

# UH-led Participatory Rural Appraisal, Baucau District, Timor-Leste A Summary Report

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A team of University of Hawaii faculty led a Participatory Rural Appraisal in the Baucau District of Timor-Leste in January 2004 as part of the UH agriculture and natural resources development project. Participatory Rural Appraisal is a body of methods for outside development workers, either foreign aid agencies, host-country agencies, or non-governmental organizations, to work with local communities in diagnosing problems and identifying opportunities. PRA is a group of tools and techniques designed to help villagers to share, enhance and analyze their knowledge and conditions and to plan, act, monitor and evaluate (Chambers 1997). The PRA process can also be used to help researchers and development workers to better understand village-level resources, constraints and opportunities. These techniques were developed in reaction to top-down, outside-imposed development projects that sometimes provided precise answers to the wrong questions. In conducting the appraisal, we provided the necessary facilitation that allowed local people to take the lead in describing what they see as their problems and tell us what they would like to do. They began the process of taking over a project begun by UH and the Timor-Leste Ministry of Agriculture, Forestry, and Fisheries (MAFF) and making it their own.

Prior to independence, Timor-Leste had been under varying degrees of foreign domination for centuries. Most host-country agency personnel were trained in the Indonesian system, which seems to have emphasized top-down planning and centralized solutions to local problems. Because of the diversity of environments and cultures of Timor and the independence of the Timorese people, top-down solutions to development problems are unlikely to take root in Timor-Leste. The MAFF staff members we worked with were aware of participatory methods, but few had ever used them in their work. At the same time, the UH faculty on the project were keenly aware of our need to better understand the Timorese agro-ecology and social systems. We therefore designed a participatory rural appraisal that would work as a training exercise for the MAFF staff and students at the National University of East Timor.

We conducted participatory rural appraisal exercises in seven communities in the Baucau District from January 16<sup>th</sup> to 25<sup>th</sup>, 2004. The UH team consisted of Dr. Catherine Chan-Halwendt, economist, Dr. James B. Friday, forester, Dr. Andre du Toit, agronomist, Dr. Harold McArthur, anthropologist, Dr. Luciano Minerbi, planner, Mr. John Powley, livestock specialist, Dr. Leon Watson, natural resources specialist and country coordinator. Having a large and diverse team allowed us to split up into small groups and also to investigate a full range of agriculture and natural resource problems. We worked with eighteen MAFF staff, including staff from the Crops, Livestock, and Extension and Research divisions in Dili and the Crops, Forestry, Fisheries, Livestock, and Irrigation divisions from the Baucau and Viqueque offices. Four students also accompanied us from

the National University of East Timor and Dili University and three US Peace Corps volunteers. The latter were invaluable as translators and cultural informants.

The PRA process involves public social events that are strongly influenced by local tradition, and existing social relationships (Mosse, 1995.) In some communities, we were introduced in formal group setting. Our first visit to the community was marked with a procession, speeches, traditional dances, and feasting. Community leaders took the opportunity to stand up formally in front of the group and explain what they would like the government to do for them. Our colleagues with the MAFF were understandably uncomfortable with the situation and explained to us that although the farmers' desires were understandable, the MAFF did not have the resources to do what was being demanded. Once the formal meetings were over, we broke up into small groups in which we were able to have conversations with local farmers and really begin to understand their concerns and problems. We used a variety of techniques including mapping, ranking of problems and opportunities, construction of crop calendars, and informal surveys. The mapping, in particular, was useful in getting people to describe both their resources and what they saw as their problems in their landscape. For example, one group began by mapping roads, then mapped their water sources and rice paddies. This indicated that growing paddy rice rather than maize was their priority, an observation that they confirmed verbally. They continued by mapping areas where severe gully erosion was occurring, which showed us that they were aware of the problem and desired to do something about it. This led into a discussion with the local foresters about the best trees to plant to prevent erosion and how the MAFF could assist the villagers in growing trees and reforesting the area. We frequently broke the groups up so that at least one group was all women and was facilitated by women. Dr. Chan-Halbrendt also facilitated an economic enterprise ranking exercise, conducted market surveys and interviewed sellers at farmers' markets.

As our PRA progressed, more and more of the facilitation work was done by the Timorese and less and less by the UH staff. In many cases, for example with an exercise in mapping community resources, the local farmers themselves took over, with the MAFF staff actively listening and the UH staff facilitating and observing. In this way, the MAFF staff learned ways of involving local farmers and community members in planning exercises that were non-threatening but could be of great assistance in developing future projects.

We conducted our exercises in the most informal and direct manner possible, often on a farmers' front porch or back yard. When we had the opportunity, we followed up our small group mapping or ranking exercise with a walk around the farmer's fields or a tour through the village. In this way we were able to verify what we were being told by our own observations and also see new things that were not mentioned in the interviews. For example, one farmer had not mentioned having planted any *Leucaena* trees, but we observed seedlings on his farm that he then told us he had obtained from the forestry nursery. At other times we were presented with contradictory information. One group (led by men) denied that availability of firewood was a problem, but a single woman head of household told us that she spend a large amount of her time collecting wood and water.

The UH staff got together while still in country to write a report of all our observations while they were fresh in our minds (Chan-Halbrendt *et al.*, 2004). Only the most important points are reviewed below. We observed both rice and corn crops, but farmers clearly told us that paddy rice was their most important crop and corn was grown only for subsistence. Most farmers did not see either rice or corn as income-producers, but instead were interested in developing cash crops such as peanuts, onions, and vegetables. Some corn was grown as a sole crop, but most was intercropped with squash, pumpkins, sweet potatoes, beans, or other vegetables. Problems with crops included low soil fertility, pests and diseases, weeds, lack of water, and the labor involved in tilling. Farmers knew something about fertilizers but wanted to learn more about what types to use and how to apply them. They also had heard that chemical fertilizers were bad for the soil and knew from experience that they were expensive and so wanted to learn about making compost and using locally produced organic fertilizers. Many farmers thought that the role of the government was to provide inputs and wished to be given fertilizers and even tractors. While many farmers have used fertilizers in the past, these were heavily subsidized by the Indonesian government, and the true costs were not borne by the farmers. The current project needs to continue to work to emphasize that our role is educational and that we will not be providing inputs. The project is clearly on track in seeking to develop good fertilizer recommendations and in evaluating the economics of fertilizer use. At the same time, the PRA uncovered new opportunities in exploring the use of organic fertilizers, the effect of fertilizers in mixed cropping systems, and the use of fertilizers for cash crops. A further opportunity is to collaborate with the German-led agricultural development project in Baucau that is importing fertilizers and tractors to start local agricultural supply enterprises.

The most frequently mentioned problem for forest and range was the invasion of the exotic weed, *Chromolaena odorata*. This unpalatable weed, which became common in East Timor only in the 1990s, has taken over much of the open grasslands that were used for grazing livestock (McFadyen 2003). It also reportedly prevents fallow fields from reverting to forest. Farmers did not see a great need for planting trees for either fodder for animals, as confined animal feeding is almost unheard-of, nor for firewood. However, they did desire to plant more valuable timber trees such as teak and mahogany for future harvests and trees to control erosion. One community developed a plan to plant widely spaced trees in an area used for grazing. Superior varieties of *Leucaena* trees were supplied to the community by the project in conjunction with the Café Cooperativa Timor and planted a month after the PRA. Some local communities are already taking action to prevent deforestation from over-harvesting of wood and have instituted a traditional ban on cutting, called a *tarabandu*. Future efforts of the forest and range component of the project will focus on community-level tree production and reforestation and weed control for grazing areas.

Many farmers, especially women, expressed frustration with the lack of markets for agricultural products. Farmers have little incentive to bring products to market when prices are low or unknown in advance. Market prices are set by the availability of imported goods, especially rice. Local markets are limited as few local people have off-

farm income to purchase produce, and transport to better markets in Dili is usually prohibitively expensive. People were interested in opportunities to produce value-added, non-perishable products from their farm and to grow new crops that could be sold to generate income. Future efforts of the project will include training for the MAFF on marketing of agricultural products and the creation of value-added products.

While a traditional Participatory Rural Appraisal would involve a group of outside facilitators spending five to ten days in a single community, we visited several communities over the course of little more than a week. In doing so, we trained the MAFF staff in PRA concepts and methods while learning about communities at three different elevations in the watershed. Although we were able to make initial community assessments at different locations we were less successful in getting the local communities to take over the process and set their own agendas and anticipate that this will come with time. The PRA process is ongoing and the current MAFF staff in the district offices and UH collaborators will continue to work with the local communities to address their agriculture and natural resource needs. Most of the MAFF staff had not had any experience in Participatory Rural Appraisal, and some had had only classroom training. That classroom training is insufficient is proved by the fact that those who had done it had nonetheless never used the techniques learned in the field. We involved the MAFF staff in field exercises, even though some were initially uncomfortable doing so, so that they would learn more effectively. We have produced a video of our experiences that will be translated into Tetun and Portuguese and later in other local languages to facilitate its use in training other MAFF staff in PRA concepts and techniques.

The January PRA began a process that will empower both MAFF staff and the farmers in the local communities. Our agricultural development program has broadened from begin focused solely on the main subsistence crops of rice and corn to include market crops such as vegetables and peanuts. Fertilizer recommendations will include consideration of organic fertilizers. We will work on developing markets for other agricultural products such as candlenut. Our natural resources management program will include aspects of weed control and agroforestry systems that work with local land use patterns. Local people in the communities will see that the program has responded to their ideas and be encouraged to be active participants rather than passive recipients of the research and development process.

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