

Fisheries Resources Management Plan for Kuala Teriang Langkawi, Kedah

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PURPOSE

To formulate Community-Based Fisheries Resource Management Plan for Kuala Teriang and Kuala Chenang, Langkawi, Kedah with the view of establishing a smart partnership between the government and local community. Partnership in this sense covers the areas of conservation, protection and management of fisheries resources that would lead to mutual benefit.

BACKGROUND

Fisheries Resources Management Plan for Kuala Teriang represents a progress in a long journey towards realizing a Community-Based Fisheries Management (CBFM) concept in Malaysian coastal fisheries. It is an outcome of a collaborative regional project established under the ASEAN-SEAFDEC Fisheries Consultative Group (FCG) Mechanism back in 2003. This pilot initiative formally known as Locally Based Coastal Resource Management (LBCRM) in Pulau Langkawi is co-funded by the Department of Fisheries Malaysia and the Japanese Trust Fund Program in SEAFDEC.

In order to integrate the multi-faceted activities common to coastal communities, the project was later revitalized and known as Integrated Coastal Resources Management (ICRM). It embraces FEDs and ARs installation, fish landing data collection, creation of business activities, training, some research elements, and most importantly demarcation of the management zone.

The Plan is a premise that will guide everyone towards achieving a more successful Community-Based Fisheries Resources Management of Malaysian chapter in future.

Demography and socio-economic information

Information on population, occupation, sex ratio and profile of fishermen in the project area are shown in **Table 1**.

Table 1. General information on the villages covered by the project

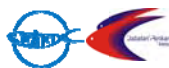
Maklumat	Kuala Teriang	Kuala Melaka	Kuala Chenang	Pantai Kok/Sungai Kok
Head count	2104	870	2953	342
Gender ratio M:F	1007:1097	416:454	1530:1423	163:179
No of households	485	120	520	60
no of fishermen	386	268	220	13
No of KPSP* Members	47	13	105	-
No of Women's Group Members	17	-	-	-
No of Licensed Boats	73	39	40	13

Notes: All figures are estimates and changes taken place over time

**KPSP – Fisheries Resources Management Group*

Status of fisheries industry in the area

Briefly, there are approximately 35 outboard boats while 38 inboard vessels registered in Kuala Teriang. The neighboring villages that are traditionally closely linked to Kuala Teriang are Kuala Melaka, Kuala Chenang and Sungai Kok. The main fishing gear used by fishermen are the fish and shrimp gill net, and hook and line. The record in 2004 shows the landing of various species from Kuala Teriang, Kuala Melaka, Kuala Chenang and Pantai Kok was about 3000 mt.



OBJECTIVE

The main objective of the FRMP is to promote the active involvement of the fishers in the community in managing, protecting, enriching and conserving the fisheries resources sustainably with a view of raising their socio-economic level and livelihood.

GOALS

Specifically, the FRMP aims to:

- a. promote direct involvement of the community;
- b. ensure that resources in the demarcated area are managed sustainably;
- c. implement CBRM in accordance with the CCRF;
- d. ensure an equitable distribution of resources among stakeholders;
- e. promote equal sharing of responsibility between local community and government in managing the resources;
- f. conserve the marine ecosystem in light to minimize further destruction; and
- g. increase monthly community income level to at least RM1000

FISHERIES RESOURCE MANAGEMENT ZONE OF KUALA TERIANG (ZPSPKT)

Zoning

The said zone would be gazetted under Section 61, Fisheries Act 1985 and would be known as the “Fisheries Protected Area”.

Location

The area covers approximately 30 nautical miles and has been traditional fishing ground for fishermen from Kuala Teriang, Kuala Chenang, Pantai Kok, Kuala Melaka and its vicinity and represented by the following coordinates:

- a. Position A (099°33'58.49"E, 06°20'47.14"N) to position B (099°37'52.00"E, 06°23'28.00"N)
- b. Position B to position C (099°38'49.00"E, 06°21'38.50"N) and connected to D (099°42'30.00"E, 06°19'21.00"N)
- c. From position D to position E (099°36'05.65"E, 06°17'47.12"N)
- d. From position E to position A and 5 nautical miles from the shore

The ARs and FADs

To highlight the FADs and ARs installed in the area by various parties among others, the local community, LKIM, DOF and SEAFDEC/TD, the FADs and ARs installed are listed below and the location of the FADs and ARs is shown in **Fig. 1**:

<u>FADs¹</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Owner</u>	<u>Year installed</u>
1.	099°37.655 E	06°20.450 N	Rozi bin Ismail	2005
2.	099°37.574 E	06°20.320 N	Rozi bin Ismail	1999
3.	099°36.164 E	06°20.134 N	Che Isa bin Hassan	1999
4.	099°36.247 E	06°20.276 N	Che Pa bin Bakar	1966
5.	099°36.019 E	06°20.276 N	Mahadzir bin Ibrahim	1966
6.	099°36.148 E	06°19.762 N	Hashim b Awang	1970
7.	099°36.342 E	06°19.830 N	Morat bin Osman	1966
8.	099°36.136 E	06°19.009 N	Kuala Teriang (4 units)	2004
9.	099°36.400 E	06°20.266 N	KEN Kuala Teriang	2001
<u>ARs²</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Owner</u>	<u>Year installed</u>
1.	099°36.006 E	06°20.327 N	LKIM	2001/2004
2.	099°37.658 E	06°20.501 N	LKIM	2006
3.	099°36.106 E	06°19.652 N	LKIM	1997

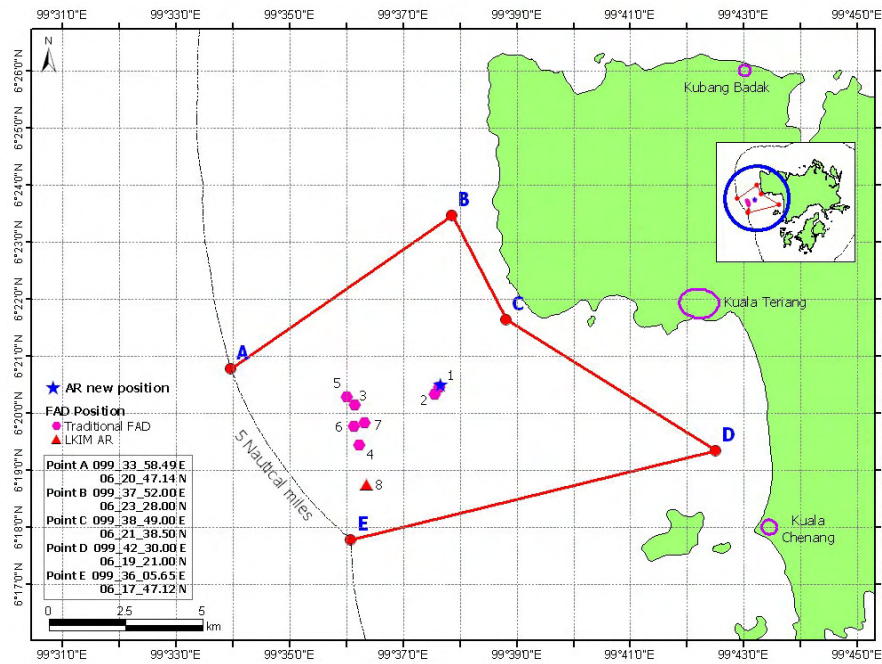


Fig. 1. Location of FEDs and ARs in Pulau Langkawi

THE ROLE OF INSTITUTIONS AND THEIR RESPONSILBILITIES

Fisheries Resource Management Committee of Kuala Teriang (JPSPKT)

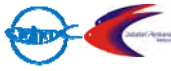
The Committee comprises 17 members lead by a chairman and assisted by vice chairman, secretary, treasurer and 14 committee members (Table 2), under the supervision of the DOF and LKIM. The committee reserves the right to appoint additional members where and when necessary including managerial staff.

Table 2. The Fisheries Resource Management Committee of Kuala Teriang (JPSPKT)

Advisor	Director of Kedah State Fisheries or his representative Dirrctor of Kedah State LKIM or his representative
Chairman	Chairman of KEN Kuala Teriang
Vice Chairman	Pengerusi KEN Kuala Chenang
Secretary	Secretary of KEN Kuala Teriang
Treasurer	to be appointed
Members	1 representative from JKKK Chenang 1 representative from JKKK Kubang Badak 1 representative from JKKK Kuala Teriang 1 representative from JKKK Kuala Melaka 1 representative from JKKK Batu Ara 4 representatives from KEN Kuala Teriang 2 representatives from KEN Kuala Chenang 1 representative from the fishermen’s community in Kubang Badak 1 representative from the Area Fishermen’s Association of Langkawi

Responsibilities of the JPSPKT

- a. overall planning of the resources management of the area
- b. to manage and protect the FADs and ARs including access to the use, installation, maintenance and security
- c. to ascertain that the method and resource exploitation system in the area are in conformity with the existing procedures and licensing policy of the DOF Malaysia



- d. to assist the government in managing, conserving, protecting the resource as well as to formulate the resource management relevant policies
- e. to resolve problems and conflicts among the fishers in a community
- f. to collect, safe keep and disseminate information on members, gears, boats, etc.
- g. to conduct consultations with the concerned fishermen communities
- h. to convene meetings at least once a month

Coordination and Monitoring Committee (JKPP)

This Committee would coordinate and monitor the implementation of the management plan, and would comprise:

- Chairman : Director General DOF or his representative
Members : Fishermen Industrial Development, LKIM HQ
Kedah Fisheries State Director or his representative
Kedah LKIM State Director or his representative
Langkawi District Office
Langkawi Development Authority (LADA)
Kedah Marine Department
Fisheries Research Institute of Malaysia
Legal Advisor, DOF
Kedah Department of Drainage and Irrigation
Kedah Fishermen Association (NEKAD)
Representative from JPSPKT (2)
Representative from SEAFDEC/TD
Representative from academe
Representative from NGO
Member of Parliament (to be decided)
Secretariat : DOF Malaysia

Responsibilities of JKPP

- a. to act as advisory body to JPSPKT mainly in the area of resource management and policy
- b. to monitor the implementation of the plan
- c. to decide on unresolved matters raised by JPSPKT
- d. to plan and formulate policy and concept implementation of CBRM
- e. to review and decide on the type of assistance and support services to be provided towards the successful implementation of the management plan including, R&D, training, information collection, etc.
- f. to convene meetings at least once every 3 months

The Role of Community

Membership

All members of KEN Kuala Teriang and Kuala Chenang are automatically members of the management system and deserve the equal rights to voice their opinion and be benefited from the resource exploitation of the area.

The Rights of non-member

Fishermen domicile in the vicinity and yet non-members of the system are allowed to exploit the resource on conditional basis. They will not enjoy the privilege to utilize the facility provided such as FADs and ARs owned by KEN.

The Role of Area Fishermen Association (PNK)

The Area Fishermen Association forms part of the system by being member of the JPSPKT. Fishermen are required to be first a member of PNK before being allowed to join the KEN.

MODES OPERANDI

Consultations

- a. The existing consultation mechanism such as KEN¹, PNK² and JKPP³ will be continued
- b. All proposals will be tabled to JPSPKT to be scrutinized and decided for possible implementation
- c. Matters that require government's decision would be forwarded to JKPP

Conflict Settlement

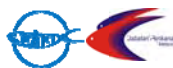
- First to be handled by JKPSKT and subsequently by JKPP for unresolved issues
- Any violation to the norms and understanding reached, are to be resolved in accordance with the existing or improved punishment system

Government's Responsibility

- a. to provide technical advice in the area of resource management, legal, organization management, entrepreneurship, etc.
- b. to provide support in the area of research, training, extension, etc.
- c. duty bound to continuously provide enforcement and effective prosecution
- d. secretariat for JPSPKT
- e. to ensure that plan is implemented and expanded elsewhere
- f. to register and provide detailed information on FADs and ARs to the stakeholders
- g. to seek for development fund
- h. to conduct 'base-line survey' to gather basic information on resource status and socio-economic background
- i. to conduct impact evaluation program in a stipulated period
- j. to meticulously back the plan with regulation and practical legal instruments

Role of the Community

- a. to form and activate Implementation Committee (J/K pelaksanaan)
- b. to formulate and design implementation system for management plan, such as punitive measures, conflict settlement, etc.
- c. to ensure that implementation procedures run in parallel with existing government policy in view to achieve its goal
- d. to assist the government in enforcement
- e. to provide and channel information to government
- f. to ensure that the rights of the community is equally safe-guarded
- g. care taker of the safety of FADs and ARs as well as other facilities provided
- h. to search for fund for day to day management operation, FEDs maintenance, etc.
- i. to conduct environmentally related activities



SOURCE OF FUND

For operations

The JKPSKT to secure and generate income/fund thru *inter alia*

- membership fees
- revenues from fines
- FEDs and ARs utilization charges
- business activities, e.g. recreational fisheries, boat rental etc.
- contributions from KPSP, PNK, etc.

Government's contribution

Possible government department and agency's contributions through normal development funds would be sought to enable the conduct of various activities *inter alia* research, training, provision of facilities etc. in accordance with the requirement and existing policy of the government.

MANAGEMENT OF FISHERIES RESOURCES

Management of FADs and ARs

- a. Cover those registered by DOF
- b. All FADs and ARs constructed and installed by DOF/other agencies will automatically be transferred to KEN while those constructed and installed by individuals will remain as their own
- c. All new installations will undergo stringent scrutiny by the JPSPKT. DOF/LKIM will provide technical advice in terms of suitable location, etc.
- d. KEN will be responsible in full to regularly maintain the FADs and ARs
- e. JPSPKT would device operational procedure in consultation with members, non-members and sports fishermen in the use of ARs and FADs. Procedures will also be developed for mooring and anchoring.
- f. JPSPKT to resolve issues pertaining to encroachment and destruction of FEDs and ARs

Management of Fishing Gear

Fishing Vessel

To adopt conditions, policy and licensing procedures those are being implemented by DOF. List of registered vessels will be maintained by a database being developed by JKPSPKT

Allowed Fishing Gear

- a. Kail Mengail (hook and line)
- b. Mengeret (trolling)
- c. Pukat-pukat hanyut kecuali yang tidak dibenarkan seperti dinyatakan dalam (all gill net except stated below)
- d. Bubu ikan yang saiznya kurang dari 3 x 8 (kaki) (fish trap not more than 3x8 m)

Not Allowed fishing Gear

- a. Pukat sotong yang menggunakan lampu (squid net with lights)
- b. bubu sotong (squid trap)
- c. Pukat Jerut Bilis (anchovy purse net)
- d. Bubu ikan yang saiznya melebihi 3 x 8 (kaki) (fish trap more than 3x8 m)
- e. Pukat Tunda dan Jerut Ikan (trawler & purse seine net)
- f. Rawai (long line)
- g. Pukat Hanyut Tenggiri (saiz mata 4 inci dan ke atas)- gill net with mesh size > 4 inch

Environmental Conservation

The JPSPKT should engage itself in conserving and protecting the environment by adopting fisheries activities in responsible manner. It is also envisaged to be involved in environmental related activities, such as:

- a. mangrove reforestation
- b. proper waste effluent discharge to the sea
- c. environmental awareness campaign
- d. beach and fish landing jetty cleaning

Legal Back-up and Licensing Procedures

- a. The demarcated zone is gazetted under Section 61 Fisheries Act 1985 as Fisheries Protected Area
- b. To make necessary amendment to licensing procedural to ensure its consistency and relevance to the management plan
- c. Through the Director-General's Directives as stipulated in section 10, Fisheries Act 1985

Monitoring & Evaluation

To ensure that the management plan is effectively implemented in order to achieve its objectives, a practical evaluation and monitoring system will be put in place. These would include the following:

- a. Conduct of 'Base line survey' to establish reliable preliminary information prior to implementation;
- b. As a matter of sustainability, resource survey in the area should be conducted at regular intervals;
- c. Regular monitoring should be conducted by convening the JPSPKT and JPT meetings and producing a monthly;
- c. Internal impact assessment should be carried out by the DOF; and
- d. A third party impact assessment should subsequently be conducted once in three years.

