Abstract

This is an analysis of the success of operations for livestock development and promotion by the Royal Project Foundation through evaluation of livestock activities of research participants. This assessment was conducted by means of questionnaire regarding factors represented by 4 indicators: food resources, revenue, renewable energy (biogas), and alternative production inputs (livestock manure). Research participants consisted of farmers and staff of Royal Project Development Center livestock operations in 5 areas: Royal Agricultural Station Pangda (black bone chicken, bresse chicken); Royal Project Development Center Thung Roeng (black bone chicken, bresse chicken); Royal Project Research Station Mae Lod (black bone chicken, bresse chicken, black tailed chicken, pig); Royal Project Nong Hoi (black bone chicken, pig); Royal Project Development Center Mae Tha Nuea (dairy buffalo, dairy goat). Results from the questionnaire were analyzed and summarized from which evaluation criteria were derived, according to the 4 indicators, in order to obtain satisfaction ratings, or level of success of operations as compared against a break even point (50%).

Results of the evaluation of indicators for livestock development and promotion by the Royal Project Foundation showed that the revenue indicators and alternative production input indicators (using manure for fertilizer as an alternative to chemical fertilizer) obtained scores above that of the break even point. Therefore, from this perspective, operations can be considered successful and accordant to plan; animal husbandry being, demonstrably, a viable additional occupation in conjunction with a primary occupation, with participants able to self-produce certain production inputs, in some instances, and the possibility of sale of livestock manure to generate further income. By contrast, food source indicators (protein) obtained scores below that of the break even point, due to some types of livestock being incongruous with local dietary habits, or requiring to be sold out of financial necessity. Similarly, renewable energy indicators (biogas) also obtained scores below that of the break even point, due to lack of budget support for implementation and available quantities of livestock manure being insufficient for biogas production.

Regarding the evaluation of indicators for the different types of livestock being raised, according to the evaluation criteria, all types of livestock obtained scores above that of the break even point. The respective scores were, in descending order: dairy buffalo and dairy goat (95%), pig (91%), black bone chicken (79%) and bresse chicken (75%), This is due to dairy buffalo, pig, and dairy goat being relatively low initial cost and possessing short rearing times relative to profitability, further reducing production costs, together with the potential sale of manure, and are therefore able to generate higher revenue, and more quickly, than that of bresse chicken and black bone chicken, which present higher production input

costs, especially in the case of hatchlings, and require higher initial investment in equipment such as breeding houses. However, the latter are still able to generate revenue that exceeds the break even point if reared consistently and continuously in large quantities.

With respect to the collective evaluation of indicators for all types of livestock, operations can be considered successful and accordant to plan. However, consideration should be given towards improvement of the conceptual framework and operation guidelines for better accordance with the particular situation, context, and way of life of farmers in the highland regions.

