

Abstract

This project using the Community Food Bank Project under the Royal Initiative of His Majesty The King Rama IX, as the principle guideline for research study. The research focused on the participation as well as the creation of learning communities in the conservation and restoration of local biodiversity for household consumption, utilization as well as generating income from local biodiversity-based of highland communities. The objectives were (1) to study and gather ethnobotanical knowledge in plant used by local people and studying for appropriate propagation method of potential and rare plant species, (2) to study the conservation and restoration of local biodiversity within the community and natural forest, (3) to promote household consumption, utilization, and income generation from local plants, and (4) to encourage local community participation in traditional knowledge and biodiversity protection. The results showed total of 1,262 plant species (from 6,728 data) were used by 84 local communities in 8 provinces, include of 10 ethnic groups. These species were divided into 3 categories (some species overlapped among these categories): 680 edibles, 669 medicinal, and 482 for other purposes. The propagation and cultivation practices were studied in 86 plant species. The total of 950 species were restored for creating natural forest fertility (2,188 rai) and household consumption (5,170 households), while 165 rehabilitated species were rare plants (75% recovered). The four schemes to promote local plant utilization consisted of knowledge transfer and exchange within/or without community by traditional knowledge's holders to young generation, supporting plant exchanged between community, set up local community course and local school curriculum to create the young generation of inherited knowledge, developed learning center of local biodiversity, and support local people to generated income from potential varieties. The 400 rai of community forest of Ban Huay E-Khang (Thung Loun Royal Project Development Center) were selected for plant protection area through participatory processes. Moreover, the creation of new generations to raising awareness or consciousness of conserving biodiversity was also important. Thus, the community organization had been developed to achieve the sustainable biodiversity conservation, restoration and utilization in 4 communities, included Ban Pa Kluai, Ban Huay E-Khang, Ban Pa Paa, and Ban Pa Dad.

Keywords: Local community food bank, Highland biodiversity, Traditional knowledge, Knowledge transfer