

Project Update: November 2008

Research foundation and development

The São João do Jaburu community located within a Brazilian Sustainable Development Reserve in eastern Amazonia is increasingly demonstrating greater interest, skills and enthusiasm for conservation of their floodplain forests. With support from a Rufford Small Grant for Nature Conservation, I strengthened my partnership with this traditional community to understand the ecology of key forest species that sustain local livelihoods throughout the Amazon estuary region. Building on 3 years of previous work, we generated key ecological information necessary to elaborate guidelines on best forest management practices, integrating scientific research methods with insights of local people. To effectively and genuinely incorporate local people and their traditional ecological knowledge, community members were engaged at all stages of the research and training program: setting research priorities, species selection (in which the seed-oil producing species *Andiroba* topped their list), participatory mapping, data collection, and a capacity building program. Throughout this process, trust has been built, perspectives and knowledge have been shared, and platforms for collective learning have been developed.

Catalytic repercussions: attitudinal and management changes after preliminary results

Because of this participatory approach, preliminary research results were quickly integrated into the community, often causing lively debate about current and future resource use. For example, findings clearly demonstrated that many current management practices were still far from being sustainable, and that NTFP (non-timber forest product) resources were not being used efficiently. After interpretation, validation and dissemination of these preliminary results, community members organized meetings to discuss forest use strategies and take collective action. As a result of this mobilization, from 2007 to 2008, the community's resource use patterns drastically changed. They reduced substantially destructive harvesting activities that have a high impact on forest integrity, marketed a range of NTFP species through certified production, and had their income and welfare enhanced. Indirect impacts of this local success have also been observed; some local politicians are now expressing interest in incorporating wise management and marketing of NTFPs into the local policies to improve livelihoods and foment conservation.

Increasing interest and active engagement on research activities and dissemination

Additionally, this participatory approach and the consequent positive impacts on local livelihoods and families led community members to become increasingly more interested in the research processes. During the previous 3 years, I built a field work team to collect ecological data in the forest (composed of 8 local male researchers or "monitors", one field assistant and myself). With Rufford funding, the number of monitors has more than doubled and become more diversified. I now work with 20 monitors, including youth, women, and community leaders - all enthusiastically engaged in research activities and dissemination.

Reflection note

I am surprised by the efficiency of the approach adopted for advancing science as well as promoting real and lasting social and environmental impacts. The lessons learned are vast and still being collected and processed. I believe that the participatory approach to research and resource use planning is *the* innovation that leads to real change in how communities think about resource management and NTFP marketing.

Specific activities funded by Rufford in 2008

In mid May, as part of my master's degree program, I arrived in the field and carried out two main activities: (1) Collection of a series of additional ecological data with the community in general, and the monitors in particular; and (2) Design and delivery of an intensive program of capacity building and results dissemination (as described below).

Participatory data collection

From May to July, we: (1) continued bi-weekly monitoring of andiroba fruit production through intensive and extensive samples (48 and 507 trees respectively, spread throughout the community landscape); (2) conducted baseline re-measurements of diameter growth for the whole production sample (555 trees) and; (3) conducted inventories (18 1-ha plots) to assess population structure and start a population dynamics monitoring study in which we tagged and recorded data on 1,111 trees, composed of all size classes. Additionally, I integrated and trained all the new monitors recruited for the team. One interesting point is that, in spite of the hard work and tough conditions in collecting all this data in the forest, a really good atmosphere and collaborative spirit developed within the field crew. We exchanged knowledge, debated research findings, discussed ecological processes, and developed strong and lasting relationships.

Capacity building and research dissemination

Capacity building priorities were also identified with the monitors. They wanted to continue learning sessions on science fundamentals, research methodologies, and the particulars of forest ecology and management. They also, however, wanted to be prepared to disseminate research results. For that reason, we decided to conduct full day classes (workshops), every weekend. I divided these workshops into two modules: ecology classes taught using training for transformation principles and presentation of research results for socialization of findings.

Training for transformation. I conducted the ecology classes using the elicitive learning process and training for transformation principles. This approach dictates that participants and their knowledge are seen as the primary resource for the training, whether or not they initially see themselves as such. The key principle of this approach is that no education is neutral; it can either domesticate or liberate you. While 'domestication' is where people are taught in a way that strengthens and maintains the existing situation, 'liberation' is said to enable people to be critical, creative and responsive (Freire, 1970). Then, in these workshops, the monitors were encouraged to be critical, analytical and learn by asking questions. The subject was approached using the examples and perspectives brought in by the participants themselves, within the local context rather than from outside.

Socialization and dissemination of research. To socialize the research process and results, we recapitulated the entire progression of research during this module, including research goals, activities, methods, and preliminary findings interpretation and implications. Each monitor was charged with studying one aspect of the findings, and then presented those findings to the rest of this internal research group. This exercise not only honed their presentation skills, but it also fortified their knowledge of the subject matter. As a strategy to reach marginalized groups within the community, we also invited others to participate in these presentation training exercises. These “outside” participants observed and provided feedback on the presentation. This training culminated in a big one-day presentation that was organized by the community. The monitors took the lead in not only mobilizing all community members, but also inviting other communities within and outside the reserve. This event happened on July 13th, and had over 70 participants. The monitors presented all findings themselves, from beginning to end.

Follow up work plan. Prior to my July departure to return to the university to continue my study program, I met with the monitors to evaluate the work and share ideas for the future. In this meeting, the monitors expressed their joy of learning from both forest-based and class activities and their motivation to continue the work. They also expressed a sense of responsibility to expand and multiply the newly-acquired knowledge and awareness of sustainability and conservation issues. They made a list of priorities in which they would like to engage: continue meetings to discuss forest ecology and practice research presentations; develop strategies to disseminate research results and discuss management strategies in the region (within and outside the community); and raise funds through partnerships such as community associations, local government, grassroots movements (such as Rural Farmworkers Union), schools and the environmental ministry. They even mentioned the idea of creating an official “Monitors Group” to enable them to write proposals and run their own research projects in the future.

Potential for expanding activities and scaling up benefits

I am actively seeking ways to continue advancing this approach and expanding the ecological study to other important forest species in addition to the prioritized NTFP, andiroba. Using the results generated from the participatory ecological studies I also seek to collaboratively construct sustainable management models that are adapted to the local reality. Finally, I aim to establish locally-based strategies for scaling up results with a bottom-up plan to influence policy concerning multiple-use forest management systems.

Forest Ecology & Management Module, Capacity Building Program

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Socialisation & Dissemination of Research, Capacity Building Program
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Participatory Data Collection

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