The Land Use Change and Socio-economic Impact of Baiyankeng Geo-cultural Village, China

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1. Introduction
Over the years, the three-dimensional rural issues concerning agriculture, countryside and farmers are long-standing problems in Chinese society. The government of China released a package of policies charting the roadmap for rural vitalization. Among the policies, the government of Zhejiang Province proposed a strategy of *Geo-cultural village* in 2013, on account of a lack of cultivated land for the large population in Zhejiang. The policy of *Geo-cultural village* is considered to be a model of endogenous development. Although most of the Geoparks in China are operated by the government, the policy of *Geo-cultural village* gives a top priority to self-governance by the villagers. This research aims to illustrate the land use change, industrial transformation and the impact on rural society and economy after Baiyankeng village has been registered as the first *Geo-cultural village* in China. The data of this research are collected from the interviews of the village committee, reports and statistical yearbooks of the local government.

2. Research Area
Baiyankeng village is one of the traditional villages in Kuaijishan mountains of middle Zhejiang, where Chinese Torreya trees have been cultivated through long periods of ancient grafting and artificial selection techniques from the weathering of Cretaceous volcanic rock strata. The project of *Geo-cultural village* has started here since Kuaijishan Ancient Chinese Torreya Community was registered as a *Globally Important Agricultural Heritage System* in 2013. By 2019, there are 251 families living here with a registered population of 760. The total area of the village is 6.03 square kilometers, 23.2% and 26.3% of which are respectively covered by Torreya forests and tea plantations. Other forests occupy 31.55% and only 4.5% is cultivated land. The villagers are mainly growing Chinese Torreya and Chinese tea for a living.

3. The Change of Land Use and Socio-economic Situation of Baiyankeng Village
The policy of *Geo-cultural village* caused many changes in the village from 2013 to 2019. The development of geo-tourism, homestay business, and Torreya production distinctly raised the income and increased the economic condition of the village. Although people are still going out of the village for part-time jobs, some people returned to the village to grow Chinese Torreya or to do some service jobs for geo-tourism. The land of planted Torreya trees is increasing, while the land of tea plantations is decreasing. In the meantime, however, some wild forests have been destroyed by cultivation of fields for Torreya. In addition, the fundamental facilities are constructed such as road and parking lot.

4. The Driving Forces behind the Change in Land Use and Socio-economic Situation
Initially the soil in the village is suitable to cultivate Torreya trees. Since Chinese tea is common around China but Chinese Torreya is distinctive, growing Torreya is easier to receive benefits than growing tea. The visitors would like to buy Torreya nuts rather than buying tea. Also, more labors are demanded and more chances for working in the village are provided due to the development of geo-tourism. After the improvement of the infrastructure, the living condition has become better. More and more previous villagers who took part-time jobs in the city would like to return to the village to work. Furthermore, the support of the local government and the enthusiastic members of the village committee give a big push to...
this rural vitalization project.

5. Summary
Geo-cultural village aims to make use of the geological resources, inherit traditional ideas and rebuild cultures. It can be considered as a new model of endogenous development. The policy causes a positive impact on land use suitability, solving the three-dimensional rural issues and promoting social and economic development. Meanwhile, there are problems with self-governance, the prevention of over-development that should be considered for future research.

Keywords: Geo-cultural Village, Endogenous Development, Chinese Torreya, Land Use, Rural Vitalization, Baiyankeng Village