



Lessons learned No. 2



Marine Ornamental Fish Trade in the Philippines – New Ecological and Quality Standards



Deutsche Gesellschaft für
Technische Zusammenarbeit (GTZ) GmbH



Coral reefs around the Philippines are the source of more than half of the world's colorful, tropical marine fish. Together with Indonesia, the Philippines supplies an estimated 85 percent of the world's saltwater ornamental aquarium fish. Over the past decades, cyanide fishing, despite being illegal, has become a common method used to catch ornamental aquarium fish on the reefs.

Since the 1960s, more than 150 tons of deadly sodium cyanide has been squirted onto Philippine coral reefs. The destruction of coral reef habitats affects not only the ornamental fish population but also the small-scale fishery that provides a livelihood for thousands of poor fishermen. Today there are almost 4,000 aquarium fish collectors operating across the country.



The market for aquarium fish is steadily growing worldwide: today exports to developed countries from the Philippines are worth more than US \$ 6.4 mio/year (1998).

Certification in the marine ornamental fish trade – a new approach

In 1998 the Marine Aquarium Council (MAC), an international non-profit organization, initiated the development of a comprehensive certification program for the marine aquarium industry. In cooperation with the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH and selected Philippine/

Public Private Partnerships (PPP)

The rationale behind public private partnerships is that if private companies and the GTZ pool their resources and know-how, they can achieve their respective objectives better, faster and at a lower cost. PPP projects between the GTZ and private companies are jointly planned, financed and implemented. The success of previous development partnerships with the private sector has prompted GTZ to increasingly involve private sector companies in general technical cooperation (TC) with developing countries. Private sector companies can thus benefit directly from government arrangements between the Federal Republic of Germany and its partner countries. More information can be obtained from www.gtz.de/ppp

German private enterprises involved in the ornamental trade, the MAC criteria and standards were reviewed and adopted with the aim of raising the "quality and sustainability" of the Philippine ornamental fish trade.

As a result, the German company FLORA 2000, together with its Philippine partner company AquaEx, set up a MAC-certified pilot export facility on Cebu Island which complies with the MAC standards for marine ornamental trade.

During a project period of two years (2000-2002), a training program on sustainable, environmentally sound techniques for the catching and handling of ornamental fish was developed. Links were made to other GTZ-supported coastal resource management programs in the Philippines in order to expand the training program to other provinces. Today, more than 900 collectors have started to be trained in applying the standards.

The training materials are available in English and five local dialects, and can be downloaded soon from the MAC website.

The project Policy Advice for Sustainable Fisheries...

is operated by the GTZ on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ). It helps implement the Code of Conduct for Responsible Fisheries (CCRF) and related international conventions which form the framework of the German commitment towards sustainable fisheries management and the protection of biodiversity and food security. In the Philippines, the project has worked closely with two GTZ-supported projects, the ICOM (Integrated Community-based Coastal Zone Management Silago Bay Project) and VISSEA (Visayan Sea Integrated Coastal Resources and Fisheries Management Program), in order to discuss and disseminate the lessons learned which contribute to the implementation of the CCRF.



The use of cyanide in catching ornamental fish

In 1984 the Sudden Death Syndrome (SDS) affecting aquarium fish was linked to cyanide fishing. The latter uses sodium cyanide to stun the fish, making them easier to catch. However, sodium cyanide is a powerful poison that affects the respiratory system of organisms and can cause death up to several weeks later. During the transportation and export of cyanide-stunned fish, the mortality rate can reach up to 50% or higher. In addition, cyanide destroys corals and poisons other food fish.

Essential quality criteria

- zero use of cyanide
- environmentally friendly collecting methods
- minimized mortality through good husbandry and handling
- best water quality
- appropriate and safe working conditions
- coral reef stewardship and management

Marine Aquarium Council (MAC): standards for marine ornamental trade

The Marine Aquarium Council (MAC) Inc. is an international, multi-stakeholder, non-profit, non-governmental organization. In 2001 MAC launched an international certification system aiming to protect coral reefs and ensure responsible and sustainable marine ornamental trade. The MAC core standards, which cover the supply chain from reef to retail, conform to World Trade Organization (WTO) guidelines, and were developed through an international process involving all stakeholders in the marine ornamental trade. Information can be obtained from www.aquariumcouncil.org

Lessons learned

Introducing new standards

Standards have been developed for numerous products, especially in the field of agriculture. In the fishery sector, certification and labeling are relatively new issues. Experiences in the Philippines indicate that a sustainable ornamental fish trade is both feasible and profitable and that standards, certification and labeling are key to achieving this.

Incentive: fair pay for verified good quality

All stakeholders within the chain of custody (collectors, exporters, importers and retailers) are convinced about the need to adopt the standards, as this significantly improves the health and quality of the fish and increases their income. A training and awareness program on sustainable, environmentally sound collection methods alone would not ensure the conversion of cyanide users to non-destructive net users.

Social conditions

Project experiences show that employers working for certified companies are now enjoying better working conditions and have increased their income. In addition, the health risk has been reduced due to improved working and diving skills.

Higher survival rate for aquarium fish

Most non-certified Philippine export companies do not observe proper water quality management. In addition to cyanide, high levels of toxic metabolic waste products such as ammonia and nitrite stress the fish prior to their shipment and reduce their survival rates dramatically.

MAC-certified companies comply with new standards for best water quality management. Physico-chemical key parameters in the holding systems are now strictly monitored. This has contributed to a significant reduction in the mortality rate.

The role of government agencies

The impact and scale of the certified marine ornamental trade business must be recognized at local and national level by those agencies that are responsible for natural resource management, particularly fisheries and coastal zone management.

As a first step, a Memorandum of Agreement between the Philippine national fishing agency BFAR (Bureau for Fisheries and Aquatic Resources) and the Marine Aquarium Council was signed in 2002, stating support for the MAC program to eradicate cyanide fishing and maintain coral reef-friendly collection techniques for the marine ornamental trade.



Limitations

The MAC certification program mainly concentrates on criteria and standards to ensure an improved quality of ornamental fish during all stages of the trade, from collection on the reef to retail in pet shops. The MAC program sets a climate for partnerships for broad coral reef conservation. In the Philippines, local government units and line agencies responsible for fisheries and aquatic resources are free to become program partners, but are not mandated by law to eradicate destructive fishing methods for ornamental fish by adopting the new standards. Consequently, a MAC-certified collection site is not necessarily an indicator for the conservation and sustainable management of a complete reef: other collectors in adjacent communities may still try to apply illegal and destructive fishing methods within the same area.

To improve the present situation, local government units and government agencies for natural resource management and fisheries should support the certification program by considering the marine ornamental trade in their coastal zone management plans. Experiences from the project show that the MAC certification program can serve as an important incentive for coastal communities to adopt and/or review coastal zone management plans. Conversely, MAC should accredit only such collection sites with existing and implemented coastal zone management plans.

The MAC certification system is still quite new, as it was only launched in 2001, and therefore its certifying capacities are limited. At present, only a few certified collection sites and collectors are available, causing competition among exporters to purchase and market MAC-certified fish. Resources are needed to support more collection sites and collectors' groups to be certified urgently.

MAC itself does not verify compliance with its own standards. Instead, with the goal of ensuring that the MAC certification scheme is credible and

internationally acceptable, MAC aims to accredit independent third-party certification companies abroad, which in turn will assess whether industry participants are in compliance with the MAC standards. In the Philippines, local certifying consultants/companies are rare and not yet accredited for making the certification assessments according to the MAC standards. Local personnel should be trained and accredited in order to minimize the costs of certification.

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