

## THE LIVE REEF FISH TRADE: A “BOOM OR BUST” BUSINESS



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Hook and line fisherman with his day's catch of a dozen live coral trout (*Plectropomus leopardus*) to sell to a live reef fish grower.



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Live reef fish are kept in holding tanks for 24 hours to ensure they are alive and in good condition for shipment. Mortalities are sold in the local market.

- The Live Reef Fish Trade (LRFT) begins with catching reef fish and keeping them alive, from their sources to the restaurants that serve them, mostly in Hong Kong and mainland China. Live reef fish have long been a luxury food item around Southeast Asia, and the industry is worth nearly a billion dollars annually.
- International trade of live reef fish began in the mid-1970s, and has expanded throughout Southeast Asia and the Indo-west Pacific, as traders search incessantly for new fishing grounds.
- The trade's history involves a vicious cycle that has been depleting local fisheries in a widening net across the region. At the onset, fish caught in the wild are exported straight to market. As “plate size” fish are diminished, increasingly smaller fish are caught and reared in cages until they reach marketable size. A slew of problems is associated with the trade:
  - Fish are caught before they reach reproductive age.
  - Sodium cyanide is used to make catching easier, damaging coral reefs and affecting other non-target species.
  - The “trash fish” used to feed live reef fish are also commercially valuable species fit for human consumption, and are often caught using dynamite and through large-scale commercial fishing activities. The need to feed caged live reef fish adds pressure to local fisheries.
- As a “boom or bust” business, the LRFT provides communities with additional income only for a limited time, until stocks are depleted and new sources must be found. Severely depleted fish stocks threaten local food security and undermine incomes in the long term.
- The coral trout (*Plectropomus leopardus*) is the most heavily traded live reef fish, and one of the highest priced species in the trade. In 2006, the Philippines exceeded all other countries combined in export volume of the species to Hong Kong. The Philippines' main source of the species is Northern Palawan, where the fish is locally called *sunu*. Some 90% of live reef fish cages are in the municipality of Taytay.



### Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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Cover photo: © Mavic Matillano / WWF-Philippines. Description of LRFT adapted from brochure produced by the WWF Coral Triangle Programme.

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UPDATE

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# Progress and Plenty: Managing the Live Reef Fish Trade (LRFT) in Taytay, Palawan, Philippines

# HOW TAYTAY IS DOING IT

The long-term goal of the municipal government of Taytay is to improve the livelihoods and industries of Taytayeños, while conserving and enhancing the production capacity of its natural resources. Research and studies continue to enhance policies on the LRFT, marine protected areas (MPAs), and the Fishery Code. Some major steps:



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*Fish cages are inventoried, as they continue to proliferate. Maintaining them at ecologically viable levels is one of the challenges faced by Taytay.*

- The designation of marine zones, including core or “no-touch” zones that are important to ecological processes, fishery reserves, community-managed MPAs, mariculture areas, recreational areas, and multiple use zones
- The required registration of all fishers, fishing boats and equipment
- Working towards sustainable management of fisheries, through such devices as a traceability and certification system for all marine products coming from Taytay, to ensure that the means of collection or rearing are legal and environment-friendly, and the products are sourced from a managed area.

## TAYTAY TAKES CHARGE

### FIRST STEPS

**1993-2007:** The provincial government of Palawan and the Palawan Council for Sustainable Development (PCSD) develop policies to regulate the LRFT. Policies range from total and selective bans, to setting export quotas and registration and accreditation requirements. Results are mixed, and although existing traders are duly registered, subsistence fishers cannot afford the cost of application.



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*Guardhouse in Tetas Reef MPA. The municipal government is working for Taytay to become a source of sustainable fisheries, with a network of MPAs that are biologically important to marine life.*

### GOING LOCAL

**2008:** WWF Philippines and PCSD conduct a comparative survey of LRFT cage-rearing practices in seven municipalities in Palawan that are known sources of live reef fish. The results underscore the need for the municipal governments to proactively manage the sources and growing areas for the live reef fish.

### A PIONEERING PLAN

**2009:** Taytay becomes the first municipality in Palawan to draft its Live Reef Fish Management Plan. The plan is the product of surveys conducted by WWF Philippines, the Taytay local government, Western Philippines University, and PCSD staff, with support from the United States Agency for International Development (USAID) and the WWF Coral Triangle Network Initiative. These include surveys of fish cages and mariculture activities, coral mapping, identification of spawning aggregation sites, estimations of catch per unit effort, income surveys of people engaged in LRFT, and a review of relevant local policies. Survey results are presented at a stakeholders’ workshop, where priority actions are identified.



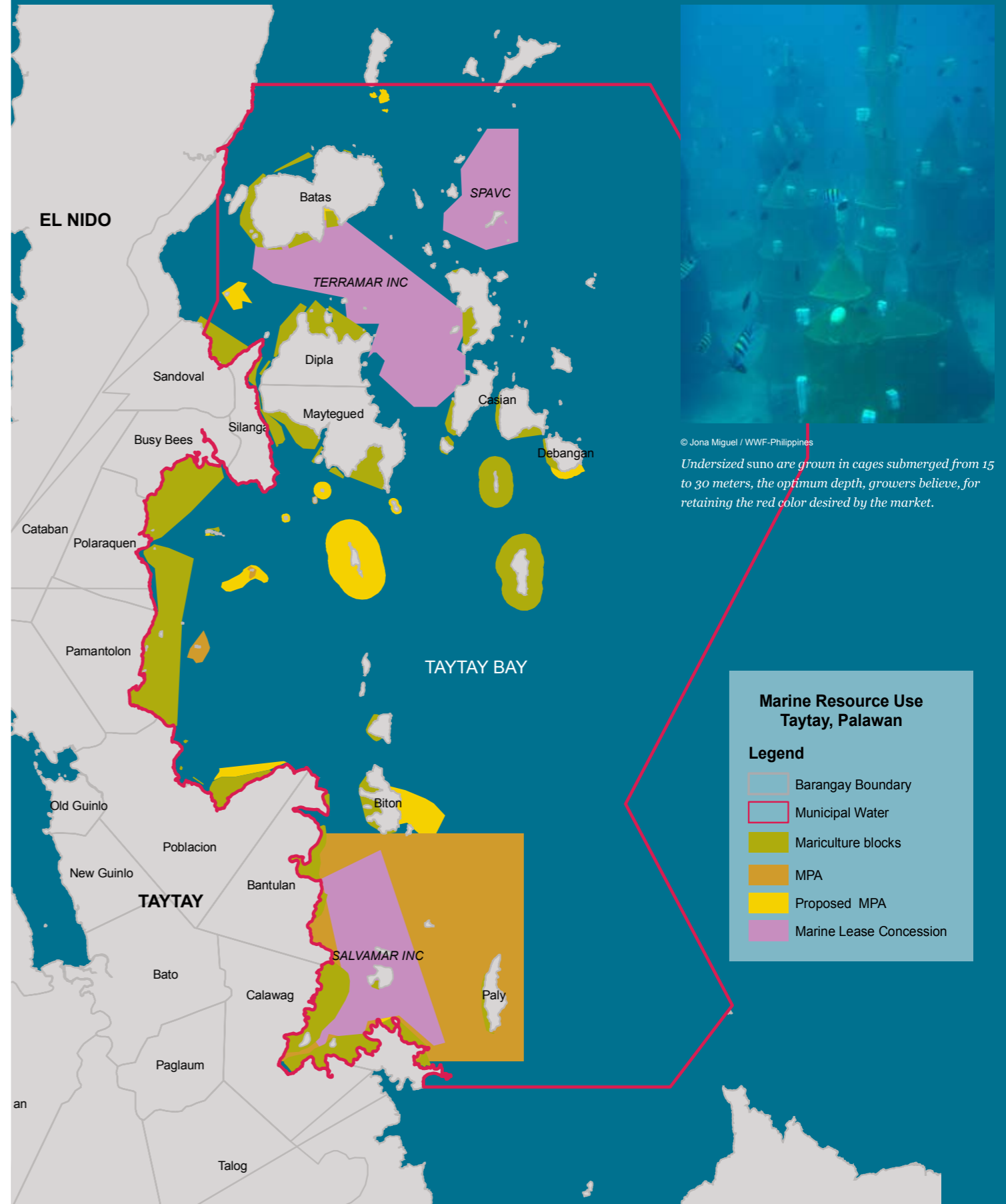
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*Mavic Matillano, WWF Philippines LRFT Programme Coordinator, checking her survey data.*

Meanwhile, on the international front, WWF Hong Kong and the WWF Coral Triangle Program begin work to raise the awareness and consciousness of the LRFT market to complement the progress in Taytay. The goal: to make the market more discerning, create a premium demand for sustainable live reef fish, and address long-term challenges in the industry.

## PUTTING THE MONEY WHERE THEIR MOUTH IS

**2010:** Taytay invests an unprecedented PhP1.8 million (US\$41,000) in fisheries management, which continues to be a priority for the local government. A trust fund established in 2007 has reached PhP7.6 million (US\$173,000) by early 2011. The fund is used for law enforcement and MPA development. WWF Philippines starts work with the municipalities of Araceli, Dumarán, and Quezon to replicate Taytay’s success. With the municipalities’ overlapping municipal waters and fishing grounds, an Ecosystem Approach to Fisheries Management (EAFM) becomes the most logical and effective way to go.



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*Undersized suno are grown in cages submerged from 15 to 30 meters, the optimum depth, growers believe, for retaining the red color desired by the market.*

**Marine Resource Use Taytay, Palawan**

**Legend**

- Barangay Boundary
- Municipal Water
- Mariculture blocks
- MPA
- Proposed MPA
- Marine Lease Concession