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Agroforestry for Livelihoods of Smallholder Farmers in Northwest Vietnam – Research in Development

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Abstract

In Northwest Vietnam, rain-fed crop cultivation is dominated by monoculture maize, upland rice and cassava on sloping lands. The loss of topsoil during the rainy season leads to a depletion of soil fertility and plant nutrients leading to reduction in crop yield. Farmers have to invest heavily in chemical fertilisers for the maize to remain productive compared to the past. Harsh weather conditions also reduce yields or even lead to crop loss and make soil and water conservation more difficult.

The project has introduced trees in mono-cropped landscapes through agroforestry to reduce dependence on annual crops, as well as increase and diversifies incomes from tree products, while also conserving the natural resource base. The research approach combined different activities, which support each other to be possible bring valuable research results to apply to reality. The agroforestry systems were designed through participatory which the scientific knowledge and local knowledge are combined. These established trials are evaluated to find out the suitable options. The add value for agroforestry adoption also involved research on propagation of priority agroforestry species, small-scale nursery development, research and transfer processing techniques, exploring value-adding opportunities by smallholders and facilitating links between producers and other market actors. The research findings were spread through farm cross-visits, farmer field days and training sessions held at the test sites, accompanied by regular impact assessments. In addition, these findings were used to inform the communication strategies, policy dialogues, extension and expansion activities through workshops, media products, extension materials and training. To promote the agroforestry adoption, the project has been developed at three levels: Participatory Farmer Trials, Farmer Demonstration Trials and Exemplar Landscapes where the scientific knowledge and local knowledge are combined and utilised. This approach is primarily based on the classic extension and dissemination theories, but highlights the important elements of collective action and social capital development among farmers, and between extension workers, local governments and researchers. The results have been found useful in demonstrating farmer adoption of agroforestry practices and developing value chains and market linkages in varying contexts, and they support the local governments to define strategy development through policy interventions.

Keywords: Agroforestry, livelihoods, local knowledge, smallholder farmers