

Project No: THA/MFFSGF/08/03

Project Title: Planting Pandanus for protection of Mangrove

Implementing NGO/CBO: Coordinating Centre of Conservation Network for Mangrove Protection: Established in 2005, through coordination of village volunteer , aiming to protect marine and coastal resources, the network began with volunteer from three villages. In order to scale up conservation activities, the volunteer group reached out to cover 11 villages at Tambo level. Since continuously carrying out conservation and sustainable use of activities, one of the villages was recognized from Krabi Province as a model village for environment conservation in 2008.

Location of project: Baan (village) Khlong Yang, Kor Lanta District, Krabi Province with flat land suitable for para-rubber and oil palm plantation, the location is an integrated ecosystems of rain forest and mangrove

Target Population: 188 households who earn living through rubber and oil palm plantation, small-scale fishery, and provision of general services

Long-term objectives to support national coastal resources policy: In addition to launching activities on rehabilitating marine and coastal resource, the project will promote Reef-to-Ridge approach to land and resources management

MFF SGF approved budget: Baht: 338,600 (งบจากกองทุนป่าชายเลนเพื่ออนาคต)

Non-MFF resources (งบสมทบจากแหล่งอื่น): Baht: 171,000 from major stakeholders as follows:

From (งบจาก):	In cash (เงินสด)	In kind (แรงงาน สิ่งของ เครื่องใช้ ที่ดิน ฯลฯ)
Communities	-	171,000
Total		171,000

Main Activities: (กิจกรรม)	Main Anticipated Result: (ผลที่คาดว่าจะได้รับ)
1. Conducting open forum to confirm project activities, especially , for land owners whose premises / cultivated land are next to mangrove (กิจกรรม 1) 2. Conducting area survey according to land ownership documents , following activity 1(กิจกรรม 2) 3. Preparing area for planting pandanus by weeding, demarcating and nursery (กิจกรรม 3) 4. Launching plantation of Pandanus(กิจกรรม 4) 5. Overseeing and maintaining the plantation (กิจกรรม 5)	1. Clearer demarcation of mangrove area with out mangrove encroachment incidence 2. Witnessed minimized water pollution and improved condition of mangrove and its resources 3. Sufficient quantity of Pandanus for community use in weaving and handicraft 4. Evinced increased conservation awareness among youth group 5. Increased income of community members Note: Baseline data & information were given as reference

Major stakeholders:

Mangrove Development Station 24 (Krabi) is carrying out a survey for planning rehabilitation of mangrove in deserted shrimp farms

Implementation Report

I. Progress report (Received: 13 December 2009, three-page write-up)

Undertaken activities:	Result and indicators
1. Conducting open forum to confirm project activities, especially , for land owners whose premises / cultivated land are next to mangrove 2. Conducting area survey according to land ownership documents 3. Preparing area and planting pandanus	1. Under facilitation of concerned authorities, 90 stakeholders participating in the forum - nearly all land owners agreeing to project approaches 2. Zoning line of about three kilometers being established and staked with detailed maps 3. The zoning line being planted with 2,700 pandanus with survival rate of 80 % protecting

	about one ha of mangrove
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Project communication: Regularly, the project was made more visible and better understood through community communication facility (loud speaker system).

Experience , lessons Learnt, problem and issue: Having implemented project activities, mutual understanding and relationship between the project and land owners neighbouring mangrove appeared to be better with only one exception. Nevertheless, there was one minor issue on mangrove encroachment by some land owners during summer months. This issue was resolved by planting pandanus during the rainy months of May-June which was ahead of planned timeline but the survival rate was high.

Project Expense: The project reported the expense of THB: 75,228 out of the first disbursement of THB: 101,580.



Intervention of and support from officials from mangrove development station 24, project approaches were better understood among landowners thus paving ways to establish conservation zone of mangrove.



Communities sufficiently know how to produce pandanus seedlings. Planting of 2,700 seedling happened in Baan (village) Khlongyarn and Tonthung with estimate survival of 80 %.

II. Monitoring Visit by NC and NSC (March 18, 2010)

Findings and observation:

At Kor Lanta District's Baan (village) Khoke Yoong, one of the targeted village amid Pararubber and oil palm plantation next to mangrove, the visiting team interacted with five members of the Pandanus Weaver Women's Group witnessing demonstration of Pandanus weaving and some products. How the group managed to generate supplementary income from the products and to pass on the knowledge to youth groups in the community school. Members of the group demonstrated their skill in weaving with enthusiasm, even though the job seemed to be rather time consuming. Producing a piece of mat of about two square meters would take about 10 days, for example. However, the return from such was said to be worth the effort and time with high demand from the market. Other livelihood activities of this 188-member community were small scale fishery and provision of general services.

After witnessing the making use of Pandanus, the visiting team was led to witness a few portions of the 11-km. already planted to protected or as a boundary line against encroachment or expansion of oil palm plantation. Due to the unusual draught, about 80 % of the species was estimated as thriving and being the boundary line to protect 1,600-ha mangrove in project location which had been under high risk of encroachment.

Against both emerging issues such as the unusual draught ,and existing ones such as land use conflict ,for plantation of oil palm and other purpose, the project would keep on with maintenance of the thriving Pandanus, additional plantation as planned and beyond, promotion of Pandanus use and conservation of mangrove.

As the project was situated in and received both technical and institutional support from the Mangrove Development Station 24, community members expressed increased capacity and confidence with some revealed outputs. However, the visiting team witnessed and learnt that there were some surrounding villages whose members were not totally participatory due to more demand for short-term land use for other purpose rather than conservation for long-term use. In addition, current public policy on land use seemed to be in favour of short-term land use for quick money over conservation.

The community had set up a good example for conservation, it seemed rather complicated for the project to replicate or be up-scaled successfully within a few years ,unless a real and practical public measure was enforced systematically.



Baan (village) Khoke Yoong is a coastal village in Krabi Province' s Kor Lanta. The remaining mangrove is seen as the dark green area. Through the mangrove, a small river or khlong (canal) runs and empties into the Andaman sea. Both sides of the canal becomes pararubber and oil palm plantation. The plantation is advancing into the mangrove.



The advancement of the plantation is happening both legally and illegally. Several plots belong to absentee landlords. In order to reduce this, community initiates a local species called *Pandanus odoratissimus* L.F. and plant them to establish a boundary line. The species is an associated plants of the mangrove.



In order to stop encroachment in time, some locations had to be planted with *Pandanus* in a haste, i.e. a little bit off season. This , in conjunction with the unusual draught , resulted in the death of young trees. Adding insult to the injury, some portions of the thriving *Pandanus* were burned down by oil palm planters.



Community members have been used to making use of *Pandanus* for years. This member is demonstrating how to cut and peel its leaf for further process. In addition to making use of the leaf for handicraft, *Pandanus* roots have been used for medicinal purpose.



Pandanus leaf is processed into handicraft items like these. Community weavers work hard to get one of these done. Probably 10 days would be spent to weave one mat. The selling price sufficiently pays, however. The piece is offered at THB: 700. Open to and learning from others, the weavers are able to keep their products trendy.



And yet, the implements used are community-based - no electricity or conventional energy required.

III. Final Report (March 25, 2011)

Date of Participatory Evaluation	20 March 2011		
Number of Beneficiaries/ Participating personnel	Women:	150	
	Men:	90	
	Children:	240	
Number of persons trained/ attending seminars, joining study tours	Women:	45	
	Men:	25	
	Children:	120	
Expense	Amount received from MFF SGF (2 disbursements): THB: 304,740		
	Total amount spent out of MFF SGF budget: THB: 338,490		
	Balance: THB : (-33,750)		
	Amount authorized for the final payment: THB: 33,860		
	Amount of co-financing as follows:		
	Sources:	In cash, THB	In kind, THB
	Community & grantee	-	322,500
	Khlongyarng Tambol Administrative Organization	22,000	
	Total	22,000	322,500

Activities carried out	Results and Indicators
1. Conducting open forum to confirm project activities, especially, for land owners whose premises / cultivated land are next to mangrove 2. Conducting area survey according to land ownership documents , following activity 1 3. Preparing area for planting pandanus by weeding, demarcating and nursery 4. Launching plantation of Pandanus 5. Overseeing and maintaining the plantation	1. Increased understanding & awareness of target population witnessed by secured participation in addressing mangrove encroachment by planning pandanus - clearer demarcation of mangrove and without encroachment incidence 2. Mutual understanding among community leaders, government officers and land owners regarding marginal land to be planted with pandanus- reduced possibility of land use conflict 3. Witnessed minimized water pollution and improved condition of mangrove and its resources 4. Sufficient quantity of Pandanus for community use in weaving and handicraft - Increased income of community members 4. Evinced increased conservation awareness among youth group

Project Communication:

Plans and Activities for Sustainability:

1. The project would keep on maintaining and overseeing against encroachment reforested pandanus area.
2. The project would promote income generation among target population, especially weavers' group, by making optimal use of grown pandanus and ensuring product standard.
3. The project would promote and support local knowledge on pandanus weaving for community schools which would instill conservation awareness in young generation.

Experience , Lessons Learnt , Problems and Issues:

1. An emerging problem was unclear demarcation between private and public mangrove area. According to unrealistic demarcation stated in land document, several land owners did not permit any pandanus plantation. Using open forum together with participating women and youth, negotiation had been successful in several circumstances. Pandanus was able to be planted in private areas allowing land owners to also make use of the species. The current price of dyed pandanus fibre was THB: 400-500 /kg.
2. Promoting school participation in planting pandanus and supporting relevant local knowledge learning were not only ensure holistic pandanus promotion, but also sustainable management. Old generation transferring local knowledge to young ones was able to narrow down current generation gap.