



## LOICZ SNAPSHOTS

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### Gulf of Martaban



Sustainably and small-scale fishing in the Bay of Martaban  
(Photo: C. Zockler)

This region, very close and just east of the Capital Yangon, is part of the Andaman Sea and fed by three major rivers of the country. Due to its location and shape the bay is prone to huge sedimentation processes and coastal dynamics shaping the coastline with large extensive sandbanks and mudflats, the main targets for our water birds. Even though the region is very close to the capitol, the coasts remain

very remote and the people have not met foreigners before. Most coastal sites are only accessible by boat. We managed to approach the coast by 2.5 hour motor bike ride on sandy bumpy tracks along small channels and rice paddies across uncountable small bridges, sometimes only makeshift structures or a board.

People along the coast live in small villages made of small huts of clay and straw, situated close to the mud cliff or shallow dunes. There is no dike protecting the communities. Only small dams protect the rice paddies from the sea, but not enough to protect the flat and vulnerable hinterland, when the sea is rising by storm or freak events. With little or no connection to the rest of the country the people are self-dependent, growing their own crops and live from fish and other marine products.



Some own little boats, but many fishermen walk long distances across salt marshes and mudflats to check their nets at low tide. Nobody owns a motorboat and few villages have generators and some electricity.

Fisherman checking nets at low tide a along way out (Photo: C. Zockler)

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### Arakan

The Arakan region at the northwest coast was for many years completely closed and not accessible due to local unrests. Very little was known about its biodiversity and the state of the coastal ecosystems. The opportunity with our local partner organization BANCA to visit this area in 2008 was very appealing.

In contrast to the Bay of Martaban the coastline is much more rugged and interspersed with rocky outcasts, in some places spiraling into the extensive mudflats, remnants of some volcanic activity in the geological past. The flatter part of the hinterland is used as paddy fields and mixed with many small ponds, allowing fishing inland as well. Mangrove forest has been cut as in so many places and only small rests have been left along the many coastal channels.

The most striking first impression for the foreign visitor is the almost total lack of engines and electricity. Sittwe (or Akyab) the regional capital of Arakan has hardly any cars, only affordable by a rich minority and Tony has difficulties to organize transport for our team and luggage. The main streets are full with bicycles and bicycle rickshaws, with two seats for passengers, regularly equipped with opened umbrellas as protection for the sun, shining with predictable reliability every day. Just a few mopeds try to circumvent the myriads of bicycles. Hardly any cars move along the main street.

Two of these rickshaws take our Thai friend Tii, our Burmese colleague Aung Moe and I to the edge of the town, where a sandy track leads us towards the beach. It's Sunday and many people occupy the beach. A loudspeaker, placed on the back of a lorry entertains a group of youngsters playing football, a popular game like almost everywhere in world, while young ladies stroll along the beach in small groups, dressed in fancy sarongs and hats. But only a few hundred meters further the scene is totally different again. Nobody is on the beach. Only a few brave boys followed us, inquisitive and trying to find out what these huge instruments on top of the tripods might be.



Small-scale agriculture in the near coastal hinterland with traditional means (Photo: C. Zockler)

Behind some thinly vegetated dunes we find to our surprise small settlements spread out along the back of the dunes with small crops and haystacks surrounded by small freshwater lakes. The first object I noticed is a huge moving haystack, pulled by an ox cart and two smiling farmers. A woman near by is picking up small pieces of driftwood in a basket, washed from the sea at high tide.

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Aung Moe explained it's for cooking food in the evening.

She also replies my interest with a smile. Different boys accompany us now, still checking the funny instruments we carry. We scan the lakes with our telescopes and allow the boys to look through without touching. Some manage to focus on a Ruddy Shelduck or wader and immediately show amazement.

These people keep small crops just along the dune edges on very poor soils, have a few water buffalos and ox near by, collect firewood from the beach and go out fishing at times. They live entirely from the resources found in their immediate surroundings.

In the following days our survey took us by boat into the near by coastal mudflats and beaches. Our boat was one of three motorboats we encountered during the next 9 days of the entire period of our survey. The other motorboats were a military vessel situated in the river mouth checking for illegal Bangladeshi immigrants and an overcrowded ferry across the channel. All the other myriads of boats belong to local fishermen, sailing out to their well-known fishing grounds, landing huge amounts of fish ashore. At certain tides one could see several sailing boats, each with different colorful sails, resembling a picture from the Kiel regatta in the Baltic Sea. But all these people are out there for a purpose. They pursue their fishing for their livelihoods and do not just sail for fun. Our Burmese friends stop some of the boats, which skillfully turn to come along the port side of our anchored boat. Tony shouts if we would fancy stingy ray. Of course we agreed and the fishermen pick a few huge rays from under a sheet in the wooden boat. These fishermen were specially targeting rays, a popular item for trading. Others closer to shore were fishing for prawns only. They walk along the near- shore water and use a fine net and 'hover' the sea bottom.

Once ashore the entire community is helping to process the fish, dividing the catch in different species, separating the shellfish and sepias from the fish and preparing the catch for storage and market. Big baskets full of fish are carried ashore by two men carrying the heavy load over a stick between them. Emptied on the shore women spread the fish on a layer of rice straw on the beach for drying in the baking sun. Most astonishing though is the observation of three young girls not older than 11 years who confidently drag a net from the sea on shore. Skillfully they search for valuable marine items, pick up squid, small fish and shellfish, before they throw the net back into the sea. They already become familiar with fishing by practicing fishing with small nets at an early age.

Further on, at low tide we come along a group of solely women who dig in the mudflats. At close range we identify a small shellfish-like animal with a long siphon, most likely ancient brachiopods collected from 10-20 cm depth. Several buckets are already filled.

The people live in small huts often close to the shore with little shelter from the sea. On one island we surveyed for birds, the people only settle here in the winter months,

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because in the summer the monsoon and other storms frequently flood the near shore areas. All these villages are temporarily constructed by makeshift huts and people move around seasonally dependant from coast further inland or back into the town Sittwe.

The coast is very rich in fish and wildlife. We encountered well over ten Irrawaddy Dolphins and several thousand water birds migrating from as far as Siberia and the Himalayas to winter in the rich coastal areas.

Just as I wrote these lines in May a violent cyclone hit the coast of Myanmar. More than two hundred thousand feared to have lost their lives and 2 million are threatened by disease and starvation. Little and incomplete information is coming out of the secretive country. The northern region around Sittwe seems to have escaped the storm, but the Bay of Martaban has been hit hard. The coastline has been altered completely and I can't bear the thought that some of the many smiling faces we encountered might be among the casualties.

The same dynamic coastal processes responsible for the diverse coastal ecosystems, the rich marine life and livelihoods for millions of people is now creating utter destruction and disaster as the cyclone too well illustrated.

This is not new and the Bay of Bengal always suffered high losses of life and the people knew of the risk and how to life with it. Climate change and more importantly the gradual degradation of coastal ecosystems will though exacerbate the impacts and consequences for local people, leaving them more and more vulnerable to storm surges.

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