Marine Mammal Research in the Gulf of Mottama

A little over one year ago, we confirmed – with our own eyes - the presence of Indo-Pacific Finless porpoises (Neophocaena phocoenoides), Vulnerable) and Irrawaddy dolphins (Orcaella brevirostris, Endangered) in the coastal waters of the Gulf of Mottama. We jumped up and down in the boat, ecstatic to finally have these sightings after months of exploratory 'detective work' interviewing fishermen and waiting for boat-friendly dry season to return. Some months later, we added Indo-Pacific Humpback dolphins (Sousa chinensis, Vulnerable) to the list when they swam by the survey boat for the first time.

Of course, local fishers had long known about these animals. In fact, they were the ones who first told us about them. Based on the information they shared, our team became the first to do research on marine mammals in the Gulf of Mottama, and this is the only active marine mammal project along Myanmar’s long coastline.

This team is made up of young researchers from the Myanmar Coastal Conservation Lab (MCCL) at Point B Design + Training, a research and education NGO based in Mawlamyine. Point B MCCL conducts research and research training for SDC’s Gulf of Mottama Project, which supports coastal natural resource management in the gulf, an area of extraordinary biological productivity. The project’s biodiversity component initially focused on migratory shorebirds, but has now broadened after we confirmed the presence of these three small cetacean species.

Because there has been so little research done on its marine mammals, Myanmar has not been well represented at international conferences on marine mammal research and conservation. In December 2019, with project support, MCCL’s Yin Yin Htay, Aung Naing Soe, and Wint Hte participated in the World Marine Mammal Conference (WMMC) in Barcelona. WMMC is the largest and most important gathering of marine mammal researchers in the world and this was a valuable opportunity for young Myanmar researchers to meet global experts and regional colleagues, strengthen their knowledge of marine mammals, identify future collaborations, and raise the profile of the Gulf of Mottama Project.

On top of all of the inspiration they gained from the conference, the team received the J. Stephen Leatherwood Award for most outstanding presentation on marine mammal research and conservation in South and Southeast Asia. This award reflects not only their stellar poster presentation, but also the award committee’s enthusiasm for representation from Myanmar, particularly with so many young Myanmar researchers included as authors on the poster (20 in total). The long author list reflects how this research was a valuable, and in many cases first, opportunity for young Myanmar researchers to learn about the importance of working with communities to collect local ecological knowledge and organize boats-based surveys. It was also a chance to learn about coastal conservation and fisheries more broadly.

The conference experience and the award have added to the team’s motivation to expand their work on marine mammal conservation. They are now better equipped to do so, with greater knowledge and experience. Many thanks to the Gulf of Mottama Project for supporting this research and the opportunity of this career-changing conference!

The Gulf of Mottama Project is an initiative of SDC, the Swiss Agency for Development and Cooperation, implemented by a consortium led by HELVETAS, together with NAG and IUCN. The project started in 2015 and is currently in its second phase!
Mangrove Protection Creates Unity and Improves Future Resource Management

By: Than Htike Aung

This story started at the beginning of 2017 when villages started to plant some mangroves in one small area near the coast of Thaton township in a small fishery village called Aung Khan Thar. During that event two ministers, local elected parliament members, state and district level department heads actively participated. It was the start of a change in communication between local community and the local government in that area.

One critical thinking person in Aung Khan Thar, U Myint Oo, strongly believed in the protection of natural resources and mangroves since he knew from experiences that these habitats are critical in the support for livelihoods of small fishermen and landless families. U Myint Oo was really concerned about his surrounding community, in which many villagers had a daily battle to survive because of lost fishing grounds and land near the coastal area of Thaton township.

They identified an area of newly formed land near the coast where they went fishing daily. They also observed that this new land grows fast and supports food for the mud crab which could become a source of daily income for the people who do not own boats. In order to protect these resources for a sustainable improvement of their livelihoods, they proposed to identify an area as co-management zone for both the fisheries and forest sector. They requested the Mon state government to authorize to use the land as a co-management zone for the local community. The government gave the authorization and community declared the Aung Khan Thar Co-management zone on 16th Oct 2017. The people from the local community were very proud of this achievement and in their view created a brighter future for themselves and their children. Their dream became true.

However, conflicts started one year later, when new livelihood opportunities were identified by multiple government departments and local business people from surrounding areas. It wasn’t clear to whom the land was allocated and several government departments were in charge of this allocation. During the early stages, the local community were not able to influence the land allocation in their favor and the local business people and administrator wanted to convert the whole area into new paddy land.

The local community and the Village Development Committee (VDC) consulted with the GoMP team to discuss how to overcome this issue using a conflict sensitive approach between the local business people, village administration structure and other related departments. The GoMP suggested to communicate with different stakeholders who were involved in the case. The GoMP facilitated community members to gather the right information and communicate the people needs to the respective government administration bodies in order to reach a fair decision on the wise-use of natural resources on this newly formed land.

The GoMP facilitated technical support to measure the real needs of this newly formed land along the coast and developed appropriate maps to enable in-

The villagers were carrying the concrete piles for installation to mark as a crab protective area near Aung Khan Thar Village, Thaton Township, Photo—© FDA
formed decisions on the allocation of these resources in a sustainable manner.

After this information gathering, the GoMP facilitated a public meeting in Aung Khan Thar where other people from surrounding villages were invited. During this meeting they presented and discussed the plans for an environmentally wise use of the area and a joint action plan was drafted for all the users of the area including the technical recommendation of the Forest Department and Department of Fisheries. This action plan was presented to the General Administration Department.

The leaders and villagers never gave up on their dream to protect their resources, which they value for their future use. Three village leaders worked together and agreed on the allocation of this newly formed land and they found a productive way to communicate this to the administrative body in order to stop the allocation of new land without public consultation. Because of these efforts, the government responded with the following actions:

1. To take a detailed measurement of this newly formed land by the District Land Utilization Committee.
2. The measurement took into consideration the conservation purpose of the land and the Environmental Conservation Department took part in this measurement.
3. The technical team submitted a report to the Mon State Cabinet for decision making.

After studying the report, the cabinet organized a public consultation during which it invited all the community members including farmers, fishers, and landless people. The following agreement was made:

1. To keep 9,000 acres as a mud crab protection area and mangrove plantation along the coast.
2. 800 -1,000 acres of farmland, far from the coast, will be allocated to landless people who want to grow rice and other crops. This has still to be approved by the District Land Utilization Committee.
3. To develop detailed maps for the protected areas and boundary stones to clearly identify the protected areas.

After the decision by the State Government, the local villagers made the demarcation stones and carried them to identify the boundaries of the mangrove plantation and mud-crab protection area for everybody to identify these areas. This is the first community-lead land allocation exercise in the area. It became possible through a careful and evidence-based advocacy approach, which formed the basis for the collaboration between stakeholders in a positive manner. The Government had a good learning experience on how to collaborate with multiple departments and start the formation of a Working Group at township level of the Coastal Resource Management Committee. This incident showed all the importance of integrated management of natural resources and how collaboration reduces the risk of conflicts in the daily work.

During the second phase of implementation, the GoMP started “Skills Development for Employment” (S4E) Activities with the aim to improve diversification of livelihoods in the coastal area. The project targets 1,000 youth in the next four years [2018—2021] to receive vocational skills in multiple sectors. These S4E activities will be implemented in hand in hand with the private sector through partnership agreements.

The main objectives of the S4E activities are to empower local youth in vocational skills, improve knowledge on business planning and financial management in order to increase family income. This activity is designed to work as a practical approach by applying method of competency-based skills training. In the preparation stage the Gulf of Mottama Project staff, in collaboration with private sector players, assessed the skill requirements and interest among youth, focusing on urban areas. Based on these requirements and interest, the project invited employers to come together for developing a curriculum and course design in their respective profession.

So far, the project trained about 490 youth on different skill sets such as sewing & fashion design, beauty salon and automotive repair together with 32 employer trainers. According to Gulf of Mottama Project’s Skills Development Officer, Mi Khaing Khaing Oo, currently 125 out of 490 youth were able to set up their own businesses and some are working in the garment factories. The remaining were not yet working as they graduated from the course recently. The project is conducting a tracer study to follow up on the careers of the graduates of this program.

The GoMP’s working approaches are to empower local youth to enable them to set up their business or find meaningful employment through skills they have acquired from skill trainings. In addition, the GoMP approaches allow employer trainers to improve their ways of teaching to be more systematic and monitored which benefits their businesses in the long run.

Ma Thiri Shwe, the owner of Hia Aka Ri Beauty Salon said, she had been working for 13 years in this business, but she did not have a regular customer like she has now. Before this S4E trainings, she only trained 15 trainees. In early 2018, she signed a contract with the Gulf of Mottama Project as an employer trainer and she agreed to train 30 trainees with the support from the project. During the training period, she got many customers visiting her shop and was able to strengthen her network.

Likewise, Ma Aye Mi Kyaw, Fashion & Design School owner, set-up her business 10 years ago, but she did not have a training curriculum as course instruction and based the training on her experiencese to instruct the trainees. She said, she had trained 30 young women on basic skills of tailoring but some of them could not complete the course due to several reasons. Since she cooperated with the GoMP, some changes occurred as she was able now to teach more systematically as she received technical support from GoMP on developing curriculum and teaching lesson plans. Working with GoMP improved her knowledge and confidence on facilitating and teaching. She believes and hopes that her fashion and design school will become well known and successful in the future.

The Gulf of Mottama Project is working in eight townships in Mon State and Bago Region. It focuses on conservation and sustainable development in sectors such as fisheries, agriculture, water sanitation and hygiene, governance, skills development and research.
Protecting and Managing Our Marine Resources for Our Livelihoods and the Future

What is a healthy fishery?
A healthy fishery provides income and food for many generations.
When a fishery is being overfished, it will be harder to earn a livelihood fishing. This puts people and the environment in danger.

Communities members have an important role in management and keeping fisheries healthy.

The life cycle of a fish
- Eggs
- Larval
- Juvenile
- Adult

The Gulf of Mottama Project (GoM)

What is a healthy fishery?

Fish reproduction

Fish eggs
We learned that some croaker can be found with eggs throughout the year but a higher proportion of fish have eggs in June and July.

This could mean the spawning season for croaker is in June and July but we need more research to improve certainty.

Important commercial species
We found that five important commercial species in these communities were:

- Croaker
- Sea bass
- Flathead Mullet
- Lizard fish
- Paradise Threadfin

Next steps
We should manage our fishery to ensure fish populations are healthy. If we don’t it may be harder to catch fish and earn income, which is important for education and health.

What YOU can do
Communities members have an important role in management and keeping fisheries healthy.

- Do not use illegal fishing gear. Illegal fishing gear catches small fish that need to grow to reproduce.
- Do not fish during the closed season. Croaker may be reproducing then.

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Research project
To learn about the health of fisheries and provide more information to resource users in the Gulf of Mottama, Mawlamyine University researchers May Thaw Khin, Ye Mon Aung, and Aye Nyen Soe collected information in the communities of Biang Laung, Aung Kan Thar, and Zoke Ka Li. The communities were visited twice per month from December 2018 to September 2019. This project was a joint project with the organizations EDF and GoM.