"Fish nurseries need more than mangroves, says study", *Science and Development Network* (*SciDevNet*), Londres, Reino Unido, 04 de agosto de 2011.

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http://www.scidev.net/en/news/fish-nurseries-need-more-than-mangroves-says-study.html

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Conserving mangroves alone may not be enough to protect local fisheries in the Caribbean, according to a study.

Research in the Caribbean and Mexico had previously shown that the mangrove swamps act as vital nurseries for many tropical fish species.

Now, a study conducted in Honduras reveals that seagrass beds and coral reefs also need to be conserved to boost fish populations and protect *fisheries*.

This is because seagrass beds act as nurseries, too, and link inland mangroves and offshore coral reefs. Juvenile fish migrate through these habitats, from nurseries to coral reefs, where they live as adults.

"The degree of habitat connectivity is important for the different life stages of many fish species," Jessica Jaxion-Harm, who conducted the study as part of her PhD at the University of Oxford, United Kingdom, told *SciDev.Net*.

By surveying fish in seagrass beds, mangroves and coral reefs on the islands of Utila and Cayos Cochinos, she found that daily migrations occur between mangroves and seagrass, because certain fish species feed in seagrass beds at night.

She suggests that the connectivity of seagrass, mangroves and coral reefs should be taken into consideration when implementing policy and conservation practices.

"Intermediary habitats are used as a stepping-stone in many fish life cycles," said Octavio Aburto-Oropeza, a researcher at the Scripps Institution of Oceanography, United States. "You cannot separate one ecosystem from another in terms of the function they have in the lifecycle of a species."

Globally, since 1970, about 35 per cent of mangroves have been <u>deforested</u>, 29 per cent of seagrass beds have been lost, and 30 per cent of coral reefs have been degraded.

In Utila, for example, eco-tourism practices may harm the habitats they are trying to save, according to Jaxion-Harm. Lack of water treatment facilities mean that sewage from tourist areas flows into the mangrove ponds, endangering fish populations.

"We have been losing many areas of mangroves and seagrass beds due to tourism developments, urban habitation and shrimp aquaculture," said Aburto-Oropeza. "It is common that coastal lagoons are used for discharge, causing pollution.

"Traditional fishermen in Honduras, like many around the world, are aware of the need to preserve the health of these habitats. The problems with tourism and pollution come from outside, far away from these coastal communities," he said.

Edward Barbier, an environmental and resource economist at the University of Wyoming, United States, added: "Habitats and fisheries are interrelated, and such linkages are what makes them productive and valuable. The foundation of this value is the interconnectedness of these habitats, which mirrors the life-cycle of fish.

"Beyond the biological and monetary value of fisheries, if you start losing fish species, changing the biological food web and the interconnectedness between key species, you may affect the function of the whole marine environment."