



# **Citizen Action for Transparency Myanmar**

**Economics Opportunities and Challenges  
Encountered by the Ngapali Beach Fishery Workers**





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## Executive Summary

The purpose of this study is to analyze the financial and social implications of the crews who reside near the Ngapali shore. This study included 60.78% male and 39.22% female respondents, and their economic and social circumstances were examined. Male respondents work as fishery business owners, supervisors, fishing net pullers, and crews, whereas female respondents work as accountants, domestic entrepreneurs, and fish processors (drying, slicing, and storing fish).

Within the fishing communities, educational levels vary, but the majority have completed primary school. As a result, educational support from civil society organizations is essential to raise community education levels. The living conditions varied across the region, and some of the crews were unable to find appropriate housing, forcing them to sleep in tents. Although the majority of the houses are made of wood, the roofing materials are thatch, coconut leaves, and nipa palm leaves, with iron sheets on other buildings.

Crews are mainly relying on wood and charcoal as fuel sources, with limited access to gas. Rain and wells supply water, whereas electricity and water are provided through taxation. The daily wage for crews is around 15,000 Kyats, with variable pay scales based on the fishing vessels owner and position.

The pay structure for crews is divided into three categories: daily rates (15,000 Kyat/day), monthly salary (180,000 – 230,000 Kyat), and a share (70% for owners and 30% for crews). A share denotes that the income from selling fish is divided by 7:3 between the owner and the crews. The leader of the crews receives 30% of the crews' earnings as a share, and 15% of the owner's profits and he is compelled to pay 5% of his 15% wage to his assistant. The monthly salary of crews varies according to the number of vessels with flash light.

The Kyawt Pite's business men owned at least 2 fishing vessels and 1 fishing net, and 4 fishing vessels and 4 fishing nets for the maximum. The price of a fishing net ranges from 12,000,000 MMK to 20,000,000

MMK, and the total value including the fishing vessel, net, and light bulbs, ranges from 80,000,000 to 100,000,000 MMK. Fishing along the Ngapali coast begins in October and ends at the end of April. In the fishing season, all of the fishing vessels are ready to embark on fishing expeditions in the ocean one day after the full moon and start fishing at the two and three days past the full moon monthly. Every month of the fishing season, from the 1<sup>st</sup> day of the full moon, all boats are ready to go fishing to sea, and from the 2<sup>nd</sup> (or 3<sup>rd</sup>) day, they go fishing every day. Approximately one to two days before the full moon, the fishing vessels are landed and maintenance process of fishing vessels, including lights checking, painting, and cleaning, is carried out. Most fishing vessels are equipped with GPS; Weather software installed on phones and used, but the helmsman, some leaders and some crews know how to use these things, and most of them still don't know how to use them.

Fishing is the primary source of income for crews, despite challenges such as fluctuating fish availability, market prices, and labor shortages. Notwithstanding having completed water resource conservation training, the fisheries businessmen and some crews still require extra information on modern technologies. Lack of identification as a mangrove protection zone in the Ngapali coastal areas until today will have a catastrophic long-term impact on the environment.

Despite the fact that fish availability varies, Anchovy, Cuttlefish, and other fish are caught in averages of 3 baskets (122 Kg) to 10 baskets (408 Kg) per day. The catch is sold in the domestic market and transports to Sittwe and Yangon. The fishery sector is currently facing challenges such as rising commodity and fuel prices, market constraints, and an increase in the number of fishing vessels.

The majority of the crews took loans at different interest rates from various sources to meet their financial requirements. The fishing permit tax system is likewise a little complicated, with a few variations. The land conflict with the hotels for the fish drying locations provides the issues in addition to the health care service and safety concerns.

Citizen Action for Transparency (CAfT) conducted this study which highlighted the need for education, modern technology support, and effective resource management to improve the economic and financial well-being of crews in a sustainable manner. If suitable support is obtained from various sorts of Civil Society Organizations, the fishing industry will contribute to the region's economic development.



Source - CAfT

## 1. Background

Fish is an essential component of the daily diet and is critical to the food security of Myanmar households. Fish provides the essential protein required by the human body. Furthermore, important nutrients for infant growth can be obtained from fish and fish-based products such as fish paste, dried fish, and fish sauce.

It has been discovered that 22% of the protein consumed by Myanmar families comes from fish consumption. It was also discovered that the average consumption of fish and fishery goods per capita is 20.12 kg, with 31.5% of freshwater fish, 23.5% of brackish water fish, and 45% of freshwater/brackish water fish paste at the national level.<sup>1</sup>

In 2013, the total production of fish and crab was 4.7 million tons, with fresh water accounting for 47% of total production and brackish water accounting for 53%. The Department of Fisheries reports that fish production climbed from 4478.21 million tons in 2012 to 5047.53 million tons in 2014. Inland and marine capture fisheries produced 4.1 million tons of Myanmar fish, accounting for 80% of total production.<sup>2</sup> In Myanmar, the freshwater fisheries subsector has employed 1.6 million people. 31% of the workers were full-time employees, while 19% were part-time seasonal fishermen.<sup>3</sup>



<sup>1</sup> <https://data.opendevlopmentmekong.net/dataset/f2ef7fe1-1ff2-4be6-bf90-2a4be945ddcc/resource/99c1039b-c5b0-486e-a49a-74578f9e9cb6/download/the-state-of-world-fisheries-and-aquaculture-2016.pdf>

<sup>2</sup> <http://www.worldfishcenter.org/country-pages/myanmar>

<sup>3</sup> အာရှဖွံ့ဖြိုးရေးဘဏ်အဖွဲ့အစည်း ( ADBI ) ၏ ၂၀၁၃ ခုနှစ်အစီရင်ခံစာ

Despite the fact that the Myanmar fishery industry and the number of fishery crews play a significant role in Myanmar economic and labor force participation, the socioeconomic status of fishery workers remains low in different governmental systems. Most fishery workers are unable to resist taking out loans with interest, and they must acquire a loan from a financially powerful individual in order to solve their livelihood problems during the off-season. Some fishery businessmen and crews obtained loans from fish dealers, and in order to repay their loans, they are compelled to sell their fish to the dealers at an unjustified (low) price than the market price.

Although Myanmar fishing businessmen and workers were hoping to grow their business activities after the COVID-19 pandemic, the country's economy deteriorated and hindered the fishery sector as a consequence of the military coup in February 2021. The increasing fuel price (diesel price) exacerbated the burden on the fisheries sector during the coup. Given the spike in diesel prices, small-scale and individual owners, as well as some fishery personnel, had stopped fishing and sought alternate options for earnings. The covid-19 outbreak and the military coup compounded fishing workers' lowering socioeconomic status.

The Myanmar Fishery resources is in a restorable condition within a short time if it is conserved in time because of excessive fishing in the Myanmar sea area before. If the fish resources of Myanmar are conserved in time, the fish resources will become plentiful and local businesses associated with fishing can develop, thereby enhancing the socio economic of the fishery workers.

The Myanmar Fishery resources can be restored in a short period of time if they are maintained in time due to previous overfishing in the Myanmar sea area. If Myanmar's fish resources are protected in time, the fish resources will become abundant, and local fishing enterprises will be able to develop, improving the socioeconomic status of fisheries workers.





Water resources and fishing business are critical in the present military coup time for the country, which is dealing with a number of conflicts and challenges related to food security. Citizen Action for Transparency (CAfT) conducted the research in order to sustain the fish resources, improve food security, create job opportunities, and study markets and management in the Ngapali township, Thandwe District, Rakhine State, where water resources are abundant.

The Ngapali Coastal Area, located in Thandwe District, Rakhine State, is a region inhabited by fisheries workers who primarily rely on fishing for their livelihood. This research highlighted the socioeconomic situation of the fishermen who reside near the Ngapali shoreline.

## 2. Objective

This study was conducted

- (1) To investigate the socioeconomic situation of fishery workers along Ngapali coastal
- (2) To understand the fishing communities' livelihood, occupational status, housing characteristics, educational level, and challenges
- (3) To improve the economy of fishing workers, to sustain their livelihood opportunities, and to explore opportunities for the development of the fishery industry with the assistance and recommendations of relevant stakeholders

Source - CAfT



### **3. Study Area, Types of respondents, Research methodology and Questions**

#### **3.1 Study Area**

This survey was conducted in Thandwe district, Rakhine state, Myanmar, in 2023, with the goal of better understanding the perspectives, experiences, and present problems faced by people working in the fishery business. This study includes all associated fishing business activities such as fishing vessels, helmsmen, fishing net pullers, and various types of crews. A participatory method was utilized to ensure the respondents' voluntary participation when they were selected for the individual interview.

#### **3.2 Types of respondents**

For the study, a total of 51 individuals were chosen from the Thandwe district's fishery industry, including male, female, and child workers. The respondents were selected depending on their willingness to take part.

Individual interviews were used to acquire data. A semi-structured interview was undertaken to focus on male participation in the fishing vessel and fishing net industries. The proper questionnaires were well developed in order to gather information about the relevant roles, experiences, challenges, particular duties, and requirements of the fishing industry's fishery employees.

#### **3.3 Research methodology**

Individual interviews were carried out and questionnaires were constructed to correspond with their work experiences and other characteristics. Furthermore, the questions were designed to get an in-depth understanding of respondents' roles, responsibilities, technical skills, and barriers experienced in their respective work environments.



### 3.4 Interview Topics

Crews, helmsmen, and fishing net pullers were asked about their roles, duties, and responsibilities. Their experiences, security measures, and storm weather experiences were all included in the questions to share with the public. Moreover, the questions focusing on boat construction and crew maintenance skills were added in order to acquire their skills and technical information.

The workers in charge of trawling the fishing nets were asked about their responsibilities and experiences with fishing net placement and maintenance. The questions highlighted their technical abilities, issues and the importance of their individual roles.

Thematic analysis was undertaken on the information gathered from the interviews. The respondents were classified using code numbers and categories based on their industry (fishing and trawling). The data was analyzed from information about the types, common facts, and prevailing opinions to acquire a deeper understanding of the respondents' perspectives and experiences.

### 3.5 Ethical considerations

The principles of ethics were strictly followed throughout the study. All participants were informed in advance of the interviews, and consent was obtained to ensure their voluntary participation. The safety of the interviewees was the top priority during the study, and personal information of the participants was kept confidential, and the data acquired was solely used for research purposes.





## 4. Limitations

The method of convenience sampling was adopted due to the present political system and security concerns. As a result, the study's findings may not be fully representative of Thandwe District's overall fisheries industry. The survey's results will be hampered by the limited sample size. This study, on the other hand, provides vital insights into the roles and experiences of each individual (fishery worker) who contributes to the local fisheries.

Source - CAfT



## 5. Findings

### 5.1 Socioeconomic information of the Respondents

#### 5.1.1 Ethnicity, Age, Occupation and Education

The socioeconomic status of men (60.78%) and women (39.22%) of respondents were interviewed in order to analyze the livelihood situation of individuals working in the fishery sector and residing in Napali township, Thandwe District, Rakhine. (Figure-1)

The majority of responders (95.83%) are from the Rakhine ethnic group, while 4.17% are from the Burma ethnic group, and they all practice Buddhism. 11 - 20 years old (15.69%), 21-30 years old (31.37%), 31-40 years old (11.76%), 41-50 years old (15.69%), 51-60 years old (15.69%), and 61-70 years old (9.8%) are the age groups. (Figure-2)

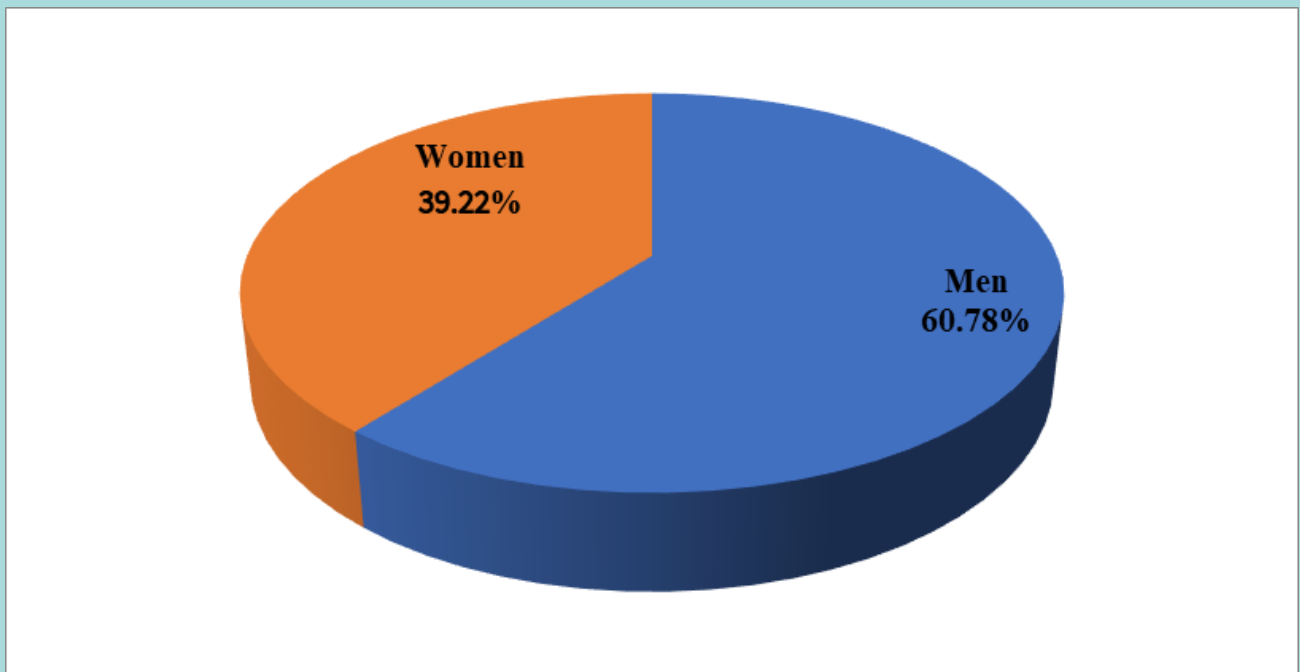


Figure-1 Number of male and female respondents

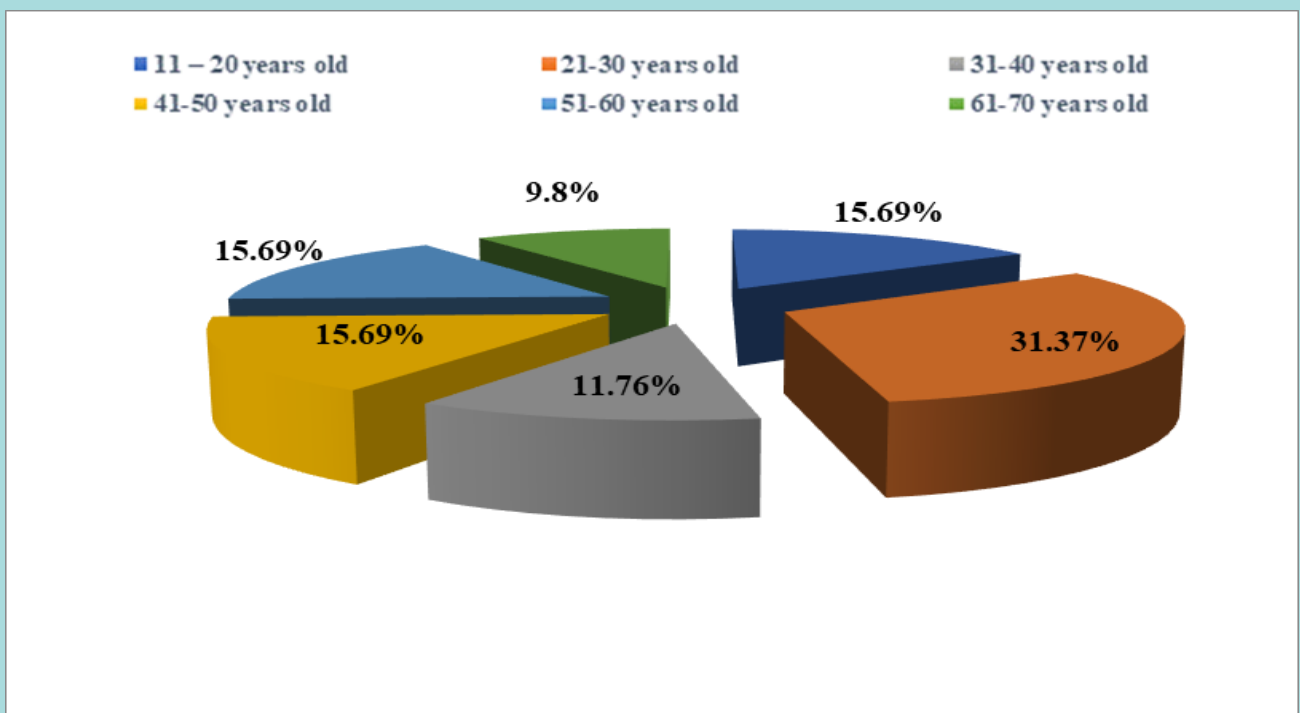


Figure-2 Numbers of fishermen surveyed by age group (%)

## Occupational Status of Women

The majority of female respondents work as accountants (5%), housewives (5%), business owners (10%), fish processors (slicing, drying) (15%), and fish preservers (drying, storage) (65%). Women work in the Kyawt pite business, including drying and storing fish. (Figure-3)

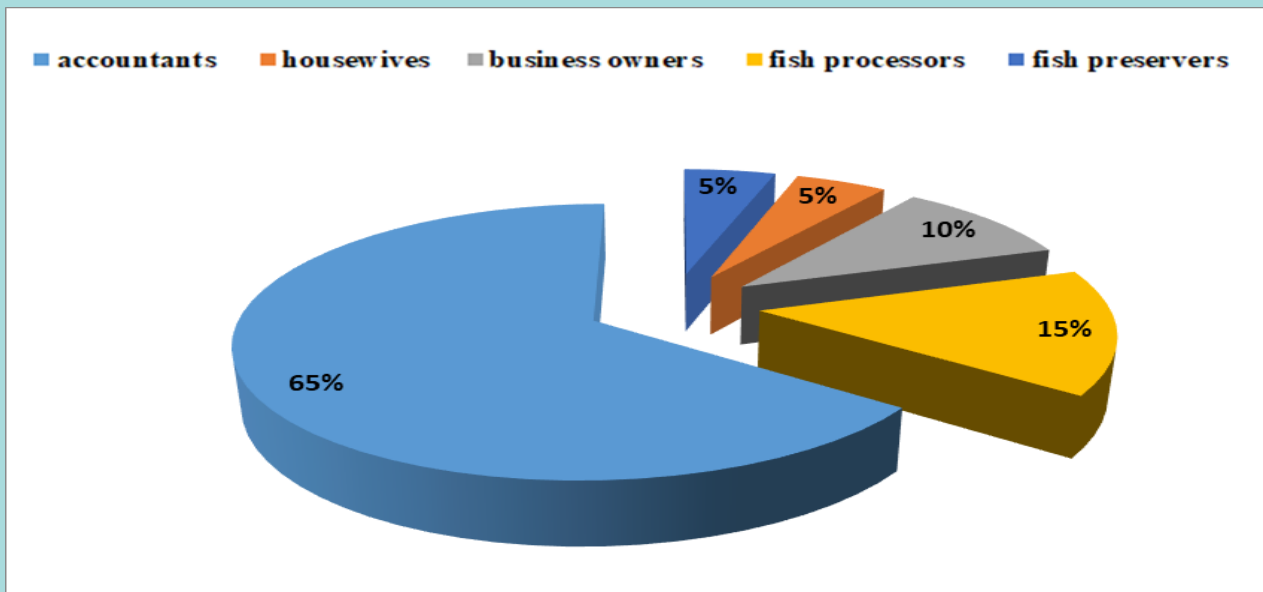


Figure-3 Types of jobs by Women (%)

## Occupational Status of Men

Male respondents are employed as helmsmen (6.45%), group leaders (6.45%), businessmen (9.68%), and fishing trawler workers (77.42%). (Figure 4)

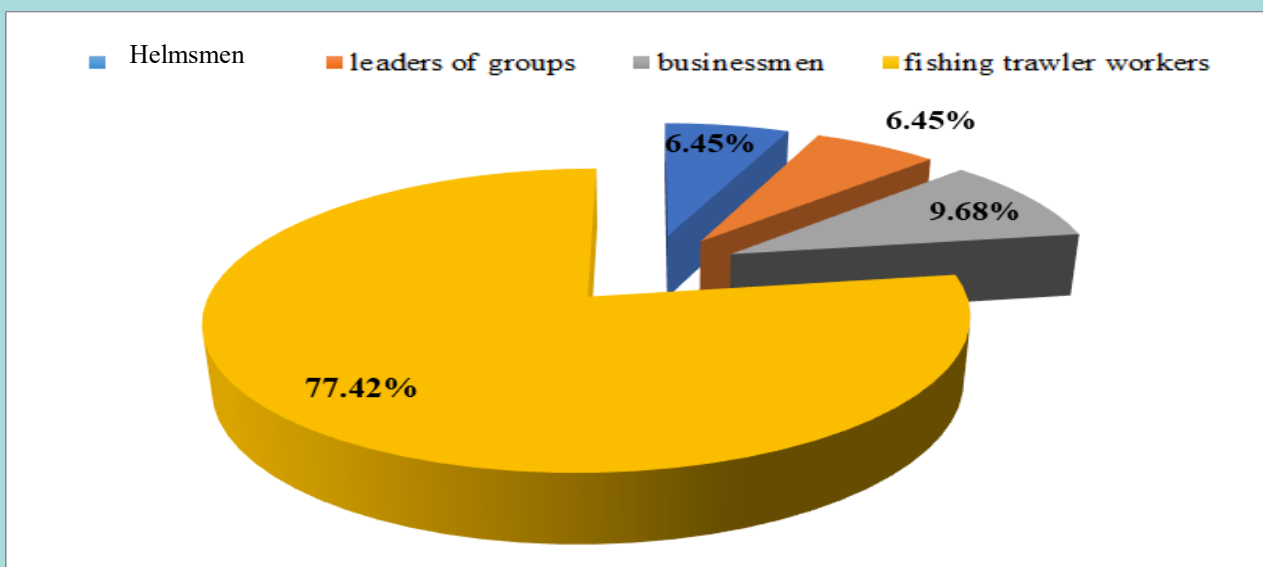
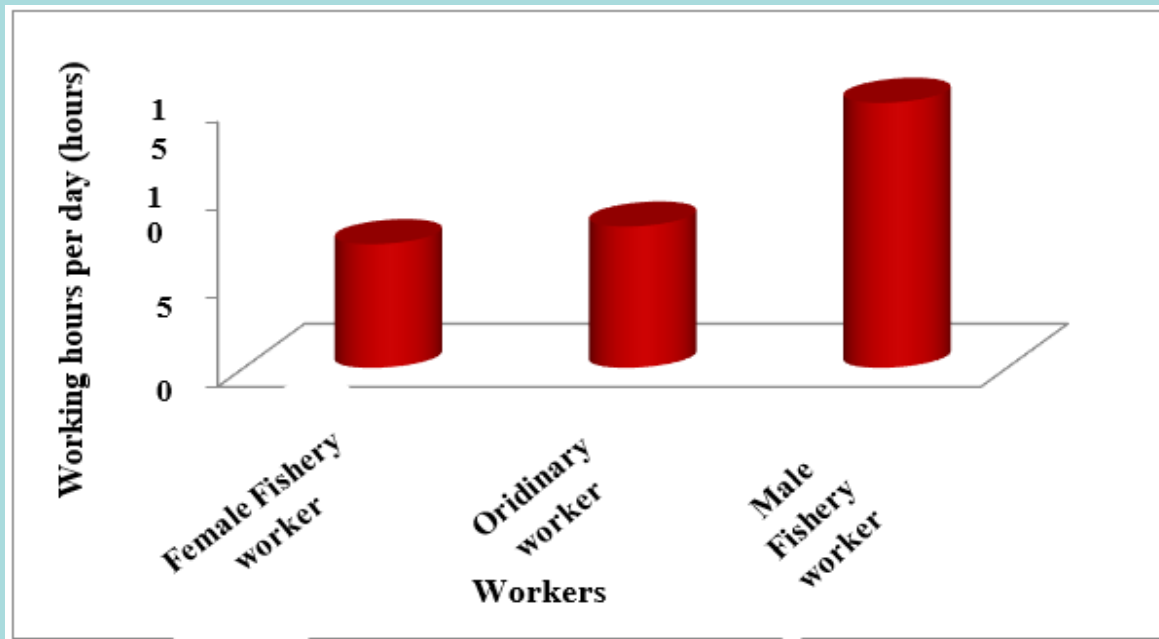


Figure-4 Types of jobs by Men (%)

Ordinary workers in other industries work approximately 8 hours each day, whereas male fishery workers work 15 hours every day. Women must work for approximately 7 hours per day. After finishing drying fish, women can take a rest and do chores in the afternoon. (Figure-5)



**Figure-5. Comparison of working hours between Fishery workers (Men, Women) and other employees (Hours)**

From October to April, fishermen began kyawt pite fishing, and during the resting season, they worked on repairing fishing nets, vessel maintenance and related activities, farming, and other causal jobs. (Table-1)

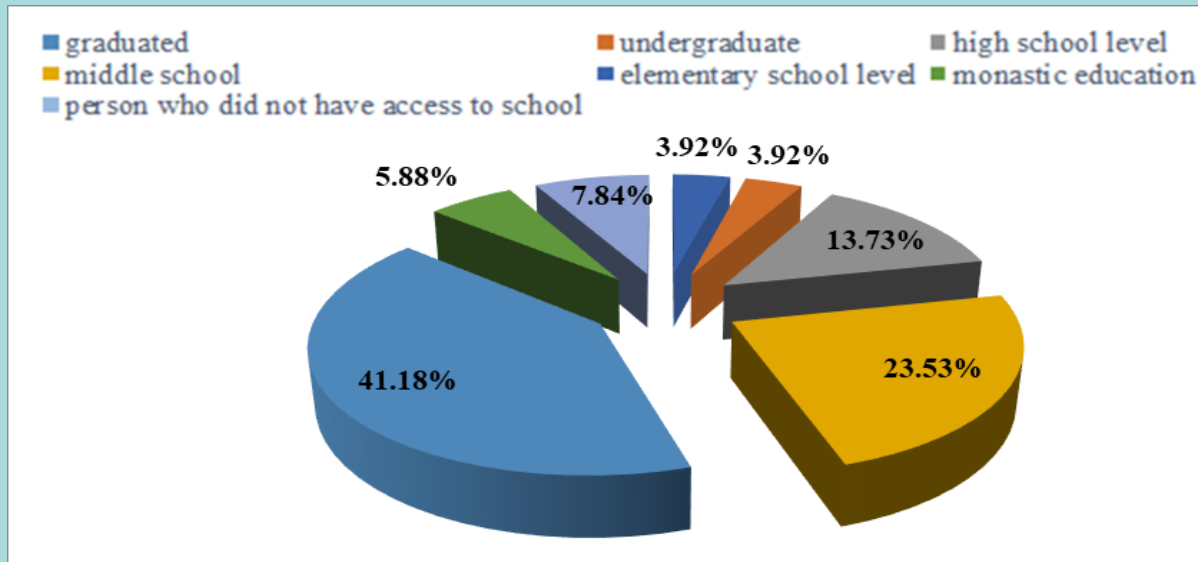
**Table-1. Types of job activities categorized by month**

No	Month	Activities
1	January	Fishing
2	February	Fishing
3	March	Fishing
4	April	Fishing
5	May	Fishing, Fishing net collection, Cleansing and keeping vessels



6	June	Fishing net repair, Vessels repair, Causal work, Orchard work, Farm work
7	July	Fishing net repair, Vessels repair, Causal work, Orchard work, Farm work
8	August	Fishing net repair, Vessels repair, Causal work, Orchard work, Farm work
9	September	Light bulb check, engine check
10	October	Fishing
11	November	Fishing
12	December	Fishing

The youngest employee is 13 years old, while the oldest is 70. Graduated (3.92%), undergraduate (3.92%), high school (13.73%), middle school (23.53%), elementary school (41.18%), monastic education (5.88%), and person who did not have access to school (7.84%) are the education levels. (Figure-6)



**Figure-6. Education level of respondents (%)**

The fishermen's educational attainment varied, with the majority (41.18%) completing only basic education. As the proportion of people with tertiary education declines, civil society organizations must place a high priority on promoting education in the region, particularly for children from fishing households.

### 5.1.2 Household characteristic, consumption of natural resources, occupation and income status

Since they lack adequate housing, some fishery workers need to live in temporary homes. These temporary structures are not safe or adequate for a long-term healthcare system. The majority of the houses in the community are made of wood, with some made of thatch, coconut, or with iron roofs. They obtained wood and bamboo from the demolished building or went to the hills to cut and collect dry branches from the forest to use as fuel for cooking. They had to buy charcoal, however. There is a restricted supply of electricity and an intermittent supply of gas. The dam water is utilized to make drinking water. Rainwater and well water are also used for various purposes. Most crews earn around 15,000 Kyats per day and receive varying compensation according on their role and vessel ownership. Fishery entrepreneurs often own at least two vessels and up to four fishing nets (Figure 7). The fishing season begins in October and ends in April. Some people use GPS and weather software, although the adoption of modern technology is still limited.

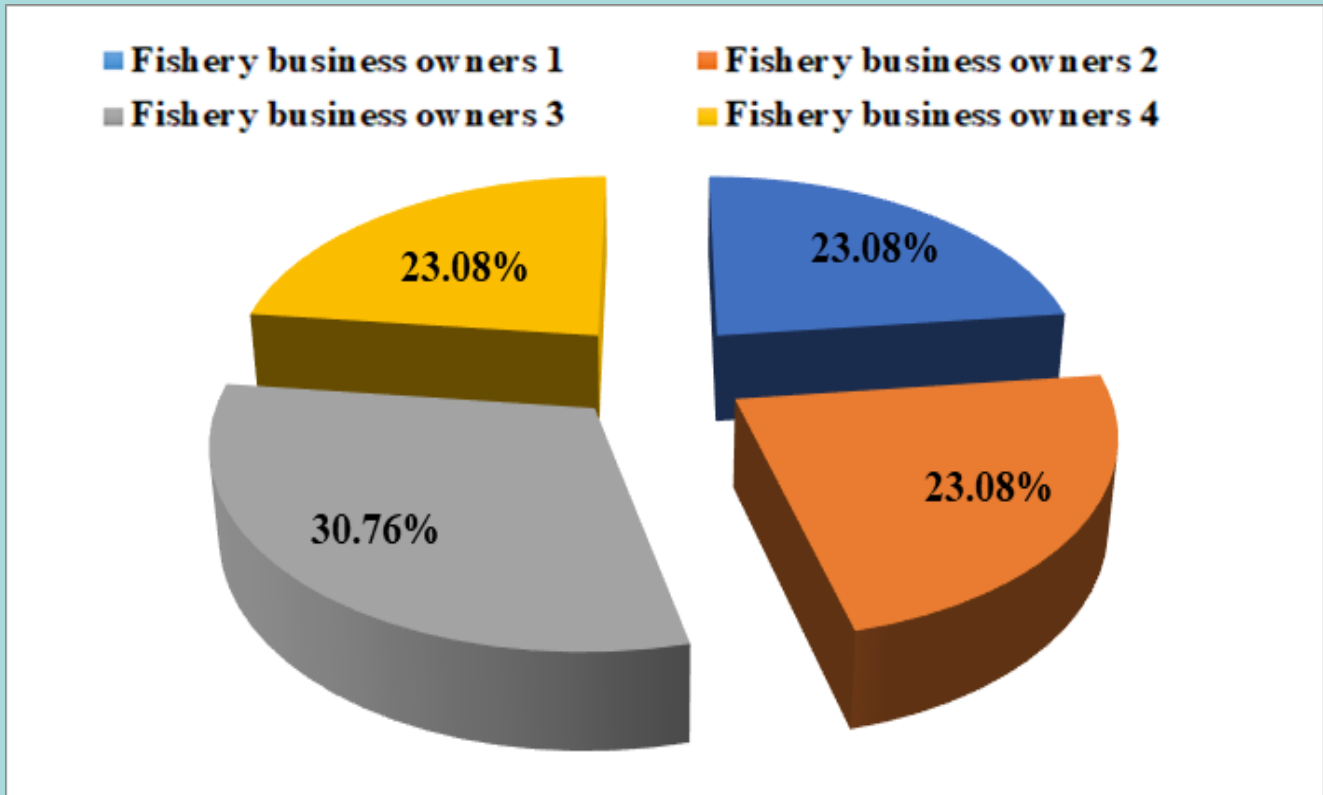
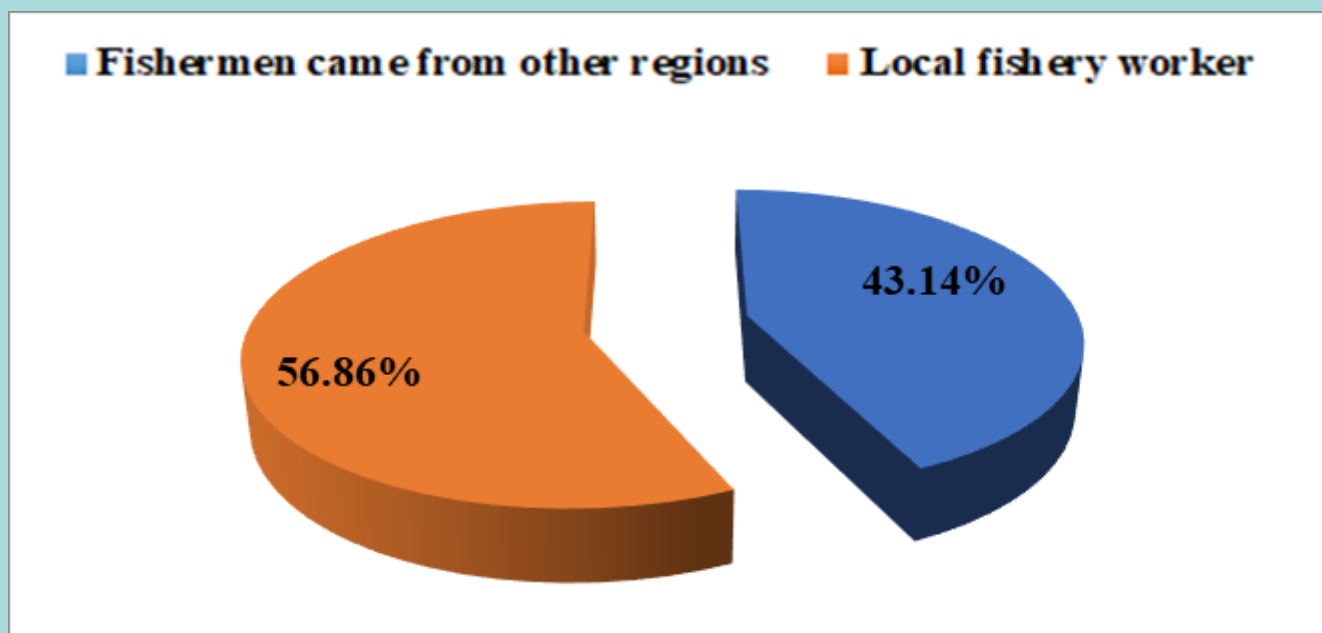


Figure-7. Comparison of the number of vessels owned by fishery business owners

Fishery Workers work 22 to 23 days a month, starting fishing in the afternoon and returning to the beach early the next morning. It was also discovered that crews working on various fishing boats work together to complete their tasks.

Labor shortages have become a big issue as the number of fishing vessels increases on an annual basis. Migrant workers from northern Rakhine state fulfill labor shortages, although this raises travel and other expenditures. (Figure-8)



**Figure-8. Comparison of the number of visitors from other regions and the region (%)**

The majority of the fishermen received training in water resource conservation, identifying various types of prohibited fish, and setting out the restricted time of year to catch them. They are, however, nevertheless ignorant of modern technology. The lack of a mangrove protection zone along the Ngapali coast poses a number of environmental problems.

### **Fish Catch, Market Conditions and challenges**

The average daily catch is roughly 10 baskets (approximately 408 lb), although daily availability varies. Anchovy, cuttlefish, and other small fish, as well as other aquatic animals, are the most regularly caught species. In the fishing business, the lack of clearly defined markets and inadequate market development

impedes the production and marketing of fish. Sharks and other aquatic creatures, such as turtles and whales, are listed as protected species and are released if they are accidentally trapped. (Table-2)

Fluctuations in fish prices, rising fuel and commodity prices, and an expanding number of fishing boats all have an impact on the fishing industry's economic viability and growth.

**Table-2. List of captured, rare, prohibited and extinct fish species**

No.	Captured fish species		
	Scientific Name	Common Name	Local Name
1	<i>Stolephorus commersonii</i>	Commerson's anchovy	ငါးနီတူ
2	<i>Trichiurus savala</i>	Small headed ribbon fish	ငါးတံခွန်
3	<i>Cynoglossus lingua</i>	Long tongue sole	ငါးခွေးလျှာ
4	<i>Sardinella gibbosa</i>	Gold stripe sardine	ငါးကုန်းညို
5	<i>Alutera sp.</i>	Starry file fish	ငါးသန်
6	<i>Rasterlliger kanagurta</i>	Rakegilled mackerel	ပလာတူး/ငါးမိုးသီး
7	<i>Cybium guttatum</i>	Indopacific Spanish mackerel	ငါးညို/ငါးကွန်းရှုပ်
8	<i>Caranx sp.</i>	Torpedo scad	ငါးကျီးကန်း
Rare fish species			
1	<i>Epinephelus labaricus</i>	Reef cod	ငါးတောက်တူ
2	<i>Lutianus sp.</i>	Blood red snapper	ငါးပါးနီ
Prohibited Species			
1	Subdivision: Selachimorpha	Sharks	ငါးမန်းမျိုးစိတ်
2	Order: Cetacea	Whales	ဝေလငါးမျိုးစိတ်
3	<i>Neophocaena phocaenoides</i>	Finless porpoise	လင်းရှူး
4	Order: Testudines	Sea turtle	လိပ်အမျိုးမျိုး
Extinct Species			
1	<i>Kurtus indicus</i>	Indian hump head	ငါးဖောက်လောက်



## Borrowing, Taxation, Conflicts and difficulties

Some fishery businessmen borrowed money at varied interest rates at the beginning of the fishing season to meet their financial demands, and most fishermen accept loans for a variety of reasons. Twenty people out of the total number of people surveyed took out loans, while the remaining 31 people did not. Some people take out loans but do not have to pay interest since they know the lender. (Figures 9 and 10)

Fishery businessmen must pay a variety of taxes, and there are issues with tax receipts and payment processing.

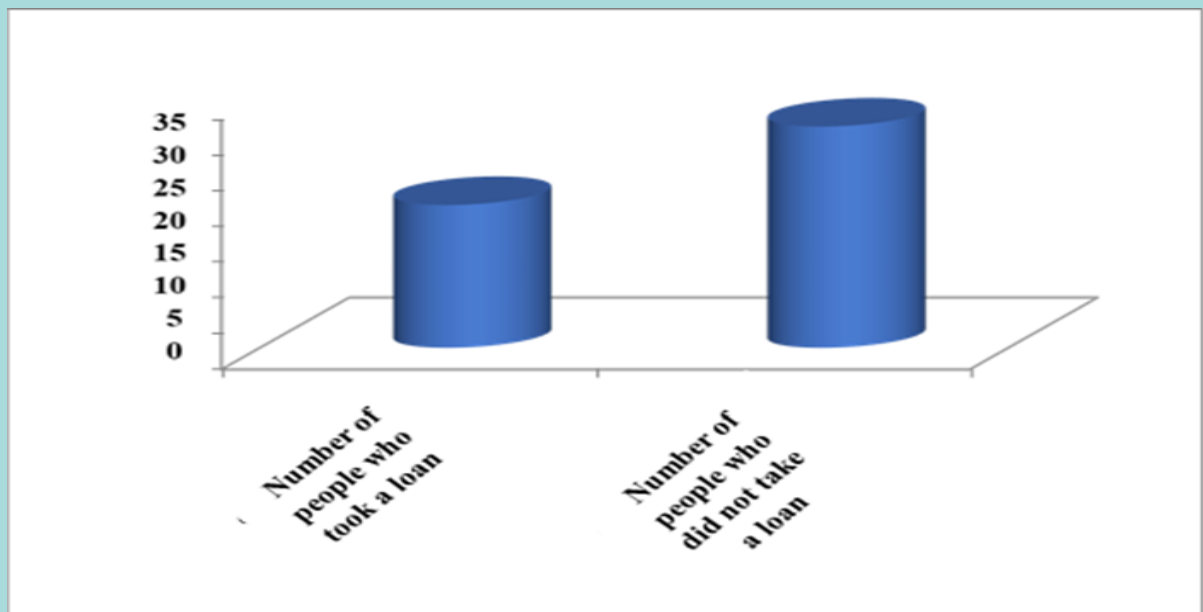


Figure-9. Comparison of the number of people who took a loan and the number who did not take it

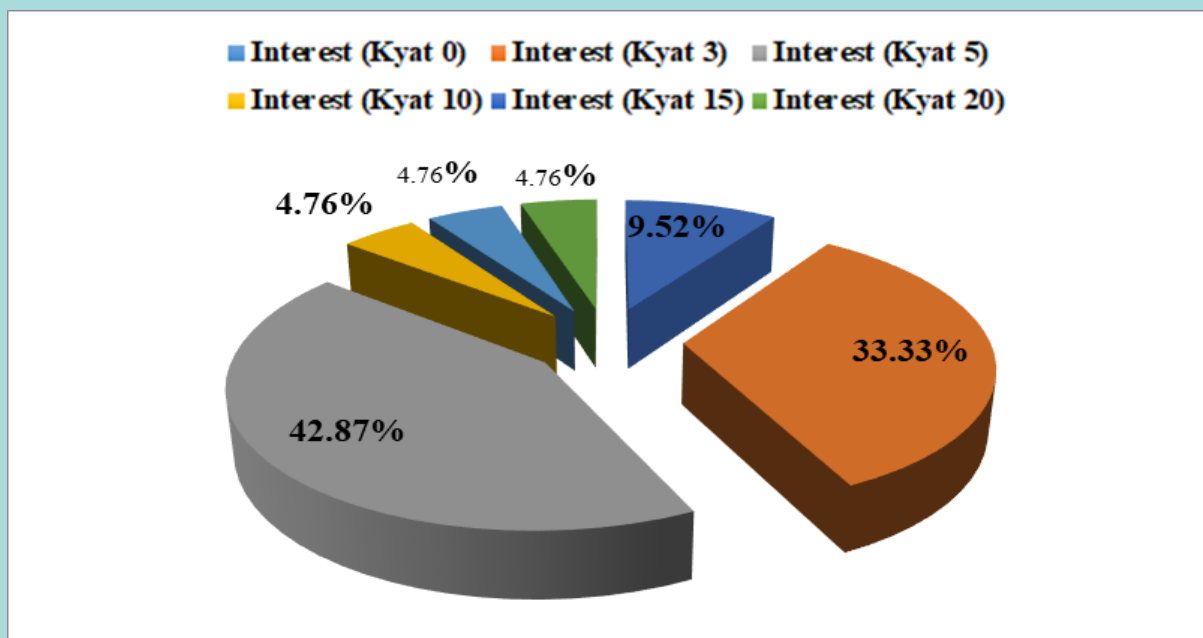


Figure-10. Number of Borrowers by Different Interest Rates (%)

During storms, fishermen face health and safety risks and individuals living in net huts are frequently robbed.

The current land space for drying fishing is gradually decreasing as a result of an increasing number of hoteliers purchasing beachfront land. Hotel owners do not allow the drying of fish on land purchased for the construction of beachfront hotels. Furthermore, there is a land conflict between fishermen and hotel owners, who refuse to allow fish to dry in front of another hotel on the beach. The conflict has lasted generations, and the last NLD government successfully handled these issues. However, as a consequence of the military coup, tensions between fishermen and hotel owners have risen. The fishing business provides a significant source of income for local fishermen, as well as a significant source of food security for the country and a contributor to foreign earnings. The economic and livelihood status of fishermen in the Ngapali coastal area faces a mix of opportunities and challenges, including education and technical assistance; sustainable fishing techniques; market development; and improved financial support.



## 6. Conclusion

Fishermen in the Ngapali region rely primarily on fishing for their livelihood. Male and female fisheries workers coexist. Male workers account for approximately 60.78% of the population, while female workers account for approximately 39.22%. Male fishermen in the industry are primarily involved in business activities such as helmsmen, business owners, fish merchants, and fishermen. Female workers, on the other hand, are employed in a variety of occupations such as accounting, housework, and small-scale fishing; selling/buying fish; and preserving fish (drying, shoring). The male crews who trawl the fishing nets leave by boat around 4:00 p.m. and return to the dock around 7:00 a.m. the next morning. Males work 15 hours each day on average. Women who work on fish selection, drying, and lifting fish start at about 4 a.m. and work until 9 a.m. on picking and drying fish. They have to take away the fish between the hours of 3 p.m. and 5 p.m. Women work an average of 7 hours every day.

Fishermen have various levels of education, with the majority having a primary education (41.18%). There are, however, multiple levels of education ranging from elementary to high school, as well as individuals who have graduated from university. The fact that some fishermen and their children were educated in monasteries demonstrates the continuing importance of monastic education among fishermen. The majority of the fishermen in this fishing community on the Ngapali coast are Rakhine and follow Buddhist beliefs.

The fishing business is struggling to find enough labor. Other challenges they confront include fish availability and fluctuating market pricing. Despite these obstacles, fish workers lack proper training in modern technology and water resource management, which might increase their capabilities and the sector's sustainability.

Some fishermen live in improvised huts because they do not own their own homes, and housing ownership status varies among fishermen. Most of them must rent a home and purchase property on which to build a home. Access to contemporary fossil fuels such as electricity and gas is limited, and most people still cook using local fuels such as firewood and charcoal.

Since financial resources are limited, some fishermen are compelled to take out loans at different interest rates to meet their demands. The tax collecting system of the department has some issues with discrepancies between official records and actual tax payments.

Tourism has increased in the Ngapali coastal area in recent years, and fishing and drying areas of fisheries business owners and fishermen have resulted in land disputes with hotels. Concerns about the increasing number of fishing boats and shortages in labor must also be addressed in order to ensure the fisheries industry's long-term growth.

**Source - CAfT**





## Socioeconomic

Education is still a vital part of the fishing community's long-term development. Efforts that support the younger generation's education and skill development, in particular, can improve their prospects for a better future. Furthermore, investments in housing, infrastructure, and technologies improve people's quality of life. It has the potential to foster effective and secure fishing methods and a livelihood system, resulting in a stronger overall healthcare system and development.

Maintaining marine ecosystems and mangroves through sustainable fishing practices is critical for fisheries' long-term viability. Collaboration between government agencies and environmental organizations is essential for achieving a balance between business and environmental conservation.

It is crucial to establish a market where aquatic products may be simply and swiftly exported in order to increase sales for fishermen and obtain fair pricing and market opportunities. Obtaining essential loans, streamlining tax procedures, and maintaining adequate documentation are all critical to the financial viability of fishery communities.

For the well-being of fishermen, it is necessary to solve labor shortages and safety concerns. Healthcare support and safety equipment can successfully reduce job risks and improve safety. Furthermore, encouraging cooperative and solidarity actions will draw attention to the issues that fishery workers confront and provide support for their demands and rights.

In conclusion, the economic well-being of fishermen on Rakhine State's Ngapali coast is inextricably linked to the sea and its resources. While fishing remains their primary source of income, education, the demand for modern technologies, as well as housing and labor availability concerns, requires emphasized support from a variety of organizations. By resolving these concerns, the fishing community can move toward a more successful and sustainable future.

Source - CAfT



## 7.Recommendations

- (a) Various institutions, including the government and non-governmental organizations, should prioritize education in the fishing community. Scholarships, vocational training programs, and workshops on up-to-date fishing practices have the ability to improve fishermen's knowledge and skills, allowing them to adapt to emerging industry trends.
- (b) Efforts should be made to provide proper housing and infrastructure for fishermen, as well as low-cost housing projects and attempts to enhance basic necessities such as access to electricity and clean water, which can improve their livelihoods and overall health.
- (c) Encourage the use of modern technologies such as improved fishing equipment and weather forecasting systems. The promotion of GPS device and weather software purchase and use, as well as the provision of training and grants for their professional application, can improve the efficacy and safety of the water business.
- (d) To develop mangrove-protected areas and encourage sustainable fishing methods, the Department of Fisheries and environmental conservation organizations should collaborate with fishery business owners, fishery workers, and local communities. It is critical to educate fishermen on the importance of maintaining marine ecosystems in order to ensure the sustainability of their livelihoods.

- (e) A properly operating market can help to stabilize the price of aquatic products and fish, so assisting in the formation of a proper market for fish and other aquatic products can help fishermen sell their catches more effectively. Stakeholders in the region, as well as local and international organizations, should collaborate to find and develop a fair and regulated market.
- (f) Facilitating the availability of financing at reasonable rates for fishermen is essential. Financial management training should be provided to assist fishermen in maximizing their financial resources, including easy guidelines that fishermen can follow when applying for loans.
- (g) Tax payment processes must be streamlined, and transparent records of tax rates paid annually by fishing entrepreneurs must be maintained. To avoid deviations in the taxation system, precise and formal receipts for tax revenue received by fisheries businessmen are required.
- (h) To cover medical expenses for fishermen in the event of illness or accident, a health care fund or insurance system should be established. To reduce the risks associated with the fishing sector, it is vital to strengthen safety procedures, supply the necessary equipment, and provide technical assistance.
- (i) Local workforce development should be fostered through skill development programs, on-the-job training, and improved dry fish processing methods. It is also critical to develop strategies to address labor shortages and lessen dependency on migrant workers.
- (j) Cooperation should be encouraged among fishing communities, local authorities, INGOs, local civil society organizations, and other stakeholders, and they should engage in advocacy efforts to raise awareness of the issues encountered by fishermen and obtain support for their needs and rights.
- (k) The importance of encouraging responsible disposal of waste and beach cleaning efforts, as well as maintaining a sustainable balance between tourism development and traditional fishing practices. This necessitates the involvement and coordination of hotel operators, INGOs, and local civil society organizations.
- (l) The socioeconomic conditions of fishing communities should be assessed and investigated on a regular basis. The assessments' findings will serve as strong evidence for future policies and activities targeted at formulating a more sustainable future.

Source - CAfT



Implementing the aforementioned recommendations will improve the financial well-being of fishermen along the Ngapali coast, enhance the fishing sector, and protect the traditional source of livelihood. In summary, ongoing study, together with the application of proposed strategies and continuous monitoring, can considerably improve the economic viability of fishermen along the Ngapali coast. Sustainable and profitable futures for these coastal towns will be achieved by finding a balance between customary and modernization while maintaining the environment and safeguarding the socioeconomic well-being of the fishing community.