Participatory Conservation of Mangroves and Traditional Organic Vegetable Gardens in Palk Bay

2021 - 2022



www.marubis.de
MARUBIS
Mariner Arten- und Biotopschutz e. V.

ERBACHER STIFTUNG

OMCAR FOUNDATION

1. Level of achievement of the project's original objectives and factors affecting this.

	Objective	Not achieved	Partially achieved	Fully achieved	Comments
1	To raise 15000 mangrove seedlings in 5 community nurseries through trained fisher women groups.				The mangrove seedlings have been successfully raised through the trained fisher women in the first two months.
2	To establish backyard vegetable gardens in 150 houses with the hands-on training and participation of women in households.				The backyard vegetable gardens have high success rate due to good rainfall and monsoon weather in 2021 and early 2022.
3	To establish 2 community earthworm manure production units with hands on training for women groups to supply organic manure to 150 vegetable gardens of the proposed project.				The organic manure unit is functional and continue to produce the manure with the participation of local community.
4	To plant 15000 mangrove seedlings during September to December 2021 along the coast of Palk Bay.				About 20% of planted mangrove seedlings were damaged by insects (pests) and cattles. We protect the remaining mangrove seedlings by fencing in the selected areas.

2. Unforeseen difficulties that arose during the project and how these were tackled.

We faced difficulties of mortality in the planted mangrove seedlings besides our best efforts and experience. A group of insects attacked the planted mangrove seedlings in the field and as we don't use chemical pesticides we tried with herbal sprays. But it did not work in the field. So, about ~20% of planted mangrove seedlings were damaged by insects within the first month after plantation. However, we protected the rest of the planted seedlings by fencing to protect from cattle grazing. We used *Prosophis juliflora* (exotic thorny plants) which grows abundantly on coastal areas, and cut those thorny plants to make a fence around the planted mangrove seedlings in plantation site with the support of local communities.

Even after this project period, we had to service and repair the fences every six months to make the fence strong. This additional effort will be beared by OMCAR, and we have taken time lapse images of this site which will be submitted to Marubis every year in the next five years.

3. Most important outcomes of your project.

The real challenge exists that how we connect the local community with the mangrove restoration for long-term, in addition to the daily wages paid for their field work and buy back of mangrove seedlings from the backyard nurseries. Through this project we connected the fisher families with our project by helping them to establish their own backyard vegetable garden (tomatoes, brinjals, different varieties of beans plants etc) and organic manure from the vermi-compost unit. It easily made good bonds as our approach mutually benefits our conservation interest with their nutritional needs. At the same time, we have been donating goats from our other projects to each fisher family, and the first goat kid will be donated back to OMCAR, which again donated to other families. Likewise, we have about 350 goats that are being replicated (reproduced) and donated to other families through OMCAR, in exchange of their contribution for the conservation of mangroves in our coast. It's a slow progress but with proven method of how simply the grassroot conservation works using local resources without complicated trainings to the fisher women.

4. Involvement of local communities and how they have benefitted from the project.

The beneficiaries received vegetable seeds, manure through the project to establish their own nutrition supply to their families. The process will be repeated again in every monsoon (with every mangrove plantation) that they will be sharing back their vegetable seeds with OMCAR to be distributed to other families. The same practice is also followed for our goat sharing project in coastal villages. So, it ensures that each family received a organic vegetable garden and goats. We also experimenting with native chickens in the same model. This approach helps us to establish a long-term grassroot conservation model to be replicated in other parts of the world.

5. Continuation of this work

Yes, we need to focus on strengthening OMCAR's organic farming reserves (*as goats, vegetable seeds, native chickens and a few acres of land*). This is really important to have such set up within the project area.

So, this "OMCAR Organic Farm" can serve as a hotspot to exchange the goats, vegetable seeds, organic manure, native chickens among the 42 fishing villages in a self-replicable and systematic manner.

Such farm products can be used as a conservation tool for planting more mangroves, releasing more dugongs, turtles, sea horses, restoration seagrass beds for very long term in future.

6. Global Recognition for our approach

The project work has been well recognised in global level. We also received Blue Solutions Blue Champions Award in 2021 for buying chickens and goats to the fisher families for planting more mangroves in the next years. Please see this link https://vimeo.com/659293797

We continue to spread the message through our website and social media. OMCAR reached 15 years now, so we made a documentary in local language about our work. Please see this link here https://www.youtube.com/watch?v=bLDgBsuEc7E

We will present our work in IUCN Regional Congress and World Congress in forthcoming years.

MARUBIS – OMCAR 2021-2022 Project Field Work Photos









Date:17.09.2021

Place:Kollukkadu, Mangrove nursery pocket preparation











Date:20.09.2021 Place:Kollukkadu, Mangrove Backyard nursery pocket distribution


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Date:27.09.2021
Place:Kollukkadu, Mangrove Seed sowing







Date:02.10.2021 Place:Somanathapattinam, Mangrove site selection


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Date:16.10.2021 Place:Somanathapattinam, Fencing work













20.10.2021 Somanathanpattinam, Mangrove plantation.













Place: Kollukkadu, Coconut thatches work
Date: 12.10.2021









Date: 12.10.2021 Place: Kollukkadu, Mangrove seed sowing











Date:10.12.2021 Place:Kollukkadu, Mangrove backyard Nursery


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Date:20.12.2021 Place:Velivayal, Mangrove backyard Nursery


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Date: 10.01.2022

Place: Sampaipattinam, Mangrove plantation work






2022
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Date: 11.01.2022 Place: Kollukkadu, Mangrove Seedling collection






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Date: 12.01.2022 Place: Velivayal , Mangrove Seedling collection

Earth Worm Manure Production and Vegetable Garden 2021 -2022













Organic Manure with Earth Worms (vermicompost)







Donation of organic manure and vegetable seeds to fisher women who work in mangrove restorateion



Vegetable Gardens - Before



Vegetable Gardens - After



Vegetable Gardens - Before



Vegetable Gardens - After



Vegetable Gardens - Before



Vegetable Gardens - After

Backyard Vegetable Gardens - Before

Backyard Vegetable Gardens - After













Backyard Vegetable Gardens - Before







Backyard Vegetable Gardens - After







Backyard Vegetable Gardens - Before



Backyard Vegetable Gardens - After











Backyard Vegetable Gardens - Before







Backyard Vegetable Gardens - After







Backyard Vegetable Gardens - Before







Backyard Vegetable Gardens - After







Backyard Vegetable Gardens - Before



Backyard Vegetable Gardens - After











Backyard Vegetable Gardens - Before

Backyard Vegetable Gardens - After

Date: 21.03.2022 Place: Chinnamanai, Vegetable garden





Date:21.03.2022 Place: Chinnavudayarkovil, Vegetable garden









Backyard Vegetable Gardens - Before





Backyard Vegetable Gardens - After





Date: 23.03.2022
Place: Kollukkadu, Vegetable garden





Backyard Vegetable Gardens - Before



Backyard Vegetable Gardens - After



Date: 23.03.2022 Place: Manora, Vegetable garden









Backyard Vegetable Gardens - Before



Backyard Vegetable Gardens - After



Date: 24.03.2022 Place: Sethubavasathiram, Vegetable garden









Backyard Vegetable Gardens - Before



Backyard Vegetable Gardens - After



Date: 25.03.2022 Place: Somanathapattinam, Vegetable garden









Backyard Vegetable Gardens - Before

Backyard Vegetable Gardens - After

Date: 25.03.2022 Place: Vallavanpattinam, Vegetable garden













Backyard Vegetable Gardens - Before







Backyard Vegetable Gardens - After







Backyard Vegetable Gardens - Before



Backyard Vegetable Gardens - After







Date: 28.03.2022 Place: Velivayal, Vegetable Garden