

Participatory Community engagement and education for conservation of mangroves in Palk Bay areas of Ramanathapuram District in Tamil Nadu

Society for People, Education and Economic Development (SPEED)

10 December 2013 – 10 June 2015







# 1. Project Details

Project Title:	Participatory Community engagement and education for conservation of mangroves in Palk Bay areas of Ramanathapuram District in Tamil Nadu	
Project Number:	77663-014	
Project Duration:	Start date	10.12.2013
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	INR 930,186	INR 103,380
Name of Organization:	Society For People Education and Economic Development (SPEED)	
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#### 2. Executive summary

### 3. Background to the project and rationale

Karankadu is a fishing village in Thiruvadanai Block in Ramanathapuram district, Tamil Nadu; approximately 1548 (Population Census of India 2011) fisher folk are engaged in fishing activities from the villages, operating semi-mechanised boats. They were impacted to some extent due to the fisheries conflicts between India and Sri Lanka in the Palk Straits that prevented conventional fishing operations for a period of time; depleting fish stocks have also been a cause for concern. 780 (Population Census of India 2011) fisher-women are engaged in traditional crab and fish catching (by touch). The village is surrounded by mangroves, which are degrading due to diminishing fresh water flows, and is located at the mouth of the river, which has a healthy growth of seagrass. The fisherwomen are reporting a decrease in crab and fish catch, and consequently have been forced to seek alternate livelihoods outside the village. This has caused social tensions, and decreased income levels. Predictably, the village is also facing a water shortage crisis. Most families are forced to buy freshwater for their daily needs; a significant portion of their income is spent on acquiring water.



Situated at the mouth of a tributary of the Vaigai River, close to the sea,

Karankadu is vulnerable to storms and other natural disasters; it suffered a great deal of damage following the 2004 tsunami. A sea wall was built in order to protect the communities, however, it has not been maintained, and is causing significant changes to the sediment flow along the coastline, and accretion/erosion of beaches on either side of the village.

The local community sought out SPEED for help in addressing their challenges. In particular the impacts of degrading habitats, and diminishing biodiversity seemed to be affecting the women largely, as they were no longer able to generate income to support basic household needs. Being remotely located, the village is largely forgotten by the Government and provision of basic necessities, like water, is overlooked. The need was therefore to increase the resilience of the communities in this village in order that they are able to cope with any changes; the project objectives were to:

- a) Establish a model for improving livelihoods, and protect Karankadu from cyclones and storms
- b) Improve the mangrove habitat through restoration and plantation interventions
- c) Improve gender equality in Karankadu

The target beneficiaries were 40 fisherwomen from the village. They were chosen because they were part of established Self-Help Groups, and it would thus be easier to pilot the livelihoods component of the project as they would be able to access loans. The families of the women were the secondary beneficiaries of the project, however the whole village was able to participate in capacity building trainings, awareness workshops, and related project discussions.

### 4. Activities completed

Key Activities	Achievements
Activity 1. New mangrove plantation in 10 acres and restoration in 20 acres	The community supported SPEED in obtaining the necessary land permissions for plantation by passing a resolution in the Gram Sabha for conducting the activity. The wildlife warden granted 10 acres of land for mangrove plantation within the village lands.
	6,000 ( <i>Rhizophora apiculata</i> and <i>R. mucronata</i> ) seeds were grown in the nursery area by the 20 women members of the Self Help Groups (SHGs) and Joint Liability Groups (JLGs). Another 4,000 seeds ( <i>Aviciennia spp.</i> ) are currently being grown in the nursery. The seeds were sourced from Pichavaram and purchased from the Forest Department at INR 5 per seed, through the MFF project.
	Plantation/restoration of mangroves was conducted, in 10 acres and 20 acres respectively, under the guidance of Dr. Muniandi, a mangrove expert from the Central Marine Fisheries Research Institute (CMFRI), using techniques from the Mangrove Action Project (MAP) publication on <i>Five steps to successful ecological restoration of mangroves</i> .
	The project mangrove nursery training over 2 days, to 37 women at Devipattinam, Vasavi Mahal (29 - 30 January 2014).



The field visit was made to Thiruppalaikudi Mangroves nursery maintained by the M.S. Swaminathan Research Foundation. 23 women were taken on a field exposure visit to Pichavaram mangrove forest to learn firsthand the technical aspects of mangrove plantation.

A Village Mangrove Council (VMC) has been established through democratic means to monitor the health of the mangroves, and dictate when restoration/rehabilitation activities need to be carried out. They will also oversee the selling of seeds from the nursery to other villages/parties. The VMC is comprised of 16 members, half of whom are women. Thus far, the council has been meeting once a week to discuss progress. In this way it is hoped that good governance of the mangrove ecosystem will be ensured in the future, and that both men and women will be provided with equal opportunities for income generation through mangrove related activities.

### Activity 2. DRR plan

SPEED conducted a Participatory Rural Appraisal (PRA) with the community between 6<sup>th</sup> and 9<sup>th</sup> February 2015. The community conducted social mapping, resource mapping, vulnerable mapping, and evacuation mapping exercises; these exercises formed the baseline for the DRR plan.

SPEED, developed the DRR plan with the community and Emergency Cell (Collectorate) (Block Development Officer) who has been given the responsibility to liaise with local communities and provides aid during natural disasters. 25 community members were taken to Villunthamavady, Nagapattinam district, who have successfully developed their own DRR plan, for a cross-learning experience.

The final DRR plan was communicated to the communities through stakeholder meetings, and further refined. Following this, SPEED constituted 9 associated Committees related to health, food, medical and first aid, information and awareness, counselling, rescues, finance, and lobbying. The committees were capacity-build and trained in their roles and responsibilities through a series of workshops on 29<sup>th</sup> and 30<sup>th</sup> May. Dr. Franklin Otty (Project Officer of Disaster Management, UNDP) conducted the orientation of plan to the communities.

# Activity 3. Improving alternative livelihoods for women

On 24<sup>th</sup> and 25<sup>th</sup> April trainings were provided for 22 beneficiaries on making prawn and fish pickles, and associated products. Mr. Rajendrakumar, an expert from CMFRI, and Mr Senthilkumar from GOMBRT, conducted the trainings in product making, packing and selling. At present 15 women have already taken up this activitiy at the household level; the local church is helping them find ways to commercialise this by identifying appropriate markets.

15 women were also capacity built in fish cage-culture



techniques on 9 and 10- May 2015 in Devipattinam. The beneficiaries learnt of methods in growing fish in cages for commercial purposes, and how to conduct cost-benefit analyses when utilising this technique. A training programme was similarly organized for 20 women on 6 and 7 June 2015 at Karankadu village, in crab fattening techniques. 15 women are already engaged in this activity.

Canara Bank at Thondi approved loans for the 8 Joint Liability Groups (5 women per group) established during this project. The women have savings account and pay monthly subscriptions. They maintain the bank account at Central cooperative Bank, Ramanathapuram. They regularly meet once in a month and seek for credit linkages.

As the women were provided with the necessary skills training through the project, they now have the seed funding to start the crab fattening, fish/crab pickle making and sea bass cage culture in the months following the project end. The bank will provide between INR 10,000 to 15,000 per head.

# Activity 4. Improved gender equality

Incidences of domestic violence have been observed in Karankadu village; this has not been addressed in the past. Through project interventions it is hoped that initial steps can be taken to raise awareness of this issue, and affect a behavioural change in patterns of domestic violence.

3 gender equality workshops were held; the trainings were facilitated by Barvatha Varthini, a women activist group from Madurai, Tamil Nadu.

The first training was conducted on 30 July 2014 for 22 project women, at Vasavi Marriage Hall at Devipattinam. The one day training included class room sessions, role play and focus group-discussions. Subjects covered included domestic violence, women rights, women discrimination, patriarchy system and Physical harassment/system. The second training was given to 20 men on 30 August 2014 at Community Hall Devipattinam. Subjects covered included gender inequality, discrimination, women rights, and sharing of responsibilities in the home. The final workshop was for both men and women on 25 September 2014. 30 participants were actively involved in the training, and the main focus of the workshop was identifying equality in roles and responsibilities of men and women in daily work.

# Unplanned for activities

An impromptu awareness programme on mangroves was organised for 180 village school children. They were shown the project mangrove nursery, and informed of the importance of mangroves and the services they provide.

## 5. Impacts of the project



- Through the JLGs, the fisherwomen in Karankadu village have learnt new livelihood skills to create economic development and sustainability, and financial independence for the first time in their lives. The women claim that the interventions have promoted social cohesion amongst themselves, further establishing a network of support for their families.
- The communities are confident that they can restore degraded mangrove patches around their village without external help. They have the nursery to provide them with saplings, and they have been capacity built in planting and monitoring techniques. The women who are maintaining the site expressed excitement in gaining income from selling seeds grown in the nursery. They have to manually water each seedling, a job which is time-consuming and pain-staking (so as not to waste the limited freshwater), however they insist they will persevere in this to reap the rewards in the future.
- It is noteworthy that the Government did not integrate a previously developed UNDP DRR plan for Karankadu into their interventions, predominantly because the Committees that were constituted were not communicated their roles effectively, nor capacity built to carry them out. In order to avoid this, SPEED, developed the DRR plan directly with the Emergency Cell (Collectorate) (Block Development Officer), and in doing so institutionalised it.
- There was a reported decrease in domestic violence in the project period, although it is
  difficult to attribute this to the project interventions. However, there was also a noted
  increase in the involvement of women in the Panchayat Raj Institute (PRI) meetings,
  VMC meetings, and church-based social gatherings. The women state that they are
  more empowered to participate in meetings, and voice their opinions; observations
  indicate an increase in women's participation at village meetings.

#### 6. Major constraints and challenges; lessons learned

- While they have been much in demand wherever they have been introduced (they provide a cheaper alternative to the village loan shark) microcredit firms are sceptical of administering loans to borrowers in remote areas. As such it was challenging finding micro-financing institutions to back the project; the National Bank for Agriculture and Rural Development was originally approached but they had reservations as to whether the community would be able to pay back the loans. However, through persistent interactions, and the formulation of the Joint Liability Groups, wherein the responsibility was decentralized, SPEED was able to convince Canara Bank to come on board with the project.
- Some of the women initially wanted to use the livelihood loans from Canara Bank to pay off their personal loans, depending on the desperation of their respective situations. Strong community linkages, and trust, between the implementing partner organization and local communities is required to ensure that the latter see the project through to its end, and that funding is used for its original purpose. SPEED conducted several meetings to explain the long term benefits of investing the money in livelihood interventions in order to convince the women.
- As always it was difficult securing permissions for the mangrove plantation, however working with the local Panchayats who provided support in the engagement with the Forest Dep., SPEED was able to secure land within the village for the pilot plantations.



# 7. Sustainability

- There is potential for the project livelihood interventions to eventually allow for a
  gradual squeezing out of the middle man in the village, allowing better access to
  finances for the community; the income generated from the supplementary livelihoods
  will over time enable the communities to pay off their loans.
- As the success of this project reaches other villages, it could be a bellwether for similar models in the rest of Ramnathapuram District. SPEED and IUCN are exploring opportunities to replicate activities in surrounding villages; the National Bank for Agriculture and Rural Development has already expressed support to continue similar interventions.