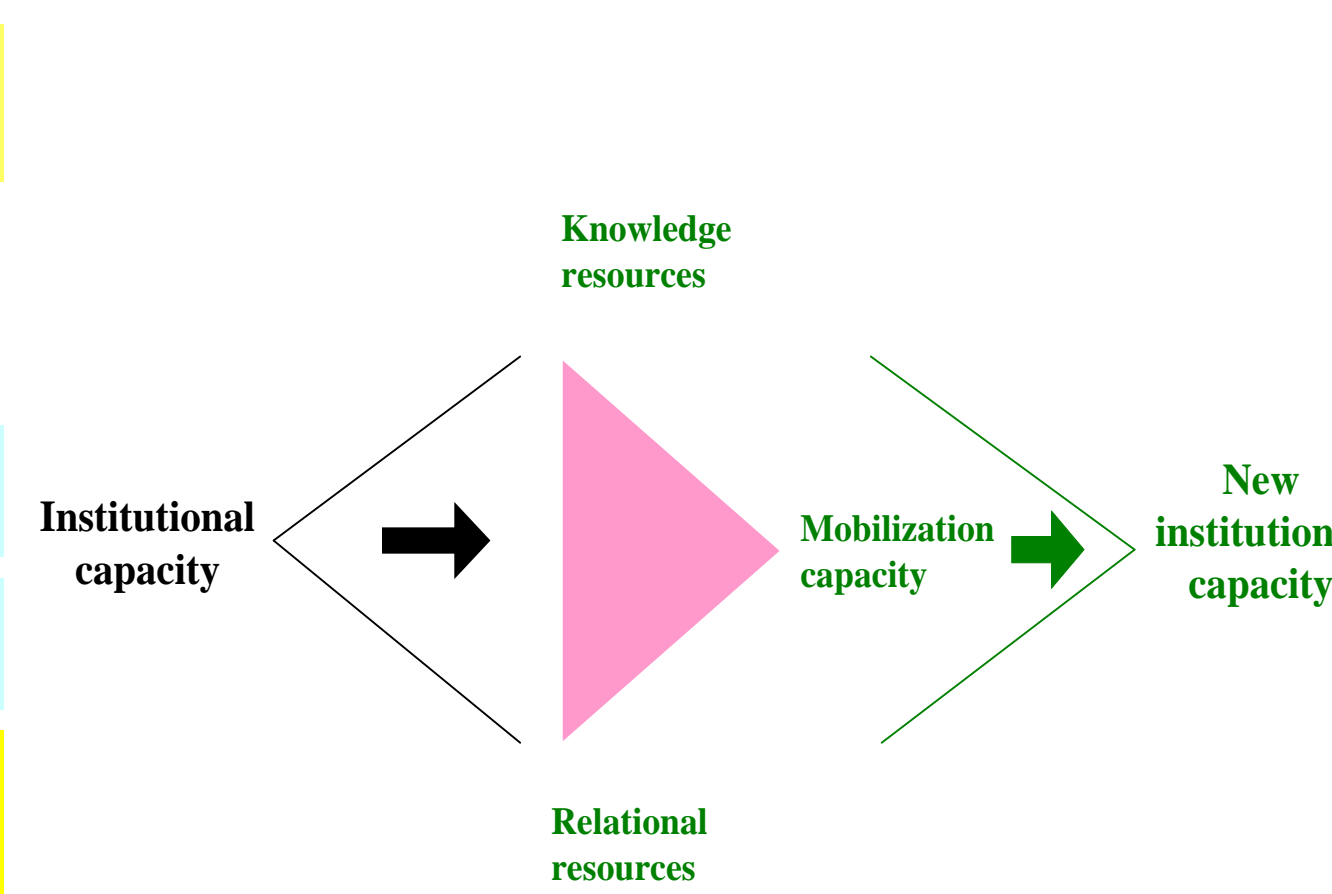


Fig.2 Theory of Collaborative Planning (Healey, 1997)

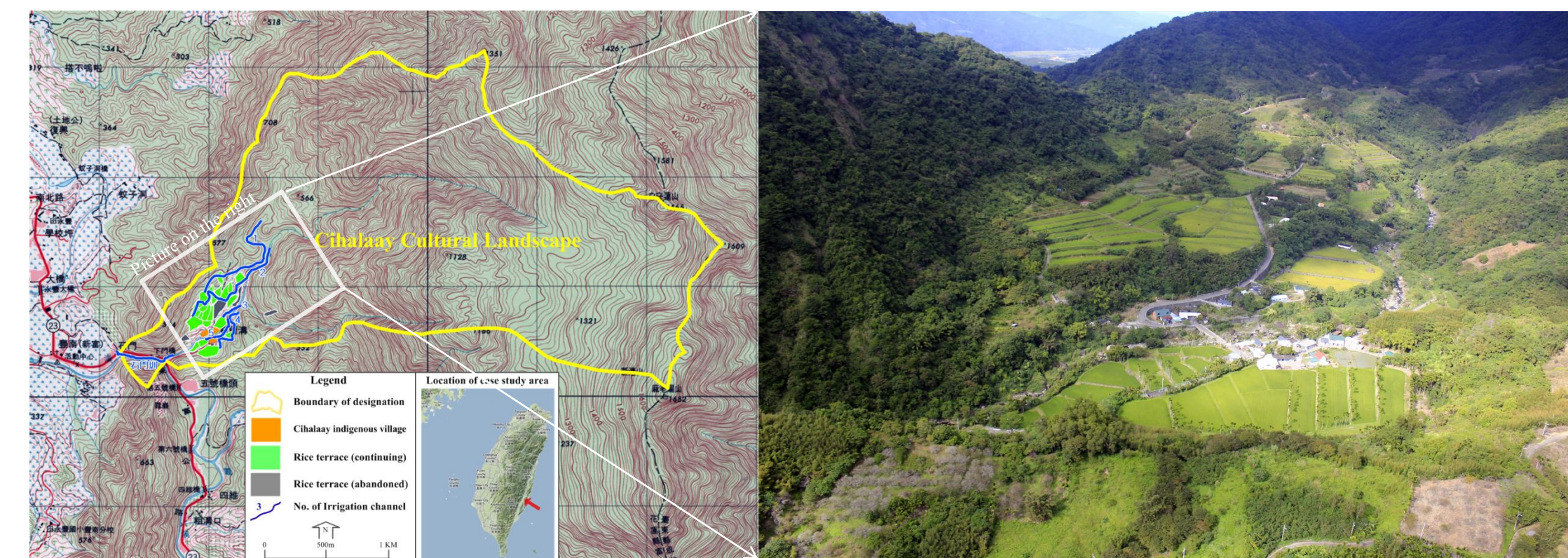


Fig.3 Location map and air photo of the Case Study Area



Fig.4 Steps of the Participatory Planning Process

## Findings

**Challenge 1 (feasible framework and institutional arrangements for application):** Designation of Cultural Landscapes under newly amended Cultural Preservation Law provides opportunities for satoyama-like rural landscape conservation. However, most designated cultural landscapes are about historical architecture preservation. None employs an integrated landscape and community-based approach to benefiting both local people and their living landscapes.

**Progress of the case study:** A mutually beneficial linkage between local community and local authority was suggested based on an analysis of feasible legal and administrative arrangements (Fig 5). The bottom-up Code of Conduct proposed by the local Management Committee was deliberately infused into the top-down Management Principles and Plan through a series of local stakeholder meetings and official meetings. The three-fold approach framework of the Cihalaay Cultural Landscape (Fig 6) in light of the Satoyama Initiative was developed and agreed by all stakeholders to be the framework of the Mid-term Management Plan.

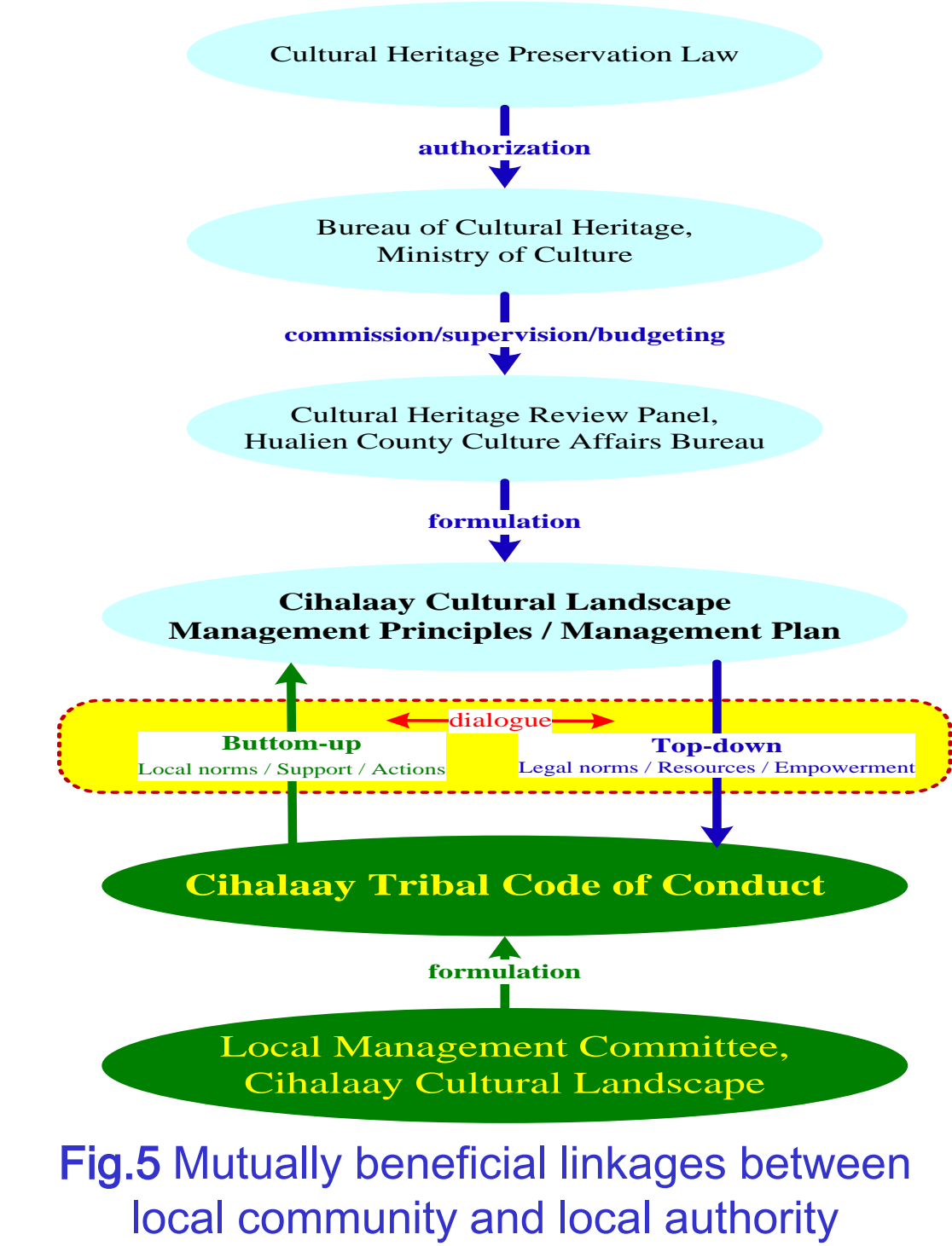


Fig.5 Mutually beneficial linkages between local community and local authority



Fig.6 Cihalaay three-fold approach to Satoyama Initiative

**Challenge 2 (design and practice of a collaborative planning process):** A satoyama-like cultural landscape is the outcome of a long-term interaction of local people and the rural environment. To sustain a satoyama-like landscape in an aging and declining rural area, a collaborative governance needs to be fostered to empower the local community while involving all stakeholders in the planning process. In Taiwan there is a lack of community-based case studies on the Satoyama Initiative to be learned from.

**Progress of the case study:** In this project the research team employed Healey's theory of collaborative planning to design and evaluate the multi-stakeholder participation processes. Knowledge resources for investigation and conservation of the Cihalaay Cultural Landscape were created through active dialogue among the local community, experts and officers (Fig 7). With the help of the research team, a multi-stakeholder partnership platform composed of the Local Management Committee, the Cultural Landscape authorities and other relevant authorities was developed to enhance social capital among stakeholders (Fig 8). Seven formal stakeholder partnership platform meeting were conducted in the local village from July 2011 to March 2013 to help stakeholders discuss issues of the cultural landscape designation and reach consensus on the Management Plan. The Mid-term Management Plan of the Cihalaay Cultural Landscape (Fig 9) comprises 6 elements including vision, legal basis, five strategies for action (see Fig 6), work task according to the strategies, time table and input of stakeholders (possible sources of funding and projects). Indicators for evaluating the future outcome have not yet been developed. The SEPLs indicator development and evaluation will be the next research topic of the case study.



Fig.7 Dialogue between expert and local knowledge to increase knowledge resources

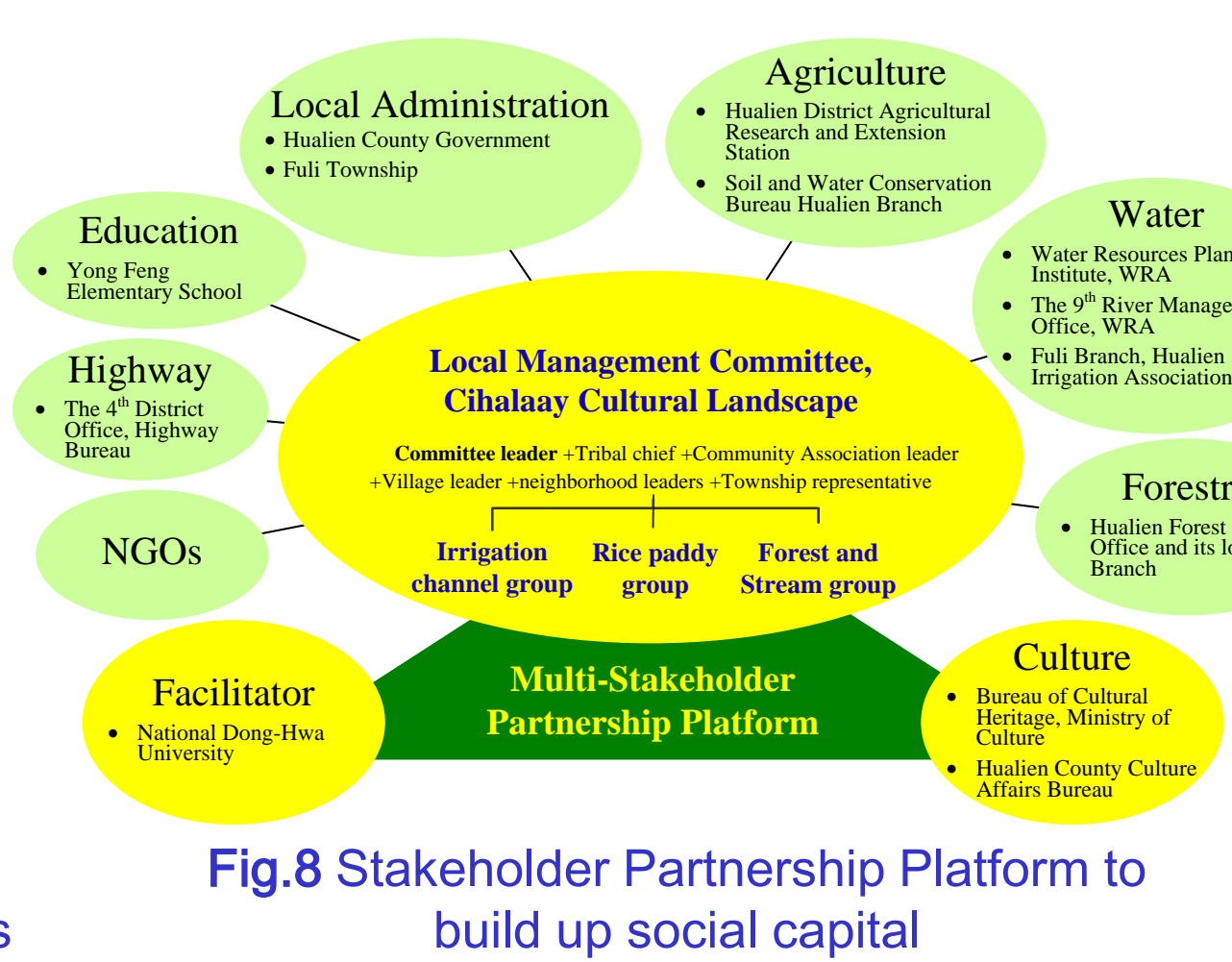


Fig.8 Stakeholder Partnership Platform to build up social capital

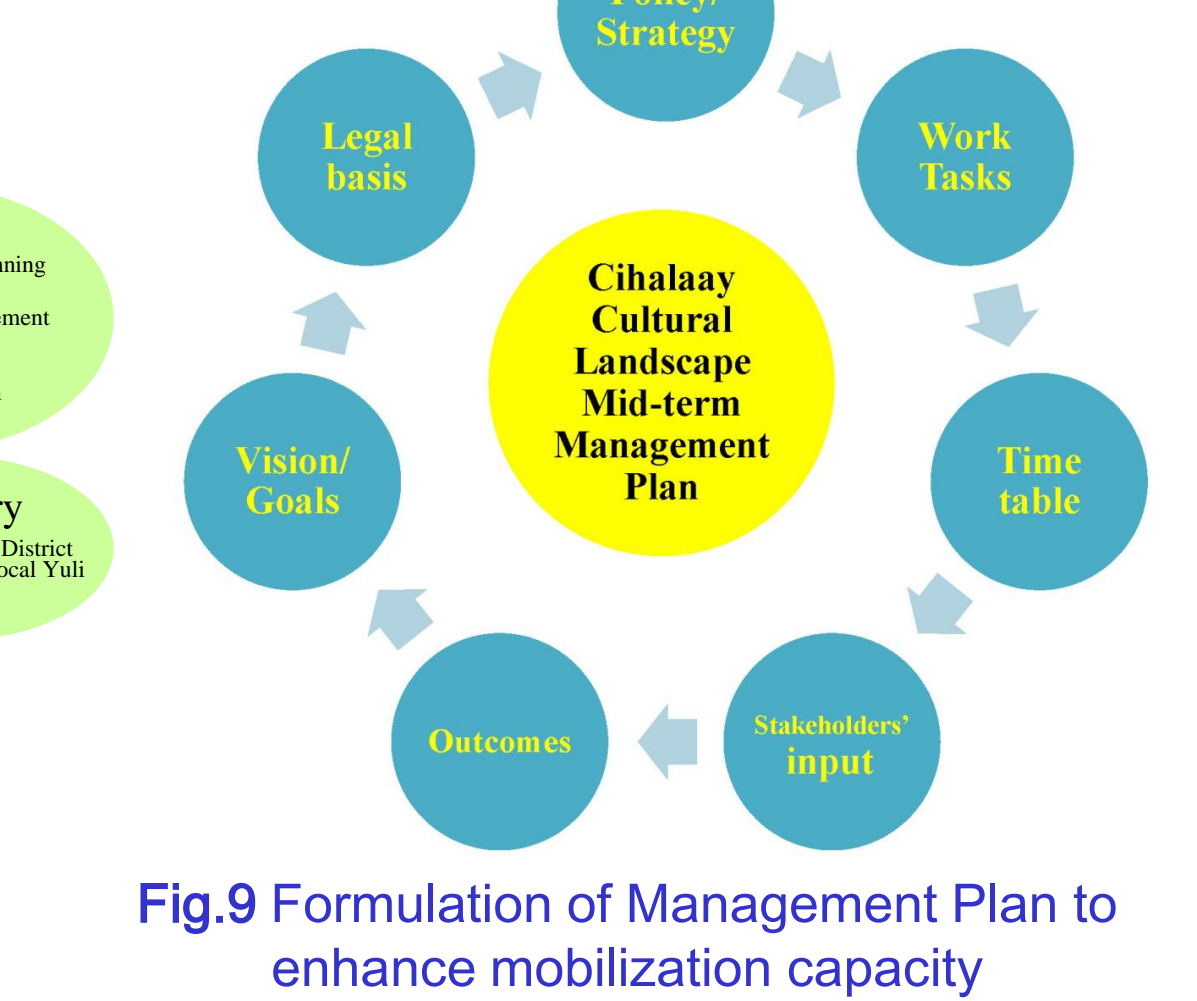


Fig.9 Formulation of Management Plan to enhance mobilization capacity



Pic.2 Interview with a local elder about the history of channel building

Pic.3 'Rock gate' irrigation channel was built in the 1920s

Pic.4 PPGIS workshops were held for production landscape mapping

Pic.5 A Local Management Committee meeting of Cihalaay Culture Landscape

Pic.6 Most Multi-stakeholder Platform Meetings were held in the local village

Pic.7 Besides of certified organic farming, natural farming is expanding

Pic.8 College students worked with local youth on rice transplanting

Pic.9 Geo- and Eco-tourism can contribute local economy

## Conclusions

The two-year action research project has successfully introduced the Satoyama Initiative's three-fold approach into the formulation of the Cihalaay Cultural Landscape Management Plan through a multi-stakeholder participation process. Based on an analysis of the legal and administrative arrangements, the project facilitated dialogue between the local community and the governmental authorities and helped to transform the local code of conduct for the Cihalaay Cultural Landscape into the formal Management Principles. The project helped the cultural landscape authority to conduct a series of stakeholder partnership platform meetings to reach consensus on the designation and the Management Plan of the Cihalaay Cultural Landscape. The case study shows that the landscape approach in light of the Satoyama Initiative can help to create a new style of protected areas (IUCN protected area category V) into Taiwan's national protected area system. The Satoyama Initiative can also be applied within a protected area.