

pared to that status which these people could realistically expect in alternative livelihoods. Allegretti also mentions arguments for using extractive reserves based on concepts from ecological economics, including the forest's role in maintaining 'natural capital' in form of climate and biodiversity functions.

The second paper, by Alfredo Homma, aims to throw cold water on some of the enthusiasm that has been generated by extractivism and the extractive reserves proposal in particular. Extractivism is viewed as 'a rather weak basis for development' and 'an economy that is dying out, doomed to disappear', leading to the conclusion that 'any attempts to support plant extractivism would only prolong the agony' (p. 35). The historical pattern of extractive products being replaced by plantation-grown products and then by synthetics is emphasized. Replacement by more efficiently produced substitutes represents a real cap on prices for extractive products, setting a limit on the money that can be earned through their sale. I might add that, while this limitation makes extractivism a 'weak basis for development' of the region as a whole, it does not invalidate the arguments for establishing extractive reserves. The government creates these reserves not as the most efficient means of obtaining rubber, Brazil nuts, and other commodities, but rather for their environmental functions. That is why they are created under the authority of the Ministry of the Environment rather than the Ministry of Agriculture. Homma also attacks extractivism as a 'cult to poverty' and 'sustainable underdevelopment' (p. 36). However, it should be remembered that in the case of extractive reserves, these are proposed by the extractivist inhabitants themselves. People are not being forced to live in poverty for the benefit of environmentalists, especially foreign NGOs, as one might be led to believe (p. 35). Homma raises the problem of feeding Brazilian Amazonia's 8 million city dwellers, saying that 'it will be difficult to do this through extractive reserves' (p. 38). The implication that someone has proposed such a role for extractive reserves is, to this reviewer's knowledge, a false one. The same is true of the implication of Homma's suggestion that Amazonia's GDP (most of which comes from such activities as mining and industry) 'would be difficult to substitute by inherently extractivist activities' (p. 38). The intermingling of discussions of extractive reserves with extractivism in general (especially a hypothetical scenario of a regional economy based exclusively on extractivism) is part of the reason for confusion. Extractive reserves, which receive a substantial part of Homma's fire, should better be viewed as a means of supplying environmental services of tropical forest. Extracting rubber and other commodities is only a means (and a partial one at that) of achieving that end. Comparisons need to be made of this means of supplying environmental services with other alternative means of supplying those services, rather than focusing on comparisons of different ways of supplying material commodities.

The third and final paper, by Jean-Paul Lescure, Florence Pinton and Laure Empeaire, provides information on extractive economies in the region, especially in the Solimões (Upper Amazon) and Rio Negro basins where these authors have concentrated their fieldwork. These areas are outside of extractive reserves, and are principally suppliers of a variety of forest products other than rubber and Brazil nuts. The paper contains information on the products and their production, processing and marketing mechanisms, and on the social relations such as the *aviamento* system of patrons and their 'captive' extractivists. The paper compares the yields, labour and costs of extractivist production with those of agriculture and agroforestry, and makes a series of suggestions as to how to improve economic returns to farmers and extractivists. The need is stressed

Extractivism in the Brazilian Amazon: Perspectives on Regional Development

ED. MIGUEL CLÜSENER-GODT AND IGNACY SACHS

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This short volume presents three papers emanating from a 1992 conference held in Manaus. It provides a good introduction to the diversity of views on what should be the proper role of extractivism for non-timber forest products in Amazonian development.

The first paper, by Mary Helena Allegretti, gives the rationale and the legal and historical background of Brazil's 'extractive reserves', namely forest areas where the Brazilian government grants a form of collective land-use right to rubber tappers, Brazil nut gatherers and other extractivists who traditionally occupy these areas. Extractivists in the reserves cannot sell the land and must agree to follow management plans that preclude destructive practices. Neither Allegretti nor the other authors enter into the controversies regarding where limits should lie on the uses permitted (for example, logging in theoretically sustainable timber management schemes or clearing of forest for production beyond family subsistence needs). Allegretti explains the social basis of the reserves, which originated from a 1985 proposal by the extractivists themselves. Regional statistics on the value of non-timber products are reviewed, along with various possibilities for increasing the yield and value of what extractivists obtain in the reserves. Studies are emphasized that indicate a better economic status of extractivists as

for improved marketing arrangements, including breaking the hold of the patrons. The authors point out the potential for improving rural livelihoods by integrating extractivism with agroforestry activities, and for promoting these combinations in buffer zones around conservation units.

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