The Andaman Sea jelly fishery: resiliency and adaptability of longtail fishers following the tsunami

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A while ago, Daniel Pauly came to University of Rhode Island and presented a lecture on fishing down the aquatic food chain, based on his article in Science demonstrating that as top trophic levels are intensively fished, the fishery moves to targeting ever lower and lower trophic levels. He jokingly said during his presentation “We will all be eating jelly fish soon!” Well, that day has now come in Thailand in the Andaman coastal fishery. Over the last several months, almost all fishers with longtail boats (replaced after the December 26, 2006, Indian Ocean tsunami) have taken advantage of the unusually high abundance of jellyfish. One fisher remarked it is more than he has seen in over forty years of fishing. Boats are loaded so full of jellyfish that their hulls ride extremely low on the water. Almost every boat observed entering one landing site in Suk Samran District in January 2006 contained a full hold of jellyfish. Abundant processing tanks have sprung up along the beaches and in the mangroves near every fishing village.

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The exploited jellyfish average between 14-16 inches in diameter and float near the surface. They are scooped up with a dip net with fairly large mesh size and deposited in the central hull portion of the boat. Netting is placed fore and aft to provide a hold. Therefore, gear costs to enter the fishery are extremely low, explaining why so many fishers have taken advantage of the fishery. The fishery is very profitable with fishers reportedly making between 2,000 – 4000 Baht per day (US$50-100). Each jellyfish weighs between 2-3 kg and is sold for 4 Baht off the boat to local processors.

Jellyfish are processed in simple tanks, approximately 3 m² in size. The tank frame is made of bamboo with lining made of blue or black waterproof tarpaulin. Jellyfish are put in the tank, where they are processed over a five-day period with a mixture of bicarbonate of soda, salt and alum. They are moved from different ‘baths’ once a day - the first day in salt and alum, the second in a mixture of salt, alum and bicarbonate of soda, and the next three days in salt. There is no wastage as the tentacles and bells are all used. Local processors sell the final product to a firm in Ranong where they are packaged with labels in Korean, Japanese and Chinese. Processed jellyfish are exported to Asian markets, but the delicacy is also found in local restaurants and on the dining tables of local fishers. Before cooking, processed jellyfish need to be thoroughly soaked and rinsed to remove preservative salt. They are boiled for 10 minutes and allowed to cool. They are then seasoned with lime juice, vinegar, crushed fresh chili, garlic, shallots, fish sauce, and sugar added to taste.

The jelly fishery was not even mentioned by fisher participants in community PRA exercises conducted in June of 2005 in Suk Samran. However, the rapid move into the jelly fishery by almost every fisher several months later demonstrates a good deal of adaptability and resilience within these coastal rural fishing communities. As a new resource abruptly presents itself in unusual abundance, fishers quickly change fishing tactics to take advantage of a profitable, even if short term, opportunity. Fishers are now gearing up for the onset of the squid fishery as the jelly fishery winds down.

A jellyfish being scooped.

Holding tanks for processing the jellyfish. Photos by Brian Crawford

In Memoriam: Dr Chuck Hollingworth

It is with great sadness that we report that Dr Chuck Hollingworth passed away in his sleep at his home in Montreal on 18 December, 2005.

To commemorate Chuck’s life and work, a fund to create a prize in his memory has been established at the University of Wales in Bangor. An annual prize will be given to the best undergraduate research project write up in the School of Biological Sciences, where Chuck gave his ‘Scientific Writing’ courses and had his office. Anyone wishing to contribute to the fund should contact XXXXXX

Chuck was a friend and colleague to many in the Fisheries Centre and will be greatly missed.