

Suwajee Thansutthipong 2008: Economic Valuation of Multifunctionalities of Agriculture on the Highland: Case Study of the Mae Hae Royal Project Development Center in Chiang Mai Province. Master of Science (Resource Management), Major Field: Resource Management, Interdisciplinary Graduate Program. Thesis Advisor: Assistant Professor Thanwa Jitsanguan, Ph.D. 176 pages.

It is well accepted that the appropriate patterns of highland agriculture are closely related to location, resource base and the involved society. Accordingly, both direct and external benefits are then expected as multifunctionalities of agriculture. The Mae Hae highland area in Chiang Mai province is one of good examples of the successful development of such agricultural multifunctionalities. These come to the objectives of the study that (1) investigating the implementation of Mae Hae Royal Project Development Center, (2) estimating economic values of the highland agricultural benefits, and (3) evaluating the overall economic feasibility of Mae Hae Royal Project Development Center.

The result of the study found that highland agricultural development with the integrated community development under Mae Hae Royal Project Development Center has been focusing on rural human development and participatory planning for the area. The emphasis is on agricultural production with conservation of natural resources and environment to yield the sustainable multifunctionalities. The total direct and external benefits are estimated at 55,155,515.44 baht per year. Economic value is found with the highest proportion at 52,776,592.34 baht per year or 95.68 percent while the rest are allocated to the environment and social benefits at respectively 3.74 and 0.58 percent. Economic feasibility study of the project within the framework of 29 years under the implementation of the Royal Project reveals the satisfactory result. The key indicators including the Net Present Value (NPV) at 947,742,025.43 baht; Benefit Cost Ratio (BCR) at 18.45 and Internal Rate of Return (IRR) at 53.01 percent are evidenced of the estimation. The study therefore highly recommends continuity of the project with expectation of better resource management, hill tribe cultural promotion, land and water use planning and then the more efficient valuation of multifunctionalities.

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Thesis Advisor's signature

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