

## Trading Trees for Naught: Strengthening rural people's power to conserve Amazonian forests

In eastern Amazonia, along the Capim River, Joao exchanged the logging rights to 25 hectares of pristine forest for an outdoor stove. Pedro gave five 35-meter tall piquia trees of excellent quality timber, for one injection for his sick son. Loggers offered Curumi's village the equivalent of US \$2/tree for six months of timber extraction, but after logging, forgot to pay. Forests throughout the Amazon basin continue to fall, in part, because of lack of information concerning their actual worth by forest residents. Unaware of the commercial value of their trees and facing hunger and desperate economic necessity, residents often forego the long-term value of forest resources and sell land and timber for trifling sums. With one third of the Brazilian Amazon managed by indigenous groups and small holders, local communities are a powerful force in deciding whether forests stand or fall.

In the same region, Senhor Mangueira's family calculated that the sums the loggers offered could not possibly compensate for the fruits, fibers, medicinal plants and game animals that he and his children gleaned from their forest. Today, neighbors visit Mangueira's family forest reserve to collect food and construction materials. Working with scientists from the Center for International Forestry Research (CIFOR), Sr. Mangueira and neighboring communities collected long term data on the "invisible income" offered by forests. The results of their work attracted the attention of the Brazilian government who requested a manual on the local benefits of biodiversity for the Amazon region.

### Bringing market and ecological information to remote villages

With support from the Overbrook Foundation, researchers from CIFOR traversed the Amazon basin, searching for scientists and forest villagers with relevant conservation experiences. Over 90 Brazilian and international scientists agreed to share their findings, interwoven with the rich experiences of forest farmers, midwives, and politicians. In 2005, CIFOR published, *Frutíferas e Plantas Úteis na Vida Amazonia* (Fruit Trees and Useful Plants in the Lives of Amazonians). Weaving together ecological, economic and nutritional data with local knowledge, the illustrated book describes 21 valuable forest fruit, medicinal oil and timber species, which have broad distribution throughout Amazonia. It reveals that an entire tree as sold for timber for the equivalent of US \$1.00 can yield US\$ 30.00 worth of fruit during only one fruiting season. The oil from a medicinal tree sold for approximately US \$ 2.00 can yield soap, an insect repellent, and a valuable remedy for arthritis. Recipes are included on how to prepare shampoo, cough remedies and bio-jewelry.



## Strengthening local capacity to negotiate with loggers

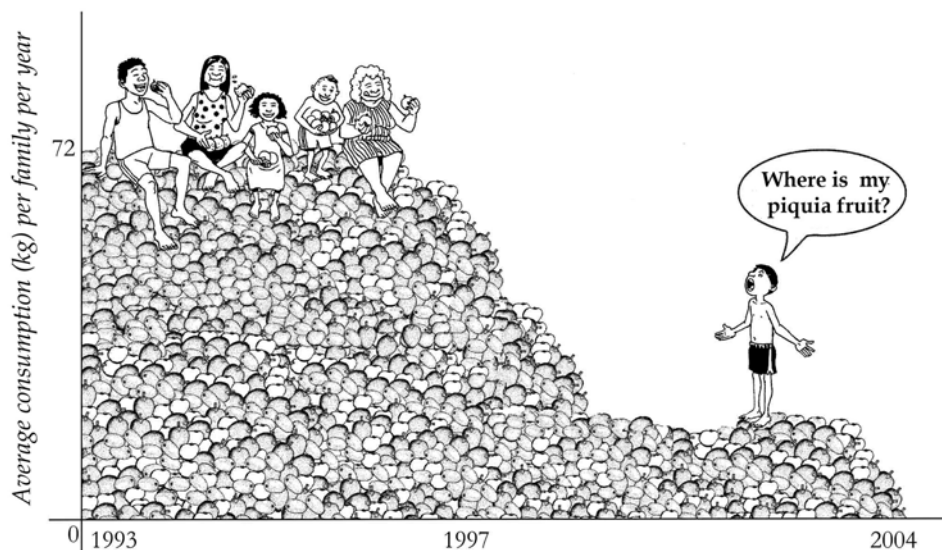
Workshops which accompany the book, *Transformation through Training*, assist communities to evaluate the importance of biodiversity in their lives. Participants learn to identify priority species, conduct forest inventories and negotiate with loggers.



Workshops are based on the premises that: people learn best when relevant information to their own lives is drawn from; that participation is a key to success; and that forest people learn best from forest people. The data, stories, and songs within the workshop have been generated by rural people and reflect the sudden and debilitating consequences of forest loss – for example the drastic reduction in household consumption of forest fruit after logging.

### Compatible to conflicting extraction of timber

Consumption of piquia fruit by Capim River families after 13 sales of timber



With the goal of preventing forest loss, workshops are primarily targeted at areas with: intact forest; traditional populations; and where major industries such as logging, ranching and large-scale agriculture have not yet reached.

To date, workshops throughout Amazonia have trained 2,590 people directly and 31,728 indirectly. Five forestry-training centers and four Universities are using the book to transform curriculum. To magnify impact, CIFOR is training trainers within extensive networks which extensive tracts of forest such as the National Council of Rubber Tappers (CNS) and the Federal Rural Literacy Program (*Pronera*). CIFOR has been invited to work with CNS and a rural literacy program, *Casas Familiares Rurais* (CFR) in all the extractive reserves in the state of Para. Through return visits and local partnerships, CIFOR is planning to monitor the impact of workshops. During the first year of workshops, some participating communities have shown concrete changes such as improved timber negotiations, enhanced forest management practices and the creation of forest reserves. As one Amazonian hunter commented, “The book helped us to recognize the many benefits we get from our forests. We no longer sell trees to the logger for nothing”.

### **Award winning work: Morocco and the *Museu Goeldi*, Brazil**

The workshops and Biodiversity manual have come to be used as references by forest product industries, University students, botanical gardens, and urban citizens. Besides synthesizing hard to find research, the book offers an example of how to make complex science accessible to civil society. In December 2005, the book won an international prize given in Marrakech, Morocco given by the Consultative Group on International Agriculture (CGIAR) and the World Bank for “Outstanding Communications”. Ten countries across five continents have requested the publication. Brazil’s Minister of the Environment, pictured below, expressed her enthusiasm for the work in a speech given in Acre, Brazil: “If I had read this book earlier in my life, I would have become a researcher in non-timber forest products, not a politician”.



In April 2006, at the mouth of the Amazon, in Belem, Brazil, another award was given to a forest farmer living in remote tributary of the Amazon, Senhor Mangueira. For two decades, he and his family have firmly held out against aggressive loggers and ranchers. His family's sixty hectares of mature forest make up an island of green amidst logged over, burnt secondary vegetation. The oldest research institution in Amazonia, The *Museu Paraense Emilio Goeldi*, gave Sr. Mangueira a plaque and carved canoe oar to celebrate his conservation achievement (Fig 5). The *Museu Goeldi's* educational department has formed a theatre troupe which uses Mangueira's wooded reserve as an example to inspire other forest communities and urban citizens. As Mangueira's son, Jaime, commented, "we survive off this forest, we must protect it".

Sr. Mangueira (center) receiving his award for forest conservation at the *Museu Goeldi*.

