

### Abstract

Doi Chang Village is one of the main extension areas of Wawee Highland Development Project Using Royal Project System. This mountainous area is located in Mae Kok watershed of Mae Suai District, Chiang Rai. The village has cool temperature all year round and suitable for Arabica coffee production. About 90 percent of agricultural land use is coffee fruit trees and vegetables. Forest area has been slashed for coffee plantation and facing of low soil fertility and erosion. Mono cropping of coffee is risky on production yield and pricing caused by alternate bearing and non-suitable land use management. This study was set up to demonstrate a better technique on plant management under agricultural system conditions. 10 farmers were participated with 20 rai of demonstrated plot. Yield and quality will be monitored in coming harvesting season. In addition, marketing of alternative crops such as table grape, macadamia nut and Japanese peach has been studied with high potential in local market. The main outcome of this project is having a suitable planting system under agro-ecosystem management for a better livelihood of highland community.

**Key words:** Wawee, Agricultural system, Coffee

