# Restructuring of Life Foundation after Migration in Rural Laos: Focusing on Distribution and Usage of the wild palm plant, Chan Daeng

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Key Words: Laos, rural area, NTFP, palm family plant, human network

## **Research background**

Lao People's Democratic Republic (below Laos) has been working to reduce poverty since the first half of the 1990s, as it is believed that poverty is the main factor leading to natural environment destruction and drug cultivation. Despite these efforts, Laos currently suffers from a "poor rural" outlook. Previous research examines the effectiveness of initiatives such as the adoption of alternative commercial crops (Neef et al., 2010), the utilization of non-timber forest products (Sunil 2010), financial support for livestock breeding, and the introduction of fertilizers (Phinseng 2006). However, research has not revealed how issues, such as crop failure due to drought, pests and diseases, illness or injury, and labor shortages filled by school-aged children effect individual households. Earlier projects and research concentrated on solving the poverty problem by introducing ways to improve household income; therefore, these studies have failed to introduce a social mechanism that reduces risks.



Photo 1. Limestone near the summit and landscape surrounding the village

# Research purpose and aim

This research examines how, and on what scale, people living in rural Laos promoted life restructuring and what

challenges the villagers faced. Sugihara et al. (2010) proposed the new concept of Human Life Foundation, defined as "the basis of livelihood catering for survival, reproduction, and subsistence." This study also re-evaluates the techniques used by farmers to remain independently viable. Taking into account production and distribution according to tradition and customs, this research emphasizes the viewpoint of survival in such a way that it does not exclude consumption and reproduction. As such, through investigation of the risk management technique associated with life restructuring after emigration in rural Laos, the study attempts to clarify a singular technique to control the variations of life. By focusing on the distribution and usage of Chan Daeng, a wild palm plant, as the major natural resource in this village, before and after immigration, this investigation aims to lead to a reassessment of Laos's "poor rural" outlook.



Photos 2. Chan Daeng to be distributed in the forest when the canopy is opened

# **Results and achievements through fieldwork**

Chan Daeng (scientific name: *Dracaena loureiri Gagnep*) belongs to the palm family, and is to be grown at an altitude of 500-2000m (NAFRI 2007). Actually, it had grown at an altitude of 990m-1172m, about 20 strains of which were confirmed around the L village in 2015. The main living area of villagers covers around 945m. The village is located in the basin surrounded by mountains and forests. The ownership, use, and rights of Chan Daeng have not been determined in the village, and there is no limit on its use. Intrusion by residents of the nearby village has never been a problem. The ridge of the mountains is used as a boundary between neighboring villages. Chan Daeng prefers rocky areas and highlands in the forest when the canopy is opened. Distribution is of two types: single strain distribution and multiple strains distribution, as a priority species in an area. This survey examined the biggest tree, which was roughly 15m in height and 50cm in diameter. Its age is unknown. Horizontal stripes can usually be seen on the bark because of traces of petiole in the stem after the leaves fall, but they cannot be seen on the old tree. As the bark of the old tree has cracked, it creates an impression of fish scales. It has never been domesticated.

Chan Daeng fruits are harvested, dried, with the seeds. Fruiting season is from February to March. Sometimes the brown part of the tree core is sold. Dried fruits are collected by villagers only if the Lao people's merchant comes

to the village to buy it. It is not a natural resource that can be sold or bought at any time if collected. Dried fruit collected from the prefecture is picked up in prefectural capital Xam Neua, and then shipped via Boten (Luang Namtha Province) in Yunnan (China). About 570 tons were exported in Laos 2014. About 20 tons of the annual average has been shipped from Houaphanh Province in the past five years (according to the Laos Ministry of Agriculture and Forestry Statistics). National statistics show that the amount traded every year varies greatly. It is said to be used as pharmaceutical raw material to counteract abdominal pain in China, but how it is actually used in China is not known. Moreover, whether or not the product has been processed is not confirmed. It was once used as a traditional medicine in the village, boiled with hot water and consumed to combat abdominal pain. It has also been used to treat cuts as a tree poultice, serving as a disinfectant. However, local people do not use it in recent years.

The track record of Chan Daeng collected in the L village was 1150kg / 32 households (2012, before migration), and 1360kg / 27 households (2015, after migration). There was a 210kg increase after migration. Forest products that can be exchanged for money were reduced from seven to one species during this period. Looking at the case of the Chan Daeng when collected at more than 100kg in one household, it was 4 households before migration (12.5 percent of all households), but more than 6 households after migration (the same as above 22.2 per cent). This shows an increase. On the other hand, 15 households before migration (the same as above 46.9 per cent) and 13 households after migration (the same as above 48.1 per cent) did not collect Chan Daeng at all. The number of households decreased but the percentage of all households increased. Looking at the contribution of forest products in cash income, Chan Daeng had accounted for more than half of the household income in the households that collected Chan Daeng after migration. Chan Daeng was the only source of cash income for some households. I found that the proceeds from Chan Daeng are intrinsic to the lives of a majority in the village, and so the collection pressure on Chan Daeng increases. However, there is no movement toward new arrangements around Chan Daeng collection in the village, while the movement towards other sources of cash income is seen in some households.



Photo 3. Bark of Chan Daeng



Photos 4. Seed and seedlings of Chan Daeng

### Implications and impacts on future research

Field research was carried out in March and November 2015. However, the flowers and fruits of Chan Daeng could not be observed, and it was not possible to observe the site directly once it was traded to the merchant. Although flowering occurs from August to March in the plant encyclopedia, it is necessary to be reconsidered for the investigation period. In addition, although Chan Daeng is positioned in the dialects of Chan Dai in the plant encyclopedia, some local people consider Chan Dai and Chan Daeng as different species (the dialect of Chan Dai is Oinanni). On the other hand, some local people recognized that there are two classifications in Chan Dai. One is Chan Dai Hoom and the other is Chan Dai Boo Hoom. Of these, only the former is Chan Daeng. The survey was extremely confused in the beginning and there is still no clarity about the species and local language. However, there is only one type around the research village and its villagers do not distinguish between the species.

This survey was to consider the use of non-timber forest products (NTFP) for the risk control techniques associated with life restructuring after emigration. However, there are no cases that show the direct exchange of NTFP with the life tools, such as food, clothing and tools of housing. So it is difficult to capture the impact of NTFP on the life restructuring. Chan Daeng is one of the NTFPs, but its function as a safety net is weak, because Chan Daeng is not an NTFP that can be exchanged for money whenever desired. If so, safety nets for the villagers, for example, should be in the human network, which could allow the borrowing of daily goods at no charge. A question around the human network formation is whether Chan Daeng collecting would be effective for making a net-work. It needs to be investigated further.

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