

Conservation and Ecotourism in Brazil and Mexico: The Development Impact

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Conservation projects alter local productive modes and have an impact on livelihoods. For example, sea turtle conservation projects affect fishing communities through hunting restrictions. It is not painless for communities to improve fishing technology in order to prevent the accidental capture of sea turtles. The inability to adapt to environmental requirements forces fishermen to abandon traditional livelihoods. A combination of environmental conservation and ecotourism development can provide the solution.

Sea turtle hunting has been banned in most Latin American countries. Brazil banned it in 1980 and Mexico in 1992. Before the bans, older fishermen in Mazunte, Mexico, and Praia do Forte, Brazil, taught younger ones the traditional knowledge of: (i) capturing turtles at sea; (ii) collecting eggs at local beaches; (iii) slaughtering adult turtles; and (iv) preparing meals from turtle meat or eggs. As with any traditional knowledge, this one demanded learning and practice before the fishermen became fully adept. The ban on sea turtle hunting meant cessation of a generational activity.

Then came the conservation and ecotourism projects: the *Centro Mexicano de la Tortuga* and Brazil's *Projeto Tamar*. These were implemented to recover the sea turtle population through education programmes and alternative livelihoods. Fishing boats with nets were replaced by those with sea turtle exclusion systems. Fishermen were hired to help find sea turtle nests and transfer them to incubation areas. In helping to recover nests, the fishermen began to earn a living. As a result, the projects gained important conservation allies.

But did the conservation and ecotourism projects reduce poverty? In the case of the communities in Mazunte and Praia do Forte, the answer is yes. The table shows changes in key social indicators in both towns by comparing the periods before and after the conservation and ecotourism projects. Before the projects, households had virtually no potable water or electricity, nor access to health facilities and schools. The projects significantly improved household welfare.

Average family income increased by 17 per cent in Mazunte and by more than twofold in Praia do Forte. Universal access to piped water was achieved in Mazunte. A hospital was opened in Praia do Forte. Three schools were opened in each town. Food and nutritional intake also improved because of the availability of more options and variety. Before the conservation projects, the main staple food in both towns included sea turtles, corn, rice and beans. Beef, fruits, poultry and vegetables are now commonly consumed and form the basis of a modern diet.

Changes in Key Social and Economic Indicators

Mazunte, Mexico (population, 2,000)

	Family income	Piped water	Electricity	Health	Schools
Before conservation (1999)	US\$600	0 homes	0 homes	0	0
After conservation (2008)	US\$700	1,000 homes (100%)	1,000 homes (100%)	1 clinic	3 (K-12)

Praia do Forte, Brazil (population, 5,600)

	Family income	Piped water & sewage	Electricity	Health	Schools
Before conservation (1999)	US\$300	0 homes	0 homes	0	0
After conservation (2007)	US\$900	1,900 homes (95%)	2,000 homes (100%)	1 hospital	3 (K-12)

Source: Data collected by author; and Comisión Federal de Electricidad (CFE) and Department of the Municipality of Santa Maria Tonameca, for Mazunte; and Companhia de Eletricidade da Bahia (Coelba) and Empresa de Agua e Saneamento da Bahia (Embas), for Praia do Forte.

The value of rentable spaces and land plots increased significantly.¹ For example, a commercial space of 60m² in Praia do Forte could be rented for about US\$600 in 1999, whereas by 2007 the same space would rent for US\$3,000. In Mazunte, a 2,000m² plot of land would sell for about US\$4,000 in 1999, while by 2008 a lot of the same size would sell for about US\$21,000 (not in table). Members of the communities have also integrated themselves into ecotourism by offering lodging, dining and entertainment.

Before the conservation and ecotourism projects, both Mazunte and Praia do Forte were geographically isolated and they relied on sea turtle hunting and the cultivation of one or two crops. The experience of these towns shows that well designed initiatives can reduce poverty. Fishing is less profitable now, but it no longer threatens sea turtles and still guarantees additional income and food supplements. Through training and capacity-building, local communities were able to move from a subsistence-based economy to a successful, service-oriented one.

Note:

1. Reliable data for land price and rent are only available since 2000, as the ecotourism boom in both towns only started around 1999.

Reference:

Fleischer, David I. R. (2009). 'Ecotourism, Sea Turtles and Livelihoods: Adaptation and Resistance to Development and Conservation in Mexico and Brazil'. Dissertation, University at Albany, Department of Anthropology.