

Our Story

from Buleleng



Ahmad Suhaeri, a fisherman from the Buleleng district in Bali, found 'piama', a blue-girdled angelfish (*Pomacanthus navarchus*) on the 10th of October 2007. Piama is a marine ornamental fish of great value to the fishermen of this region.

The fishermen had been waiting a long time to see the precious piama again. This fish disappeared soon after the fishermen started using potassium cyanide in the 1980s to increase the number of ornamental fish they could catch. But the potassium cyanide destroyed the coral reef, the home of piama, and with it the fishermen's main source of income and their livelihood.

With the collaborative support of LEAD Indonesia, LEAD International, Pilang, a local NGO in Buleleng, the Indonesian teams of the Marine Aquarium Council and Reef Check Foundation Indonesia, and the generous funding from the UK Government's Darwin Initiative, the fishermen stopped using potassium cyanide and started collecting marine ornamental fish with nets, just as they did before the ornamental fish trade began 20 years ago.

This investment in environmentally-friendly fishing practices has made a surprisingly quick return. The project started in early 2005 and by late 2007 had achieved its first success – the return of piama.

There is still a long way to go before the coral reef in the Buleleng district fully recovers, but the commitment of the local fishermen gives tremendous cause for hope. The fishermen are key to the reef's recovery; they are the ones who can be the guardians of their biodiversity and sustain their marine resources for long-term use.

Now, having seen piama return, the fishermen are willing to commit to a sustainable future.

We believe in 'Piama'



Preface

LEAD activities at Gerokgak sub-district, Buleleng district, Bali Province, to protect the coral reefs as part of habitat for ornamental fish and other species of animal from 2005 – 2008, would not succeed without active participation from fishermen and ornamental fish collectors of Penyabangan village, Pejarakan village and Sumberkima village. The ornamental fish collectors involved in trainings conducted by LEAD, Marine Aquarium Council and Reef Check Foundation Indonesia had shown their efforts to shift their fish-catching method from using chemicals to environmentally friendly fishing practices. Those who joined the ornamental fishermen group at the three villages are certified ornamental fishermen.

More than just about the certificate, we feel all the more proud because of the fact that these ornamental fishermen group really concern about preserving the biodiversity of the marine resources. Although the sustainable fishing method is more difficult and takes more time compare to using chemicals, and the price of the caught ornamental eco fish is not higher than the ornamental fish caught by the destructive fishing practices, these ornamental fishermen have committed to not going back using those destructive fishing practices because they believe that all the marine resources belong to the future generations, their children and grandchildren, who also need to have a better future from the same sea. LEAD really appreciates their strong will, and hopes that the Buleleng sea will always become the source of life to its people, and be carefully maintained by its people. We, LEAD, would like to give our highest appreciation to all the ornamental fishermen who had been involved in LEAD activities.

We would like to give our appreciation to Lembaga Pilang, especially to Ms. Ni Made Indrawati or Ms. Indra, who had given an endless support for LEAD project at Gerokgak sub-district from the very beginning to its completion. Ms. Indra had shown her commitment in pushing the passion among all parties for them to appreciate the natural resources of Buleleng and the effort has resulted in the establishment of marine and aquatic natural resources management institution and local ornamental fishermen group at Penyabangan village, Pejarakan village and Sumberkima village, as well as the start out of dialogues between the villagers and the local authorities.

We also would like to show our gratitude to all parties who had been directly or indirectly involved in LEAD activities at Buleleng district. We hope in the future the local community would perceive a better living, and that the marine natural resources can be enjoyed from generation to generations.

Buleleng, 22 April 2008
Darwina Widjajanti
National Program Director
LEAD Indonesia

Our Story: We believe in 'piama' (The fishermen of Buleleng, Bali, Indonesia)

By Darwina Widjajanti & Nusya Kuswantin
darwina@lead.or.id
nusyakuswantin@yahoo.com

The Milestone



The appearance of the blue-girdled angelfish or "piama" (the local name for Pomacanthus navarchus) in the waters near Penyabangan village is a sign that the marine habitat has started to recover from the use of potassium cyanide

It was a hot day in October 10 of 2007 in the sea-side village of Penyabangan, on the north western coast of Bali, Indonesia, when Mohamad Halil, a fisherman and ornamental fish collector, smiled. He smiled not just with his lips, but with his eyes. It was a contented smile. Then he opened his mouth and cried, "Wow-wow-wow! Piama!"

'Piama' is the local name for the blue-girdled angelfish, or *Pomacanthus navarchus*. This beautiful and valuable ornamental fish, with an aquamarine head and sides and a yellowish back, had vanished from the waters near the

village seven years ago, driven away by fishermen using cyanide and other destructive fishing practices. But now piama was back.

Halil (41 years) was delighted. He carefully poured the fish out of a plastic bag into a bucket of seawater mixed with freshwater. The fish was as big as the palm of his hand.

Ahmad Suhaeri, the man who had caught the fish at a depth of about seven meters, stood close to Halil and looked on. He was also delighted. To him, it was a miracle that Piama was back. It was a blessed day for the village. For three years now, the fishermen of Penyabangan had been practicing sustainable fishing, using nets rather than chemicals to catch

their fish. And finally their efforts had started to bear fruit with the return of these sensitive fish to the local coral reefs.



Ahmad Suhaeri, fisherman, found the ornamental fish "piama" (Pomacanthus navarchus) on October 10, 2007. Piama had not been seen for seven years.

Halil returned to his hut and phoned an exporter to find out how much he would offer for a medium-sized piama. "70,000 rupiah," Halil reported back to Ahmad (about £3.80). The more common ornamental fish they collected in the area went for only about 2,500 or maybe 5,000 rupiah at the most. Piama was indeed a valuable fish. With 70,000 rupiah they could buy 25 kilograms of rice.



Mohamad Halil, the middle man in the eco fish trade

Two other fishermen came by Halil's hut to see the fish. "Ketut's son, who works in pearl culturing nearby, told us that yesterday he saw a big piama mother with a small baby at a depth of 40 metres," said one of the men. "Well, piama is really back again then!"

This particular day – 10 October 2007 – was a milestone for the fishermen of Penyabangan and the surrounding fishing villages. The return of piama after a seven-year absence is a sign that the coral reefs are coming back to life after being badly destroyed by unsustainable fishing practices. The fishermen's efforts to conserve the coral reefs by practicing eco-friendly

fishing have paid off. They now have a more reliable livelihood and the future of the environment looks brighter.

Seven Years Ago

Saiful Anam took the snorkel off his mouth and sighed. "The piama does not exist anymore, not even the babies," he thought. "Only the ones swimming in Bali Barat National Park are left."

He sighed once more. He knew it was a crime to steal fish from the national park and would not do it. He took a deep breath, put the snorkel back in his mouth and dove back down into the sea. There he spotted five 'napoleons' or humphead wrasses (*Cheilinus undulatus*) hiding among the coral reefs. He sprayed the reef with a mixture of cyanide and water from a plastic bag and all the fish came out from the reef, half-conscious. Anam had no problem catching the poisoned fish and put them into his bag.



Saiful Anam, the head of community-based ornamental fish enterprise, Laut Lestari

It was the year 2000. Anam had heard that using 'potass', – as locals call cyanide - , to catch fish was going to be banned in the neighbouring villages soon. The ban would eventually spread to his village, Pejarakan, adjacent to Penyabangan village. He understood that the rule would be applied without exception.

Anam was born in 1968, and started his fishing career at a shrimp pond. After two years, he became a fisherman, catching ornamental fish. Life was good; he loved the feeling of swimming under the sea and the ornamental fish business was booming. For him, fishing was not just about earning a living. It also gave him a sense of

achievement and excitement.

For many years he and other fishermen freely used any tools they liked to catch fish. They used hammers to break the coral into pieces. They used home-made bombs to blast the coral reefs, which also destroyed the fish eggs in them. They used cyanide, which bleached the corals to death.

"All of us used cyanide, every single day. The practice started in the early 80s. On average, I used about one kilogram of cyanide in a week," he recalled.

The cyanide was cheap and easy to buy at small kiosks near his house. Preparing his fishing tool was easy. He just mixed the poison with water in a plastic bag and fixed a spray nozzle on it and he was ready to fish. Using this tool, he could catch a lot of fish in just two or three hours.

Anam realised that the practice was not fair on the sea, but the practice of using nets to capture ornamental fish had died out many years ago. All the fishermen had swapped their nets for a more practical and productive tool: cyanide.

Today

Today Saiful Anam is the chair of the Laut Lestari ornamental fishermen group, with 69 members from Pejarakan village, Gerokgak sub-district, Buleleng district, Bali province, Indonesia. The group was established in 2005 to help free its members from loans they could not pay back and to help them build sustainable livelihoods by introducing ecologically friendly fishing practices.

Along with the neighbouring villages of Sumberkima and Penyabangan, Pejarakan is the focus of LEAD Indonesia's project, "Conserving Reefs through Community Ownership and Enterprise". LEAD and the Marine Aquarium Council (MAC) offered training and certification for the fishermen from these villages.

Ketut Baktiyasa participated in this training and got certified by MAC but admits that he got tempted to use cyanide again. It was easier and faster to collect fish this way. Besides, catching 'eco fish' – ornamental fish caught using nets and no harmful chemicals – was too time consuming and required different skills for different fish species. Eco fish did not fetch a better price, so why should he bother? Ketut needed to provide for his family's daily needs.



Ketut Baktiyasa, the head of the community-based ornamental fish enterprise, Sinar Baru

But the fish began to disappear from the area one by one. The village needed the fish and the only way to get them back was to re-institute sustainable fishing. Ketut's family and the village blamed him for destroying their marine resources and eventually he crumbled under the pressure and stopped using cyanide.

Now Ketut Baktiyasa is chair and Halil is the secretary of the Sinar Baru group of 19 ornamental fishermen in Penyabangan and is committed to being the guardian of their marine resources. It is his responsibility to secure the future and stick to sustainable fishing practices,

even if the price of eco fish is the same as fish caught by cyanide, even if fishing for eco fish takes more time. He hopes one day that people will pay a higher price for eco fish.

Buleleng district – an ornamental fish resource



Bali Province, Indonesia, with Buleleng district in the north.



Gerokgak sub-district



The project took place in four villages: Sumberkima, Pejarakan, Penyabangan and Pemuteran

The Buleleng district is on the northern coast of the island of Bali in Indonesia. It covers an area of 1,365.88 square kilometres (25% of the total area of Bali province) and has 144 kilometres of coastline. In the west of the district is the Bali Barat National Park, which has protected areas – both land and sea – adjacent to Pejarakan village.

With typical tropical temperature of 25–30° Celsius, the district has two seasons: the dry season from April to October, and the rainy season from October to April. The southern part of the district is mountainous, with

some areas rising to 1,000 metres above sea level. The northern part of the district is low-lying, with a long coastline.

The major activities of the community are agriculture in the south and fishery in the north, along with many other income-generating activities such as trade and services, including tourism.

The population of the area is 618,076 (2005), with approximately equal numbers of males and females. The community is a mixture of local Balinese and migrants from Java, Madura and Sulawesi.

The majority of the population is Balinese, and each *banjar*, or traditional Balinese village, organises much of the traditional community life. The Balinese are Hindus and cultural and religious tradition plays an important role in daily life. Government agencies are responsible for administrative activities. The majority of the community (almost 70%) has finished elementary school, and less than 1% has attended a university.

Buleleng district is one of the world's key ornamental fish exporters, and must become more sustainable in its fishing practices if it is to survive. Cyanide is widely used in the area. In collaboration with local non-governmental organisation (NGO) Lembaga Pilang, the Marine Aquarium Council (MAC), a United States-based NGO, and Reef Check Foundation Indonesia, a US-affiliated local NGO, LEAD Indonesia and LEAD International conducted a successful project called 'Conserving Reefs through Community Ownership and Enterprise' in four villages in the district: Penyabangan, Pejarakan, Sumberkima and Pemuteran. All four villages are situated in the Gerokgak sub-district of Buleleng district. The three-year project (April 2005 – March 2008) was funded by the United Kingdom government's Darwin Initiative.

The project aimed at transforming unsustainable exploitation of marine ornamental fish resources and unsustainable fishing practices into a sustainable, green and fair trade of eco fish.

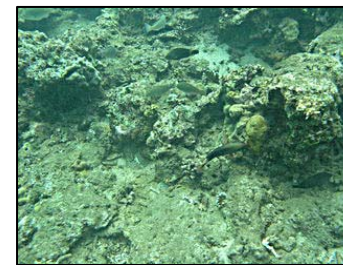
MAC trained the fishermen in environmentally-friendly fishing practices that protect the marine biota and the marine habitat. LEAD helped the community to understand the importance of a sustainable future and of securing the marine resources for the village. LEAD also facilitated the establishment of a group called the Community-based Coastal and Marine Resource Management (CBCRM) to manage marine resources and to

improve relevant policies. The CBCRM was trained in monitoring the reefs, and expertise in this area needs to be strengthened in the future.

With the help of LEAD, the fishermen had access to financial resources beyond the usual loan sharks. They also experienced working directly with an exporter – 'Blue Star' – which shortened the eco fish trade supply chain and thus increased the price fishermen got for eco fish. All of the activities were made possible by the endless support from the local NGO Lembaga Pilang. The NGO's chair, Ni Made Indrawati, facilitated engagement with the community, assisted with policy, and helped secure the exporters' commitment to assist the fishermen in the trade of eco fish.

The findings of a fish stock survey conducted by MAC in 2004, 2005 and 2007 indicate an improvement in marine fish stock. In the case of Penyabangan village, the village marine resources have increased by around 30% from 2004 to 2007.

The community of Penyabangan village believes the scientific findings because of their own findings of 'piama'. They have seen the transformation that occurs when they change from destructive practices to sustainable fishing. The eco fish fishermen have hope in the revival of their marine resources, as evidenced by their statement, "We believe in the re-appearance of piama."



This marine habitat has been destroyed by the use of potassium cyanide



An example of a healthy marine habitat



The Members of Ornamental Fish Community Enterprise



*Ni Made Indrawati
Executive Director of Lembaga
Pilang, Community Organizer*

For further information please contact:
Ni Made Indrawati
Phone : 081803591707
Email : pilang_2004@yahoo.co.id