

Transformations towards sustainability – A SEPLS restored by the Gongrong community

Jung-Tai Chao^{1*}, Yie-Hom Lin², Chen-Yang Lee³, Chen-Chuan Huang⁴ and Ling-Ling Lee^{1,5*}
 SWAN International^{1*}, Gongrong community², Soil and Water Conservation Bureau (SWCB)³,
 SWCB Taipei Branch⁴, Biodiversity Research Center, National Taiwan University^{5*}

¹Board member of SWAN International, former Senior Scientist and Deputy Director of Taiwan Forestry Research Institute, ⁵Professor of Institute of Ecology and Evolutionary Biology and Director of Biodiversity Research Center, National Taiwan University.

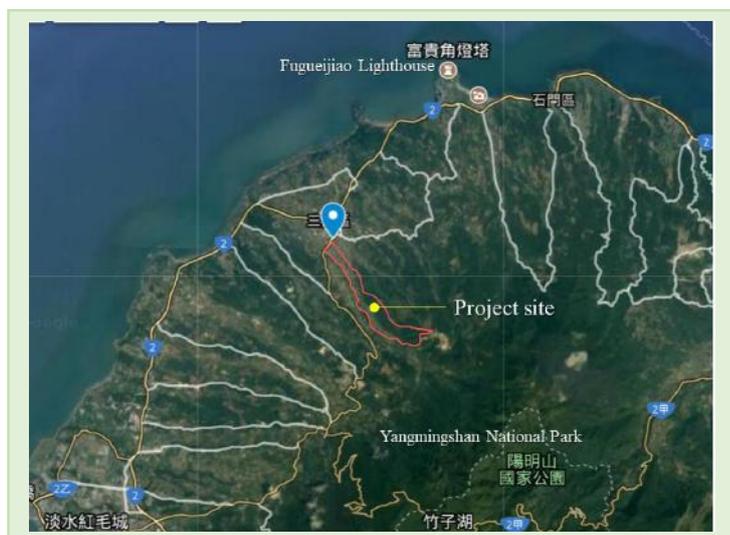
jt00chao@gmail.com, leell@ntu.edu.tw



Geographic and demographic information



Country	Chinese Taipei
Province	New Taipei City
District	Sanzhi
Size of geographical area	2.2km ²
Number of indirect beneficiaries	23,072 persons (Men: 11,884 persons) (Women: 11,188 persons)
Dominant ethnicity	Han Chinese



Size of project area	2.2km ²
Number of direct beneficiaries	362 persons (Men: 194 persons) (Women: 168 persons)
Geographic coordinates (longitude and latitude)	25°14'57.5"N 121°30'27.7"E
Dominant ethnicity	Han Chinese (70%) Hakka, 30% Hoklo

X	Forest	X	Grassland	X	Agricultural	X	In-land water
	Coastal		Dryland		Mountain	X	Urban/peri-urban

Important species in the site

Common name (Local name)	Scientific name	Description
Crested serpent eagle	<i>Spilornis cheela</i>	A legally protected raptor. Living in forest area, these medium-sized raptor specialize in feeding on snakes and lizards.
Taiwan blue magpie	<i>Urocissa caerulea</i>	An endemic species of Taiwan. It is now listed as other conservation-deserving wildlife.
Chestnut tiger	<i>Parantica sita</i>	A danaid butterfly found in Asia. It has been found migrating from Japan to Taiwan and Hong Kong.
Japanese mitten crab	<i>Eriochier japonica</i>	A native crab living in clean river or stream. It migrates between upper stream and estuary.



General introduction

The 210 ha production landscape managed by the Gongrong community is located in the northwest corner of New Taipei City, adjacent to the Yangmingshan National Park (YNP), the largest protected area in northern Taiwan. Human activities on this production landscape can have a major impact on the conservation effectiveness of the YNP.

The challenges the site faced included land degradation due to illegal landfilling and improper land development, pollution from open-air trash burning, unmanaged domestic wastewater, overuse of chemical fertilizers and pesticides, improper stream construction, interception of irrigation water, etc., which led to abandonment of agricultural land, reduction in income from farming, disappearance of traditional knowledge, loss of job opportunities, decreasing productivity, and an aged population.

The objective of this project is to report challenges Gongrong community faced in reviving its SEPLS, the process and key elements that facilitated the transformation of Gongrong, the lessons learned, and how such a transformation helped biodiversity conservation, benefited local livelihoods and enhanced the conservation effectiveness of the adjacent YNP.

The transformation of Gongrong involved implementing its rural regeneration plan collectively to stop further land degradation, clean up the environment, initiate environmental friendly activities including eco-friendly farming, revive abandoned agricultural land by cultivating diverse crops, thereby bring back biodiversity and ecosystem services that had once vanished.



A bird's-eye view of the production landscape managed by the Gongrong community.



Farmers' market run by local farmers selling eco-friendly agricultural produce help increase farmers' revenue

Contribution to Aichi Biodiversity Targets' Strategic Goal C

Please showcase your project outcomes by describing how you assessed/ measured the progress /achievement to the Aichi Biodiversity Target by using quantitative and qualitative information and/or figure as much as possible. Please focus on the Aichi Biodiversity Target Group that you have been assigned in the working group.

		Breakdown Target	How did you measure the outcome?	Result
Strategic Goal C	TARGET 11	At least 17 per cent of terrestrial and inland water areas are conserved		
		At least 10 per cent of coastal and marine areas are conserved		
		Areas of particular importance for biodiversity and ecosystem services conserved		
		Protected areas are ecologically representative		
		Protected areas are effectively and equitably managed		
		Protected areas are well connected and integrated into the wider landscape and seascape	Methods used in collecting information for this project included literature review, document search, observation and interviewing of residents of the Gongrong community.	The SEPLS managed by Gongrong and Ankang communities serve as an Other Effective Area-based Conservation Measure (OECM) that have helped to expand the effectiveness of biodiversity conservation of the adjacent Yangmingshan National Park and integrated it to this human-nature interactive landscape.
	TARGET 12	Extinction of known threatened species has been prevented		
		The conservation status of those species most in decline has been improved and sustained	Methods used in collecting information for this project included literature review, document search, observation and interviewing of residents of the Gongrong community	Having cleaned up the environment, prevented air and water pollution, used eco-friendly farming practices, etc. the once vanished migratory Japanese mitten crab (<i>Eriocheir japonicas</i>), native fishes such as the Taiwan shovel-jaw carp (<i>Varicorhinus barbatulus</i>) and ray-finned fishes (<i>Zacco pachycephalus</i> and <i>Acrossocheilus paradoxus</i>), protected species such as serpent eagle and at least 10 frog species have become much more abundant than before.
	TARGET 13	The genetic diversity of cultivated plants is maintained		
		The genetic diversity of farmed and domesticated animals is maintained		
		The genetic diversity of wild relatives is maintained		
		The genetic diversity of socioeconomically as well as culturally valuable species is maintained		
		Strategies have been developed and implemented for minimizing genetic erosion and safeguarding genetic diversity		

Relations to other Aichi Biodiversity Target & SDGs

Please indicate the Aichi Biodiversity Targets other than the targets your working group focuses and SDGs that your activities contribute to if any. Use “●” and “■” to indicate the “direct” or “indirect” contributions to the targets.

CBD Aichi Biodiversity Targets (<https://www.cbd.int/sp/targets/>)

Strategic Goal A				Strategic Goal B					
●			●			●	●		
Strategic Goal C			Strategic Goal D			Strategic Goal E			
●	■		●				●	●	

UN Sustainable Development Goals (SDGs) (<https://sustainabledevelopment.un.org/sdgs>)

●		●	■		●		●	
■	●	●	■	●	●	■		

Any difficulties you found during your assessment

It is challenging for local communities to collect scientific data for quantitative assessment on progress of conservation of biodiversity and ecosystem services.

Key messages for the CBD in planning for the post-2020 Targets

A continuous expansion of SEPLS all over the world, based on principles of the *Satoyama* Initiative, has delivered and will continue to extend effective and enduring *in situ* conservation of biodiversity and ecosystem services through sustainable use of biodiversity beyond the boundary of protected areas. Therefore, as one mechanism to carry out activities identified by the *Satoyama* Initiative, IPSI should further disseminate knowledge, build capacity, promote projects and programs, provide guidelines and successful case studies for the sustainable use of biological resources.