The Current Status of the Fisheries Sector in Ampara District

¹S. Rafeeka, ²K. Kuraisiya

¹Department of Geography, South Eastern University of Sri Lanka ²Department of Probation and Child Care Services, Eastern Province kalantherkuraisiya@gmail.com

Abstract:

The fishery sector of Ampara district is called Kalmunai fishery district because most of the fishing activities are concentrated in Kalmunai. All categories of fishing such as offshore fishing, coastal fishing and lagoon fishing are mostly practicing in this district. The fisher population of this district is 825,120 person in Marine sector and 198660 person in Inland sector (NAOD- 2014). Fishing activities in this area have been affected by ethnic conflict and the tsunami. Due to these reasons changes are clearly reflected in fish production, fishing fleet, active fishermen and catch composition, which reduced after 1981, were severely changed in 2005. However, after 2006, fisheries sector shows positive signs and increasing trend in fish production. Annual marine fish production in Ampara shows a positive trend and the latest records show a production of fishing is 535,050 metric tons (NAQD- 2015). The study shows that the Ampara District has a big potential for development of fisheries sector as resources are readily available. The level of satisfaction in fishermen in the Ampara District is higher than 50% on their crafts and gear availability as most of the fishermen now have crafts of their own. However, the gears are not available in satisfactory level. In overall, the impacts of ethnic conflict and the tsunami on livelihood of fishermen had come to an end. The fishermen have adequate amount of craft and gear when compared to the situation prior to tsunami and conflicts. Support from the government to improve the infrastructure facilities of fishery sector and introduction of modern technology will bring benefits to the fishing community who live in Kalmunai fishery district.

Keywords: fisheries sector, ethnic conflicts, tsunami & modern technology

1. Introduction

Fisheries are the second largest subsector of agriculture in Ampara District and are the predominant economic activity of the District. Ampara District situated in Eastern Province. The Eastern Province Districts have 507 Km length of coast line equivalent to 32% of the country's coastline and around 3,900 ha of brackish water lagoons. Besides, large extent of water bodies (3600 ha) in irrigation tanks and reservoirs are also available for inland water fishing. The fisheries sector in Ampara has suffered mainly from the civil unrest and later in 2004 devastated by the tsunami (NARA, 2008)

2. Research Problem

There are several problems, issues and challenges constraining the development of the fisheries sector in research area for example this coastline affected by Tsunami. And also this area's fish production continuously affected by North-East monsoon period. The problems need to be address clearly in the development plan to

make this potential sector more productive. But in research area, there is not a clear broad overview of the development which held in fisheries sector (i.e. lagoon, coastal, specialized and offshore fishing). And also these area fishermen do not use proper technologies to maintain sustainable fishing for their future generation.

3. Objectives of Research

- To establish a broad overview of the development of fisheries Sectors
- To address the challenges which is pacing by research area's fisherman
- To identify the main sources which want to develop in future.

4. Methodology

> Collection of secondary data

Mainly we have collected data from secondary sources. Fisheries sector related data collected through the past records of fishing sector's publications (Books, Magazines, Articles, & research papers), which published by various stakeholders and in-country resources, national and international agencies. Further information was collected via internet sources.

> Interviews with key informants

We conducted a rapid survey with the representation of primary, secondary and tertiary stakeholders engaged in the fisheries sector in Ampara Districts. The data were collected through focus group interviews and key informant interviews with Fisherman, fishing societies and various personnel who involved in fisheries sector.

> Questionnaire Survey

We are prepared 70 questionnaires to collect the information to maintain the reliability of data. These questionnaires randomly distributed within 7 village fishermen and fishing Sector related persons those villages are Nintavur, Karative, Saintamaruthu, Kalmunai, Panama, Potuvil and Oluvil. We have distributed 10 questionnaires for each village.

5. Results & Discussions

5.1 Status of fisheries in Ampara

The basic information with regard to the fisher community is given in Table. (Table 1) Reportedly, a total of 4,870 fishermen in Sri Lanka were dead because of tsunami in 2004. The number dead in the Eastern Province amounted to 1920 fishermen. It is nearly 39% of the total number dead. (Survey Department, 2006)

5.1.1. Fishing Communities

Death rate was highest in Ampara. Lowest number of active fishermen, fisher households and fisher populations were recorded in 2006 but recovered by the year 2007.) The increase in number of active fishermen and households may be due to

the census carried out in 2005 by the Ministry of Fisheries and Aquatic Resources after tsunami to provide donor funding to fishermen in tsunami affected areas.

Year	No. of Fishing	No. of Active
	Households	Fisher Man
1989	9328	9022
1996	12342	13224
1999	13265	14592
2004	15100	15550
2008	16450	20600
2011	22740	26040
2012	22940	26460
2013	22890	25960
2014	22920	26190

Table 1: The basic information on fisher communities in Ampara

Source: Survey Department, Statistics Unit Ministry of Fisheries and Aquatic Resources Development

5.1.2. Coastal and Offshore fishery:

Year	Fish Production (MT)	
1983	10650	
2000	9210	
2005	7940	
2007	12810	
2008	22050	
2009	16260	
2010	16380	
2011	20120	
2012	23410	
2013	23070	
2014	21660	

Table 2: Marin Fish Production in Ampara (Mt)

Source: National Aquaculture Development Authority of Sri Lanka (NAQDA) Analysis of coastal and offshore fishery, this district was not possible due to the method of data recording by the DFEO offices.

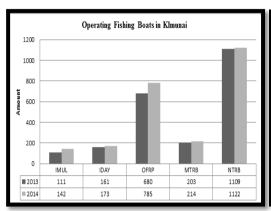
The data is not recorded separately for offshore and coastal fishery. However, as indicated by the species composition of the marine fish production it is evident that the contribution of coastal fishery to the marine fish production is higher in Kalmunai.

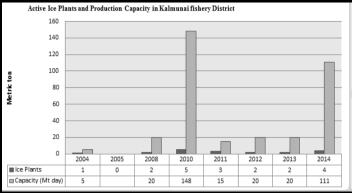
The table 2 clearly indicates the impact of ethnic conflict on the marine fish production is affected. The fluctuations in productions 1991 to 2014 may be due to relaxation of rules from time to

time. When the tsunami devastated the country in December 2004, fishing industry was the most affected sector. The total damage was estimated at 10000 LKR million and the cost needed for development of the sector was estimated at 17888 LKR million (MOFAR report, 2006). Impact of tsunami is clearly reflected in the low

production of 2005, 2006 and 2007. During these three years relief funds flowed into the country and the fisheries sector has been strengthened through provision of gear and crafts, construction of harbours, landing facilities, anchorages and supporting services. The contribution to marine fish production from Kalmunai increased by 72.1%, in 2008 compared to that of 2007. The removal of security barriers to fishing in the eastern province after the re-establishment of civil administration in the area indicates this increase in fish production.

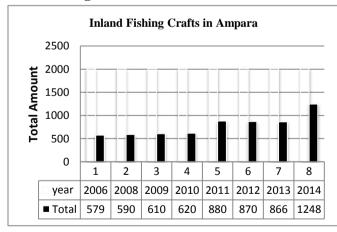
5.1.3. Fishing Fleet & Ice Plants





Source: Statistics Unit, Ministry of Fisheries and Aquatic Resources Development

5.2.1. Fishing Gear and Crafts

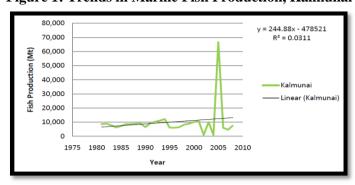


Wooden boats and Fiber boats are mainly for fishing inland Fishing Activities. According to the fishermen most of the wooden canoes have now been replaced by fiberglass canoes. Different kinds of gears are in use in the Eastern Province. Cast netting is practiced both from a boat and from the shore.

Drag net is another gear used in lagoons.

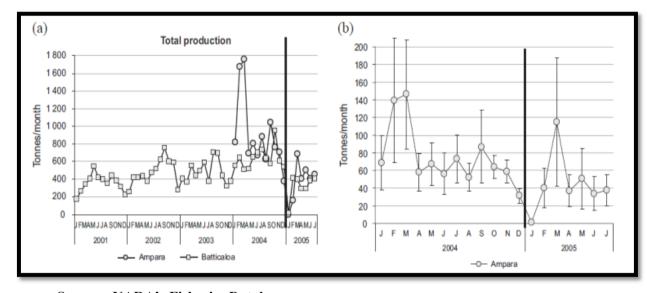
Source: Statistics Unit Ministry of Fisheries and Aquatic Resources Development, NAQD

5.2. Trends in offshore fishery/Coastal fishery Figure 1: Trends in Marine Fish Production, Kalmunai



The research area's marine fish production was decreasing in 87-89, 95-96 and 2005-2006. After 2006, the trend shows clear growing in marine fish production. The decline in 2005-2006

is due to the impact of tsunami while the earlier ones are due to various regulations issued by the security forces from time to time because of the ethnic conflict.



Source: NARA's Fisheries Database

Data on total fish production are recorded by the district offices for a number of fisheries (FI) divisions. According to these data, after the tsunami, the monthly catches at Ampara fell to nearly zero and increased by March 2005, but remained lower than the equivalent months in 2004. Landings' data for small pelagic species in seven Districts using NARA's Small Pelagic Fisheries Database were examined. Kalmunai Fishery District had data from 2000 to early 2006.

5.3. Problems, Issues and Challenges

The more important issues are discussed below:

Poor fisheries infrastructure particularly the under - equipped and badly maintained fishery harbours have vulnerable off - shore coasts and deep sea

fishing. Inadequate ice production, storage and transport facilities have constrained value addition, quality improvement and marketing of fish. The quality of fish landing place is also very poor, particularly after Tsunami. Fish spoilage is high in the landings of Multi - day boats. The spoilage is estimated to be up to 30% adequate harbor facilities are presently available but support infrastructure is not available. Ice production is not adequate and should be improved. And Access roads should be improved. The fishermen in Panama Lagoon are of the view that harbouring the boats of offshore and coastal fishermen in the lagoon disturbs their fishing. They want the authorities to find another place for anchoring the boats. Another fear in Panama fishermen is that tourism industry which is likely to be developed in the area will pave way to destruction of mangroves. Use of destructive fishing gear is another problem faced by fishermen in the research area. Use of monofilament gill nets affects the catches of the fishermen who are using legal gears but the authorities do not implement the regulations. Use of light course fishing also should be prohibited. Inadequacy of Fisheries Officers in research area also affects the career of fishermen. They were given training on post-harvest technology but the catches are not adequate to start an industry. Post-harvest handling is still in poor condition and more awareness programs should be given.

5.4. Conclusions and Recommendations

> Creating a database on fisheries sector

The craft and gear used in lagoons are not recorded systematically and data are not available. The scarce data available are also scattered and restricted to studies conducted by universities or Research Institutes for undergraduate and post graduate studies. The studies are rare which focuses on the aspects we have studied. Universities also can contribute by collection of data for student and graduate research and such study reports should be deposited in fisheries offices for use of the planners.

> Lagoon fishery, Aquaculture and stock enhancement

It was observed that there is a big potential in enhancing prawn stocks in small and medium sized lagoons in Kalmunai area. These lagoons are suitable for prawns and stock enhancement will increase the income of the fishermen. Brackish water fish cage culture can be developed in the lagoons to increase the fish production. This would be a very profitable venture if initiated.

Ecotourism

Destruction of mangroves for any purpose should be avoided. Fishermen, City Planners and other project proponents have to be made aware of the functions and values of the mangroves on fish production.

> Improving support facilities

The marine fish production is increasing in research area but the ice production is not sufficient. Therefore, the support facilities for fishermen such as ice, kerosene oil, access roads etc. should be provided.

> Reviving traditional fishery

Revival of traditional fishing methods such as Ja-kotu should be encouraged.

> New Technology

Fishermen should be exposed to new technologies of fish finding and should be allowed to carry GPS to find where they are.

In overall, the impacts of ethnic conflict and the tsunami on livelihood of fishermen has come to an end. The status of fishermen has improved and they have adequate amount of craft and gear when compared to the situation prior to tsunami and during conflicts.

6. References

- 1. Blindheim, J. and Foyn, L. 1980. A survey of the coastal fish resources of Sri Lanka. Report No. III, Jan-Feb 1980. Colombo, Sri Lanka, Fisheries Research Station/Bergen. Norway, Institute of Marine Research. 78 pp.
- 2. CONSRN, 2005. Impacts of the tsunami on fisheries, aquaculture and coastal livelihoods, Sri Lanka. Report produced by NACA, FAO, SEAFDEC and BOBP-IG, March 2005. 10 pp.
- 3. NARA 2008. Fisheries Year Book
- 4. Joseph, L. 2005. National report of Sri Lanka on the formulation of a trans boundary diagnostic analysis and strategic action plan for the Bay of Bengal Large Marine Ecosystem Programme. Colombo, BOBP, 114 pp
- 5. Maldeniya, R. and Jayamanne, S.C. 2006. A rapid assessment of the status of the fisheries in tsunami affected areas of Sri Lanka. FAO (OSRO/RAS/504/LAO)/ National Aquatic Resources, research and Development Agency (NARA). 66 pp.