Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

HELVETAS MYANMAR

Network Activities Group

IUCN

Gulf of Mottama Project

Opportunities for Small and Medium Scaled Enterprises (SMEs) for Small-scaled Fishers in Mon State in the Gulf of Mottama

Reported by:

Wint Hte
Coastal Resources Programme Officer | IUCN

Pann Yahmone Oo
Thazin Htet
Thae Eainda Hsu
Zun Pyae Oo
Nyan Lin Htet
Myanmar Coastal Conservation Lab (MCCL) @ Point B

Research Team:

Moe Kyaw Kyaw Hein
Pann Yahmone Oo
Thazin Htet
Thae Eainda Hsu
Zaw Min Htun
Nyan Lin Htet
Su Su Maw
Win Nandar Htay
Zun Pyae Oo
Myanmar Coastal Conservation Lab (MCCL) @ Point B

Reported Date: 30th September 2022

SUMMARY

The Gulf of Mottama is one of the most important and dynamic intertidal wetland systems and declared a Ramsar site in 2017 and 2020. It is home to critical habitats, species of conservation concern, commercially important fisheries and communities that rely on these resources. However, these resources and communities are facing threats such as overexploitation of fishery resources, depletion of critical species and unsustainable practices of resource extraction and management. Therefore, the Gulf of Mottama Project (GoMP) is protecting its natural resources and well-being of its local communities, management that address ecosystems, livelihoods, and governance. One of the activities of GoMP is diversifying livelihoods opportunities for people in small-scaled fishery market chain to not only improve their well-being but only reduce heavy dependency on the fishery resources. One of the opportunities is supporting establishment of SMEs (small and medium enterprises) for the fishers. However, there is a significant knowledge gap in understanding the potential SMEs for developing support framework by the project. So, the action research was conducted to understand the SME opportunities in fishing communities in Gulf of Mottama for GoMP and associated organizations to support SMEs for communities to uplift the well-being of communities while reducing their dependency on fishery resources.

The action research was conducted in 9 villages of 5 townships in Mon State and a total of 221 household interviews, 17 focus group discussions were sampled. A total of 107 men and 114 women who are both members of GoMP (33.5%) and non-member (66.5%) are included in the sample. The study collected status of current livelihood activities, changes in livelihoods, potential SMEs in the community, interest in SMEs and opportunities, challenges and supports needed to initiate SMEs by the community.

The study highlighted the high potential for development of SMEs in fishery value chain as well as high interest rate from fishing communities to establish them. Then, based on the interest and opportunities, the nine fishery related SMEs are recommended to focus supporting in the Gulf of Mottama. The nine identified SMEs includes 1) fishery input shop, 2) grocery shop, 3) aquaculture, 4) fishery product trading business, 5) transportation services, 6) livestock, 7) fish paste production, 8) fish and rice integrated farming, and 9) rice selling. The key constraints identified in the study to implement these SMEs are limited to no financial capital, limited skills, and knowledge especially in business and financial management as well as specific technical skills relevant to each SME, and access to markets and corporations for distributions of goods and services and investment opportunities. Therefore, the study recommends supporting in creating financing opportunities for fishing communities such as assessing financial opportunities in the regions, support financially to implement the SME activities through establishment of informal financial support systems and advocate the SMEs to formal financial institutions such as banks, and microfinances. Then, the local human capacity should be raised through technical skill trainings and capacity building supports. As the understanding of SMEs in fishery sectors in the context of GoMP is poorly known, further research on market demands and investment opportunities from private sectors and enterprises on the SMEs should be conducted to fill the knowledge gap. Finally, this information should be advocate to relevant stakeholders to enhance better collaboration in development of SMEs in the region.

ACKNOWLEDGEMENT

The research project is supported by Gulf of Mottama Project (GoMP) which is mainly supported by Swiss Development Corporation (SDC). Therefore, we would like to provide our sincere acknowledgement to SDC for supporting the research through the GoMP. Most importantly, we would like to appreciate the participants in the communities who involved in the interviews and discussions for their meaningful and valuable contributions. In addition, we want to thank the fishery officer, the townships and clusters coordinators and the community facilitators and monitors (CFMs) of the project for their supports in development of the project as well as coordination for field activities. Finally, we would like to appreciate field researchers and research assistants from Myanmar Coastal Conservation Lab (MCCL) @ Point B, who actively participated throughout the research process.

TABLE OF CONTENTS

1. INTRODUCTION

The Gulf of Mottama (GoM) is one of the most important and dynamic intertidal wetland systems and declared a Ramsar site in 2017 and 2020. It is home to critical habitats, species of conservation concern, commercially important fisheries and communities that rely on these resources (GoMP, 2019). However, these resources and communities are facing threats such as overexploitation of fishery resources, depletion of critical species and unsustainable practices of resource extraction and management. Therefore, the Gulf of Mottama Project (GoMP) is protecting its natural resources and well-being of its local communities, management that address ecosystems, livelihoods, and governance. One of the activities of GoMP is diversifying livelihoods opportunities for people in small-scaled fishery market chain to not only improve their well-being but only reduce heavy dependency on the fishery resources. One of the opportunities is supporting establishment of SMEs (small and medium enterprises) for the fishers.

SMEs contribute a great role in most economies especially in developing countries (World Bank, 2021). In Myanmar, the SMEs constitute about 83.8% of all manufacturing firms as same as other neighbouring countries (Asian Development Bank, 2020). According to Small and Medium Enterprises Development Law (2015), the SMEs are classified in accordance with industrial sector, number of full-time employees, capital, and revenue. In manufacturing, a firm with up to 300 employees (up to 600 employees for labor-intensive manufacturing), and capital not exceeding MMK 1,000 million is classified as an SME. In services (except wholesale and retail trade), a firm with up to 100 employees and turnover not exceeding MMK 200 million is classified as an SME. In wholesale and retail business and other sectors, a firm with up to 60 employees and turnover not exceeding MMK 100 million (MK300 million for wholesale business) is classified as an SME. However, there is no specific description for microenterprises and therefore, most of the country review reports on SMEs also include micro, small, and medium-sized enterprises (MSMEs).

Although most of the businesses are classified as SMEs in Myanmar, there is limited information on the status and development of them. Especially for SMEs related to fishery value chain, there are limited understandings on SMEs in coastal fishing communities to support decision making process for the development of such SMEs. The knowledge gaps for GoMP to support SMEs in the community include the understanding on relevant SMEs for fishing communities in the GoM, the levels of interest from these SMEs by the communities, constraints and supports needed to implement the SMEs. To fulfil the gap, the research was conducted with the aim to understand the SME opportunities in fishing communities in Gulf of Mottama for GoMP and associated organizations to support SMEs for communities to uplift the well-being of communities while reducing their dependency on fishery resources. The specific objectives of the study are as follow:

1. To identify SME opportunities for the small-scaled fishers in the selected study areas.
2. To assess the interest of small-scale fishers on SMEs and identify supports needed for the fishers to start SME.
3. To evaluate the challenges/ problems and motivations for the fishers to start SME.

2. METHODS

2.1. Study Area

In this action research, the study sites were identified in consultation with Fishery Officer and Township Cluster Coordinators from the GoMP. The villages were selected fishing villages which have potential to develop SMEs as well as interests of project to support the development of SMEs. Therefore, nine villages from five townships in Mon State of GoM were selected for the study.

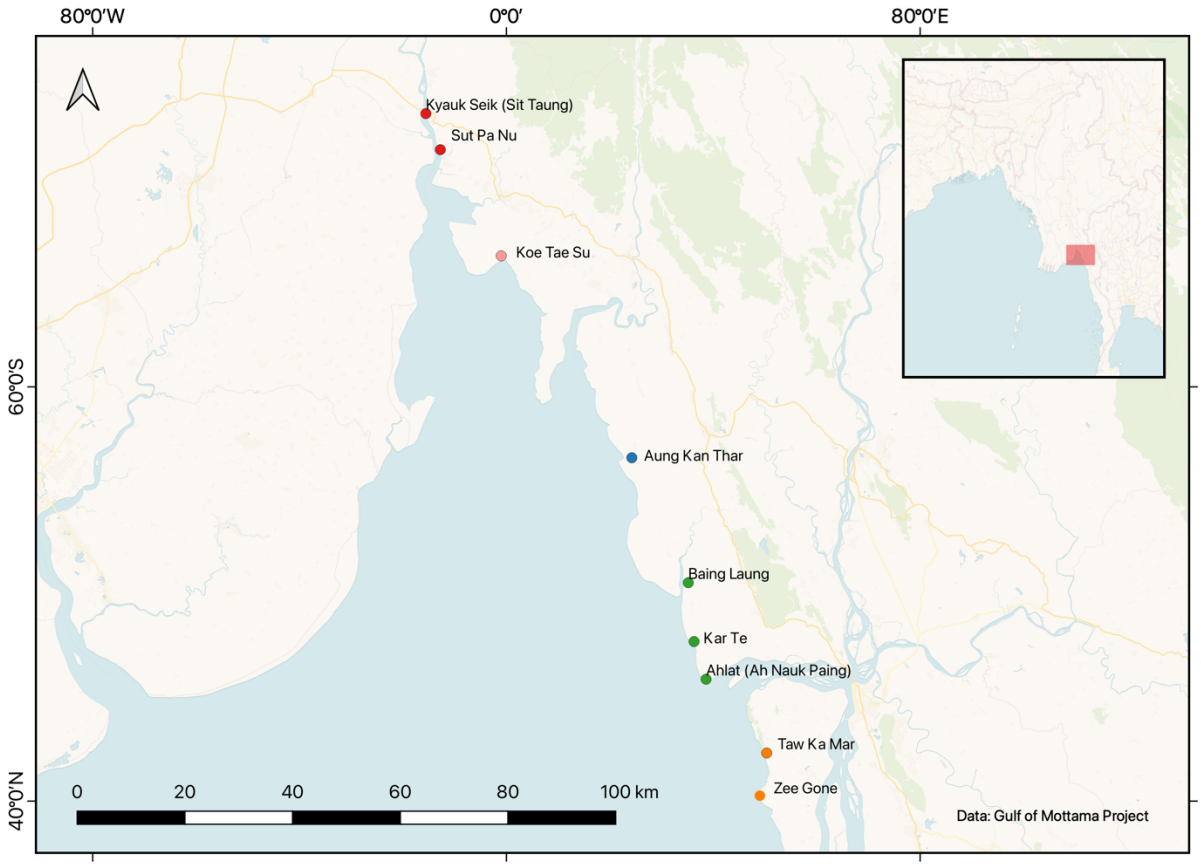

Figure 2.1. Map showing the villages where household questionnaires and focus group discussions were conducted in the study

2.2. Research Methodology

The action research applied human-cantered qualitative research methods to explore the experiences, feelings of target users, small-scaled fishers in the GoM to understand their motivations, constraints, interests and needs to develop SMEs. The field survey applied two methods: focus group discussion (FGD) and household in-depth interviews (HH). The field visits were conducted from 31st May 2022 to 15th July 2022.

In conducting field research, the field researchers from MCCL @ Point B Design + Training were trained in interviewing, facilitation for FGD and data enumerations. The field activities, data enumerations, data management and quality control were supervised and managed by research officer of the GoMP.

2.2.1. Focus Group Discussion

The FGDs with communities applied the following visual tools for facilitating the discussion:

1. **Seasonal calendar:** The tool captured the livelihood opportunities throughout the year to identify months of the year with few or no livelihood opportunities.
2. **SMEs in the community:** The brainstorming activity collect information about potential SMEs in the communities related to male, female and for both genders. Then, top 5 SMEs were selected for force field analysis.
3. **Force field analysis for SEMs:** Adapting the concept from Lewin, K. 1948, the force field analysis was used to identify what are driving forces (opportunities in the communities) and restraining forces (challenges and problems) to implement selected SMEs. In addition, the tool also identified what are supports needed to strengthen driving forces (opportunities) and limit restraining forces (challenges and problems) to successfully initiate SMEs in the community.

In each village FGDs are facilitated separately in VDC members and non-VDC members. The participants were pre-selected by the GoMP or VDC due to coordination issues with the community. In each group, a total of 6 participants (3 males and 3 females) were participated. However, due to availability of the communities, women participated more in some of the villages. The numbers of participants included in each village are listed in Table 2.1. Each session took 45-60 minutes.

Table 2.1. Sampling frame showing total number of households, sample size for questionnaires conducted in the study.

Villages	**Township**	**Total Households***	**Sample Size**	
			Focus Group Discussion (# FGD)	**Household Interviews (# HH)**
Aung Kan Thar	Thaton	230	2 (M = 6, F = 6)	25 (M = 12, F = 13)
By Laung	Paung	86	2 (M = 6, F = 6)	25 (M = 13, F = 12)
Sut Pa Nu	Kyaik Hto	314**	1 (M = 3, F = 3)	25 (M = 11, F = 14)
Kyauk Seik (Sittaung)	Kyaik Hto	80	2 (M = 6, F = 6)	20 (M = 10, F = 10)
Koe Tae Su	Bilin	108	2 (M = 7, F = 8)	25 (M = 11, F = 14)
Kar Te	Paung	130	2 (M = 6, F = 6)	26 (M = 12, F = 14)
Ah Lat (A Nauk Paing)	Paung	250	2 (M = 7, F = 6)	30 (M = 14, F = 16)
Zee Gone	Chaung Zone	162	2 (M = 3, F = 6)	25 (M = 12, F = 13)
Taw Ka Mar	Chaung Zone	82	2 (M = 1, F = 11)	20 (M = 10, F = 10)
Total			**17 FGDs (M = 45, F = 58)**	**221 Respondents (M = 107, F = 114)**

*Data updated by GoMP in 2020.
**Number of fishing household = 76
M = Male
F = Female

2.2.2. Household Interviews

The research team designed simi-structured questionnaires to collect personal information of respondents, status of current livelihood activities, changes in livelihood activities, potential SMEs in the community, interest in SMEs and opportunities, challenges and supports needed to initiate a SME. In each village 20-30 households were selected through convenient sampling. Representatives from different livelihoods, social status, gender, religion, and social groups were selected to gain diverse perspectives from the community. The sample size for each village is showed in Table 2.1.

Each interview was conducted by 2-3 trained interviewers and took from 30 – 45 minutes to complete the questionnaire. As a small token of appreciation for the respondent's time and information, the team provided instant noodles.

2.2.3.Focus Group Discussion with Fishery Development Association

After completion of both FGD and household interviews in the communities, two FGDs (total: 11 members) were conducted with member of FDA. The FGD applied the following tools:

1. **FLAP analysis:** The tool reflected the achievements, problems, lesson learned and future directions about SMEs supported or led by FDA.
2. **SMEs opportunities:** The potential SMEs identified by the household interviews were shared to the FDA and the team prioritized top 5 SMEs they were interested to implement or support in the communities.
3. **Force field analysis of SMEs:** The opportunities, challenges/ problems and supports for top 5 SMEs were discussed through force field analysis.

2.3. Data Analysis

The field data were enumerated into Excel as soon as the data collection was completed. The quantitative data were analysed in SPSS and Excel using simple descriptive statistics. For qualitative data, the team mainly applied thematic analysis by coding the data using Excel. For each piece of qualitative information, different codes were assigned from standardized list of codes to identify the main theme covered by that piece of information. Then, they were quantified and evaluated the insights provided by the data.

3. RESULTS

3.1. Demographic Overview

The study conducted a total of 221 household interviews and 17 focus groups discussions in 9 villages of 5 townships in Mon State of the Gulf of Mottama. A total of 107 men and 114 women were participated in the household interviews of which 33.5% were members of GoMP related groups and 66.5% were non-members. The age group of most respondents are 40 – 60 years (n = 110) and the second is 21-40 years (n = 89). Different age groups of respondents in each village are illustrated in Figure 3.1. More than half of the respondents (56%) were original residents and 54% of total respondents spent their whole lives in their respective communities.

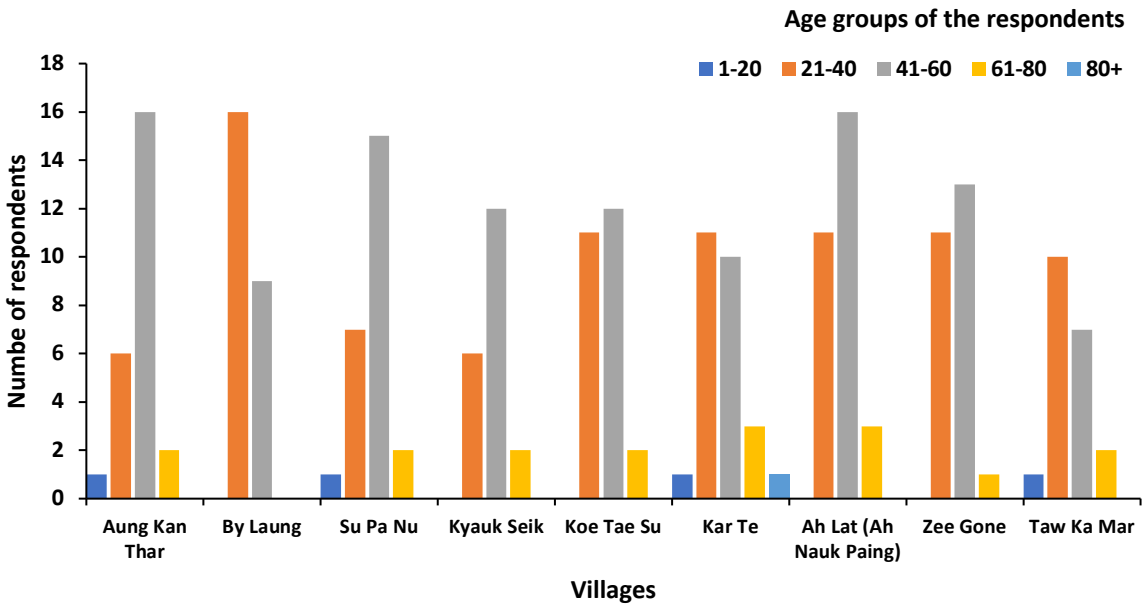

Figure 3.1. Number of respondents of 5 different age groups from study villages

3.2. Current Status of Livelihoods and Income in the Communities

3.2.1. Seasonal Livelihood Activities

Applying different fishing gears and targeting different fish (including mud crabs and mollusks), the villages conduct fishing activities through the year. Seasonal fishing activities focus on economically valuable species such as lizard fish (August – October) and hilsa shad (September – June). Some villages have rice farming activities from July to October and green gram farming from November to February. During these seasons, some small-scaled fishers and villagers work as wage labors in farming activities. The other year-round activities include livestock, trading and shop keeping.

3.2.2. Sources of Income

The main source of income from all respondents is from fishing (42%) and followed by remittance from foreign countries (15%) and small and medium scaled businesses (grocery shops, fish/crab collectors, etc.,) (14%) (See Figure 3.2). Respondents from all villages ranked fishing as main source of income except for Taw Ka Mar, where the main source of income is from crab fishing.

The average annual income for all the respondents is about 7,000,000 MMK (Maximum: 11,176,800 MMK in Sut Pa Nu, Minimum: 2,548,000 MMK in Taw Ka Mar). The average annual income of respondents from each village are showed in Figure 3.3.

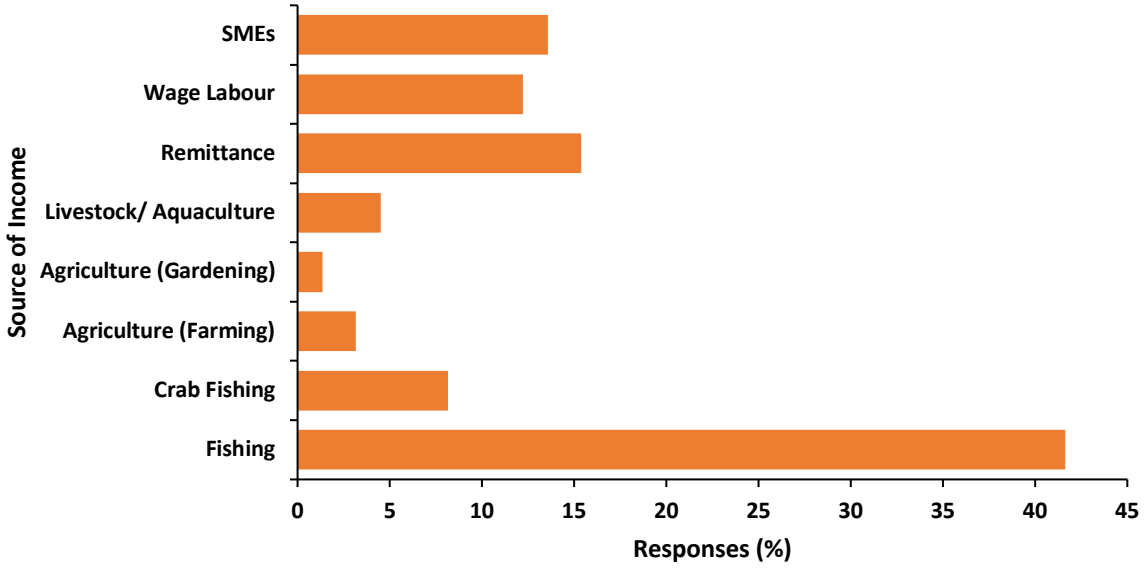

Figure 3.2. Percentage of main sources contributed to the income of the respondent's household

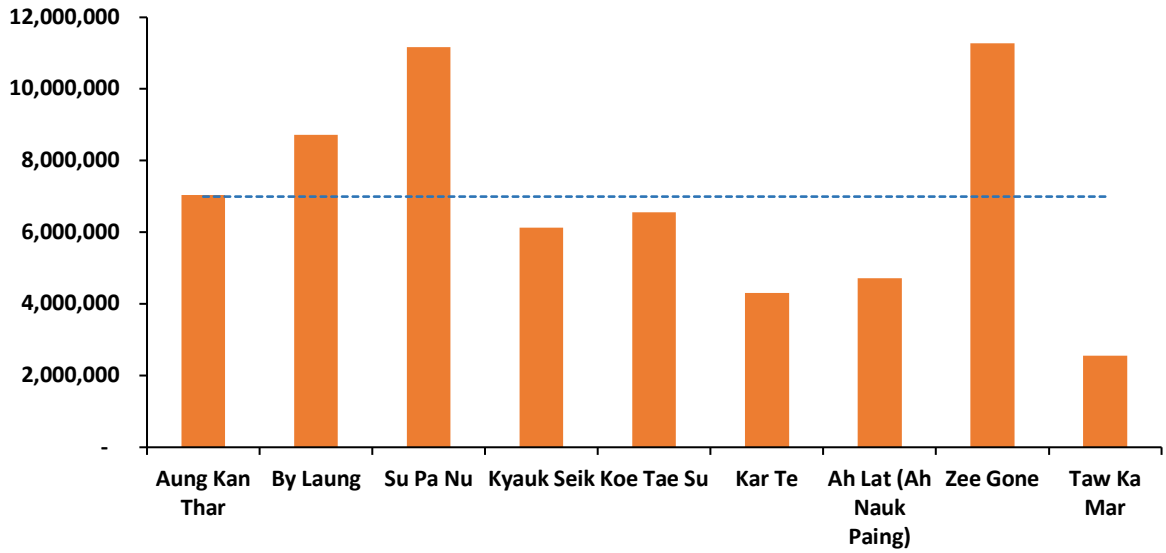

Figure 3.3. Mean annual household income of respondents from each village. The blue dotted line represents the mean annual income of the whole sampled household (6,996,787 MMK).

3.2.3. Sufficiency of Income

In total, 0.9% (n = 2) responded that the income was totally insufficient and 31.7% (n = 70) are insufficient to support the expenditures and well-being of the household. The main reasons for the insufficiency are higher commodity prices, lower catch, lower market demand and market prices of fishery products. Due to COVID 19 and political situation, the prices for living cost as well as inputs for livelihood activities increased steeply. However, the fish catch is lower, and the fishery product prices are lower than usual. Therefore, the income is not regulating well to conduct regular livelihood activities and supporting for household expenditures. The unexpected health issues, loans payments and schoolings for household with children make the situation more challenging.

About 48% (n = 106) replied that their income was sufficient. They saved money during the months of higher catch or good income and then, spent the savings when the catch and income was lower. So, the income and expenditures are just in equilibrium. Some of the respondents stated that they were able to save money in the past but not in recent years. It is the result of higher commodity prices and grater market prices of fishery products.

Only 16.3% (n = 36) stated their income exceed and 3.2% (n = 7) expressed exceed a lot to save after spending for household expenditures. It is more common in household with fewer people, all of them have income and have household members working in foreign countries. They also have extra sources of income from multiple businesses and regard themselves as hardworking and good at financial management.

The responses on the sufficiency of income by villages are shown in Figure 3.4.

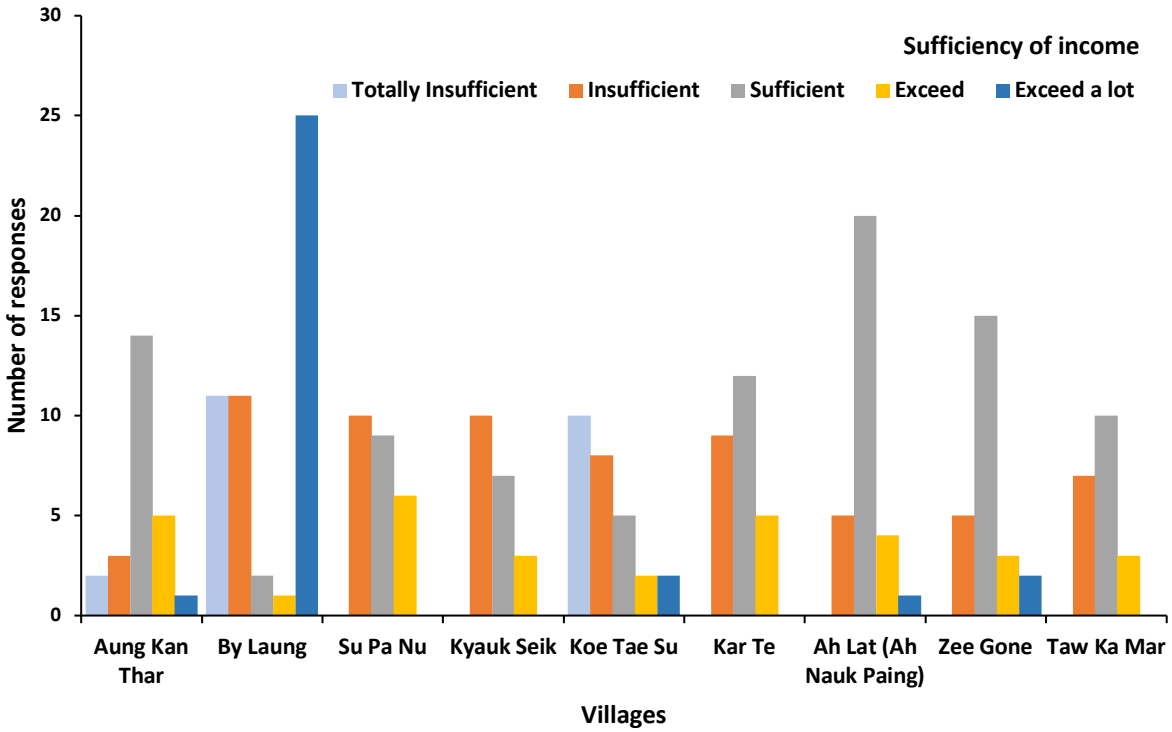

Figure 3.4. Responses on the questions "How sufficient your monthly household income is to support the household expenditures?"

3.2.4. Changes in Livelihood Activities

A total of 201 respondents (91%) responded that the conditions of livelihood changed in the past five years. The top 10 livelihoods with reported changes are in Figure 3.5. As most of the respondents were fishers, 152 stated the change in fishing activities and 41 respondents in crab fishing.

In fishing related activities, the negative changes include scarcity of resources, higher commodity prices of inputs for fishing activities. Moreover, it is more difficult and competitive to extract resources, but get lower market prices. The fishers are also facing disasters more frequently while extracting resources. The driving forces of these changes are increasing pressures due to illegal and unregulated fishing activities, increasing number of fishers, COVID 19 and political situation. The resource scarcity is also linked to natural processes such as changing tidal channel, sedimentation, alluvial formation, and frequent extreme

weather events. The effects of these changes resulted in lower income, more difficult to support food and living costs to household, loss of investment, more engage into debt. Specifically, due to more frequent weather event, fishers are riskier to extract resources. In contrast, some fishers expressed that the market prices were higher, and they become more profitable compared to the past five years.

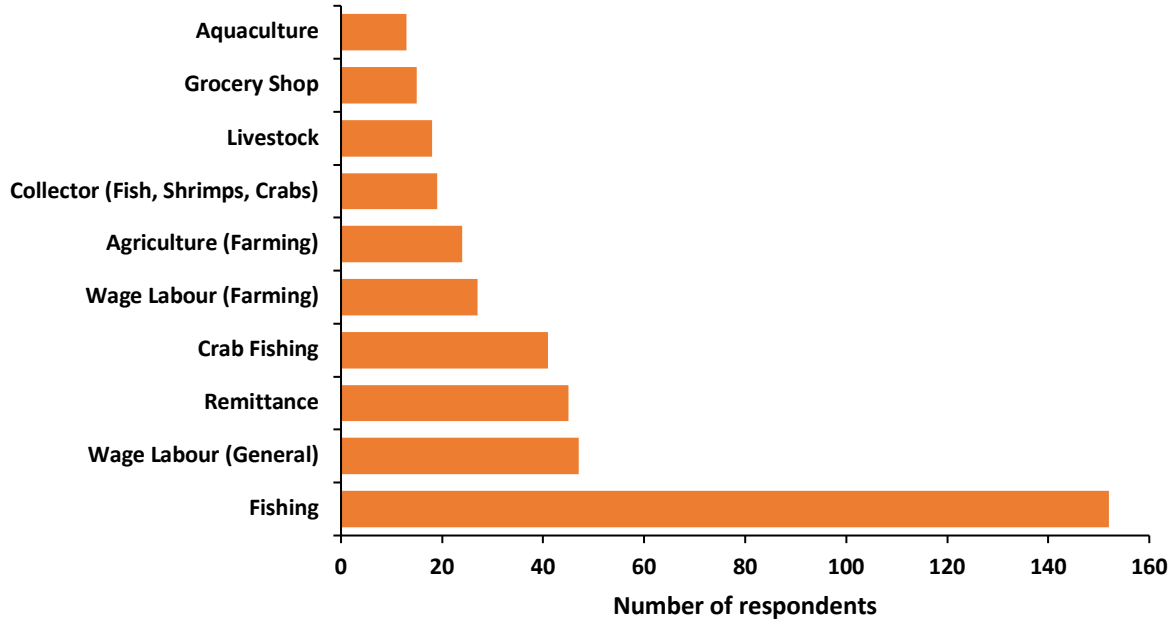

Figure 3.5. Top 10 livelihoods where changes were occurred in the past five years

3.3. Potential SMEs for the Communities

3.3.1. Interests in SMEs

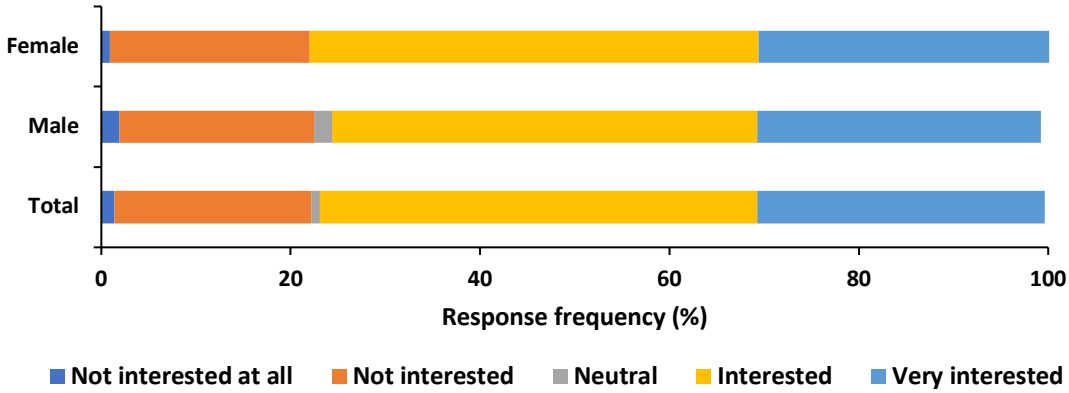

Figure 3.6. Interests to establish SMEs by respondents in the community.

Majority of the respondents (76.5%, where male = 74.8% and female = 78.1%) are interested to establish a SME in the community whereas 22.2% (male = 22.5% and female = 22%) are not interested in SME. The level of interest for each village are shown in Figure 3.7. Except in Ah Lat (A Nauk Paing) the interests do not differ significantly as majority are interested in SMEs. In Ah Lat (A Nauk Paing) half of the sample are not interested and half are interested in SMEs.

The factors influencing the interests in SMEs are illustrated in Figure 3.8. About 29% (n = 21) are not interested in SMEs as they do not want to change another job. This is because they only want to focus on their existing livelihoods and business. 9% of them are not willing to start new SMEs as they have already established profitable business in the community. The other factors include age and health issues (16%), lack of human capital (12%) and lack of financial capital (5%).

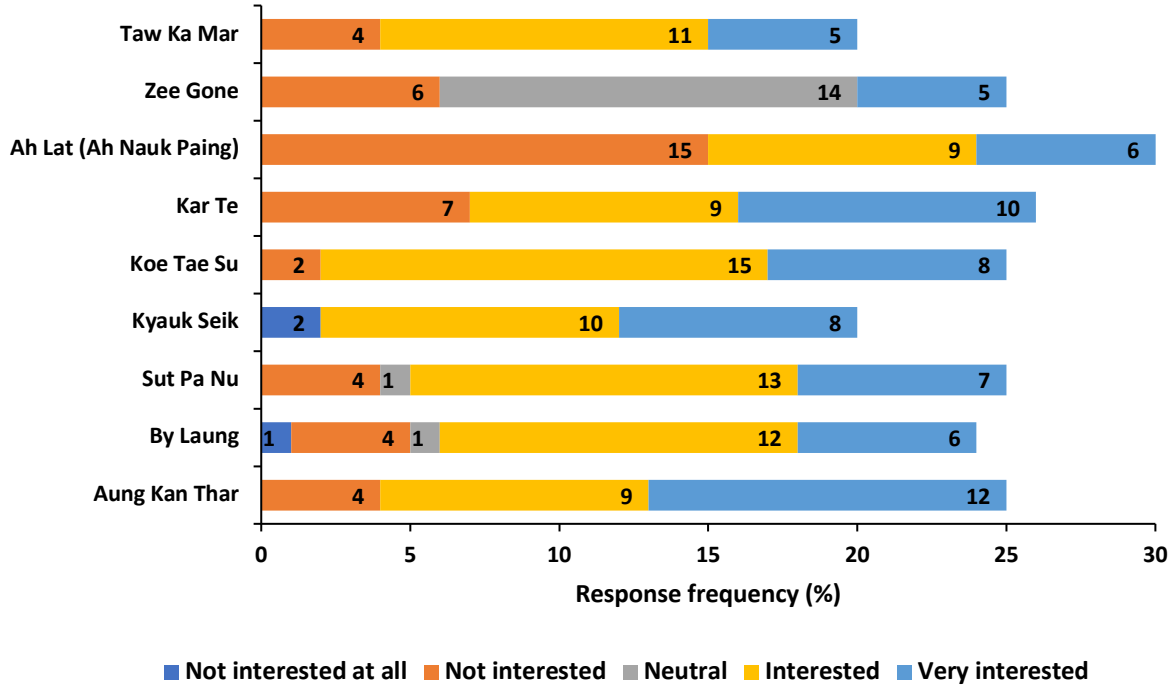

Figure 3.7. Interests to establish SMEs by respondents in each study village.

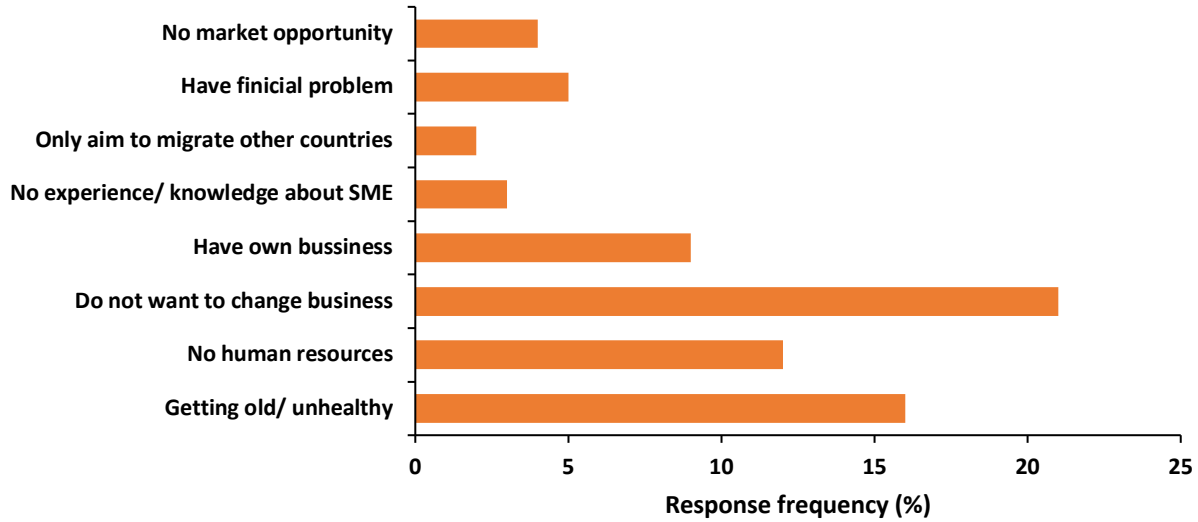

Figure 3.8. Frequency of responses on why respondents are not interested in SMEs.

The top 10 responses on why community are interested in SMEs are shown in Figure 3.9. The main favorable reasons are that 63 respondents think SMEs are profitable and 50 of them responded that they wanted to gain additional income from SMEs. As the current livelihoods are not performing well or not profitable, people want to seek additional income from SMEs. The other reasons include the potential to focus on high demand services and goods in the community which suit the needs of the community. About 20 responses stated that SMEs

would create opportunities to base at home and therefore 16 of them expressed that it would be easier to get income than traditional livelihood activities. Some fishers (n = 20) are willing to start a SME because they want to quit fishing as fishing become less profitable, more dangerous and require higher investment.

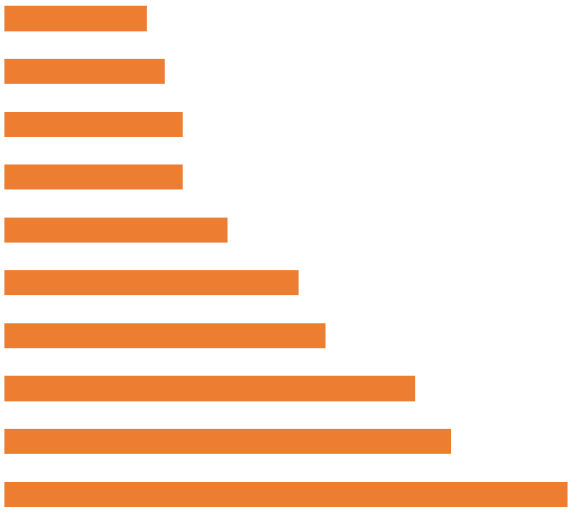

Figure 3.9. Frequency of top 10 responses on why respondents are interested in SMEs.

3.3.2. Potential SMEs from Household Interviews

The respondents expressed diverse SMEs opportunities on the question "What are the top 3 SMEs you want to establish in the community?". In total, 45 SMEs opportunities are recorded. The top 10 SMEs (50% of total SMEs) and livestock related to SMEs (31% of total SMEs) are only presented in the report. The SMEs with less than 5 responses have been categorized as other SMEs (19% of total SMEs) are excluded in the report.

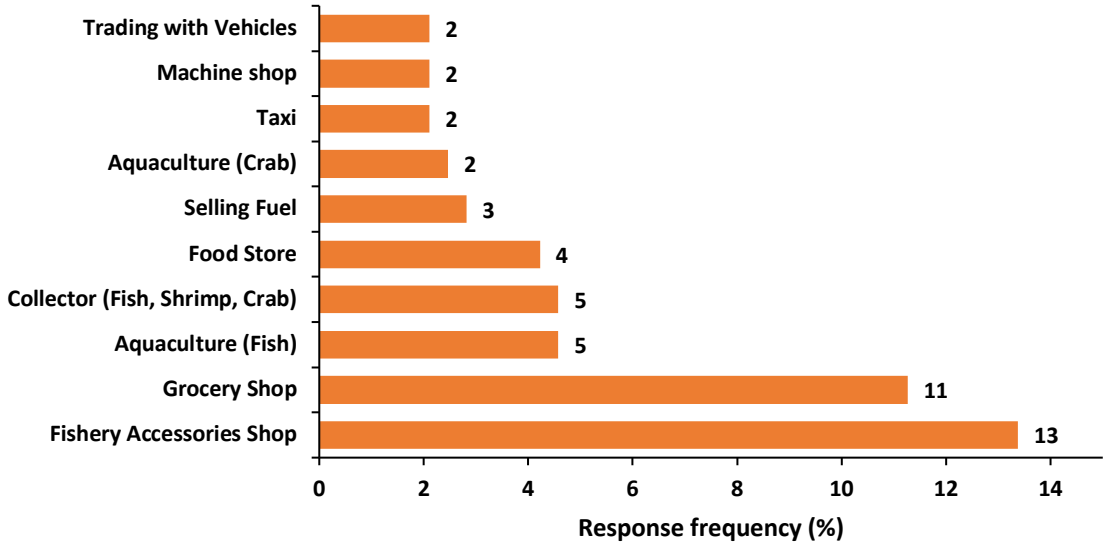

Figure 3.10. Top 10 SMEs and the percent of respondents who are willing to start in the community. The figure excluded livestock related SMEs (30.98%) and other SMEs (19.37%).

The top 10 SMEs (excluding livestock) are shown in Figure 3.10. The highest number of respondents (13%, n = 38) are interested to sell fishery related accessories in the community. There are people who expressed interests in selling fuel (3%, n = 8) and machine shop (2%, n = 6). These three activities are integrated into fishery input shop as a SME in this report. Similarly, the food store (4%, n = 12) and trading with vehicles (2%, n = 6) are also combined with grocery shop. The opportunities, challenges and supports for 5 selected SMEs: fishery input shop, grocery shop, aquaculture, fishery product trading and transportation services are all tabulated in Table 3.1.

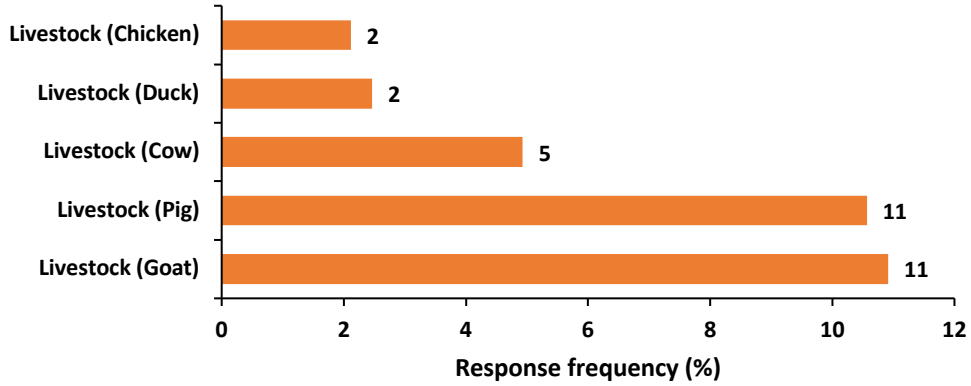

Figure 3.11. Percent of respondents who want to start livestock as SMEs in the community.

In total, about 31% of the respondents are interested in livelihood related SMEs. According to Figure 3.11, people are interested in farming of goat and pig at 11% respectively and 5% are interested in cows. Only 2% are interested in poultry farming. The expressed opportunities, challenges and supports needed are in Table 3.2.

3.3.3. Force Field Analysis of Potential SMEs from Focus Group Discussion with communities

In total, the 17 FGDs in 9 villages identified about 70 SME opportunities for the community. Then, the top 5 prioritized SMEs for both FGDs with VDC members and non-members are shown in Figure 3.12. Among the top five, four of them (fishery input shops, livestock, fishery products trading and grocery shops) are same as identified in household interviews (see Page 15 – 16) the opportunities, challenges and required supports are (see Page 15 – 16). The new identified SME is fish paste production. The opportunities, challenges and supports for each SME are tabulated in Table 3.3.

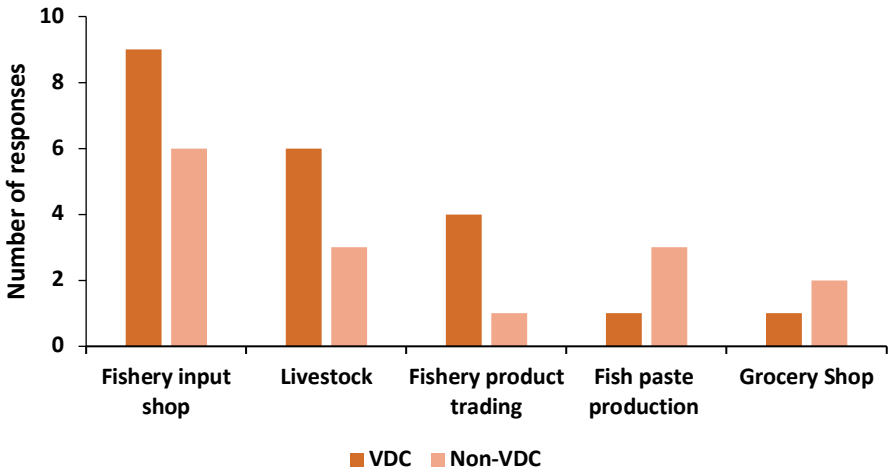

Figure 3.12. Top 5 SMEs discussed in the FGDs with communities.

3.3.4. Force Field Analysis of Potential SMEs from Focus Group Discussion with FDA

The 2 FGDs with FDA members prioritized five potential SMEs for communities and they are fishery input shop, collective fishery product trading business, livestock, rice and fish integrated farming and selling rice. The detail discussions on identified opportunities, challenges and supports are in Table 3.4.

3.3.5. Potential SMEs for the Communities: Opportunities, Challenges and Supports

The common SMEs identified in three user groups: household, communities and FDA were summarized as nine potential SMEs. However, due to the investment capacity and context of GoMP, the following businesses are more relevant to categorise as micro enterprises. The summary profile of potential SMEs with suggested opportunities, challenges and needed supports are as follow (see Table (3.1), (3.2), (3.3) and (3.4)):

1) Fishery input shop

The SME will sell materials, products and accessories related to fishing activities including fishing gears, fishing nets, ropes, buoys, etc. In addition, for people who have financial and human capital, the shop will also sell fuel, accessories for boat engines and provide services to repair the boat engines. It has high potential because most of the household in the fishing communities dependent for these products, but there is no or few similar shops in the communities. Traditionally, fishers have to go to nearest city to buy the products and accessories and get the repair services. So, in addition to the direct cost, the opportunity cost is higher as fishers have to spend hours for travelling and getting the services. Therefore, if the similar SME is established within community, it is not only profitable to the business owner but also beneficial to the fishers. Moreover, most of the respondents expressed that they are proficient in managing the business they themselves are fishers and have prior knowledge and experience. The respondents are also knowledgeable about where to get these items in major cities such as Mawlamyine, Kyaik Hto and Thaton.

However, the major bottleneck is that the SME needs high investment as it is essential to provide all necessary products and accessories demanded by the community. These investments are long-term as profits can't be expected within a short period of time. In addition, the respondents do not have access to financial institutions to get loans or funding for the business. Although the respondents may be knowledgeable about the products and accessories required by fishing communities, some expressed that they have no experience or knowledge in managing the SME. As a result, the respondents requested supports in financial access (loan with small interest rate or funding opportunities), franchise opportunities with companies or wholesalers to re-sell the products in the community, linkages for market access and technical support in establish a SME.

2) Grocery shop

The grocery shop will mainly be targeted to fishers and sell household items required by the community. It includes variety of products such as rice, cooking oil, salt, onions, and vegetables. These products are essential to the fishers especially when they go out for long fishing trips (typically takes 7-10 days). The custom in the community is the fishers will get the grocery items in credits and pay them after fishing trip. It is not just a demanding business; the shop keeper can be home-based and work parallelly with other activities such as livestock. The SME can also be integrated with selling fishery input products. The creative opportunity expressed is mobile grocery shop with tricycle or small truck by visiting around nearby villages to reach more customers. The financial constraint is the major challenge and there is no financial access in the community. Some respondents showed worries in lower demand and profitability as the commodity are getting higher and the livelihood activities in the communities are in decline. Similar to other SME, community requested financial support and capacity building in SME development.

3) Aquaculture

It includes different types of aquacultures: wild fish, commercially important fish (seabass, snakehead, etc.), mud crabs and shrimps. Some of them also showed interests in integrated farming like rice fish farming and mangrove friendly aquaculture. Some are also interested in home-based aquaculture which doesn't need ponds whereas it can be farmed in large tanks constructed with waterproof canvas and wooden structure. The interest in aquaculture is more common in area where there is mangroves and extensive unused land as aquaculture need a lot of spaces. People are interested because aquaculture is very relevant to their livelihood (fishing), less care or human resources is needed to run the business and they have prior knowledge and experiences. Some villages already have successful model of aquaculture in the community.

The key challenges include financial limitation for high investment needed for aquaculture business. In addition, the profitability is unpredictable as it depends on the weather condition, suitability of fish species to the location, the food intake and so on. The community also suggested that they are also lacking in such technical skills. There is also limitation in access to market due to lack of market linkages and transportation problems. As result, the supports needed are financial access, technical skills for aquaculture and developing market access.

4) Fishery product trading business

The trading SME aims to collect fish, crabs and shrimps from the local fishers and sell them back to wholesalers and traders in nearby city like Mawlamyine, Thaton and Kyaik Hto. In addition, it can collect processed fishery products such as dried fish, dried shrimps and fish paste directly to customers or wholesalers. Now, most of the fishers are tied with collectors as they took loans from them. So, the fishers do not have capacity to deal the price with collectors and it is possible that the collectors are monopolizing the market price with wholesalers. However, if there is collector or trading business which buys similar prices as wholesalers, most of the fishers will sell the catch or products. Therefore, it is mutualistic benefits for both traders and fishers. Some villages have successful model in the community whilst some have no collector or trading center in the village at all. It has high potential because people have prior knowledge and experience as fishers as well as they know the markets to connect with the business. Likely, the community requested support in finance and technical skills development as they are lacking in financial and human capital to start such high investment business. Moreover, better transportation is essential for trading business as well.

5) Transportation services

It is an important business in the community with high interest as well as high demand. Most people use small trucks, tricycle, and motorbike for transportation of fishery products and passengers in the community. However, there is relatively low supply in the community. Similar to other SME opportunities, the key constraint is limited or lack of financial capital.

6) Livestock

The opportunities for each type of animals are as follow:

a) **Goat:** Higher number of people are interested in goat farming because goats reproduce and grow fast (about 2 breeding per year). They do not need extra care unlike other farmed animals and do not need to worry about the food. Most of the communities have free space for them to graze and it suits with the community. Therefore, they are the most profitable livestock for the community.
b) **Pig:** The second highest animals that respondents want to farm because pigs do not need extra care and the food for pigs are easy to access in the community as they feed on leftovers. Most of the respondents have prior knowledge and experience in farming pigs and therefore, they are interested.

c) **Cow:** They are in high demand and the market price is very high compared to other animals. It is also easy to get food as there are grazing areas and foodler can be easily harvested in the community.
d) **Poultry:** Respondents want to do poultry farming as both the eggs and meat are in higher demand and market price. In addition, their proficiency due to previous experiences, skills and knowledge motivate them to start the farming.

The challenges and supports are similar to all the farmed animals. The key challenges to farm animals are due to lack of financial capital and lack of technical experts to take care of the well-being the animals. Specifically for pigs, not having proper waste management systems is difficult to farm pigs in the community due to environmental and hygiene issues. Therefore, the requested supports are financial assistance, health care support, technical trainings (especially for feeding). The respondent also suggested to have access to markets. People are interested profit sharing deals with large companies or wholesalers. It means, selected community member will farm the animal with support from companies and when the animals are sold, the benefits will share between two parties.

7) Fish paste production

The SME mainly to trade locally produced fish paste to traders and wholesalers outside of the community. People are mainly interested in fish paste from striped dwarf fish (locally known as Nga Zin Yine Nga Pi) and various small fish (locally known as Zayar Nga Pi). These products are high demand as well as high profitability. In addition, the process can be easily done in household level. The major limitations are that the raw products are only available seasonally. In addition, the target fish in the community already have demanding markets and higher value to sell them raw than processed. It would also discourage the interest of community to invest in the fish paste production. It needs spaces to process and store fish paste and so, it need high investment. It is also difficult to access to market outside the community for distribution. Therefore, community need financial support, technical skills for mass distribution of fish paste and access to market.

8) Fish and rice integrated farming

Due to high suitability and potential profitability, FDA prioritized integrated farming of rice and fish as potential SME for communities. It is suitable especially for farmers with interest in additional income and affordable for extra workforce. So, it doesn't need extra space and do not need intensive care like other aquaculture. The fish seed can be wild fish or locally available fish. It is very profitable that some successful individuals got value of up to three million kyats for selling farmed fish. In addition, the respondent believe that the fish regulates the growth of rice to produce higher yield. The main constraint is initial investment cost in preparing the farm for integrated farming such as building trench around the rice field, dyke to protect saltwater intrusion in flooding seasons and keep required water level for fish during dry season. The anecdote experiences shared that saltwater intrusion is major challenge for successful implementation of the farming as it could killed both rice and fish. Moreover, the chemicals in farming would cause harm to the farm fish as well. The supports include financial assistance, creating market access to sell the fish, connection to get suitable fish seed and most importantly is to advocate farmers to pilot the integrated farming while supporting required technical skills.

9) Rice selling

It is very similar to grocery shop, but FDA suggested to sell only rice as it would be lower investment yet higher profitability. Rice is demanding staple food for all the communities including fishers. Fishers need not only for household but also for long fishing trips in the sea. In addition, if the service accept payment in credit with monthly repayment, it will have higher demand. However, there may be potential constraints such as delay in repayment and competition with existing similar businesses in the community. The main support needed is financial assistance.

Table 3.1. Respondents' responses from household interviews on opportunities, challenges and supports needed to start their **top interested SMEs** in the communities. The number in parenthesis represents the number of responses who stated the same response.

No.	Potential SMEs	Opportunities	Challenges	Supports
1.	Fishery input shops (fishing gears, fishing engines, fuel, etc.,)	• Connection and access to markets (19) • Locally high demand and suit the community needs (16) • Prior knowledge, skills, experiences, and capacity to manage the business (13) • Access to resources (financial and human) (9)	• Financial difficulties high investment and the need for long-term investment (33) • No knowledge, skills, experiences, and capacity to manage the business (3) • COVID 19 and political situation (1) • Difficult to access loans and financial services (1)	• Financial support such as loans with small interest rates and fundings (28) • Access to markets for trading (6) • Franchise opportunities with wholesalers (3) • Technical supports (1)
2.	Grocery shop (grocery items for fishers including rice, oil, instant food, etc.,)	• Connection and access to markets (19) • Prior knowledge, skills, and experiences (17) • High interest and passion (6) • Access to resources (space, financial and human) (9) • No or few similar businesses in the communities (3) • Home based work and can do parallelly with other livelihood activities (2)	• Financial difficulties (26) • Limited resources (space and human capital) (3) • Low demand due to lower income in the communities (3) • No or difficult to access loans (2)	• Financial support such as loans with small interest rates and fundings (28) • Space to start business (2) • Financial and business management training (1)
3.	Aquaculture (fish, crab, etc.,)	• Favourable conditions to develop the business (3) • Need less care (3) • Prior knowledge, skills, and experiences (3) • Access to resources (financial and human) (2) • Connection and access to markets (2)	• Financial difficulties high investment and the need for long-term investment (10) • No technical knowledge and skills (6) • The profit is unpredictable (2) • No access to market to sell the product (2)	• Financial support such as loans with small interest rates and fundings (8) • Technical skills for aquaculture (8) • Access to market for trading (2) • Financial and business management training (1)

4.	Fishery product trading (raw fish, crab, processed products)	• Prior knowledge, skills, and experiences (8) • Connection and access to markets (5) • Access to resources (financial and human) (2) • Successful model in the community (1) • No or few similar businesses in the communities (1) • Profitable for both traders and fishers (1)	• Financial difficulties (9) • Limited resources (human capital, vehicles, etc.) (4) • Difficulties in transportation for trading activities (1)	• Financial support such as loans with small interest rates and fundings (9) • Technical skills (1) • Transportation and road access (1)
5.	Transportation services	• Prior knowledge, skills, and experiences (3) • Access to resources (financial and human) (2) • No or few similar businesses in the communities (1)	• Financial difficulties (9) • In debt (1) • Difficulties in transportation due to political situation, road, weather (1)	• Financial support such as loans with small interest rates and fundings (3)

Table 3.2. Respondents' responses from household interviews on opportunities, challenges and supports needed to start **livestock as SMEs** in the communities. The number in parenthesis represents the number of responses who stated the same response.

No.	Livestock as SMEs	Opportunities	Challenges	Supports
1.	Goat	• Already have space to start the farming (13) • Need less care (10) • Prior knowledge, skills, and experiences (9) • Very profitable (6)	• Financial difficulties (17) • Need people to take care of the livestock (12) • No space for farming (6) • No technical skills (1) • Infectious diseases (1)	• Financial supports (21) • Supporting the stocks (3) • Supporting technical skills for livestock management • Financial and business management training (1)
2.	Pig	• Prior knowledge, skills, and experiences (11) • Need less care (10) • Already have space to start the farming (8) • Strong interest and passion (6) • Have access to get knowledge and skills (3) • Have resources (3)	• Financial difficulties (14) • No space for farming (6) • No technical skills (4) • High investment (2) • Need more resources (human capital) (2) • Infectious diseases (2)	• Financial supports (16) • Technical trainings (5) • Supporting the stocks (2) • Profit sharing deals with livestock companies (1)

3.	Cow	• Already have space to start the farming (6) • Profitable due to high demand and market price (6) • Need less care (5) • High interest (2) • Successful model in the community (2) • No access to health care services (1) • Less vulnerable to infectious diseases (1)	• Financial difficulties high investment and the need for long-term investment (12) • Providing animal food (1) • No space to start the farming (1)	• Financial supports (16) • Profit sharing deals with livestock companies (2) • Supporting the stocks (1) • Health care services (1)
4.	Duck	• Already have space to start the farming (3) • Need less care (2) • Prior knowledge, skills, and experiences (2)	• Financial difficulties (2) • No space to start a business (2)	• Financial supports (3) • Need technical skills for management (1)
5.	Chicken	• Have resources (3) • Prior knowledge, skills, and experiences (2) • Have strong interests (2)	• Financial difficulties (2) • No technical skills (1) • High investment (1)	• Financial supports (3) • Need technical skills for management (1) • Supporting food for animals (1)

Table 3.3. Responses from force field analysis with communities (VDC members and non-VDC members) on opportunities, challenges and supports needed to start **top five SMEs** in the communities. The number in parenthesis represents the number of responses who stated the same response.

No.	SMEs	Opportunities	Challenges	Supports
1.	Fishery input shops	• High demand as communities depends on fishing activities (11) • Crete job opportunities to women as there are women skill workers in communities who excel at making and mending fishing nets (4) • Fishers can buy directly in the community (3) • If there is market access, the products can be sold with lower prices (3) • The locally made fishing nets can also be transported to other regions such as Yangon and Bago (2) • Profitable (1)	• High investment (7) • Most of the people in the community buy in credits and pay back in instalment. If they didn't pay back regularly, it would be very difficult for shop owners (2) • No connections with wholesalers in major cities (1)	• Financial supports (15) • Provide re-sellers deals from wholesalers (2) • Transportation (4) • Access to market (4) • Business management skills (2)
2.	Livestock	• High demand and good market price (4) • Have prior knowledge, skills, and experience (3) • Do not need high investment (1) • Livestock are cost effective if they are farming in large number (1)	• The animal food is expensive (5) • No technical skills to take care of the animal (4) • No financial capital (2) • No proper waste management system for some animals such as pigs (2) • No healthcare workers (2)	• Financial support such as loans (7) • Technical skills in feeding and taking care of the animals (4) • Healthcare for animals (2) • Suitable breeds (1)
3.	Fishery product trading	• Have link with traders and wholesalers (2) • Fishers can sell fish with higher prices without having travel to major cities (2) • Good trading market in the community (1) • Profitable business (1)	• No investment (2) • No familiar with the market system (1) • Difficult to get connection with processed fishery products (dry fish, shrimps, etc.,) • High investment (1) • Need labour forces for handling and processing (1)	• Financial support (5) • Access to market (2) • Better transportation (2) • Technical support and coaching for business management (1)

			• Fishery resources are in decline (1)	
4.	Fish paste production	• High demand and supply to produce striped dwarf fish during rainy season (1) • Prior knowledge and experience in trading fish paste (1) • High profitability (1) • Can produce fish paste in the household • Zayar fish paste is unique and only found in Kyaik Hto (1)	• No investment (2) • Difficult to get buyers (1) • Most the community do not like fish paste production due to hygiene issues (1) • No space to store and produce fish paste (1) • The supply for fish paste is only enough for local distribution (1) • The target fish in GoM are higher in economic value. Therefore, making fish paste is less profitable (1)	• Financial support (2) • Need technical support for mass production of fish paste (1) • Connections with buyers (1)
5.	Grocery shop	• Higher demands in fishing communities. Some items are needed for long fishing trips such as rice, salt, oil, etc., (3) • Do not need technical skills and knowledge to start the business (1) • Low investment (1) • Do not require special space (1)	• The grocery shop should sell various items and it need higher investment (2) • Far from major cities for transporting the goods (1)	• Financial support (4) • Market linkage (2) • Connections with big companies to start re-seller shops in the community (1)

Table 3.4. Responses from force field analysis with FDA on opportunities, challenges and supports needed to start **top five SMEs** by the FDA.

No.	SMEs	Opportunities	Challenges	Supports
1.	Fishery input shop	• High demand in the fishing communities as the fishers can buy the essential fisher products (gears, ropes, buoys, etc.,) in credit and pay back in instalment • High profitability • No or few similar businesses in the communities	• May create competition in the community if there has already similar shop in the community • Need high investment	• Financial support • Market access and connections with wholesalers to buys the essential products for the shop
2.	Collective fishery products trading	• Have technical skills and knowledge (such as quality control) • If such business is owned by community, the local fishers will get better prices • The community has high interest	• High investment • Create competition with existing collectors • The fishers already have deals with fish collectors as they took loans from the collectors • The transportation is difficult • Difficult to get market linkages and access to sell the products • For fish paste and dry products, the raw materials are seasonal, and it won't supply the demands for the whole year round	• Effective financial supports to start the business • Need strong collaboration among communities • Access to financial institutions such as banks to get loans • Market access
3.	Livestock	• More suitable for more inland villages where there was less opportunity for fishing • Doesn't need high investment • They can increase the financial capacity as livestock can be sold immediately and gained profits	• Do not have skills, knowledge, and capacity to provide healthcare • No technical experts who can take care of the well-being of the farmed animals • Limited space/ Need a lot of space • Flood and other coastal natural hazards	• Protective buildings for the animals • Healthcare system • Access to suitable breeds based on weather, location, and available food • Technical advice for feeding

4.	Integrated farming of rice and fish	• Lower investment as wild fish and locally available fish are suitable for the integrated farming. It can be done in own farmland or rice fields • High profitability as the fish can improve the yield • High interests by farmers • Successful models in the community	• Higher initial cost for preparing the farms such as making trench along the rice fields, building dyke or embarkment to sustain water longer in the fields • Need information on suitable fish species • The chemicals using in the rice farming would harm the fish	• Advocating farmers to pilot the methods • Assessment on suitable fish species • Connection to get fish seeds • Financial support • Market access
5.	Selling rice	• Staple food for the communities and the need for every household • Selling in credit (with monthly repayment system) would be beneficial	• Potential competition with existing shops • Delay in repayment	• Effective financial supports to buy enough rice to meet community demand

4. DISCUSSION

The study explores the opportunities for establishing small and medium scaled enterprises (SMEs) in the community. According to the results of the action research, the chapter examines SME opportunities along the fishery value chain identified in the research. It then discussed key insights from the results. Based on this information, the recommendations are provided for area of interventions and supports to develop SMEs in the communities in Mon State of the Gulf of Mottama. According to the results, the SMEs mentioned and discussed in the report are more relevant to classify as Micro, Small and Medium Enterprises (MSMEs).

4.1. SME Opportunities in Fishery Value Chain

Following the (ISF Advisory, 2021), the research analyses fishery related SMEs along the fishery value chain in Mon State. The taxonomy in **Figure 4.1** and **Figure 4.2** summarized the key finding of the research as schematic fishery value chain with required services and inputs needed for the development of value chain and then potential SMEs are identified. The required services in the value chain can be distinguished into two categories. The first segment is about harvesting and processing which includes input supply and preparation for harvesting, harvesting of fishery resources, and post-harvesting and processing. Another segment is about marketing which includes transportation, trading and marketing, and distribution for retails and consumption. The services in harvesting and processing include equipment required for fishing, resources to conduct harvesting and processing activities, labour to support in the process and the access to information.

The required services for trading and marketing segments are supply chain management and market linkages. To support these services, manufacturers for fishing gears, fishing engines, fuel companies and ice factory and distributors to provide these services and products to the community are required. In such case, potential SMEs are fishery input shops, grocery shops, ice and fuel distributions, and services such as repair shop or person for mending of fishing gears and fishing boat engines. With this SME intervention, it will develop job opportunities for youths, women and fishers including marginalized fishers. As result, fishing communities will access quality inputs at reasonable prices, reduce travel time to access these products and services as well as support the harvesting process with lower cost to improve the fishers' income.

The harvesting, post-harvesting and processing are mainly involved by wage labours, women, local processors, and producers as well as fishers in aquaculture. Therefore, the SMEs in these segments of value chain are value-added fishery products production, farming, and livestock. So that, it would be supporting the well-being and development of communities as fisher increased income from increased catch and access to premium prices and production of value-added products. Transportation, trading, and marketing of the harvested products and processed or value-added products in the value chain are provided from collectors, wholesalers, exporters, and transportation services. The trading related SMEs and services to support trading and marketing of products create job opportunities as well as support well-being and development of fishing communities. The SMEs in this segment will have potential to engage with women to be part of cooperatives, provide marketing arms and fair prices in trading to increase the income of fishers. The final session of the value chain is about retail and consumption. The service providers are mainly vendors and local food store or restaurants which can promote domestic product while supporting communities. However, there are very few SME opportunities to fishers in the community with direct sales of fishery products expect in some villages which have access to local markets or potential tourism activities.

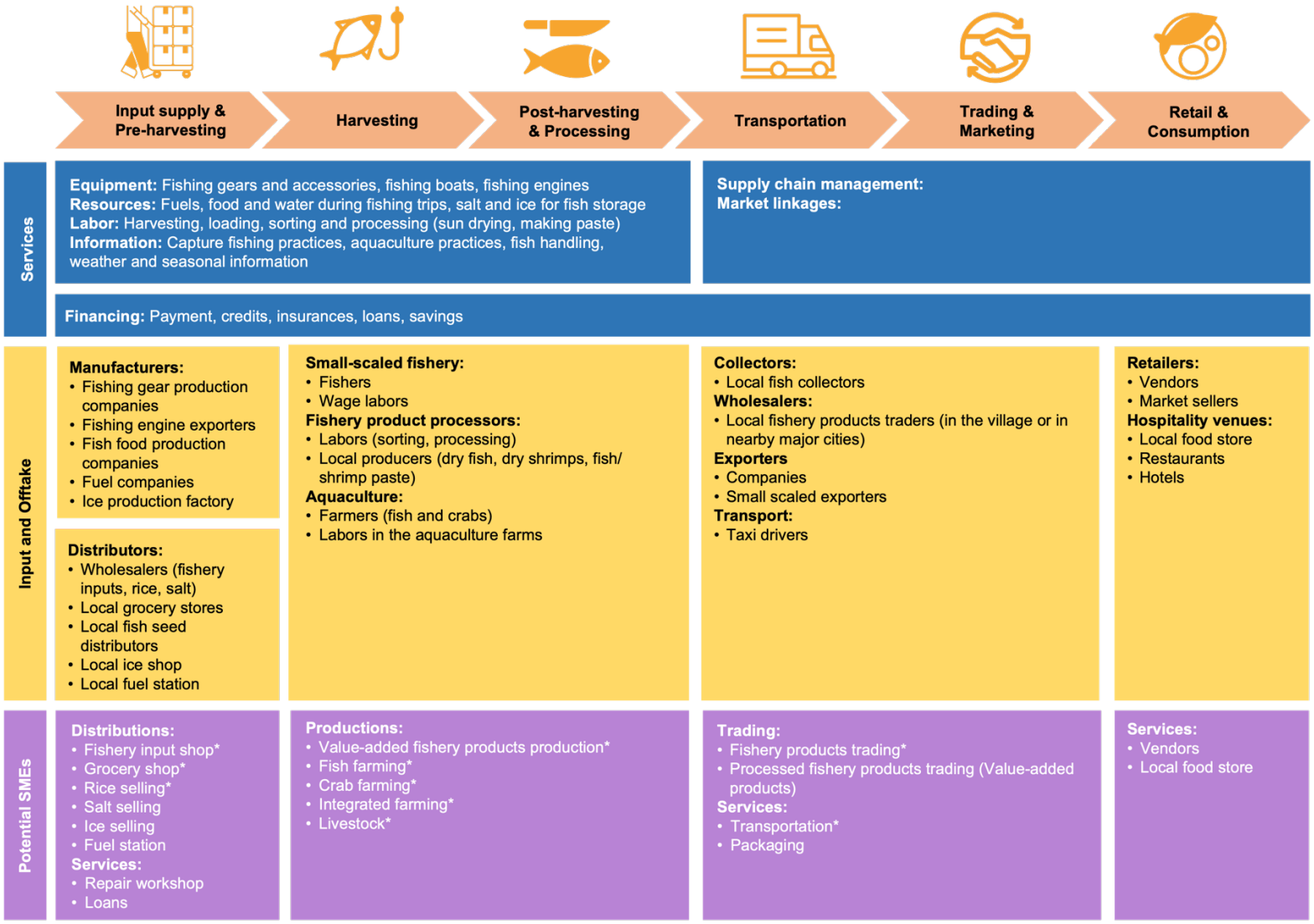

Figure 4.1. Fishery SME taxonomy showing the fishery market chain with services, inputs and potential SMEs required in each component. *The selected SMEs prioritized by the respondents in the research.

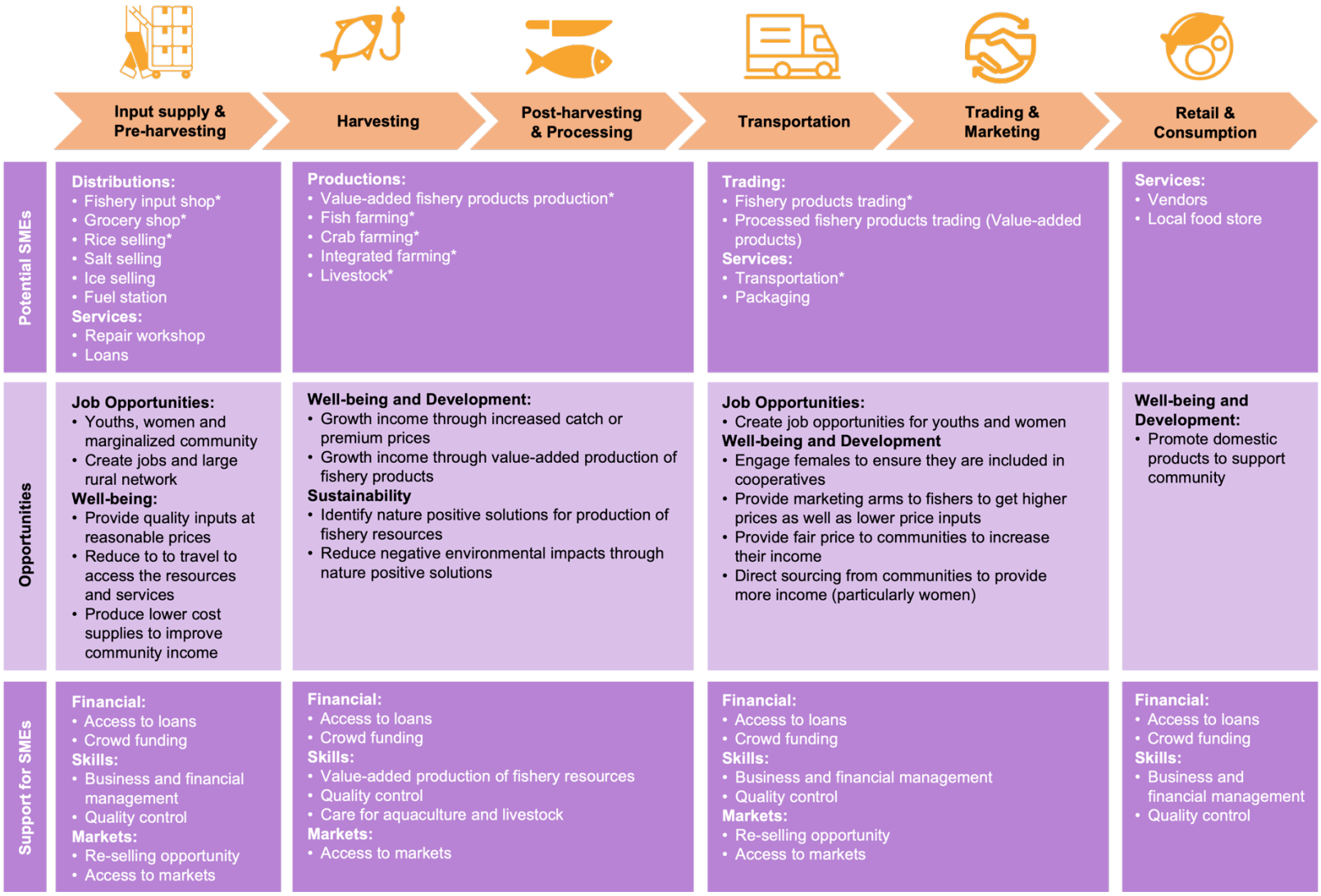

Figure 4.2. Fishery SME taxonomy showing the fishery market chain with services, inputs and potential SMEs required in each component. *The selected SMEs prioritized by the respondents in the research.

4.2. SME Interventions by FDA

The information on SMEs in fishery sectors is very limited especially in the context of GoM expect for activities implemented by FDA. Therefore, the study discussed SME interventions by FDA as case study in gain more insightful recommendation.

In the Phase 2 of the GoMP, the FDA supported seven interventions for livelihood development of the communities: selling ice, selling ice box, production of instant dry fish, selling rice and providing supports to rice-fish integrated farming and wild fish aquaculture. Among them, all these SMEs are now postponed or cancelled during the pandemic, due to current political situation, and profitability from the activities. In addition to the pandemic and political change, the key constraint in these actions was mainly due to the lack of assessment for market demands. Therefore, the products and/ or services are not directly relevant to the target groups and resulting in less marketing opportunities. In addition, financial limitations and proficiency in related business also fuelled the impacts of these interventions.

4.3. SMEs in Fishery Sector

Synthesizing the interests, opportunities, and challenges of the potential SMEs by the communities, the key insights are as follow:

4.3.1. Communities have high interests in SMEs

According to the study, the development of SMEs which are suitable to local context have high potential to successfully implement in the community as most respondents expressed high interest in it. The community's interest in SMEs depend on their experiences, prior skills, and knowledge. They showed high interest in SMEs as they can get additional and stable income while the fishing become less profitable. They are interested to change livelihood from fishing as they prefer comfort lives working in SMEs. However, some fishers want to work parallelly with existing fishing activities and their interested SMEs. In addition, women and elders prefer to have SME as they can get income from home-based activities while taking care of the family.

4.3.2. SMEs have potential accessible income due to robust demand in the fishing communities

The study suggests that there are less SMEs to support community needs in most of the fishing communities. Therefore, there would be higher demand than supply in terms of goods and services required in input supply and pre-harvesting segment of the fishery value chain in the community. There should be SMEs target on fishers in supporting the essential supplies (such as gears, fuels, grocery, etc) needed for the harvesting and processing activities. In contrast, it is essential to consider that the profitability mainly depends on local demand and therefore, if fishers have low catch and become less profitable, the SMEs will be impacted.

In post-harvesting and processing segments, the production of value-added fishery products has high potential of profitability. However, getting local supplies (raw fish, shrimps) to produce the demanding goods may still have limitation as most of the supplies are seasonal. Outside of the fishery value chain, the livestock is important SME to gain profit as market demands on goats, cows, and eggs production from duck and chicken are higher.

4.3.3. Opportunities for cooperative SMEs

In terms of cooperative SMEs, most of the household interviews are not interested to collaborate with other fishers or local groups in implementing SMEs. However, they are interested to cooperate with large enterprises, companies, and wholesalers to get financial support to initiate their interested SMEs. The common interest is getting investment from the large business and share the profits among collaborating parties with agreed proportion in

SMEs such as livestock and fishery product trading. In addition, the individual fishers are interested to franchise the products and services from large business as well. For example, they will get fishing gears from one company, and they want to get commission or shared profit if these products are sold.

However, FDA shows very high interest in cooperative SMEs in trading segment of the value chain. They are mainly interested to have a cooperative fishery trading business which collect fish directly from small-scaled fishers and then trade to large companies or enterprise which can pay highest value for the products. With this system, FDA is hoping that they will offer better prices for the fishers, and it will alleviate the well-being of the communities. However, there may be obstacles because not all fishers have freedom of choice on where to sell their fish as most of them have deals with local collectors or wholesalers.

4.3.4. Opportunities for ecosystem-based SMEs

Throughout the research, there were some expressions in the interest on ecosystem-based SMEs such as environment friendly aquaculture businesses and eco-tourism associated businesses. However, as only small proportion stated, these results were omitted in the result session. In villages with mangroves (such as in Taw Ka Mar, By Laung and Kar Te), people are interested to invest in mangrove-based aquaculture. They are willing to farm mud-cabs and local fish in the mangroves by creating small ponds without destroying the mangrove ecosystem. In Taw Ka Mar and Zee Gone of Chaung Zone township, people expressed potentially growing tourism associated with mangrove forests and sandy beaches. Therefore, they are willing to provide community-based ecotourism services to the visitors and provide restaurants selling local seafood and beverages. Therefore, these opportunities should further be explored for development of such SMEs.

4.3.5. Potential competition in the community

The study suggests that there were a lot of similar interests in SMEs by the community. Therefore, it is needed to consider about potential competition in the communities in implementing business in the community. The competition may lead to conflicts or reduce community demand with lower profitability. In the case of livestock, if there are higher animals than the capacity of the community, there may be health issues, competition in grazing areas and waste management problems.

4.3.6. Financial capacity is the key constraint

The most distinguished challenges to implement SMEs are due to financial difficulties. Most of the fishers are interested in SMEs and have strong believe in its profitability, but they have no investment capital to initiate the business. The current situation with higher commodity prices creates more challenges. The financial challenges are not just in the start-up process of the business cycle, but to run the business continuously. In the community, the goods are commonly trading in credit payment system (buying in loan) and pay them back in instalment. Therefore, if the repayments are delay, it also impacts on the business owner that they can afford to continuously invest in the goods and services they are providing.

4.3.7. SMEs need to be environmentally sustainable

As GoMP mainly focuses on conservation and sustainability, any SMEs related to GoMP should consider on the environmental impacts and sustainability. The key areas to consider are plastic issues from increasing number of businesses in the community. As most of the communities have not proper waste management system, the increased use of plastic would adversely impact to the coastal environment. In addition, business which sell fishing gears, the materials which fuel the widespread use of illegal fishing practices should be controlled. Moreover, as supporting for SMEs is not only to increase income for fishers, but also decrease fishing pressures. If there are more access to supplies in input-supply and pre-harvesting segment, there may be chances of increasing fishing pressure as more people have easier

access to the fishery inputs and better opportunity to modify the existing gears with new supplies. In villages near Kyaik Hto, some of the fishers expressed interest in production of Zayar fish paste as locally produced fish paste. However, the fishing of Zayar (small fish) is using very fine mesh sized gears and therefore, they catch very small juvenile fish and shrimps in the spawning areas. So, fishery production from unsustainable practices of fishing should also be controlled in implementation of SMEs. There are also concerns on potential environmental impacts from ecosystem-based SMEs such as tourisms and aquaculture. From unregulated tourism activities and aquaculture practices, it may pose threat to natural resources and leads to impacts on the environment such as increased pollution, increased pressure on species, and natural habitat loss.

4.4. Recommendations for Supporting SMEs

The key considerable limitation in the study is that the study only focused on the supply components of the potential SMEs as it only explores the interests in the community. Therefore, the potential demands for the identified SMEs are not clearly understood in the study. In addition, the study was carried out during the time that do not represent normal situation in the country due to synergic impacts from the pandemic and the political situations.

Regardless of the limitations, the study provides key recommendations for the GoMP to support SMEs in the fishing communities in Mon State.

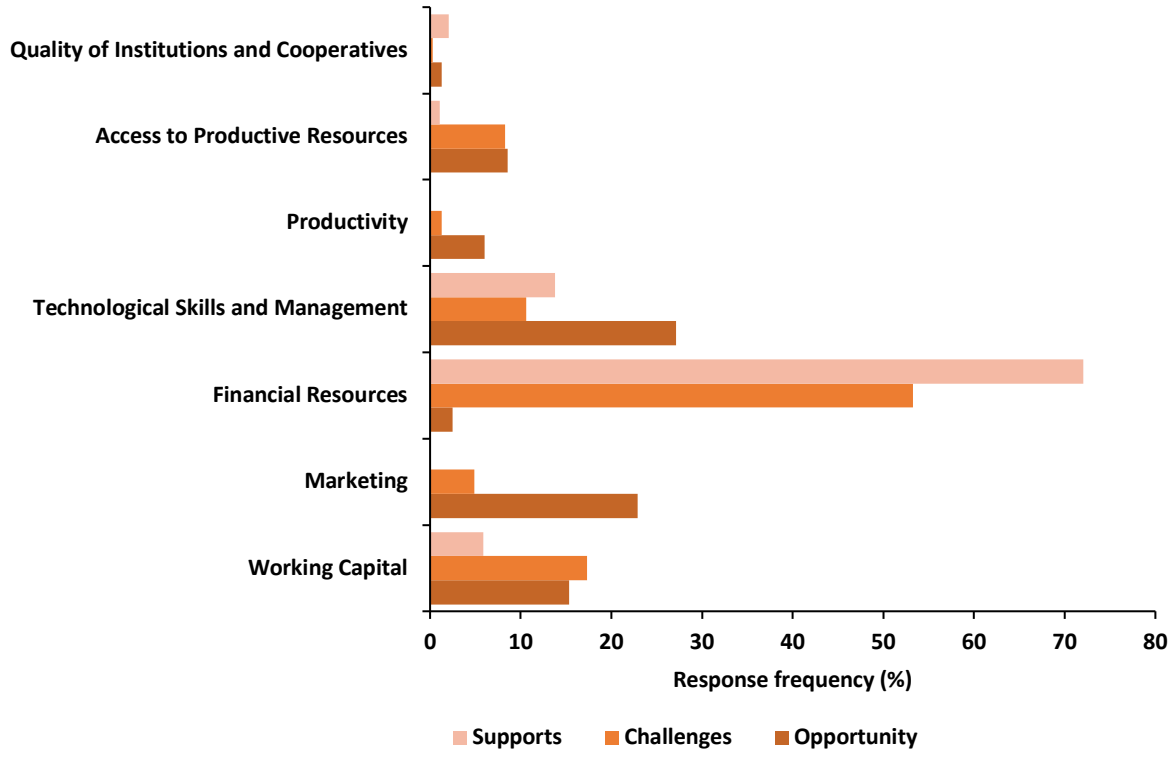

Figure 4.3. Identified fields of supports, challenges, and opportunities in implementing SMEs in the fishing communities.

The key challenges in SMEs in Myanmar include limitation to produce quality products at international standards or access to relevant markets, lack of technical skills and management capacity, very low in the use of technology and innovation and, similar to neighbouring countries, the paramount challenge is access to finance to develop SMEs (Asian Development Bank, 2020). In addition, the common factors influencing the implementation of SMEs are 1) working capital, 2) marketing opportunity, 3) financial resources, 4) technological skills and

knowledge, 5) productivity of the key resources, 6) access to productive resources, and 7) quality of institutions and cooperatives (Setyawan Agus et al., 2015) (Karim et al., 2021) (Jappar & Jandosova, 2013). Therefore, the responses in the study are classified into these seven factors and the result is shown in Figure 4.3. According to the analysis, the major supports needed are financial support (72.07%), human resources to technically support SMEs (17.31%), technological skills, management capacity (13.79%) and access to institutions and cooperatives (2.07%). Therefore, the study recommends as follow to support the identified needs of the community.

4.4.1. Creating financing opportunities for SMEs

The most distinguished challenges as well as requested support to develop SMEs is the solutions for financial constraints to start an SME. According to the research, the nine identified SMEs need at least 2,000,000 - 5,000,000 MMK to start one of them. However, most of the existing SMEs are funded individually, with supports from family members or friends and some of them get loans from local informal loan providers with relatively high interest rate. So, it is obvious that there is very limited access to financial institutions to access loans or financial services to start an SME in the community. There is a great gap in financing communities to enhance the SME opportunities as well as sustainability. Regarding to financing the SMEs, World Bank currently practices support in diagnostics, implementation, advocacy, and knowledge sharing (World Bank, 2021). For creating financing opportunities, the following actions are recommended.

- Financial sector assessments to determine areas of improvement in regulatory and policy aspects enabling increased responsible SME access to finance,
- Implementation support of initiatives such as development of enabling environment, design and set up of credit guarantee schemes, and
- Advocacy for SME financing institutions.

4.4.2. Supports technical skills and capacity building for the community

The study discovered that the prior experience and proficiency are important factors for the community interest in SMEs. Therefore, it is important to provide relevant skills and knowledge for nine identified SMEs to the community. The technical skills are mainly requested in post-harvesting and processing segment of the value chain. For example, skills in production of value-added products should be provided to develop the segment. Significant knowledge and skills are required in animal husbandry and aquaculture. The key capacity building should be choosing relevant animals or species to do farming, adequate feeding methods and supporting health care to the animals. For all the sectors, cross-sectional skills and knowledge should be SME management, financial management and entrepreneurships specifically designed to the context of social-ecological systems of the gulf. To implement these actions in supporting technical skills and capacity building, assessing the needs of community and selecting the target users should be prioritized.

4.4.3.Support SME opportunities for women entrepreneurship

Although it is recognizable that SMEs have high potential to provide additional income to the family, the supports specifically for women in SMEs is limited as there is no clear definition for women-owned SMEs in the context of fishery value chain. However, women play an important role in SMEs in fishery value chain especially in segments of input-supply and pre-harvesting, post-harvesting and processing, and marketing. The study recorded women involvement in financial and business management, access to financing opportunities (getting loans) and access to market in SMEs generate significant support to income but their roles are poorly recognized (Manyungwa, 2019). Therefore, supports and empowerment for women-owned SMEs is the opportunity to empower women by ensuring their employability and entrepreneurships. In terms of women-owned SMEs, both financial and non-financial constraints are mostly common in the start-up stage of the business cycle (Ganuza et al., 2014). Therefore, to support from the beginning of the SMEs, it is recommended to assess

gaps in women involvement in SMEs in developing framework for SMEs in small-scaled fisheries. Then, the supporting framework should encourage collaboration of women as well as empower their entrepreneurship and engage financial institutions to support women entrepreneurships through women-owned SMEs.

4.4.4. Advocate potential SMEs to gain access to institutions and cooperatives

The SMEs in the fishery value chain are poorly understood especially in the GoM and therefore, there's a big gap in developing knowledge of SMEs and advocating this knowledge to the enablers who can provide financial and non-financial investments in fishery related SMEs. In order to gain deep insight of the SMEs in GoM, it is necessary to assess the community demands on these identified SMEs, interests of supports or investment from local enterprises and private sectors, and validify the results of assessment with local experts. Then, this assessment should be widely advocate with business owners and enterprises in the fishery value chain for direct investment in these SMEs and with financial institutions to gain financing opportunities for the identified SMEs.

5. CONCLUSION

The study concluded that there is high potential for development of SMEs in fishery value chain as well as high interest rate from fishing communities to establish them. Then, based on the interest and opportunities, the nine fishery related SMEs are recommended to focus the support in the Gulf of Mottama. The nine identified includes 1) fishery input shop, 2) grocery shop, 3) aquaculture, 4) fishery product trading business, 5) transportation services, 6) livestock, 7) fish paste production, 8) fish and rice integrated farming, and 9) rice selling. The key constraints identified in the study to implement these SMEs are limited or no financial capital, limited skills, and knowledge especially in business and financial management as well as specific technical skills relevant to each SME, and access to markets and corporations for distributions of goods and services and investment opportunities. Therefore, the study recommends supporting in creating financing opportunities for fishing communities such as assessing financial opportunities in the regions, support financially to implement the SME activities through establishment of informal financial support systems and advocate the SMEs to formal financial institutions such as banks, and microfinances. Then, the local human capacity should be raised through technical skill trainings and capacity building supports. As the understanding of SMEs in fishery sectors in the context of GoMP are poorly known, further research on market demands and investment opportunities from enterprises on the SMEs should be conducted to fill the knowledge gap. Finally, this information should be advocate to relevant stakeholders to enhance better collaboration in development of SMEs in the region.

REFERENCE:

Asian Development Bank. (2020). *ASIA Small and Medium-Sized Enterprise Monitor* (Vol. 1, Issue October).

Ganuza, M., Kipnis, H. M., Dassanou, M. E., Khan, A. A., Khodakivska, A., & Kudo, Akiko. (2014). Women-owned SMEs: a business opportunity for financial institutions - a market and credit gap assessment and IFC's portfolio gender baseline (English). In *International Finance Corporation*. http://documents.worldbank.org/curated/en/574801510949557053/Women-owned-SMEs-a-business-opportunity-for-financial-institutions-a-market-and-credit-gap-assessment-and-IFCs-portfolio-gender-baseline

GoMP. (2019). *Gulf of Mottama Management Plan*.

ISF Advisory. (2021). *Rethinking our Understanding of Agri-SMEs: A comprehensive taxonomy*.

Jappar, A., & Jandosova, J. (2013). *Technical Assistance Consultant's Report Kazakhstan: Improving Capacity to Support SME Development (Financed by the ADB) SME Survey: A Needs Assessment*. *May*. https://www.adb.org/sites/default/files/project-document/79676/44060-023-tacr-03.pdf

Karim, M., Salman, D., Genisa, J., & Rahmadanih. (2021). Dynamic Strategy and Contingency Power of SMEs Fish Processing Units in Achieving Sustainability Levels (Case Study: SMEs of Boneless Milkfish Processing Units in Pinrang Regency, Indonesia). *IOP Conference Series: Earth and Environmental Science*, *921*(1). https://doi.org/10.1088/1755-1315/921/1/012045

Manyungwa, C. L. (2019). *Women's engagement in and outcomes from small-scale fisheries value chains in Malawi.pdf*. 275–285.

Setyawan Agus, A., Isa, M., Wajdi, W. F. M., Syamsudin, & Nugroho Permono, S. (2015). An Assessment of SME Competitiveness in Indonesia. *Journal of Competitiveness*, *7*(2), 60–74. https://doi.org/10.7441/joc.2015.02.04

World Bank. (2021). *Small and Medium Enterprises (SMEs) Finance: Improving SMEs' Access to Finance and Finding Innovative Solutions to Unlock Sources of Capital*. https://www.worldbank.org/en/topic/smefinance