

Enhancing resilience of coastal and marine biosphere reserves in Vietnam



A Partner Driven Cooperation project

VIETNAM

Learning to live with climate change

Climate change is having a heavy impact on Vietnam. The Vietnamese organisation Centre for Marinelife Conservation and Community Development (MCD) and Stockholm University are identifying and disseminating solutions that enable people in exposed coastal regions to cope with the effects of the climate.

"We cannot just do things the way we did – we need to be more preventive. We will have to be aware more of the risk in term of ecologies. If we treat nature well, we will benefit from it," says Nguyen Thu Hue, founder and Executive Director of the Centre for Marinelife Conservation and Community Development (MCD). She underscores that Vietnam is located in a region that is heavily affected by ongoing climate change.

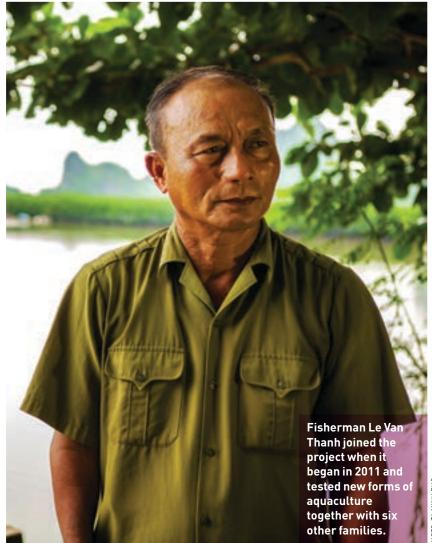
Over the past 15 years, sea levels have risen nearly 13 centimetres, affecting rice production in coastal provinces. As much as 30 percent of Vietnam's cultivable land has been impacted by soil salinisation and flooding. Coral, fish and shrimp are becoming diseased.

For fisherman and fish farmer Le Van Thanh, the changes are tangible. He has worked with fish farming and aquaculture in the municipality of Phu Long in Northern Vietnam since 1990.

"The summers have become warmer and the winters longer. Storms have become more commonplace, flooding water systems and dikes that protect against sea levels," he explains.

Until 2000, Le Van Thanh had about 100 kilogrammes of naturally occurring shrimp per hectare of water. Today, there are about 30 kilogrammes.

This is where MCD and Stockholm University come in. Nguyen Thu Hue describes the



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organisation as a link between the local population, decision makers, opinion makers and researchers.

"We are as the connector, the catalyst. We let people discuss, let people innovate and find solutions themselves," she says.

Michael Tedengren, associate professor in systems ecology at Stockholm University explains that the partnership with MCD has reached a point where they need to progress from "knowing to doing".

"We have gathered information on water quality, conditions of life and stresses on the environment. Now we can consider solutions, such as changes in how aquaculture is conducted, and these solutions are taken into account when establishing marine national parks and resources for fisheries and fishing," he says.

Advice from researchers includes cultivating more species of fish and shrimp. Le Van Thanh joined the project when it began in 2011 and tested new forms of aquaculture together with six other families.

At first Thanh and his colleagues in the working group were sceptical, but after a year their aquaculture showed good results.

The Swedish researchers contribute important knowledge for the local communities, but the learning process works in two directions:

"We are learning a lot from working with people in Vietnam. We are continuously acquiring new knowledge," says Michael Tedengren.



Members of the local communities have gained an increased understanding and knowledge of climate change and alternative livelihoods. Advice from researchers includes cultivating more species of fish and shrimp.

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/MICHAEL TEDENGREN

MCD is also eager to make use of the knowledge and experience of the local population and its participation is also important if the changes are to be lasting.

With Sida now phasing out its support, there are several concepts for continued partnership, including extending the efforts in the region to include Myanmar and Cambodia.

Scientific efforts are also continuing and the project has generated some ten masters theses. Five researchers from the two countries are also using materials from the project in their PhD theses.

THE FACTS

PARTNERS

Center for Marinelife Conservation and Community Development (MCD) and the Department of Ecology, Environment and Plant Sciences at Stockholm University.

COST

9,770,000 SEK

SIDA CONTRIBUTION

6,500,000 SEK

PARTNER CONTRIBUTION

3.200.000 SEK

TIMEFRAME

2011-2013

RESULTS

- Ecological risk assessment conducted in Phu Long has been presented to both government province representatives and members of the community.
- Presentations describing how the coral reefs off Cat Ba have been affected by climate change have been developed, based on reports by Swedish researchers among other sources.
- Local decision makers are discussing possible protective measures for the coral reefs.
- Alternative livelihood opportunities have been introduced in the Phu Long based on a model previously tested in Giao Xuan and Nam Phu.
- A memorandum of understanding has been signed between the two biosphere areas Cat Ba and Red River Delta a "Biosphere Area Network".
- A partnership is continuing through an exchange between students in Vietnam and Sweden.
- Stockholm University and MCD have initiated a business venture called Ecolife.