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But here in the present conditions one has to understand that many migrated fishermen have understood that a lot of fish available here and they started migrating to these places and they had adopted different various advanced fishing techniques.

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When fresh fish became a prime trade commodity, this also brought in migrant fishermen with advanced fishing techniques. These techniques were not necessarily always environment friendly; the use of dynamite, fine nets that catch even very small fish fry, the pounding of the coral reefs to drive fish into the nets, all created problems of over-fishing and the destruction of the environment where the fish live and multiply. But bringing in the precious commodity was more important and immediate than environmental concerns particularly for migrant fishermen with nothing to tie them down permanently to a place.

With the fish gone, they move on. Tagbanwa myths were of no relevance to the fearless migrant fishermen termed *Bisaya* and *dayo* by the Tagbanwa.

In order to compete with the migrant fishermen, the Tagbanwa learned new fishing techniques that did not go against their beliefs.

And they are not necessarily environmentally friendly, but they might have used a dynamite, the fine nets that catch even a very small fish fry, and the pounding of the coral reefs to drive fish into the nets, all created problems of overfishing and the destruction of the environment when the fish live where the fish live and multiply. So these advanced techniques these newcomers into these islands they started using the fine nets.

So that each, and every net have a different proportion on how what kind of fish it catches and it can hold. But now they are not leaving any more fish, so that is actually bringing a lot of environmental concerns especially with these migrant fishermen, and because when they are coming in different place they are not tied to this place they are not their attachments are never tied to a particular place.

With the fish gone, they move on to another Island that is what so these Tagbanwa myths were no relevance to the fearless migrant, and in fact with these migrated fishermen coming into the picture even this Tagbanwa learned new fishing techniques that did not go against their beliefs. That is how it has an impact of one do not understand the cultural aspects and how different cultures understand their ecosystems on the environment.

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The ecological environment has changed much within this generation for the Tagbanwa people. As related in oral testimonies, they are aware of what has caused these detrimental changes:

- the impact of tourism on bird's nest production,
- the diminishing fish catch caused by illegal fishing techniques,
- the careless attitudes of people who do not have a long term interest in protecting the land and sea which provide a livelihood for the Tagbanwa people



An underwater video survey conducted showed damaged reefs which had been dynamited and poisoned by sodium cyanide, a chemical used for bringing in live fish. Image Lim 2008

With this what you can see that how the coral reefs have been damaged and because of using the Dynamites and poisoned by sodium cyanide which used for bringing in live fish. So now one can see them, one can witness how it has an impact on the coral reefs you know one certain coral reef has been damaged and obviously it affects the marine system, the marine system is affected when aqua system is affected. It also affects the human systems, so there is a chain process, in fact, the impact of tourism on bird's nest production, the diminishing fish catch caused by illegal fishing techniques, and the careless attitudes of the people who do not have a long-term interest in protecting the land and sea which provide a livelihood of the Tagbanwa people.

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SPATIAL SCALE CHALLENGES

Climate impact forecasts analysis are hardly able to address the local scale, but there have been efforts in bringing them down to country scale (see for e.g. German Adaptation Strategy to Climate Change in 2008).

The scientific knowledge generated from such vast spatial scales of study and analysis is very often not reflected for appropriate considerations at local level implications.

There is a mismatch between horizontal scales and vertical scales, where the sources of climate change often lie in other regions and countries than where its effects are shown.

India Fears Natural Calamities as China Builds Hydropower Dam on Brahmaputra in Tibet



So these are some of the interesting facts that how local cultures understand the ecosystem and the environment, how these myths also protect the environment but when the foreign intrusions comes, how they get impacted, and one do not understand the other cultures interest and knowledge.

There is a spatial scale challenges when we talk about the climate change it talks about its very it talks up to much bigger scales, larger scales whereas the disaster it talks about much more to the pointed affected areas. So it is very difficult to bring them together, for instance, when we talk about a flood impact in somewhere in Bihar it may not necessarily that the impact the cause is from the same place it might have been the cause the root cause might be in some other country which is in China like for instance of China builds a hydropower dam on Brahmaputra in Tibet. It may have impact in the Indian subcontinent.

So it is the cause is falling under the different political interest and the mind so it is a challenges in addressing that as well. So there is also a mismatch between the horizontal scales and vertical scales where the sources of climate change often lie in other regions and countries then where it is affects are shown. So and also there is a scientific knowledge which has been generated from a very vast spatial scales of study and analysis is often not reflected for appropriate considerations at local level, this is the gap one can understand.

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TEMPORAL AND FUNCTIONAL CHALLENGES

The role of different acting agencies involved in the CCA and DRR are also very different. The focus and vision of each of these agencies are also varies depending on the funding available, expertise and contractual agreements.

No scope for Evaluation of their own Outcomes



Also, the temporal and functional challenges; when we talk about the temporal and functional challenges, it is also about the role of different agencies whether it is an NGO or a government sector or quasi-government which whoever are coming so especially the NGOs who are coming the agencies to do the disaster recovery projects. They are here on a contract, they are here to do certain targeted work.

Whether it is a livelihood dimension, whether it is a shelter dimension, they finish that, and they move on, their visas are also expire, and they move on. So long run what happens, who will take care of it, so they do not have long-run commitments of how this place will get modified further, how people get adjusted to it like there is no proper evaluation. The Ministry is only evaluate how many houses they have provided but not on how they have been accommodated. How people have responded to it what are the temporal changes it occurred you know how to make it into a mainstream development procedures. So for instance in Latur and Gujarat we can see even some of the houses still or empty unoccupied.

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