

A model to ensure the sustainability of rural livelihood through Biodiversity Financing Initiative (BIOFIN) on apiculture

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Abstract

Apiculture, the practice of raising and maintenance of honeybee colonies, has been identified as an economically and environmentally favorable livelihood option. However, the beneficial role of apiculture, in terms of improving food production through pollination, and regulating the ecosystem services to preserve the biodiversity has been suppressed to some extent by current malpractices in agriculture both locally and globally. Therefore, apiculture demands innovative promotional strategies. The beneficial links between biodiversity and enterprises are promoted by Biodiversity financing. Therefore, BIOFIN would be a viable option to promote apiculture. A SWOT analysis was carried out to reveal pre-requisites to build a model. The identified strengths were; medicinal value, value for pollination, commercial value of bee honey and bee-wax. Further, apiculture is listed under sustainable food production. The requirement of specific skills for the establishment and maintenance of honeybees were identified as weaknesses. Among the opportunities; demand for bee products in both export and local market is rising. Further, the appropriate socio economic factors for apiculture in the dry-zone of Sri Lanka were identified. As per the analysis, incidence of pest and diseases in bee hives, impact of climate change, application of pesticides and deforestation were identified as major threats. The proposed model considers the economic, environmental and social sustainability. Moreover, ecosystem will be protected while expanding biodiversity and increasing crop yield through enhanced crop pollination. According to the suggested model, credit facilities will be offered to functioning Farmer Organizations (FO) through regional banks assigning pre-requisites to ensure the objectives of BIOFIN. In this connection, each FO will dissolve funds further to invest on apiculture with their members creating small groups. Specific characteristics of the loans and borrowers' are expected to be decided by FO. At the end, small groups will repay the loans to the corresponding FO. Ultimately, FO will pay the initial loan to the respective bank. As mandatory requirement for the loans, sustainability of agriculture, biodiversity conservation aspects will be assigned at lending corridor, implementation and at the termination of the loan. Individual farmer groups will be evaluated based on particular performance appraisal. Moreover, a steering committee will be established in the presence of all stakeholders for the smooth function of the system. However, this model should be recommended based on pilot-studies before initiation.

Keywords: *Apiculture, BIOFIN, Dry-zone, Farming system*

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