United States
Department of
Agriculture

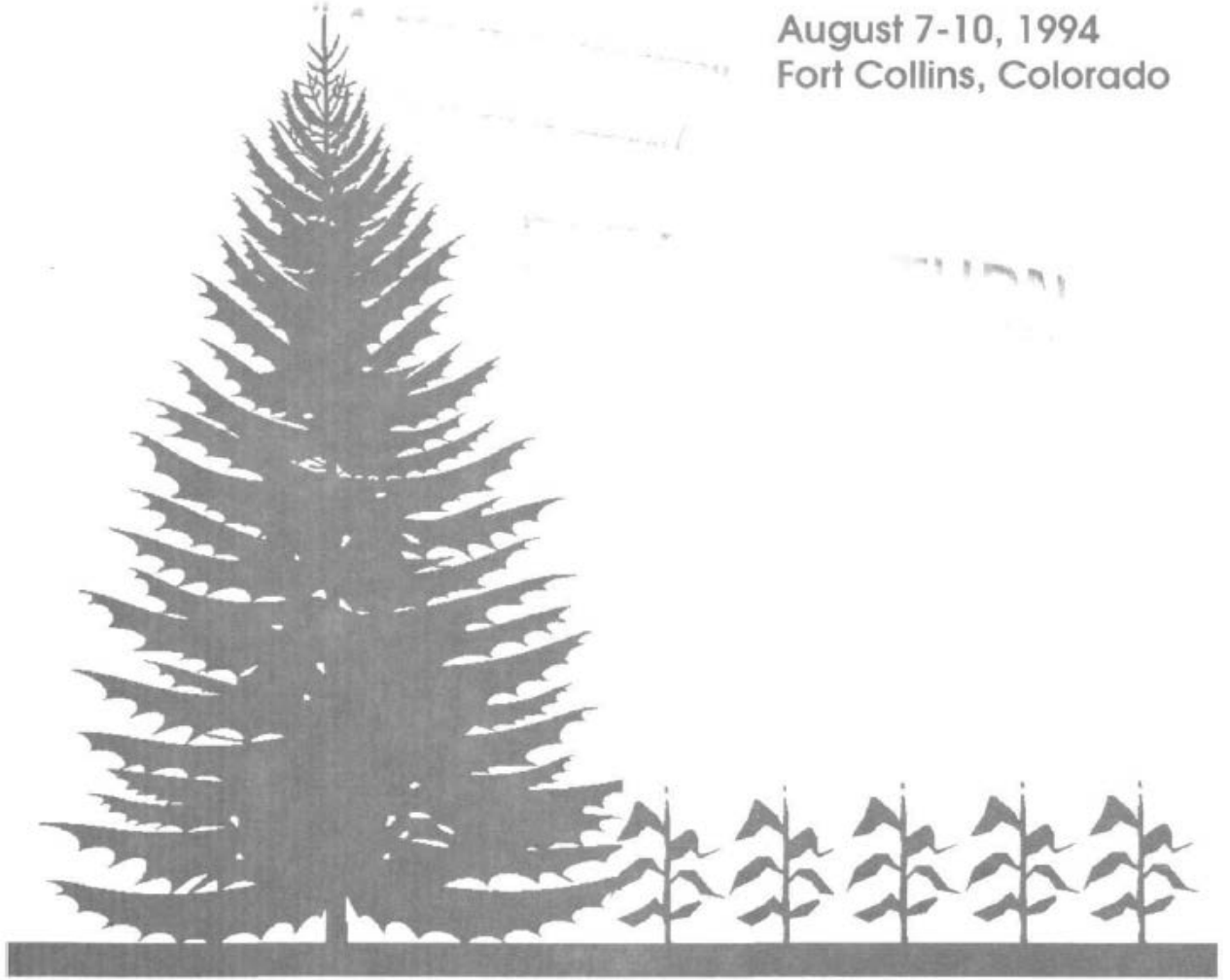
Forest Service

Rocky Mountain
Forest and Range
Experiment Station

General Technical
Report RM-GTR-261

Agroforestry and Sustainable Systems: Symposium Proceedings

August 7-10, 1994
Fort Collins, Colorado



Measuring the Socio-Economic Impacts of Agroforestry Projects in the Philippines[1]

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Conventional wisdom suggests that agroforestry projects can provide both ecological and economic benefits. Most agroforestry project evaluations, however, have failed to adequately assess the socio-economic impacts. For example, a review of 108 agroforestry project impact evaluations by Sara Scherr of IFPRI reported that only 8% assessed economic costs or benefits, 5% examined adoption or distribution of benefits by type of participant, and less than a third assessed impacts on yields. This results from a number of factors including the lack of farm level input and output data, standardized methods for basic tree and crop yield assessments, and guidelines for data collection and analysis. Given this background, the Southeastern Forest Experiment Station and the USDA/USAID Forestry Support Program are cooperating to develop and test data collection and analysis methods for assessing the socio-economic impacts of agroforestry projects.

This poster paper presents an overview of the impact assessment methodology and some preliminary results from the first case study initiated on the island of Leyte, Eastern Visayas, Philippines in July 1993. The impact assessment process proceeds in three stages: 1) an initial three- to four-week rapid appraisal; 2) a 9-12 month intensive data collection effort; and 3) data analysis. For the Philippines case study, stages one and two were completed in July 1994 with data analysis expected by October 1994. In the formal survey of 300 households, both male and female heads of household were interviewed to collect data on agroforestry adoption, production, non-market valuation, household time allocation, social, economic, and demographic information. In addition, a subsample of 37 households (both agroforestry adopters and nonadopters) were interviewed weekly for one year to gather in-depth farm budget/production, crop calendar, land-use calendar, household time allocation, and farm input and output data.

Production function analysis is used to estimate yields for annual and woody crop components of the farming systems. These are combined with market prices (and/or non-market valuations) of inputs and outputs in a spreadsheet format to calculate net present values of the agroforestry (with project) and non-agroforestry (without project) systems. The difference between these two values represents the productivity impacts at the household level. These analyses are referred to as household financial and household economic benefit-cost analyses. The household financial analyses calculate the monetary profitability of the farming system and provide insight into the cash income impacts of the project. Adding non-market inputs and outputs to calculate the total net economic benefits to the household provides the household economic analyses. Community level impacts are estimated by aggregating the household level analyses and using shadow pricing to estimate social values for inputs and outputs, including any externalities. The social equity/income distribution impacts are also evaluated at three levels. An intra-household analysis emphasizes the distribution of benefits and costs between sexes and generations within households. The inter-household analysis estimates the distribution between households at different socio-economic levels, while the inter-community level examines the distribution of benefits and costs between organizations.

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[1]*Poster presented at the Agroforestry and Sustainable Systems Symposium (Fort Collins, CO, August 7-10, 1994).*

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