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## Using Local Indicators to Evaluate Sustainability of Farming Systems in Leyte, Philippines

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### Abstract

Since even scientists cannot agree on a definition of sustainability, it is important to involve the local stakeholders when trying to identify sustainability indicators and to incorporate their perception of sustainability.

In Leyte, Philippines, criteria (indicators) for evaluating sustainability of farming systems were identified with local stakeholders. Group discussions were carried out with farmers while other stakeholders – representatives from the university, local and international NGOs and the local government unit – were interviewed individually. These locally identified criteria were compiled with externally identified ones and 30 farmers and 18 other stakeholders ranked the complete list individually. For primary data, a survey was carried out with farmers. In the area of Baybay 71 farmers were included in the survey and results from this area are presented here.

Three groups of small-scale farmers around Baybay were included in analysis: farmers practicing the so called “Rainforestation Farming” (RF) – an agroforestry system using indigenous timber trees – on individual plots (n=25), farmers planting exotic timber trees (n=14) on their land, and a comparison group of farmers without any timber trees (n=32).

Different criteria were ranked high by the different stakeholders. Soil quality, use of soil conservation measures and biodiversity were ranked high by other stakeholders, farmers valued security of tenure and membership in organisations highly. Mostly, for criteria which were ranked high by stakeholders, significant differences between the groups of farmers were detected.

Comparing farmers groups, RF farmers and other tree farmers were better off than farmers without timber trees. RF farmers had significantly more land available, were mostly landowners, better educated and reported having higher soil quality than other farmers ( $p < 0.05$ ). But from the set of indicators it is yet difficult to say if tree farmers are better off because they plant trees or if they plant trees because they are better off.

**Keywords:** Agroforestry, farming systems, local indicators, Philippines, rainforestation farming, sustainability indicators