mote sustainable fisheries, including sports-fishing enterprises, in two states known for their exceptional beauty and robust fish stocks, Ngerchelong and Kayangel. Developing a catch-and-release sports fishing industry will help protect local fish stocks and will provide re-training for Palauan fishermen as sports fishing guides.

The two organisations are also participating in the establishment of the US$12 million Coral Reef Research Center and Aquarium. The Center will offer conservation education and provide a venue for international and regional scientists to conduct applied marine research (including mariculture studies) that enhances coastal and marine conservation in the region. It will also have programmes to train Asians and Pacific Islanders in research and monitoring techniques.

Kimbe Bay, PNG

In Kimbe Bay, TNC is working in partnership with the West New Britain Tourist Bureau, the European Union and Walindi Plantation Resort (a local dive resort) to establish a small-scale conservation and research centre to be operated by a new NGO, Machonia Na Dari (Guardians of the Sea). The Centre will encourage local and international scientific research on the unique and highly diverse coral reef ecosystems of the bay.

Arnavon Islands, Solomon Islands

In the Arnavon Islands, the Conservancy and partners have worked closely on a sustainable development strategy to support three local communities and their commitment to conservation. With TNC guidance, the communities, local and national governments, and regional partners came together to establish the Arnavon Marine Conservation Area, the first community-managed conservation area in the Solomon Islands.

To allow the area's reefs to recover, the conservation areas are now closed to harvesting for three years. In order to meet the communities' economic needs, the Management Committee will pursue development of a fisheries enterprise that will:

- target the under-exploited deep-slope finfish in the area;
- provide training and equipment to fishing groups in the three communities;
- establish fisheries centres to purchase their catch, provide cold storage and supply fishing equipment; and
- coordinate the transportation and sale of the fish to overseas and local markets.

Forging ahead with partners

The extensive analysis of the live reef-fish trade by Dr Robert Johannes and Michael Riepen coupled with the hard work of NGOs such as IMA-Philippines, has helped bring together an impressive consortium of partners. The Nature Conservancy looks forward to continued work with these important allies in the effort to protect the world's richest and most diverse coral reef habitats.

World Wildlife Fund for Nature cyanide project

by Jo Ruxton [1]

The report on the live reef fish trade by Johannes and Riepen, released in November 1995, focused attention on Hong Kong's involvement in cyanide fishing; it is the world's largest importer of live reef fish for human consumption. Many of the target species destined for Hong Kong have been caught using cyanide. The WWF family is addressing the growing threat of this practice in the Asia-Pacific region.

WWF Philippines has been working with the International Marinelife Alliance – Philippines, WWF Indonesia, WWF Malaysia and WWF Hong Kong, along with WWF International's Endangered Seas Campaign, using their experience to address the problem in each of their countries. The Nature Conservancy is also working in this field, and it is envisaged that each organisation will cover specific aspects so that each effort complements the other.

Early in 1997, WWF Hong Kong will recruit a full-time staff member to work exclusively on the cyanide issue for a six-month period and half-time for the following eighteen months.

The overall goal of the project is to conserve coral reefs and their associated fauna in the Indo-Pacific region through the promotion of sustainable non-damaging fishing practices, and, in particular, to stop the use of cyanide to capture target species for the live-fish food trade. Since Hong Kong is seen as driving the cyanide fishing industry, WWF Hong Kong will concentrate their efforts on the traders.

[1] Formerly of World Wildlife Foundation, Hong Kong

The first task is to open discussion with the main importers of live reef fish in Hong Kong and make them aware of the implications of using cyanide, including the threat to the future of their own businesses. The International Marinelife Alliance – Philippines has already initiated talks with one of the largest importers and WWF will continue this dialogue and introduce more traders to the concept of sustainable fishing. The aim will be to steer traders towards a sustainable source of live fish, that is, traditional catching methods. (These are already identified in the Philippines and the intention is to encourage them in Indonesia and other source countries).

WWF Hong Kong plans to conduct a market survey amongst the public to establish a baseline of public attitudes towards eating fish sold live, the effect of cyanide on distant coral reefs, and the long-term prospects if this method of fishing is allowed to continue. If the results show that a significant percentage of the population is unaware of the consequences of cyanide fishing for the live food-fish market, a programme will be planned to change public attitudes by raising public awareness and increasing general concern for the future of coral reefs.

An informed public will promote demand for 'reef-friendly fish' produced from sustainable, well-managed sources, and methods will be developed to provide information to consumers to allow them to choose where they buy fish or which restaurants they frequent. Through WWF's Endangered Seas Campaign, the organisation will work to establish a restaurant 'labelling' method to enable the public to make informed choices of seafood from sustainable sources.

WWF will also consider the possibility of CITES listings for species threatened by the live food-fish trade. This is, however, a very long-term solution since there is little biological data available for many of the target species, such as Napoleon wrasse. Currently, in addition, no country where these species are found and which is signatory to CITES has called for a national ban on the export of such species. These issues need to be resolved before any listing can occur.

WWF also supports village-based initiatives to put their live reef fisheries on a sustainable basis. For example, it is helping support a programme run by an NGO, Fund for Nature of the Philippines (KKP) in the Turtle Islands, Philippines. The programme involves groups of 15 people, representing a cross section of each community, including conservation wardens, teachers, youth leaders, police officers, local government officials, etc. These are being asked to identify their communities' problems. Prominent among these, as has already been established, is destructive fishing methods, including the use of cyanide.

Action plans are being developed that include education for environmental sustainability in the schools and communities. A reef-monitoring programme has been established in one area. Socio-economic studies are also being carried out with the objective of identifying approaches, from the communities' perspectives, for setting up viable community enterprises based on the ornamental and live food-fish trade. Outside assistance is being obtained from local exporters and coral reef scientists, as well as a fisheries certification expert who will help establish a certification system for the export of ornamental reef fishes.

Asian gourmets taste fish to help save coral reefs

by Carol Fox [1]

Reef fish such as grouper and wrasse are highly prized by Asian gourmets, but the practice of using cyanide poison to stun and capture them is degrading coral reefs in Indonesia and throughout the South-East Asian region. The Nature Conservancy, concerned over the growing destruction of the world's biologically richest marine ecosystems, is working to create a joint venture with Indonesia to save reefs and ensure the trade in these fish is practiced in a sustainable manner.

Traditional fishing methods once allowed for a sustainable supply of wild reef fish, but current methods threaten the availability and affordability of these creatures, as well as many other varieties of seafood. High prices and decreasing fish supplies have driven fishermen to use large quantities of sodium cyanide, a deadly poison, to stun these large fish so they can be captured and transported live to market. Unfortunately, the cyanide is creating a mosaic of dead and dying reefs in the targeted areas, eliminating them as a source of food and income for locals, as well as for other fishermen who follow.

Destructive fishing has already resulted in the decimation of the majority of the reefs in the Philippines, and of large areas of Indonesia's rich underwater environment. Hong Kong fishing companies note that the continuation of these unsustainable practices is driving fishing fleets farther afield, for example to the Maldives

[1] The Nature Conservancy, Hawaii