Abstract

Nowadays, there is recognition of the necessity to provide more attention to the significance of sustainable natural resource and economics. The emphasis given in sustainable development and poverty elimination of rural community plays important role in country development while acknowledgement is very important for practical guidelines by obtaining the Sufficient Economy Philosophy to contribute conceptual framework, indicators and methods to assess community stability and capability of strength. Hence, the holistic knowledge appropriated for agricultural community are required. The livelihood and farming of Ton Pueng village depends on constraints of highland natural resources and land use regulation, which being included in Khun Pae Royal Project and Oop Luang National Park. The village is selected as the best representative for visional acknowledgement upon their geo-social based. The research objectives are 1) Studying potential and management of natural resource base at farmland level and sub watershed level in parallel with the effect of agricultural production to conditions of natural resource base and environmental consequences. 2) Studying and developing the indicator of sustainability of natural resource base, cultivation system in household level and community capability of strength in compliance with the Sufficiency Economy Philosophy. 3) Assessment of the sustainability of natural resource base, production system and agricultural economics in household level and community level in compliance with Sufficiency Economy Philosophy. Various research methods are employed with participation of the villagers by combining qualitative and quantitative conventions interactively. More importantly, it is relationship and partnership building between researchers and villagers that ensures high quality information. A friendly initiative with the villagers is conducted by exchanging information and participating social activities in parallel and subsequently allows local researchers to collect 91 questionnaires by interviewing farmers while establishing qualitative data by conducting community meeting in conjunction with focus group meeting.

The research achievement is the result of indicator categories development regarding community stability and practical way of assessment on actual condition of *Pga K'nyau* community that can be used for further development for highland community. The indicator categories consist of 1) Moderation can be categorized in two indicators, firstly, concerning with land security for food production that can fulfill household and community consumption and commercial cultivation as well. Secondly, concerning with food security counting on source and quantity to fulfill household and community requirement. 2) Reasonableness of cultivation is dealt with the ration of cultivation that rely on production planning, benefit and balancing is indicated by revenue and profit; their planting strategies for high profit and the ability of paying back loans. 3) Consideration on the need of self-immunity; with the capability of labor forces in obtaining sufficient food for family. Furthermore, the ability to access various sources of income and saving schemes. These are concerned to the stability of family in term of food and economic firmness.

Regarding to the guiding of *Sufficiency Economy Philosophy*, the community prevails in "High" level. Nevertheless, it may tend to "Conditional" level due to reasonableness of planting commercial crops and moderate production. However, the villagers can be self-dependent without greed and having no encroachment on others, which considered as a "Basic" sufficiency that can step forward to progressive sufficiency if coordination in community and environmental development is established.

The assessment of community stability of Ban Ton Pueng indicates that 1) The natural capital of Ban Ton Pueng is in "Moderate" level with tendency to "Warning risk" due to the increase requirement of utilizing natural resources in accordance with intensive commercial farming that may affect soil erosion and water quality. 2) Since 2007 -2009 AC., the economic consistency of Ton Pueng village has obtained "Highly moderate" level that meets the "Basic stage" of sufficiency economy. However, the stability of economic depends on farming. Fluctuation of agriculture input and yield price results in unstable income that causes the livelihood strategies of Ban Ton Pueng becoming more difficult. 3) Social capital obviously declines in culture, local wisdom related to farming and natural resources conservation, due to commercial agriculture. Currently, the capability of strength of Ton Pueng village is in "Moderate" level. The important factors in order to develop Ban Ton Pueng village to a "Higher" status of stability are self-analysis and appraisal in parallel with gradual and continuous geo-social based development. This research project suggests modeling development for assessment the four dimensional capitals of Pga K'nyau community in compliance with Sufficiency Economy Philosophy including the modeling experimentation on other communities that their geo-social based are closely similar to Ban Ton Pueng village. The results of modeling experimentation can be utilized as the validation of the modeling establishment.