MEETING THE INFRASTRUCTURE NEEDS OF FISHING COMMUNITIES IN PHANG-NGA BAY

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1. INTRODUCTION

Phang-nga Bay is located in the south of Thailand along the Andaman Sea coast. The Bay's landward perimeter is made up of the three provinces of Phuket, Phang-nga and Krabi (Fig. 1).

Phuket, the longest island in Thailand's waters of the Andaman Sea, is the only island having provincial status. It is also a regional headquarters. Phuket island's long shape runs from north to south. Its general geographic characteristics are rolling hills alternating with basins and some 32 small outlying islands. Phuket is the smallest southern province of Thailand; occupying 543 square kilometers. It is administratively divided into three districts; Muang, Thalang and Krathu.

Phang-nga Province covers a land area of 4,170.9 square kilometers, 57% of which is mangrove and evergreen forest. The majority of the area is mountainous, with few low-lying basin areas. It is administratively divided into eight districts; Muang, Kapong, Khura Buri, Takua Pa, Takua Thung, Thai Muang, Thap Put and Ko Yao.

Krabi is the southernmost province, and is the most open to the Andaman Sea. It occupies an area of 4,708 square kilometers that is administratively divided into seven districts and 1 sub-district; Muang, Ao Luk, Khao Phanom, Khlong Thorn, Ko Lanta, Plai Phraya, Lam Thap and sub-district Nua Khlong. General geographic characteristics include mountains, hills, plains and more than 30 small islands off the coast.

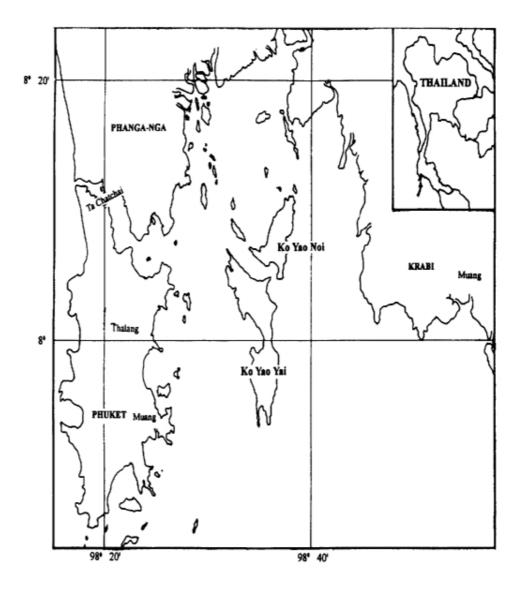


Fig. 1. Phang-nga Bay is bordered by 3 provinces (Phuket, Phang-nga and Krabi).

2. IDENTIFYING INFRASTRUCTURE NEEDS IN WANG-NGA BAY FOR SUSTAINABLE DEVELOPMENT OF COASTAL FISHERIES

The DOF has implemented fisheries activities under the 6th (1987-1991) and 7th (1992-1996) National Economic and Social Development Plans. These Plans have targeted small-scale fisheries concerns in 22 provinces along the Gulf of Thailand and Andaman Sea Coasts.

One of the DOF activities has been small-scale fisheries development of Phang-nga Bay. The activity used a "bottom-up" approach to identify villages in need of infrastructure facilities, and specific facilities that were needed by the villages. Fishermen from fishing villages of Phang-nga Bay approached the local DOF officers and governors of provinces to request infrastructure facilities.

3. INFRASTRUCTURE NEEDS PROVIDED BY DOF

Once these infrastructure needs of Phang-nga Bay for sustainable development of coastal fisheries were identified, DOF allocated technological and financial support to establish the facilities during the years 1990-1996. The infrastructure needs supplied by the Department of Fisheries in Phang-nga Bay are listed in Table 1.

Table 1. Infrastructure needs in Phang-nga Bay supported by the Department of Fisheries from 1990-1996.

Name of Province	Krabi	Phang-nga	Phuket
Total Numbers of Fishing Villages Requested	7	10	8
Infrastructure and activities			
1. Fishing Pier Construction	5	7	3
2. Retaining Wall (or Water Breaker)	3	5	2
3. Fishing Equipment Repair and Storage	2	2	-
4. Rainwater Tank	1		
5. Fish Processing, Nutrition and Storage	1	1	1

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3.1 Infrastructure facilities offhang-nga Bay's three provinces

Eight fishing villages of Phuket Province, in districts of Muang and Thalang, requested two types of infrastructure facilities which include a retaining wall and fishing pier. Among these, the fishing pier construction and retaining wall are high priority requirements.

Plot #	Village	Town	District	Activities	Year
4	Para	Pa Klog	Thalang	 Fishing pier construction Retaining wall 	199 1 1991
7	Yamu	Pa Klog	Thalang	 Fishing pier construction Retaining wall 	1990 1990
5	Та	Mai	Thalang	1. Fishing pier construction	1995

Table 2. DOF infrastructure facilities established in Phuket province.

Ten fishing villages of Phang-nga Province, in the districts of Muang, Thap Put, Takua Thung **and** Ko Yao, requested five items of infrastructure. These items, except for the rainwater tank, are similar to those requested in Krabi Province.

Plot No	Village	Town	District	Activities	Year	
1	Kok Sai	Ma Rui	Thap Put	1. Fishing pier construction	1990	
4	Kuan	Bo Saen	Thap Put	 Fishing pier construction Retaining wall 	1991	
6	Tai	Bang Tei	Muang	1. Fishing pier construction	1992	
2	Hin Rom	Klong Kian	Takua Thung	 Fishing pier construction Retaining wall Fishing equipment repair and storage Retaining wall (Coastline) 	1993 1993 1994 1996	
8	Sam Chong Tai	Kalai	Takua Thung	1. Fishing pier construction	1996	
4	Takao	K o Yaonoi	Ко Үоа	1. Fishing pier construction	1993	
				 Retaining wall Fishing equipment repair and storage 	1993 1996	
7	Lo Parade	Prunai	Ko Yao	 Demonstration of Fishing Gears and Supplying Fishing pier construction Retaining wall 	1995 1996 1996	

 Table 3. DOF Infrastructure facilities established Rhang-nga province.

Seven fishing villages of Krabi Province, in the districts of Muang and Ao Luk, requested eight items of infrastructure. Thgese include retaining wall, fishing equipment repairing and storage, rain water tank, fishing pier construction and green mussel culture.

Plot	# Village	Town	District	Activities	Year
3	Ta Lane	Kao Thong	Muang	1. Retaining wall	1993
				 Fishing equipment repair and storage 	1993
				3. Rain water tank	1993
1	K o Klang	Klong Prasong	Muang	1. Fishing pier construction	1995
	Thung			2. Retaining wall	1995
2	Klong Muong	N u o n g Talay	Muang	1. Fishing pier construction	1996
1	Hin Rao	Lam Sak	Ao Luk	1. Fishing pier construction	1992
				 Retaining wall Fishing equipment repair 	1992
				and storage	1992
3	Lam Sak	Lam Sak	Ao Luk	1. Fishing pier construction 2. Fishing equipment repair	1990
				and storage	1990
2	Ba Kan	Ao Luk Noi	Ao Luk	1. Fishing pier construction	1994

Table 4. DOF infrastructure facilities established in Krabi province.

4. FUTURE NEED FOR INFRASTRUCTURE

Further development supported under the 8 th National Economic and Social Development Plan (1997-200 1) will be considered later by request. The plan for infrastructure facilities and activities under the 8th National Economic and Social Development Plan in 22 provinces is listed below in Table 5.

 Table 5. Plan for infrastructure facilities and activities under the 8th National Economic and Social Development Plan in 22 provinces.

		Year				
Activities	Unit	1997	1998	1999	2000	
1. Fishing Pier Construction	sites	25	25	25	25	
2. Retaining Wall (or Water Breaker)	sites	25	25	25	25	
3. Fishing Equipment Repair and Storage	units	5	5	5	5	
4. Rain Water Tank	units	5	5	5	5	
5. Fish Processing, Nutrition and Storage	units	12	12	12	12	

Many of the items were allocated and completed by the Department of Fisheries during the period 1990-1995 (Fig. 1). The remaining items are expected to be completed by 1996. These items still under construction include three fishing piers, two retaining walls, fishing gear demonstration unit and one fishing equipment and storage unit.

5. CONCLUSION

While an evaluation of each activity has not been made, the facilities are widely used by fishermen communities in Phang-nga Bay.