



Trip Report: Property Rights, Environmental Services and Poverty in Indonesia

Indonesia: May 6-14, 2005

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Objectives: The purposes of this trip were to discuss initial findings of the community survey and organize the household survey. Steps for organizing the household survey were to test the sampling procedure, test the procedure for gathering biophysical data, and design and test the questionnaire.

Summary of what we learned and accomplished:

- We tested the sampling approach
- We tested the approach for collecting biophysical data
- We designed and tested a household questionnaire

May 6:

Arrive in Jakarta and transfer to Sumberjaya; arrived in the evening.

May 7-13:

Completed sampling

As described in our trip report from January 2005, we decided to use an area-based sample stratified by various land tenure categories. We will sample by plot and then interview the plot's operator. There are eight strata covering land under coffee or shrubs:

1. privately owned land
2. land in the national park
- 3-8. land in protection forest with 6 categories defined by HKm status and eviction status, as follows:

HKm status means: 1) the HKm permit is in place; 2) the HKm application is in process; and 3) there is no permit and no process in place to obtain one. Eviction status refers to whether farmers were evicted from the land in the 1990s.

Atik from ICRAF mapped all these areas and created a grid of points every 100 meters that will be our sampling frame. We will sample 80 points per stratum for a total of 640 plots, which is about what is possible given our budget.

Tested the protocol for collecting biophysical data

On one plot belonging to each respondent we will collect biophysical data to assess productivity, the status of conservation status, and the slope and soil characteristics. We will use methods that ICRAF has used in its other work; in particular, for each plot we will take a transect from the top to the bottom of the slope and count all the trees, measure the diameter of those at least 5 cm wide, measure the depth of the leaf litter layer, and take stock of conservation measures. To measure soil characteristics we will take advantage of a new multispectral analysis technique that ICRAF has used elsewhere with good calibration lines for soil organic matter. We will take 10 small samples per plot in the 0-20 cm depth range, take them back to ICRAF's office in Bogor to dry, mix together all the samples from a given plot and send a 20 gram combined sample to ICRAF in Nairobi to conduct the analysis.

Apart from taking the soil samples, we tested the various biophysical measurement approaches and it worked well. We took GPS coordinates of a point near one of our study villages, walked to the point, and collected all the data. We repeated the data collection on two plots, one with a mature coffee plantation and one with new coffee plants intercropped with annuals.

In the data collection, we will only undertake this procedure for one plot per farmer – the one sampled randomly based on GPS coordinates. Resource constraints will prevent us from doing this on more than one plot.

Developed and pretested the questionnaire

We built a questionnaire focusing on the usual kinds of things: demographic characteristics, plot characteristics, crop operations and investments, labor use, and various other factors that we think will condition production, profitability and investment outcomes.

We practiced it a few times and made various changes. Respondents seemed to enjoy answering the questions, even though it takes about three hours. People we talked with had not been interviewed much and so it seems there is still some entertainment value.

Because of the time it takes, however, we will only collect information on two plots per respondent (although some farmers have several). One will be the plot on which we take biophysical measures and the other will be a plot from a different land tenure status that is similar in biophysical characteristics according to the farmer. We will ask the farmer for biophysical characteristics of the plot, specifically asking for a comparison of the plot that we do not measure to the one that we do.

Although it would be nice to have data on all of the farmers' plots, having it for two plots will at least enable a comparison between two plots per farmer.

This survey will take place June through August, and then data entering and cleaning will take another 2-3 months. Meanwhile, the community survey has already been conducted and we will have that data ready for analysis a few weeks from now.

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