

# Unjam (Artificial Reef) One of the Kuala Terengganu North Poor Community Development Products In 2008

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## ABSTRACT

*The study in this paper was made in 2008. The author took a long time to publish because of some constraints. This paper is related to one of the poor fishing community development products. In the process of reaching the 2020 vision, a developing country like Malaysia will see all aspects to ensure that the country's goals are achieved as a developed nation. One aspect that is seen and addressed is the eradication of poverty. Respondents were selected from the list of participants of the Development Scheme of People's Welfare (SPKR) given by Terengganu State Fisheries Development Board (LKIM). The sampling method used is sampling judgment (judgmental). Kuala Terengganu Utara covers the area between Seberang Takir to Kampung Merang such as Batu Rakit mukim, Seberang Takir, Padang Nenas, Pak Tuyu, Floating Telipot and Kampung Merang. The residence of the participants is not in a single area. This area is designated by LKIM with the approval of fishermen's federation in Kuala Terengganu area. This unjam (artificial reef) use can help increase income but the revenues can only be improved beyond the hardcore poverty line. However, LKIM's efforts are being made to ensure that these reefs are not encroached in order to help fishermen obtain fish yields are also seen as a contributor to the preservation of fish resources.*

Keywords: Fisherman, Community, Poor, Unjam, SPKR

## INTRODUCTION

The study in this paper was made in 2008. The author took a long time to publish because of some constraints. This paper is related to one of the poor fishing community development products. In the process of reaching the 2020 vision, a developing country like Malaysia will see all aspects to ensure that the country's goals are achieved as a developed nation. One aspect that is seen and addressed is the eradication of poverty. Poverty in which the country is considered something that dampens the development of the country. Hairi Abdullah (1984) states that poverty is considered a social illness. This poverty strikes all classes. Regardless of farmers, fishermen or industrial workers. Poverty among fishermen communities remains a major problem in the fisheries sector (Dara Aisyah 2012). Chamhuri Siwar (2001) states that the poor of the village consist of traditional farmers, coastal fishermen, land tenants, landless farmers and laborers who have no access to resources and equipment such as land, capital and technology.

In order to achieve the goal of poverty eradication more effectively, an appropriate and coherent approach to poverty should be done so that the problem solving can be done according to the needs of poor households (Siti Hadijah Che Mat et al 2012). Therefore, to develop and assist the poor especially from the fishermen, the provision of assistance is necessary. Looking at the technological advancement in the fisheries sector has long been the case where fishermen have modified the way and the fishing gear (Ishak Shari 1990). But there is still a group of poor fishermen. Therefore, one other approach

needs to be seen. One of the approaches that can be seen is with *unjam* construction or more easily called artificial reef.

This *unjam* are an objects used to promote fish breeding in the sea. Various forms of *unjam* are made. In Terengganu under the implementation of the Malaysian Fisheries Development Authority (LKIM), the stakes have been used as one of the assistance products in the Development Scheme of People's Welfare (SPKR). Therefore, the authors wish to see the effectiveness of this *unjam* (artificial reef) in assisting the development of the poor fishermen community in Kuala Terengganu Utara.

## POVERTY

The word poverty is often spoken by the government in the issue of national development. Even the various views and definitions of poverty are given. There are various definitions of poverty. In Malaysia, the definitive definition of poverty is the definition of a figure named Ungku Aziz. Ungku Aziz (1964) defines the poor in the absence of income that can meet the basic essentials or does not get food that has the substance required for body health and cannot meet and maintain physical efficiency.

Another well-known researcher in Malaysia, Chamhuri Siwar (1988) stated that the concept of poverty was of various dimensions and it attracted the attention of sociologists as well as economists. Osman Rani and Abd. Majid Salleh (1988), explains that poverty is a concept of poverty syndrome. Where this syndrome affects the population in various situations such as malnutrition, low health status, low income, unemployment, low health status, low education level, lack of modern resources, irregular employment and negative outlook on life Daily. Sulong Mohamad (1994) defines poverty as a well-being located at a level below the minimum household needs in

terms of nutrition, clothing, housing, hygiene and other basic needs.

Valentine (1968) states poverty is a state in need of something that is necessity, wants, desires or habits known as values. Townsend (1979) states that individuals, families and groups in a population can be said to be in poverty when they lack the resources to get these kinds of diet, lack of participation in activities, lack of living conditions and lack of basic facilities in the society Where they came from. It can be seen from the definition of poverty. United Nations Development Programme UNDP (1997) states that someone who is undoubtedly below the poverty line is indeed poor. Hope (2004) states that poor people are those whose living standards are below the poverty line. Helena Thatcher Pakpahan et al (2006) generally consists of low-educated societies and their lives in poverty.

## LITERATURE HIGHLIGHTS

Ishak Shaari (1990) in his study of the poverty problem among Perupok fishermen community in Kelantan, states that fishermen are poor, moderate and rich. Most of them are poor. They lack capital and do not have their own fishery equipment. According to him, this group has very low income (between RM30 to RM300) and makes them less able to support their families.

Jomo (1991) states that these fishermen in 1970 and 1971, the third household belong to poverty. In 1976, 35% of fishermen in Peninsular Malaysia earn about RM150 while 9% earn RM500. These poor fishermen are also of different races. Most important is Malay and second is Chinese. According to Jomo, fishermen in the East Coast have less opportunities and rights in the market and they are also earning less (less than RM350).

Abd. Malik et. Al. (1996) in field work in the East Coast of Malaysia, states that poverty is closely linked to marine fisheries resources. Increasingly affected are

coastal fishermen, where their area is encroached on by trawl boats. Therefore the artificial reef made is broken. This causes fishermen to be difficult to get fish.

Christophe Bene (2003) in his research and observations in Asia and Africa stated that the level of poverty among fishing communities either individually or as a group have long been a concern. Fishermen are always associated with the saying "fishermen are poor and poor as fishermen". This research reveals more arguments to the economy (low income) and the problem aspect. There is one analysis of one probing whether poverty stemming from natural factors, namely the lack of resources. One of the results obtained show that poverty in fishing communities is due to lower catches and less of a target. This is one cause they to being poor and make they involve in poverty.

Field studies conducted by Mohammad Raduan Mohd Ariff et. Al. (2009) in Kota Belud on the fishermen found that there are several reasons that have become a barrier to efforts to increase the income of the fishermen. The obstacles are such as input problems, supplies, equipment shortages, communities and stakeholders, sources, downstream sectors, and infrastructure facilities (Mohammad Raduan Mohd Ariff et al. 2009).

There is a study conducted by Dara Aisyah et al (2010) in Indonesia. According to him, coastal fishing communities in Indonesia are mostly poor people compared to others in the non-fisheries sector. However, this study focuses on programs made to coastal communities. The PEMP is a public program aimed at improving the wellbeing of coastal communities, especially poor households. The results of this study The PEMP program should provide more assistance and equipment to poorer coastal communities to facilitate them in the maritime and fisheries sector so that future socioeconomic levels of future coastal households can be improved. Hence it can be said here though the government managed to

implement the PEMPP Program especially in terms of financial output and the establishment of the Program constitution, but its performance and achievements are weak. This is due to the many constraints, incomplete and bureaucratic red tape that interfere with the achievement of the program's goals.

There is a study in Ghana about fishermen. There are fishing fishermen acquiring fish by using light attraction equipment to increase their catch. But the act is wrong in the law of the country. Because of the poor they had to break the law to increase income (Wisdom Akpalu 2011).

In view of all the highlights of the study, the writer sees these fishermen easy in poverty and their tools are also limited to coastal fishermen. Common working equipment and limited resources for poor fishermen cause them to be poorer. However, no related studies about *unjam* that have been made.

## STATEMENT OF PROBLEMS AND OBJECTIVES

A community development, a survey made by project implementers or community development programs to see the needs of a community. As an LKIM Terengganu implementing agency involved in implementing the SPKR, it is looking to find a new alternative for the success of a managed program besides looking for other products besides providing equipment to the poor fishing community. Therefore, LKIM Terengganu has decided that the remaining balance is used to build the stakes as a product of catching sea. *Unjam* is the place where fish breeds grow. The question arises is *unjam* can become a fishermen community development product in increasing revenue. Therefore, this paper presents the main objective of this is the placement of *unjam* as one of the community development products in helping to increase the income of the poor

fishermen community in North Kuala Terengganu who are SPKR participants.

### TYPE OF UNJAM

The SPKR allocation which is more than the provision of equipment assistance to participants is used to create *unjam* (artificial reefs) where these *unjam* will be placed as far as five nautical miles from the coastline to enable the fishermen of the Development Scheme of People's Welfare as well as traditional fishermen to harvest fish in the area of this *unjam*. This *unjam* is also controlled by the LKIM. Even the unlucky placement was only informed to participants by the Terengganu Fishermen's Association (PENENTU) and the Kuala Terengganu Utara Area Fishermen Association (PNK).

Even trawlers were also monitored to avoid them. Lately, the *unjam* keboid have been replaced by *unjam* Protek. This is where the *unjam* is more resistant and saves the area and the cost of production.

All *unjam* properties are all manufactured using cement and iron. In fact, there are *unjam* that are fastened to facilitate it in the sea. The molding of this *unjam* is to breed marine fish with high and commercial values. Examples of fish that have high value in the market are black pomfret, white pomfret, snapper, flower grouper, red grouper, kurau, machete, jellyfish, white snapper, mackerel, tiger, tiger prawn, coral reef and big white shrimp. These *unjam* contain various types of *unjam* keboid, *unjam* of Shrimp, *unjam* of squid dan *unjam* protek (see photo 1 and photo 2).



Photo 1: Type of Unjam

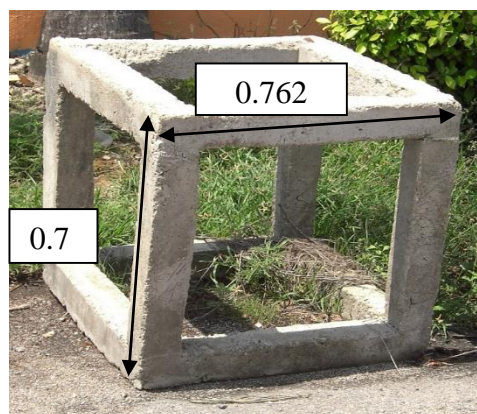


Photo 2: Size of Unjam Keboid

## RESEARCH METHODOLOGY

In this section it is discussed in detail on the method or method used during the study. However, the authors would like to emphasize that this study was implemented in 2008. So the respondents' information was at that point. The issues raised were location selection, respondent selection, sampling method, data collection technique and data processing. The location of the study chosen is the habitat of fishermen in North Kuala Terengganu, mostly in rural areas and near the coast. Kuala Terengganu North is part of Kuala Terengganu district. This area is the most fishery area in the State of Terengganu, with 1,790 people settling in the area (Terengganu State Economic Planning Unit 2002).

Respondents were selected from the list of participants of the SPKR given by LKIM Terengganu. The sampling method used is sampling judgment (judgmental). Kuala Terengganu Utara covers the area between Seberang Takir to Kampung Merang such as Batu Rakit mukim, Seberang Takir, Padang Nenas, Pak Tuyu, Floating Telipot and Kampung Merang. The residence of the participants is not in a single area. This area is set by LKIM Terengganu with the approval of fishermen's association in Kuala Terengganu area. The number of participants is 30 people. Respondents who met all were 17 people but only 15 people who work fishermen. The other two respondents were the wives of the fishermen who had died. However, they are still involved in the sale of products that are produced by fish that are lobster and satar. There are two data collection techniques that are used as secondary data and primary data.

Interview techniques are also used during interviews or conversations with respondents and those involved with SPKR namely LKIM officers, Terengganu State Fishermen's Association (PENENTU) and the Kuala Terengganu Utara Region Fishermen's

Association (PNK). While an informal interview, spontaneously submitted to the writer's conversation with the respondent. The purpose of this questionnaire is to respond to respondents to add information in the study where the respondents clarify the information in detail and the information is recorded. Data from this interview is important to strengthen the argument and data in this paper, which cannot be in the collection of other information. This method can also gather the latest information. In addition, a survey form is also used to facilitate respondents to answer questions. This is to see if this program helps increase their income or vice versa. In addition to achieving and completing the objective objectives of this paper.

## FINDINGS

This section describes the findings of the study. The findings of the study of the *unjam* are five nautical miles from the coastline placed in the area as it fits and facilitates coastal fishermen. The information on the *unjam* in Terengganu waters was notified by Terengganu LKIM officers and Terengganu State Fishermen's Association (PENENTU) officers to SPKR participants who worked in fishermen. This has been confirmed by all 15 respondents. It is also one of the additional assistance under SPKR as well as the provision of equipment for all SPKR participants organized by LKIM Negeri Terengganu.

This method is also seen as avoiding shortage of fish supply to coastal fishermen, especially SPKR participants. They also point out that the *unjam* helps increase the catch. However, in view of the increase in revenue, only 13 of them managed to increase their income. Not only that, some of these participants stated that they brought their adult child to place that an *unjam* been put in the sea. This to facilitate their children to marine fish while temporarily replacing their work when they were sick. Even some of

them stated that they had brought one or two fishing rods in a short time when the weather and the sea conditions were not so turbulent. By bringing these anglers they get some money to help increase their revenue.

Additionally, this paper also found that SPKR participants stated that they did not have to find a suitable place in the marine waters to catch fish. They even find it easy to collect fish catches. But for them, weather factors also play a role in catching fish catches. Not only that, there are other factors that because fish catch decreases. Invasion is also one of them. The place that had been put *unjam* keboid are been intruded by big boat fishermen. Not only that, nets they use damage the *unjam*. This destroys the fish habitat to lay eggs. This reduces fish breeding in the area.

The *unjam* damage (artificial reef) provided by LKIM through SPKR is also a problem in this scheme. This *unjam* damage occurs after being placed in the sea where fishermen using trawlers and tiger trawls catch fish in the area where they are located. This affects fisherman's livelihood. This is what Abdul Malik et al. Al. (1996), fishermen cannot earn much money due to *unjam* damage.

This artificial turf is a fish breeding area and only small netting is permitted such as trawl 1"-9" allowed to be used near the area. The use of trawlers and tiger trawls causes *unjam* damage when the trawl is increased. Fishing nets are caught in *unjam* causing *unjam* to touch other *unjam*. This condition causes the artificial reindeer to rupture or the net will be stuck in the unearthed area. This will cause fish breeding to be disturbed.

The damaged *unjam* had been remove and take out from sea. It place had been replaced with a new one. The diver from LKIM Negeri Terengganu also had to go down several times into the sea to remove traps caught on *unjam*. The use of trawlers also causes *unjam* to move from their area.

LKIM Negeri Terengganu has taken action by replacing this *unjam* keboid with a stronger *unjam*. They also often monitor coral reefs. LKIM also requested cooperation from the Fisheries Department and local authorities to assist in monitoring *unjam* areas. These *unjam* help fisherman, especially SPKR participants in increasing their income. Even placement of *unjam* in the immediate area facilitates SPKR participants to fish in the area.

## CONCLUSION

After seeing the result of the study, it can be seen that the use of *unjam* can help increase income but the revenues can be improved only through the income poverty line. However, LKIM's efforts are being made to ensure that these reefs are not encroached in order to help fishermen obtain fish yields are also seen as a contributor to the preservation of fish resources.

However, at the time of no monitoring of the sea authorities there were trawl boats that harvested fish products in areas near *unjam*. This caused their nets to fall into *unjams* that had been placed in the sea. With this new protective protector reef, it reduces the problem of *unjam* damage. This is because these *unjam* are more resistant to the immune reef. Overall, the use of *unjam* can help increase the income of the majority of fishermen involved in the study. Even if this *unjam* is able to increase the income of the chief household and also fisherman community.

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