

## **Mangroves for Livelihood**

In many coastal areas of Ecuador, Honduras, Sri Lanka, Indonesia, Thailand, the Philippines, and other countries around the Tropics, poor people live sustainably in or near mangroves by collecting shells and crabs, by fishing, and by using mangrove wood for charcoal and building materials. Mangroves are usually public land in the tidal zone. When governments grant concessions for shrimp farming, or when mangrove lands are enclosed illegally by shrimp growers, these acts provoke social, economic, and political resistance by the poor.

Shrimp production entails uprooting of mangroves, and loss of livelihood for people living directly from, and also selling, mangrove resources (shells, fish, wood). Beyond direct human livelihood, other functions of mangroves such as coastal defense (against sea level rise erosion), breeding grounds for fish, carbon sinks (where the mangrove ecosystem heavily absorbs carbon dioxide), repositories of biodiversity (e.g., genetic resources resistant to salinity) are also lost, perhaps irreversibly, together with aesthetic values when coastal zones are converted to export-oriented shrimp farming. In the fight against export shrimp farming, people who make their livelihoods in the mangroves resort to destroying shrimp ponds, when circumstances allow, replanting rhizophora seedlings as a symbolic gesture and perhaps with some hope of reconstructing vanished mangroves.<sup>1</sup>

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<sup>1</sup>Greenpeace participated in a joint action in July 1998 with Fundecol (a local grassroots group of about 300 people in Muisne, Ecuador), together with some other environmental groups and sympathetic observers (including myself). This consisted in destroying at sunrise one crop of shrimps from an illegal pond (by opening a hole in one of the walls, letting the water flow out), and in symbolically replanting mangrove seedlings. The presence of the Rainbow Warrior's motley crew gave the necessary strength to the local groups, but both the destruction of that particularly illegal pond, and the replanting, were ideas proposed by Fundecol in previous years.

Intermediary non-governmental organizations (NGOs) like Greenpeace, or the Mangrove Action Project, or Fundecol from Ecuador, or Prepare from India, and many others, connect local mangrove protective groups into international networks campaigning against shrimp farming. Their intervention can be very important to mangrove protection. In Ecuador a rumor circulated in early 1999 that 60,000 hectares of illegal shrimp ponds built after 1994 on mangroves were to be legalized by shrimp farmers paying a fee of US\$ 1,000 per hectare to the government. The shrimp ponds were to convert into legal 99-year leases held by the government.

Greenpeace sent a letter to Ecuador's then-President, urging protection of mangrove-based livelihoods of the local population. "We are aware of economic research on Ecuador's mangrove ecosystems that has valued the various goods and services provided by such ecosystems to the economy annually at US\$ 13,000 per hectare," wrote Greenpeace's ocean and fisheries campaigner Michael Hagler (who was also a member of the International Shrimp Action network's steering committee). "We fail to see the economic justification in sacrificing tens of billions of dollars of long term economic benefits to be gained over the proposed period of the 99 year leases in order to gain a one-off payment of 60 million dollars in the short term."<sup>2</sup>

Greenpeace warned the President of other dangers from dilapidated mangrove lands: new diseases (as actually happened later in 1999), and "the potential for a major eco-conscious consumer backlash against farmed shrimp." Greenpeace further urged the President to adopt a policy to restore and preserve mangrove ecosystems, and bolster coastal communities, self-reliance and development. Hagler cited Odum and Arding's account of the enormous "emergy" (embodied energy) exports which the shrimp industry represents in support of this alternative policy.<sup>3</sup>

A week prior to Hagler's letter to Ecuador's President, Fundecol distributed a message to international environmental networks couched

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<sup>2</sup>Hagler's letter of March 18, 1999.

<sup>3</sup>H.T. Odum and J.E. Arding, *Emergy Analysis of Shrimp Mariculture in Ecuador*, Working Paper, Coastal Resources Center, University of Rhode Island, 1991. Cost-benefit analysis has been applied in other cases. For example, when in 1996 the Supreme Court of India banned all industrial shrimp aquaculture within the country's coastal regulation zone, the court accepted as evidence demonstrations that the costs of harm done to coastal environment and coastal communities far outweighed the value of any benefits, including foreign exchange earnings attributable to the shrimp industry.

in a non-economic and non-thermodynamic language. It included the following call from a woman (here translated from the original Spanish) against what would be called in the US “environmental racism.”

We have always been ready to cope with everything, and now more than ever, but they want to humiliate us because we are black, because we are poor. But one does not choose the race into which one is born, nor does one choose not to have anything to eat, nor to be ill. I am proud of my race and of being conchera because it is my race which gives me strength to do battle in defense of what my parents were and my children will inherit; proud of being conchera because I have never stolen anything from anyone, I have never taken anybody’s bread from his mouth to fill mine, because I have never crawled on my knees asking anybody for money, and I have always lived standing up. Now we are struggling for something which is ours, our ecosystem, but not because we are professional ecologists but because we must remain alive, because if the mangroves disappear, a whole people disappears, we all disappear, we shall no longer be part of the history of Muisne, we shall ourselves exist no longer....I do not know what will happen to us if the mangroves disappear, we shall eat garbage in the outskirts of the city of Esmeraldas or in Guayaquil. We shall become prostitutes. I do not know what will happen to us if the mangroves disappear....What I know is that I shall die for my mangroves, even if everything falls down my mangroves will remain, and my children will also remain with me, and I shall fight to give them a better life than I have had....We think, if the camaroneros who are not the rightful owners, nevertheless now prevent us and the carboneros from getting through the lands they have taken, not allowing us to get across the esteros, shouting and shooting at us, what will happen next, when the government gives them the lands? Will they put up big ‘Private Property’ signs? Will they even kill us with the blessing of the President?<sup>4</sup>

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<sup>4</sup>Message from Fundecol@ecuanex.net.ec, March 11, 1999. Concheras are women who collect shells, mostly for selling, also for subsistence; concheras get across esteros (the swamps) by boat to reach the mangroves to collect shells at low tide. Camaroneros are owners of shrimp ponds (camaron being the shrimp). Carboneros are charcoal makers.

Death threats must be taken seriously even in Ecuador, which has been an island of peace between Peru and Colombia, as well as in Honduras and the Philippines, as also in India and Bangladesh.<sup>5</sup>

Along Colombia's Pacific Coast, the shrimp industry increases pressure to convert mangroves to shrimp farms, though they are mostly preserved. In the Tumaco area, sustainable extraction of shells is part of the everyday economy for a few thousand women. On both sides of the border with Ecuador, defense of mangroves is connected to the birth of an African-American movement.<sup>6</sup> There is much contact between family members across the Colombian-Ecuador border in this area.

One local cooperative in Tumaco successfully set up small-scale shrimp farming, although industrial shrimp growers exercise increasing pressure. Local grassroots leaders practice a doctrine of sustainable mangrove use and of resistance to commercial shrimp growers.

Jose Joaquin Castro, head of Asocarlet (the association of charcoal makers, who sell it for local energy consumption) in Tumaco, says of growing conflicts with commercial shrimp growers, "The mangroves are part of our culture, as you can see. From the time the first slaves arrived here, what they found as an alternative for livelihood was the mangrove forest, and today, when we are moving towards the 21st century, the mangroves still subsist despite development. For us in the Pacific Coast, the priority are the mangroves as a means of subsistence, as a means of protection. From the mangroves we obtain our food, and the charcoal for cooking food, and also the wood to build our homes which are 80 percent mangrove wood. The young mangroves are not cut down. We cut in one zone today, we come back in one year, and there is

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<sup>5</sup>In Honduras, conservation of mangroves has exacted a price in human lives, but it has been successful because of the effectiveness of the NGO Codefagolff, led by Jorge Varela, recipient of the Goldman Prize in 1999. In the Philippines, Broad and Cavanagh report: "Eliodoro Ely de la Rosa, a forty-three year old father of five, had been a fisherman and a leader of the fishers, group LAMBAT....Ely was deeply concerned that Manila Bay was dying, that there would be no fish for his children and grandchildren. He talked of his organization's efforts to halt the destruction of the coastal mangroves. He spoke eloquently of the dangers of prawn pond expansion, of the need to stand up to the prawn-pond owners and other mangrove destroyers, and of his plans to start a mangrove replanting program. For his visions and for his ability to inspire others to take action against the impediments to these visions, he was murdered [on January 22, 1990]."

<sup>6</sup>L. Grueso, C. Rosero and A. Escobar, "El Proceso Organizativo de Comunidades Negras en Colombia," *Ecologia Politica*, 14, 1997.