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# ► Assessment of value chains in pilot areas of the Myanmar Programme on the Elimination of Child Labour (My-PEC) in the Ayeyarwady Region, Yangon Region and Mon State





- ▶ **Assessment of value chains in pilot areas of the Myanmar Programme on the Elimination of Child Labour (My-PEC) in the Ayeyarwady Region, Yangon Region and Mon State**

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# Acronyms and abbreviations

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<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FDI</b>	foreign direct investment
<b>GNI</b>	gross national income
<b>ILO</b>	International Labour Organization
<b>IRRI</b>	International Rice Research Institute
<b>LIFT</b>	Livelihood and Food Security Trust Fund
<b>MSDP</b>	Myanmar's Sustainable Development Plan
<b>My-PEC</b>	Myanmar Programme on the Elimination of Child Labour
<b>OCHA</b>	United Nations Office for the Coordination of Humanitarian Affairs
<b>OSH</b>	occupational safety and health
<b>SDGs</b>	Sustainable Development Goals
<b>TVET</b>	technical and vocational education training
<b>US\$</b>	United States dollar
<b>USAID</b>	United States Agency for International Development

# Acknowledgements

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# Foreword

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The Myanmar Programme on the Elimination of Child Labour (My-PEC) represents a decade-long commitment by the United States Department of Labor and the International Labour Organization (ILO) to combat child labour in Myanmar. As the first project in Myanmar specifically addressing child labour, My-PEC initiated its pilot interventions at the village tract/ward level in 2016. The primary goals have been to increase participation in quality education for children at risk of child labour, improve access to safe work for children above the minimum age for employment, and reduce the vulnerability of target households to child labour.

This report focuses on the assessment of selected value chains within My-PEC's target areas and is a vital component of our broader strategy to create sustainable economic opportunities and enhance livelihoods in vulnerable communities to prevent and eliminate child labour.

The findings and recommendations in this report are the result of extensive field research, including surveys and consultations with a diverse array of stakeholders. These efforts were conducted amidst significant challenges, such as the COVID-19 pandemic and the socio-political turmoil following the 2021 military takeover.

The report highlights the critical value chains in Labutta Township in the Ayeyarwady Region, Ye Township in Mon State, and Dagon Seikkan Township in the Yangon Region. These value chains encompass key agricultural and non-agricultural sectors, providing a comprehensive analysis of their potential to drive local economic development and reduce child labour through improved livelihood opportunities. The findings will inform the design of project interventions aimed at supporting skills building and livelihood activities at the community level.

As we present this report, we reaffirm our commitment to eliminate child labour in Myanmar. By leveraging the findings of this assessment and fostering strong collaboration with local and international partners, we can make significant strides towards a future where every child in Myanmar is free from the worst form of child labour and has the opportunity to thrive.

Finally, I would like to express my deep appreciation to the United States Department of Labor for its funding support to My-PEC since 2013 and all those who have contributed their valuable time, expertise and experiences to the development of this report.



Yutong Liu

Liaison Officer/Representative

ILO Liaison Office, Myanmar

# Executive summary

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This assessment examines selected value chains, and identifies emerging or potential economic opportunities within them, in areas targeted by the Myanmar Programme on the Elimination of Child Labour (My-PEC). My-PEC is a 10-year project (2014–2024) funded by the United States Department of Labor and implemented by the International Labour Organization (ILO) that works to establish a comprehensive, inclusive and efficient multi-stakeholder response to reducing child labour in Myanmar. The Myanmar Labour Force, Child Labour and School to Work Transition Survey 2015 estimates that 1.125 million children are engaged in child labour, 616,815 of whom are involved in hazardous work.

This assessment focuses on value chains identified by an earlier assessment in 2016<sup>1</sup> in My-PEC's pilot areas – Labutta Township in the Ayeyarwady Region (the rice, dried shrimp and mud crab value chains), Ye Township in Mon State (rubber, durian and betel nut) and Dagon Seikkan Township in the Yangon Region (street food, and home-based enterprises).

The assessment's findings are based on a survey of 249 respondents (56.5 per cent women and 43.5 per cent men) in these areas, selected using a snowball sampling method, combined with information gathered through a desk review of available literature. Value chains were shortlisted and prioritized using a checklist based on My-PEC's objectives and partners' comments, taking into account the results of the situation analysis and consultation with My-PEC's implementing partners, communities and beneficiaries in the pilot areas. Detailed data was then collected on the top three value chains identified by the shortlisting process.

When evaluating the performance of value chains, marketing margins are important indicators. In the value chains examined by this assessment, wholesalers benefit from larger marketing margins. Moreover, financial and technological constraints hamper the capacity of producers. Increasing producers' access to working capital, productivity, and access to market information are key areas that this assessment recommends My-PEC focus on. Specific recommendations are given provided for each value chain.

Few foreign organizations are currently operating in Myanmar, although some international NGOs continue to have a presence. However, it is unclear how many NGOs are involved in active programming. To advance My-PEC's goals, collaboration with local and international NGOs is required. Some organizations, with specialized goals and experience could be helpful in putting My-PEC initiatives into action, such as the International Rice Research Institute (IRRI) and WorldFish.

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<sup>1</sup> In 2016, My-PEC conducted a local economic development and value chain analysis assessment to understand the economic situation of vulnerable households and identify income and employment opportunities in its pilot areas.

## Recommendations

1. **Enhance technical, skill and vocational training:** Provide targeted training to improve production quality and management skills among value chain participants.
2. **Improve market linkages:** Establish marketing platforms to link producers with markets, enhancing access and sustainability.
3. **Strengthen financial support:** Increase access to financial resources for value chain participants to support sustainable initiatives.
4. **Policy implementation:** Accelerate the implementation of supportive policies to foster a conducive environment for value chain development.
5. **Inclusive development:** Ensure that training and development initiatives are inclusive, addressing gender and disability considerations.

## Conclusion

This value chain analysis highlights the critical need for coordinated efforts to strengthen value chains in Myanmar. By addressing identified constraints and leveraging opportunities for collaboration, My-PEC can significantly contribute to sustainable local economic development and the reduction of child labour through improved livelihood opportunities.



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# Introduction

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## ► 1.1. Country context

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Myanmar is a country of around 676,577 km<sup>2</sup> located in Southeast Asia (see figure 1).<sup>2</sup> With gross domestic product (GDP) of US\$1,420 per capita in 2021, Myanmar is categorized as a lower-middle income economy according to the World Bank's income group classification. The country has a population of 54.806 million according to 2021 estimates, reflecting an average population growth rate of 0.6 per cent per year over the past decade.<sup>3</sup> This is underpinned by a fertility rate of 2.2 births per woman in 2020, and an average life expectancy of 69.8 years for women and 63.7 years for men in 2020, up from 65.8 and 59.1 years, respectively, a decade earlier. In 2021, 30.9 per cent of Myanmar's population lived in urban areas.<sup>4</sup> For 2023, the World Bank estimated an overall unemployment rate of 3.9 per cent, with the women's unemployment rate (3.9 per cent) higher than the average unemployment rate for men (2.5 per cent).<sup>5</sup> The estimated unemployment rate among youth in 2023 was far higher, at 9.8 per cent.<sup>6</sup> Disaggregating employment by sectors reveals that, in 2022, agriculture employed 47 per cent of men and 37 per cent of women, industry employed 6 per cent of men and 13 per cent of women, and services employed 33 per cent of men and 45 per cent of women.<sup>7</sup>

Political, legislative and economic reforms began to be introduced after the formation of a military-dominated civil parliament and government led by President Thein Sein in 2011, and subsequent democratic administrations. Donors increasingly invested in the government, expecting their former beneficiaries to increase engagement with the government as it became more legitimate. Myanmar soon became one of the world's largest recipients of aid, and a range of activities were implemented across sectors. However, Myanmar's democratically elected civilian government, headed by the National League for Democracy, was overthrown by a military takeover on 1 February 2021, which threatens to push back progress made on reforms.

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<sup>2</sup> UN, "UN Data: Myanmar".

<sup>3</sup> UN, "UN Data: Myanmar".

<sup>4</sup> UN, "UN Data: Myanmar".

<sup>5</sup> World Bank, "Unemployment, total (% of total labor force) (modeled ILO estimate) - Myanmar", World Bank Open Data database, accessed 7 June 2023; World Bank, "Unemployment, female (% of female labor force) (modeled ILO estimate) - Myanmar", World Bank Open Data database, accessed 7 June 2023; World Bank, "Unemployment, male (% of male labor force) (modeled ILO estimate) - Myanmar", World Bank Open Data database, accessed 7 June 2023.

<sup>6</sup> World Bank, "Unemployment, youth total (% of total labor force ages 15-24) (modeled ILO estimate) - Myanmar", World Bank Open Data database, accessed 7 June 2023.

<sup>7</sup> Sutirtha Sinha, *A Growing Crisis: Work, Workers, and Wellbeing in Myanmar* (World Bank, 2023).

According to the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), as of December 2022, 66 international non-governmental organizations (NGOs), 88 national NGOs, 10 United Nations (UN) agencies, and 36 civil society organizations were operational in Myanmar.<sup>8</sup>

Following the military takeover, several organizations called for inclusive solutions, including provisions to ensure the population's peaceful and full exercise of their human rights. For instance, the 14<sup>th</sup> International Labour Organization (ILO) Commission of Inquiry report of October 2023 urges all parties to work towards a peaceful transition back to democracy. Its recommendations for the military regime include stopping the use of all forms of violence, torture, and other cruel treatment against trade union leaders and members; dropping criminal accusations against trade unionists detained in connection with the exercise of their civil liberties and lawful trade union activities; and restoring, in full, the fundamental civil liberties that have been halted since the military takeover.

### 1.1.1. Child labour in Myanmar

The ILO defines "child labour" as work that deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development.<sup>9</sup> It refers to work that:

- is mentally, physically, socially, or morally dangerous and harmful to children; and
- interferes with their schooling by depriving them of the opportunity to attend school, obliging them to leave school prematurely, or requiring them to attempt to combine school attendance with excessively long and heavy work.

Thus, child labour affects children's health, education and general well-being, preventing them from reaching their full potential. This has direct and indirect effects on socio-economic development at various levels – from children themselves, to households, communities, and countries as a whole.

According to Myanmar's Labour Force, Child Labour and School to Work Transition Survey 2015, an estimated 1.125 million children in the country are engaged in child labour, 616,815 of whom are involved in hazardous work.<sup>10</sup> According to some estimates, Myanmar has a higher proportion of children between 5 and 17 years old involved in child labour (9.3 per cent) than the average for the Asia Pacific region (7.4 per cent).<sup>11</sup> In 2014, it was ranked as one of the top 10 countries for child labour risks worldwide among 197 countries.<sup>12</sup> Increasing levels of child labour have become a major risk in the wake of the military takeover in 2021 due to job losses, decreased access to education, limitations on freedom of speech, instability and violence, alongside the impact of the COVID-19 pandemic and rising rates of inflation.<sup>13</sup>

In terms of measures to curb child labour, Myanmar ratified the ILO's Worst Forms of Child Labour Convention, 1999 (No. 182) in 2013, as well as the Forced Labour Convention, 1930 (No. 29) – one of the ILO's core Conventions on fundamental principles and rights at work.<sup>14</sup>

<sup>8</sup> United Nations Humanitarian Country Team in Myanmar, *Myanmar Humanitarian Response Plan 2023*, 2023.

<sup>9</sup> ILO, "What is Child Labour".

<sup>10</sup> Myanmar, Ministry of Labour, Employment and Social Security, Central Statistical Organization and ILO, *Myanmar Labour Force, Child Labour and School to Work Transition Survey 2015: Executive Summary Report*, 2015.

<sup>11</sup> Alyssa Augustus, "Child Labor in Myanmar", Ballard Brief, March 2022, quoting Rick Glauert and Cape Diamond, "Myanmar's Big Challenge in Tackling Child Labour", DPA International, 8 June 2018.

<sup>12</sup> BSR, *Child Labor in Myanmar's Garment Sector: Challenges and Recommendations*, 2016, quoting Verisk Maplecroft, *Child Labor Index 2014, 2014*". See also: Verisk Maplecroft, "Press Release on Progress on Child Labour Flatlining in World's Manufacturing Hubs: Child Labour Index", 29 May 2019.

<sup>13</sup> ILO, *Myanmar: Labour Market Update 2023*, July 2023.

<sup>14</sup> ILO, "ILO Declaration on Fundamental Principles and Rights at Work".

Myanmar signed the Minimum Age Convention, 1973 (No. 138) in June 2020, which establishes the minimum working age as 14 years old. Myanmar is the 178<sup>th</sup> signatory state of the Convention, which entered into force in the country on 8 June 2021. Myanmar has also ratified four of the ILO's eight core conventions,<sup>15</sup> committing it to putting in place laws and policies for the effective elimination of child labour.

## ► 1.2. Myanmar Programme on the Elimination of Child Labour

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The ILO's Myanmar Programme on the Elimination of Child Labour (My-PEC) – a 10-year project (2014-2024) funded by the United States Department of Labor – aims to establish a comprehensive, inclusive and efficient multi-stakeholder response to reducing child labour in Myanmar. It does so by:

- expanding the knowledge base on child labour in Myanmar;
- increasing awareness and knowledge about child labour;
- improving legislation and strengthening national and local capacity to address child labour in compliance with international standards;
- strengthening the capacity of national and local stakeholders to network and advocate on the issue; and
- reducing child labour in target communities through direct interventions.

My-PEC is the first project in Myanmar to specifically address child labour. Its pilot interventions at the village tract/ward level began in 2016, with the aim of increasing the participation in quality education of children at risk of becoming engaged in child labour and children already involved in child labour; increasing access to safe work for children above the minimum age for employment; and reducing the vulnerability of target households to child labour. Between 2016 and 2024, My-PEC has supported direct services for beneficiaries (children and their parents/guardians) in three pilot areas in the Ayeyarwady Region, Mon State and Yangon Region. These services intend to remove 40 per cent of children from the worst forms of child labour, and to prevent 60 per cent of at-risk children from becoming involved in child labour.

To date, specific activities undertaken by My-PEC include:

- supporting communities to cope with the COVID-19 pandemic;
- undertaking and sharing the results of an endline survey with partners and stakeholders;
- establishing and training community-based child labour watch groups to mainstream child labour concerns, instead of pursuing school-based mechanisms;
- implementing an awareness raising campaign on occupational safety and health (OSH);
- organizing and conducting training for local authorities and other relevant community stakeholders on OSH, age verification and monitoring;

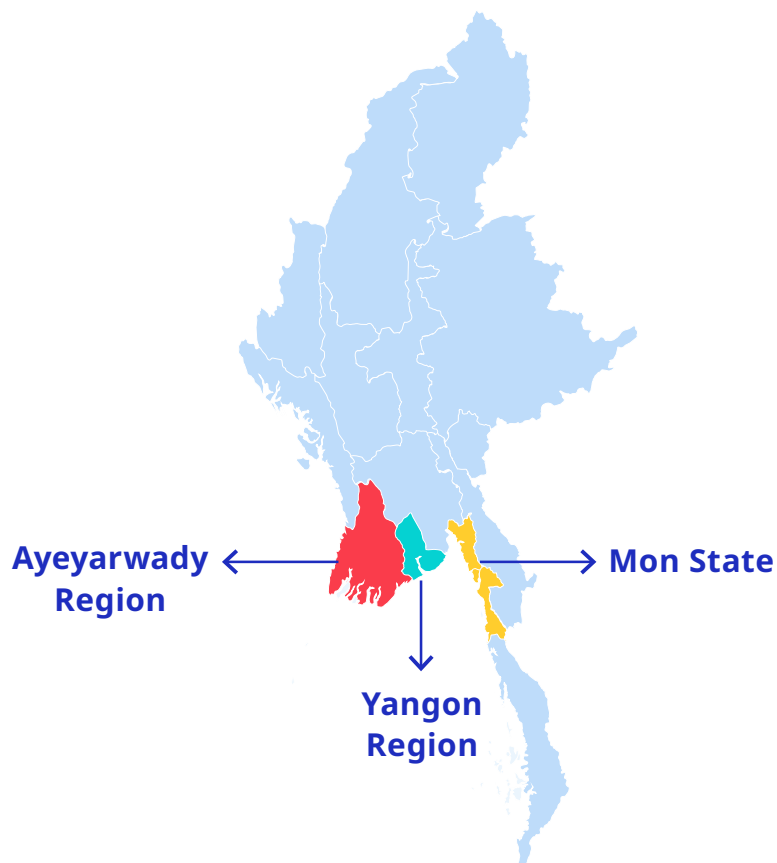
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<sup>15</sup> ILO, *Myanmar: Legal Review of National Laws and Regulations Related to Child Labour in Light of International Standards 2020: Executive Report*, 2022.

- conducting local economic development (LED) and value chain analysis (VCA) in the selected rural communities;
- delivering relevant skills training on production and quality management;
- establish marketing platforms to link producers to markets;
- assessing productivity and delivering training to enhance productivity;
- training beneficiaries on financial management;
- training community-based savings group on management systems;
- forming links with technical and vocational education and training (TVET) and entrepreneurship skills training providers; and
- covering the school fees and other school requirements for selected youths enrolled in TVET or entrepreneurship courses.

Once My-PEC's implementation ends, there will be a need for ongoing support in many areas. Nonetheless, many initiatives, such as support for the legislative review of child labour-related regulations, will remain valid until relevant legislation is changed. Furthermore, capacity building will remain sustainable as long as trained individuals continue to be involved in initiatives to combat child labour. Nevertheless, the "new reality" after the military takeover in 2021 threatens the sustainability of the results that My-PEC has achieved in light of rising inflation and job losses, security concerns, and decreased access to education.

► **Figure 1. My-PEC targeted pilot areas in Myanmar**





## ► 1.3. Objectives of this assessment

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This main objective of this assessment is to offer programming insights for the ILO by focusing on identified value chains. Specifically, this assessment:

- examines value chain options (agricultural and non-agricultural) for livelihood interventions, job pathways, and market access;
- undertakes market assessments of sectors/subsectors/value chains identified by an earlier assessment, and identifies emerging or potential economic opportunities in the pilot areas; and
- provides recommendations for adjustments of livelihood and TVET strategies in My-PEC intervention areas.

## ► 1.4. Scope and limitations of the assessment

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Since the study's approach was non-random selection, inferences about the population are unattainable. This study is further limited by the current uncertainty, which makes it challenging for data collectors to acquire respondents because of travel restrictions and security concerns as a result of the current ongoing conflict. Nevertheless, the project engaged with its implementing partners to gather data at the field level, prioritizing the trust and familiarity of the community. The implementing partners received training on data collection using KoBo and subsequently approached various respondents with questionnaires prepared by an international consultant. Due to security considerations regarding continual use of mobile phones and tablets in the community, partners opted to collect data using paper forms, which they later entered into KoBo database.





# Methodology

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Previous local economic development and value chain analyses conducted by My-PEC involved a thorough review of project documents, used My-PEC baseline data as a reference point, and employed a qualitative data collection methodology.<sup>16</sup> The primary data collected offered only a general overview of the villages analysed, given the difficulties of generating specific findings through a single large focus group discussion per village. Participants may have been hesitant to express their true personal opinions, especially if these differ from the views of other participants.

## ► 2.1. Shortlisting value chains

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Past studies by My-PEC<sup>17</sup> shortlisted and prioritized value chains by using a checklist based on My-PEC's objectives and partners' comments, taking into account the results of the situation analysis of selected value chains, and consultation with My-PEC's implementing partners, communities and beneficiaries in pilot areas. Specifically, the shortlisting of value chains was based on four strategic priorities:

- provide entry points and recommendations for livelihood interventions, job pathways and market access, including gender and accessibility inclusion;
- enable My-PEC to start upcoming pilot intervention phases, implementing a value chain upgrading strategy;
- produce a feasible local economic development plan for each pilot intervention to advance sustainable development in the area; and
- contribute to strengthening social dialogue.

The shortlisting also took into account alignment with local development priorities and national strategies, such as the Climate Change Strategy 2018–2030, climate-smart agriculture strategies, Myanmar's national economic policy and Myanmar's Sustainable Development Plan (MSDP) 2018–2030. The plan includes 14 goals, including raising the share of online financial transactions in the economy from 0.5 per cent in 2019 to 30 per cent by 2025, and increasing foreign direct investment (FDI) in digital industries from US\$6 billion to US\$12 billion over the same period.

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<sup>16</sup> ILO, *Opportunities to Leverage Income Generation in Marginalized Villages: Labutta and Ye Townships*, 2016; ILO, *Local Development Assessment in Dagon Seikkan Township, Myanmar*, 2017.

<sup>17</sup> See the two studies noted in the footnote above.

► **Table 1. Shortlisted value chains selected for further analysis**

My-PEC pilot areas	Selected value chains		
<b>Ayeyarwady Region</b>	Mud crab	Dried shrimp	Rice
<b>Mon State</b>	Rubber	Betel nut	Durian
<b>Yangon Region</b>	Pig farming	Street food	Home-based enterprises

## ► 2.2. Market analysis

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The assessment collected detailed data to select the top three value chains for each state or region, based on the value chains identified in the shortlisting process. The market analysis sought to answer the following questions:

- Who are the main competitors?
- What are the most important marketing channels?
- What are distribution channels exist, and where are the final markets?
- Who is adding value to the products?
- Are there market access options and opportunities with the international market, and what are the current linkages?

## ► 2.3. Primary data collection and analysis

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A desk review of available literature was conducted, and its findings combined with the findings of primary data collection and analysis. Primary data collection involved detailed market system research and analysis carried out for three priority value chains in each pilot region/state (nine value chains in total), with information gathered through a range of methods – a review of documents, a survey, and key informant discussions.

### 2.3.1. Studied areas

The assessment targets My-PEC’s pilot areas of Labutta Township in the Ayeyarwady Region, Ye Township in Mon State, and Dagon Seikkan Township in the Yangon Region.

#### 2.3.1.1. Ayeyarwady Region

Labutta Township is located at the southern tip of the Ayeyarwady Region. It faced significant devastation and loss of life during Cyclone Nargis in 2008. The township’s recovery, particularly in terms of rice production, has been challenging. The impacts of the cyclone have had a lasting effect on Labutta, and efforts to rebuild and regain economic stability are ongoing.<sup>18</sup>

<sup>18</sup> UN Habitat and UN Environment, *Climate Change Vulnerability Assessment of Labutta Township, Ayeyarwady Region, 2016 – 2050: Scenarios for Resilience Building*, 2016.

Due to its location in the delta region, Labutta Township is predominantly rural in nature. The primary industries for local population include agriculture, forestry and fishing. These sectors play a vital role in the livelihoods of residents, providing sustenance and income for many households.<sup>19</sup>

► **Table 2. Key statistics on Labutta Township, Ayeyarwady Region**

Total population	327,867
Male population	168,368 (51.3%)
Female population	159,499 (48.6%)
Urban population	32,695 (9.9%)
Number of wards and village tracts	10 wards and 65 village tracts, 505 villages
Number of households	77,234
Women-headed households	14.9% (2014 census)
Mean household size	4.2 persons
Literacy rate	96.5%
Persons with disabilities (seeing, hearing, walking, remembering)	8.1%
Unemployment rate	7%

**Source:** Myanmar, General Administration Department, *Township Profile: Labutta*, 2019.

### 2.3.1.2. Mon State

Ye Township is situated in southern Mon State, at the south-eastern tip of Myanmar, bordering Thailand. Ye town is located within the township and is bisected by the Ye River, which empties into the Gulf of Martaban, and encircled by the picturesque Tenasserim hills. The township's local economy is primarily dependent on betel nut cultivation, rubber production, fisheries and trade. These sectors contribute significantly to residents' livelihoods and play a crucial role in sustaining economic activity. Ye also benefits from its strategic location on the Mawlamyine-Dawei rail line and its seaport, which facilitate transportation and trade connectivity.

The majority of Ye's population are of ethnic Mon descent, and the township serves as an important centre for education in the Mon language and cultural preservation. Mon State has experienced high levels of out-migration, with many Mon-speaking people living in migrant communities in Thailand. The villages supported by My-PEC pilot interventions include majority ethnic Mon villages under the control of the New Mon State Party, as well as villages under the control of ethnic armed groups.

► **Table 3. Key statistics on Ye Township, Mon State**

Total population	274,673
Male population	137,091(49.9%)
Female population	137,582(50.1%)

<sup>19</sup> Myanmar, Ministry of Labour, Immigration and Population, *The 2014 Myanmar Population and Housing Census: Labutta Township Report, Ayeyarwady Region*, 2017.

Urban population	54,544 (19.8%)
Number of wards and village tracts	14 wards and 30 village tracts, 139 villages
Number of households	51,713
Women-headed households	21.3% (2014 census)
Mean household size	4.8 persons (2014 census)
Literacy rate	84.7%
Persons with disabilities (seeing, hearing, walking, remembering)	7.8% (2014 census)
Unemployment rate	5.8%

Source: Myanmar, General Administration Department, *Township Profile: Ye*, 2019.

### 2.3.1.3. Yangon Region

Dagon Seikkan Township is a vibrant and bustling area situated in the eastern central part of the Yangon Region. It shares borders with several neighbouring townships, including Hlegu to the north, South Dagon to the northwest, Thaketa to the southwest, and Thanlyin across the Bago River to the east and southeast.

Dagon Seikkan is an important hub within Yangon, facilitating trade and economic activities. Its proximity to the Bago River also provides access to water transportation, further enhancing its connectivity with surrounding areas. With its dynamic urban environment and favourable geographic location, Dagon Seikkan Township plays a significant role in the economic development and growth of Yangon.

► **Table 4. Key statistics on Dagon Seikkan Township, Yangon Region**

Total population	187,891
Male population	89,784 (47.8%)
Female population	98,107 (52.2%)
Urban population	171,225 (91.1%)
Number of wards and village tracts	35 wards and 4 village tracts, 5 villages
Number of households	49,558
Women-headed households	19.4% (2014 census)
Mean household size	4.2 persons (2014 census)
Literacy rate	95.5%
Persons with disabilities (seeing, hearing, walking, remembering)	3.3% (2014 census)
Unemployment rate	3.2%

Source: Myanmar, General Administration Department, *Township Profile: Dagon Seikkan*, 2019.

### 2.3.2. Sampling technique

While interviews with a total of 270 respondents were planned, only 249 respondents were ultimately interviewed, following their selection using a snowball sampling method. Snowball sampling, also known as chain referral sampling, is a popular business study method used to include unlicensed traders.<sup>20</sup>

Challenges encountered include the remoteness of certain target areas, monsoon seasonality, security situations and sanctions. In the Yangon Region, 100 per cent of the target sample respondents were interviewed, as were 91 per cent of the target in the Ayeyarwady Region and 85 per cent of the target in Mon State.

### 2.3.3. Recruiting and training enumerators

My-PEC recruited enumerators from among implementing agencies with previous experience of collecting baseline and endline data, and of direct beneficiary monitoring and reporting. They were overseen by a supervisor who directly communicated with My-PEC's Research Officer. The Research Officer conducted training for enumerator on data collection, the Kobo platform and questionnaires for different respondents.

### 2.3.4. Kobo collect/toolbox

Data collection for this assessment used the KoBo Toolbox,<sup>21</sup> a free, open-source programme for gathering data using mobile phones and tablets. Data was collected in the field using paper or computers, as well as mobile devices such as tablets or phones.

### 2.3.5. Data collection tools

The assessment used interview questionnaires as data collection tools to gather information on the following topics:

- the actors in the selected value chain and their roles;
- the positive outcomes that the value chains can have on local economic development in terms of employment creation, income generation and poverty reduction ; and
- the challenges that actors face in the selected value chains and in terms of local economic development.

### 2.3.6. Analysis technique

Descriptive statistics were used to summarize and describe the characteristics of survey respondents. Value chain mapping is usually the first activity in market system analysis. It explores important transactions and relationships in the flow of a product or service from raw materials through to final retail (and, in the case of circular economies, to re-use). This includes:

- the process by which a product or service goes through several stages until it reaches the end customer;

<sup>20</sup> QuestionPro, "Snowball Sampling: Definition, Method, Pros & Cons".

<sup>21</sup> See: KoboToolbox, "KoboToolbox".

- the key market actors, specifically businesses involved in core value chain transactions, as well as organizations that provide support services and set the rules (the government, banks, and associations, among others);
- the value addition that takes place as a result of each process;
- the different market channels through which a product or service reaches the final customer and the end market, the relevance of such channels for accessing new markets, and characteristics of these markets (such as its size, number of competitors and quality requirements); and
- relationships between actors in the core value chain and the characteristics of these relationships (such as whether these relationships are weak or strong, positive or negative, and power differences between actors).

For this assessment, value chain analyses involved four interconnected steps: data collection and desk research, value chain mapping, analysis of opportunities and constraints, and recommendations for future actions.







# 3

## Key findings

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### ► 3.1. Characteristics of respondents

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This section focuses on data collected from primary sources. Of the respondents surveyed, 56.5 per cent are women and 43.5 per cent are men. In terms of marital status, 84 per cent of respondents are married, 8.5 per cent are widowed, and 7.3 per cent are single (see the table below). The average family size is 5.38 household members in Ayeyarwady, 4.39 members in Mon and 4.65 members in Yangon. In all three locations, respondents in the 15 –54-year-old age group predominate.

► **Table 5. Sampled respondents across regions/states**

Region/state	Categories	Number	Percentage
Ayeyarwady Region	Customers	21	25.6
	Wholesalers	13	15.9
	Retailers	17	20.7
	Collectors	10	12.2
	Local producers	21	25.6
	Total	82	100
Mon State	Customers	14	18.2
	Wholesalers	8	9.4
	Retailers	15	19.5
	Collectors	9	11.7
	Local producers	31	40.3
	Total	77	99.1
Yangon Region	Customers	62	68.9
	Wholesalers	1	1.1
	Retailers	14	15.6
	Collectors	3	3.3
	Local producers	10	11.1
	Total	90	100

**Source:** Survey conducted for this assessment, 2023.

► **Table 6. Demographic characteristics of sampled respondents, by sex and marital status**

Region/state	Characteristics	Categories	Number	Percentage
Ayeyarwady Region	Sex	Male	55	67.1
		Female	27	32.9
	Marital status	Married	73	89
		Single	5	6.1
		Widowed	4	4.9
Mon State	Sex	Male	28	36.4
		Female	49	63.6
	Marital status	Married	72	93.5
		Single	2	2.6
		Widowed	3	3.9
Yangon Region	Sex	Male	28	28.1
		Female	62	71.9
	Marital status	Married	64	71.9
		Single	12	12.4
		Widowed	14	15.7

**Source:** Survey conducted for this assessment, 2023.

Analysing the dependency ratio<sup>22</sup> of the respondents surveyed reveals that the mean dependency ratio for youth is higher than the dependency ratio of the elderly in all three areas. The highest youth dependency ratio is found in Ayeyarwady (53 per cent), followed by Mon (27 per cent) and Yangon (25 per cent), as shown in the table below.

A high dependency ratio indicates that the economically active population and the overall economy face a greater burden of supporting and providing the social services required by children and by older persons, who are often economically dependent. A high youth dependency ratio implies that higher investments need to be made in schooling and childcare.

► **Table 7. Demographic characteristics of sampled respondents, by age, family size, youth and old-age dependency ratio**

Region/state	Category	Number	Maximum	Mean	Standard deviation
Ayeyarwady Region	<15 years old	70	5	1.79	1.31
	15–24 years old	73	4	1.30	1.13
	25–54 years old	77	6	1.75	0.81
	>55 years old	75	3	0.77	0.82
	Total family size	63	12	5.38	2.35
	Youth dependency ratio	63	100	53	38
	Old-age dependency ratio	66	67	15	19

Region/state	Category	Number	Maximum	Mean	Standard deviation
Mon State	<15 years old	25	3	0.64	0.86
	15–24 years old	24	2	0.63	0.65
	25–54 years old	24	6	2.21	1.41
	>55 years old	27	3	0.81	1.08
	Total family size	23	7	4.39	1.31
	Youth dependency ratio	24	100	27	43
	Old-age dependency ratio	26	100	22	32
Yangon Region	<15 years old	90	4	0.76	0.90
	15–24 years old	85	4	0.95	1.02
	25–54 years old	90	45	2.34	4.61
	>55 years old	90	2	0.61	0.75
	Total family size	85	49	4.65	5.08
	Youth dependency ratio	86	100	25	36
	Old-age dependency ratio	86	100	17	23

Source: Survey conducted for this assessment, 2023.

In a similar vein, an assessment on child labour by the ILO in 2023 also found that the Ayeyarwady Region had a higher percentage of surveyed children engaged in child labour (11.5 per cent) than Kayin State (6.9 per cent) and the Yangon Region (7.6 per cent).<sup>23</sup>

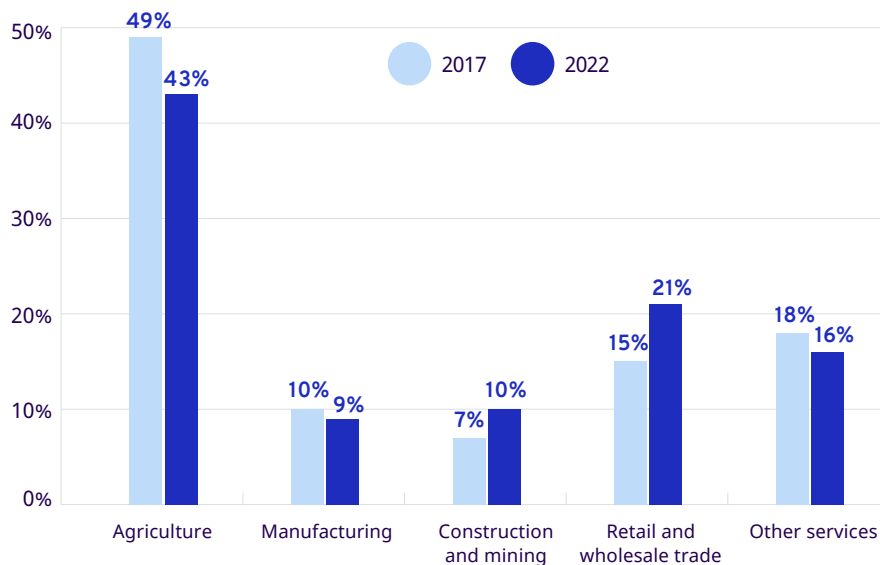
In terms of response categories, in this assessment “customers” account for 26 per cent of respondents surveyed in Ayeyarwady, 18 per cent of respondents in Mon, and 69 per cent of respondents in Yangon. Local producers account for 26 per cent of respondents in Ayeyarwady, 40 per cent of respondents in Mon, and 11 per cent of respondents in Yangon. Collectors represent 12 per cent of respondents in Ayeyarwady, 12 per cent of respondents in Mon and 3 per cent of respondents in Yangon (see table 5, above).

## ► 3.2. Livelihood dynamics

According to the World Bank, there has been a six percentage point drop in the share of persons employed in agriculture in Myanmar between 2017 and 2022. The decrease in employment in the “lower productivity” sector of agriculture this largely been mainly offset by a shift towards retail and wholesale trade, which are also often associated with low levels of value addition. Employment in other business services, which typically involve higher production levels, have also decreased (see figure 2).

<sup>23</sup> ILO, *Assessment of Child Labour in the Yangon Region, Ayeyarwady Region and Kayin State*, 2023.

►Figure 2. Employment shares by sector, 2017 vs 2022 (%)



Source: World Bank, *Myanmar Economic Monitor: A Fragile Recovery*, 2023.

Between 2017 and 2023, highly educated workers in Myanmar shifted towards less productive activities. The percentage of workers with a high school or college education employed in agriculture rose from 7.7 per cent to 17.9 per cent over this period, while their representation in non-retail services decreased from 56.4 per cent to 43.4 per cent.<sup>24</sup>

Agriculture has seen a shift in the number of workers with less than a primary level of education. Many such workers have moved from agriculture towards the mining, retail and service sectors. Workers of all educational levels indicate that they would prefer to move into the retail sector. The two main causes of this trend are two significant shocks that followed the COVID-19 pandemic – namely, high energy costs, as well as violence and conflict following the military takeover in 2021.<sup>25</sup>

Since the takeover, the digitalization of retail businesses has gained pace. Myanmar’s young tech-savvy population and expanding middle class consumer base are driving sales in the retail sector. Jobs in the private sector jobs decreased by 12 per cent between 2017 and 2022, indicating a shortage of private sector employment opportunities in Myanmar.<sup>26</sup> Real wages have decreased by 15 per cent as a result, with lower salaries reported in every region over the same period. The COVID-19 pandemic and military takeover are likely causing a reversal of structural transformation.

Between 2017 and 2022, women’s employment rate declined significantly in the Ayeyarwady Region (by 9 per cent) and Yangon (by 6 per cent). The employment rate of men in Ayeyarwady also declined over this period (by 5 per cent), but increased slightly (by 1 per cent) in Mon State.<sup>27</sup> A substantial gap between women’s and men’s labour force participation rates is linked to a lack of gender parity in enrolment at the primary and secondary school levels,<sup>28</sup> social norms, and discrimination limiting the opportunities available to women.<sup>29</sup>

<sup>24</sup> Sutirtha Sinha, *A Growing Crisis: Work, Workers, and Wellbeing in Myanmar* (World Bank, 2023).

<sup>25</sup> Sutirtha Sinha, *A Growing Crisis: Work, Workers, and Wellbeing in Myanmar* (World Bank, 2023).

<sup>26</sup> Sutirtha Sinha Roy, “Reversal of Hard-won Gains: Conflict and Structural Transformation in Myanmar”, *World Bank Blogs* (blog), 13 September 2023.

<sup>27</sup> World Bank, *Myanmar Economic Monitor: A Fragile Recovery*, 2023.

<sup>28</sup> Asian Development Bank, *Gender Equality and Women’s Rights in Myanmar: A Situation Analysis*, 2016.

<sup>29</sup> Gustavo Nicolas Paez and Myat Su Tin, “Gender-based Differences in Myanmar’s Labour Force”, *World Development Perspectives* 21 (2021): 100299.

The World Bank also reports a slight variation in employment rates between rural and urban areas (see the table below). Between 2017 and 2022, the employment rate has declined at a slightly higher rate in rural areas than in urban areas of the Ayeyarwady and Yangon Regions. The opposite is true in Mon State.

► **Table 8. Changes in employment rates by state/region, sex, urban/rural location and education level, 2017–2022 (%)**

Region/state	Sex (%)		Location (%)		Education (%)	
	Male	Female	Rural	Urban	Less than middle school	Above middle school
Ayeyarwady Region	-5.0	-9	-8	-7	-9	0
Mon State	1.0	3	4	-1	1	6
Yangon Region	1	-6	-4	-3	-8	3

Source: World Bank, *Myanmar Economic Monitor: A Fragile Recovery*, 2023.

## ► 3.3. Calculating the market margin

The “market margin” is the percentage of the final weighted average selling price taken by each stage of the marketing chain. That is, it is the difference between what consumers pay for a product, and what producers receive for their product.<sup>30</sup> Marketing margin analysis focuses on the share of the final selling price that a certain agent in the market chain can obtain. Estimating the market margins helps to analyse the performance of the selected market.

## ► 3.4. Characteristics of selected value chains

The following value chains were selected as the top priorities by the shortlisting and prioritization process. A thorough analysis of each value chain, and recommendations for My-PEC, are provided in the subsections below.

### 3.4.1. Selected value chains in the Ayeyarwady Region

#### 3.4.1.1. Rice value chain

Rice is a staple crop in Myanmar, grown over more than 8 million hectares, equivalent to 64 per cent of the country’s arable area. Rice farming is practiced by at least 5 million rural households, and up to 154 kilogrammes of rice are consumed annually per person in rural Myanmar.<sup>31</sup> The United States Department of Agriculture (USDA) projects that Myanmar will produce 11.95 million metric tonnes of rice on a milled basis in the 2023/24 marketing year.

<sup>30</sup> Vincent Abankwah, R Aidoo and B Tweneboah-Koduah, “Margins and Economic Viability of Fresh Coconut Marketing in the Kumasi Metropolis of Ghana”, *Journal of Development and Agricultural Economics* 2, No. 12 (2010): 432–440.

<sup>31</sup> Rona Niña Mae Rojas-Azucena and Grant Singleton, “Rice: The Pulse of Life in Myanmar”, *Rice Today*, 2 June 2017.

This represents an increase of 1 per cent over the previous year.<sup>32</sup> The expected harvested area has increased by 1 per cent from the previous year to 6.86 million hectares, with projected yields of 2.72 tonnes per hectare, somewhat higher than the previous year. Overall, USDA estimates that Myanmar produces 2.3 per cent of the world's rice.

Myanmar has considerable land and water potential, but its rice growers are far behind those in neighbouring Asian countries. The verdant Ayeyarwady Delta yields just half of the rice harvests along Viet Nam's Mekong Delta.<sup>33</sup> Rice is cultivated by farmers throughout the monsoon season, but during the dry season, only about one-third of farmers plant rice, while the rest grow pulses. The possibility exists of increasing land allocated for rice production. Three regions – Bago, Yangon and Ayeyarwady – produce 45 per cent of Myanmar's monsoon season rice and 69 per cent of its summer rice.<sup>34</sup> Fertilizer, labour and mechanization costs – all important inputs in paddy production – rose by an average of 13 to 21 percent throughout both growing seasons. Farmers' paddy prices rose by 68 per cent, and the real profits of paddy rice farming increased by 41 per cent in 2023 compared to 2022, despite nominal profits increasing by 70 per cent. However, high price inflation reduced the actual profit increase.<sup>35</sup>

Based on data from the United States Department of Agriculture, Myanmar is the fifth-largest rice exporter in the world, with annual sales of over 2 million metric tonnes. As global supplies of the staple become scarcer, Myanmar temporarily limited its exports of rice in order to manage growing local costs.<sup>36</sup> India is now the world's largest exporter of rice.<sup>37</sup>

With the financial assistance of millers, collectors purchase rice paddies from farmers. Once the paddy has been ground into rice, the millers pay the main collectors a charge. Various value-adding tasks are performed by millers, including packing, grading, processing and transportation. After storing rice, millers primarily supply rice to wholesalers. Thereafter, distributors ship the rice to merchants who supply local customers or exporters, with the latter supplying customers abroad.

In Myanmar's rice value chain, rice mills are the most crucial connection between farmers and customers. Since rice mills purchase paddies from farmers and transform them into rice, any significant disruptions to rice mills have an impact on both urban and rural consumers.

According to the findings of this assessment, the total gross rice marketing margin for wholesalers is 21.88 per cent, which is the difference between the wholesale prices per unit of rice at the farm level. The gross marketing margin for retailers is 6.25 per cent, which is the difference between the retail price per unit of rice at the farm level.

<sup>32</sup> United States Department of Agriculture, *Burma Rice: Situational Overview 2023/24 Wet Season Crop*, 2023.

<sup>33</sup> Lower Mekong Food Security Database, "Rice: The Pulse of Life in Myanmar".

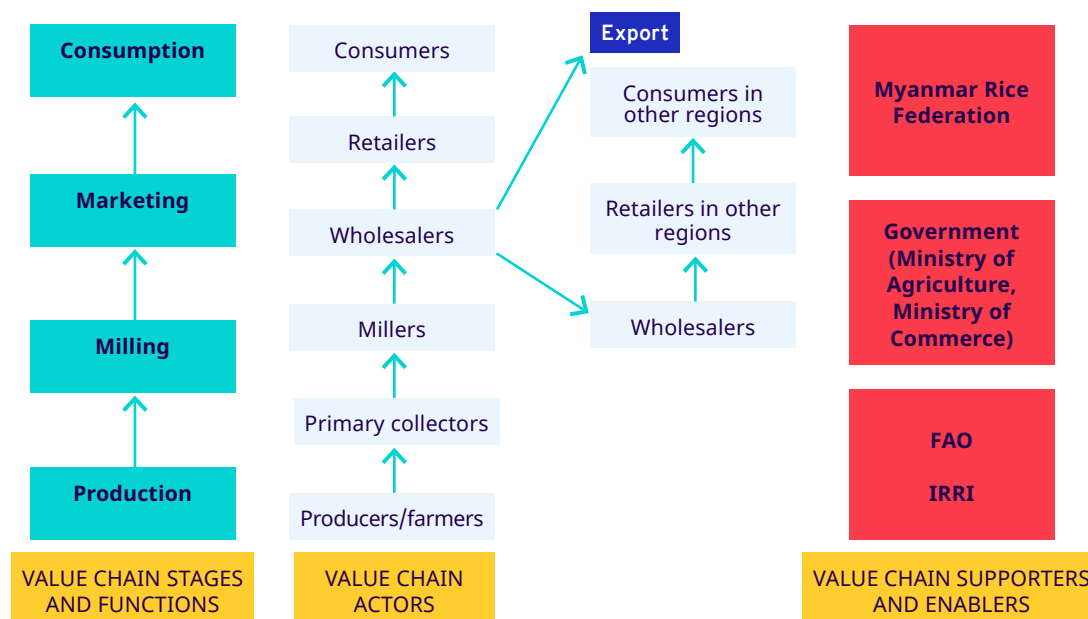
<sup>34</sup> Joseph Goeb et al., "Food Prices, Processing, and Shocks: Evidence from Rice and COVID-19", *Journal of Agricultural Economics* 73, No. 2 (2022): 338–355.

<sup>35</sup> International Food Policy Research Institute, *Rice Productivity in Myanmar: Assessment of the 2023 Dry Season*, 2023.

<sup>36</sup> "Myanmar Plans to Curb Rice Exports to Control Domestic Prices", *Reuters*, 24 August 2023.

<sup>37</sup> "Myanmar Plans to Curb Rice Exports to Control Domestic Prices", *Reuters*, 24 August 2023.

► Figure 3. Mapping of the rice value chain



In 2012, the Myanmar Rice Industry Association was reorganized and upgraded to become the Myanmar Rice Federation (MRF), a federation operating at the national level. The federation represents private enterprises in Myanmar’s rice sector, and cooperates and coordinates with stakeholders – such as with legislative organizations, committees and commissions, political parties, the media, and local and international organizations – on the sector’s development

### Child labour in the rice value chain

Of all children engaged in child labour, approximately 61 per cent work in agriculture.<sup>38</sup> Child labour is also often used in the construction industry and other small-scale sectors. A little more than half of these children perform work that could be dangerous to their physical or mental well-being.<sup>39</sup> Of the youth workforce exposed to dangerous jobs, 74.6 per cent are as young as 15 or 17 years old.<sup>40</sup> There have been claims of forced labour in Myanmar’s rice sector involving children as young as 9 years old. Children and other villagers are also reportedly forced to labour in military camps cultivating and harvesting rice, according to NGOs.<sup>41</sup>

### Major challenges and constraints

► The output of rice growers is hampered by labour shortages and traditional cultivation practices. In Myanmar’s dry zone, post-harvest losses may reach 20 per cent, principally during handling and storing, according to research by the United Nations Development Programme (UNDP).<sup>42</sup> Compared to a mechanized value chain, post-harvest losses are greater in traditional manual chains.<sup>43</sup> Postharvest technologies have been overlooked by agricultural extension services.

<sup>38</sup> ILO, “Child Labour in Myanmar”.

<sup>39</sup> ILO, “Child Labour in Myanmar”.

<sup>40</sup> Marissa Pekular, “Child Labor in Myanmar”, *Borgen Project* (blog), 30 June 2019.

<sup>41</sup> United States Bureau of International Labor Affairs, “List of Goods Produced by Child Labor or Forced Labor: Burma – Rice”.

<sup>42</sup> UNDP, “Press Release on Enhancing Food Security through Improved Post-Harvest Practice in the Dry Zone of Myanmar”, 6 June 2018.

<sup>43</sup> Martin Gummert et al., “Assessment of Post-harvest Losses and Carbon Footprint in Intensive Lowland Rice Production in Myanmar”, *Scientific Reports* 10 (2020): 19797.



- The World Bank’s Firm Survey shows that agricultural firms in Myanmar, including rice millers, are operating at 67 per cent capacity. Challenges include conflict, foreign exchange difficulties, power outages and reduced sales.<sup>44</sup>
- Due to a lack of both horizontal and vertical cooperation in the rice value chain, market knowledge is highly fragmented across actors.
- The infrastructure used by rice millers is antiquated and insufficient. Millers’ activities are significantly hindered by frequent power interruptions during the milling process, which prevents them from boosting their production.
- The desk research reveals that some banks indicate the maximum amount they can lend to farmers (1,500,000 Myanmar kyats) is restricted by official rules. However, although the Myanmar Agricultural Development Bank (MADB) has established this cap as a policy for its own lending, commercial banks are exempt from this restriction. Microfinance institutions (MFIs) are unable to provide the kind of financing that larger farmers, crop dealers, aggregators and processors need because their regulator has established a low maximum loan amount (5 million kyats) for borrowers. As a result, these borrowers are unable to get involved in value chain finance agreements.
- Exporters encounter distinct financial constraints in their global interactions, such as challenges to conducting international financial transactions and elevated interest rates at local banks relative to those at foreign banks.
- A primary impediment preventing this assessment’s respondents in the Ayeyarwady Region’s rice value chain from operating more effectively is a lack of financial resources, specifically credit or working capital.

## Recommendations for My-PEC

► **Table 9. Recommended activities for My-PEC in the rice value chain**

Activity	Target group			Absorption capacity of the value chain (low, medium, high)	Support required from My-PEC and other partners		
	Youth	Women	Men		Training needed	Financial/in-kind support needed	Local training providers
Support vulnerable small-scale producers to increase their productivity	√			High (My-PEC can train more than 1,000 vulnerable farmers)	Training on reducing post-harvest losses  Training on improved rice production technologies and practices	Improved paddy varieties	Local trainers from civil society organizations (CSOs) and NGOs

<sup>44</sup> World Bank, *Myanmar Firm Monitoring Survey: Round 14 – Results from Myanmar Firm Monitoring December 2022 Survey*, 2023.

Activity	Target group			Absorption capacity of the value chain (low, medium, high)	Support required from My-PEC and other partners		
	Youth	Women	Men		Training needed	Financial/in-kind support needed	Local training providers
Support contractual farming (youth groups)*	√			Medium (This support can be piloted with 100 members/20 groups)	Training on food vending business  Training on business startups	Initial working capital (100,000 kyats per hectare)	CSOs; Business Eye Opener (BEO) trainers

**Note:** \*Optional, as the costs of transporting inputs and outputs are high.

### 3.4.1.2. Dried shrimp

Although they belong to different groups of crustaceans, shrimp and prawns have almost the same taste, but differ in size and physical characteristics. Major contributors to the shrimp market in Asia include Bangladesh, China, India, Indonesia, Myanmar, Philippines and Viet Nam. Prawns are the most valuable fishery product in the global trade, with the United States of America, the European Union and Japan being the three largest markets.<sup>45</sup> Statistics compiled by the Food and Agriculture Organization of the United Nations (FAO) show that Myanmar ranked 13th globally in 2018 among major fishery producers, accounting for 1.77 per cent of global production.<sup>46</sup>

The shrimp subsector represents approximately 6 per cent of total aquaculture production in Myanmar.<sup>47</sup> Given its abundant resources, and as its produce is organic and free of genetic modification, fishery exports to the United States of America, the European Union, Japan and Southeast Asia are in demand, including shrimp exports. Myanmar has considerable potential to boost shrimp yields through aquaculture. To date, however, this has been prevented by a complex regulatory framework, inadequate capital inputs, antiquated technology, a shortage of skilled labour, a lack of knowledge of the variables affecting foreign markets, and a fragmented industry structure.

The pandemic has also had a particularly severe impact on fishery livelihoods, including of persons engaged in processing shrimp paste and dried shrimp. This is largely due to low demand, a shortage of the main raw material (shrimp fries), a decline in orders, and labour shortages. According to the respondents surveyed for this assessment, the production of dried shrimp has dropped by at least 50 per cent relative to usual levels.

Dried shrimp are shrimp that have been sun-dried with salt from seawater until they are as small as a thumbnail. In Myanmar's cuisine, dried shrimp, known as *bazun-chauk*, is frequently used as an ingredient in salads, soups and condiments. Most persons engaged in the shrimp drying industry are women and young people, with significant participation rates of ethnic and religious minority groups. Men tend to work in more physically demanding roles, such as fishing. They also engage in trade and control collection activities. Women work in and manage value-added processing, gather dried shrimp and engage in trading, especially at the retail level. Therefore, the growth and development of small and medium-sized enterprise (SMEs) would be advantageous for both men and women, especially in terms of the creation of seasonal jobs at the fisher/processor level.

<sup>45</sup> Aye Chan, "Prawns and Shrimp in Myanmar – A Tasteful Treasure", *Myanmar Insider Group*, 6 January 2016.

<sup>46</sup> FAO, *World Food and Agriculture – Statistical Yearbook 2020*, 2020.

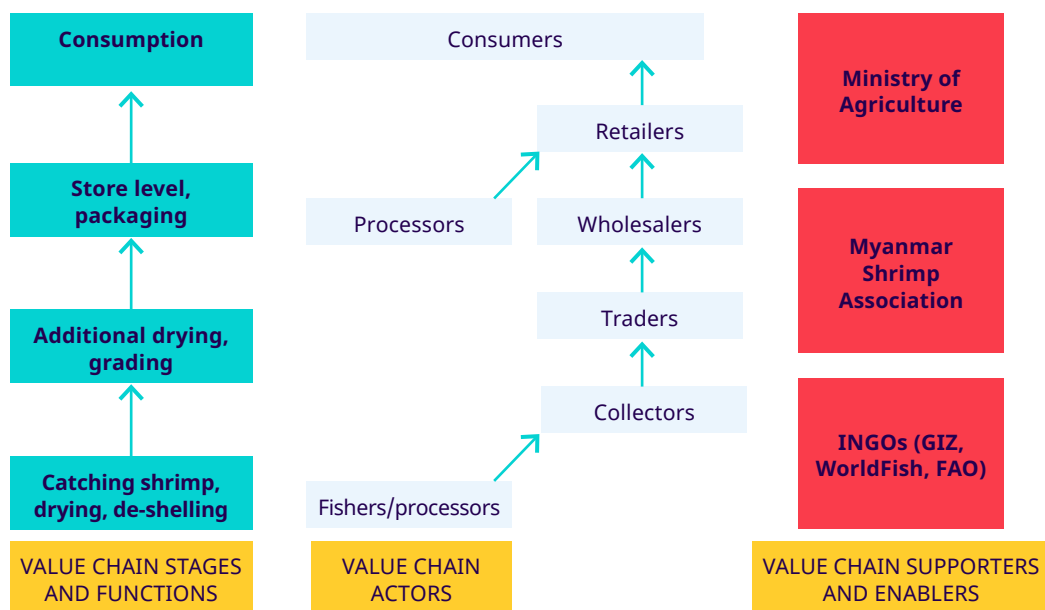
<sup>47</sup> USAID, *Rapid Market Assessment of Aquaculture Sector in Myanmar*, 2021.

There is a potential for increasing the employability of women, youth and vulnerable groups by:

- strengthening their sorting, sizing and packaging skills required for cold storage and post-harvest processing;
- supporting hatchery operations that require feeding and sorting abilities, monitoring and checking salinity levels, as well as shrimp drying and packing skills; and
- processing shrimp and prawns into finished products, such as shrimp paste or shrimp crackers, involving drying and canning.

The overall gross dried shrimp marketing margin for wholesalers – that is, the difference between wholesale pricing per unit of shrimp at the fisher/processor level – is 20 per cent, based on the results of the survey conducted for this assessment. The difference between retailer pricing per unit of dried shrimp at the processor level, and the gross marketing margin for the retailer, is 6.67 per cent.

►Figure 4. Mapping of the dried shrimp value chain



### Child labour in the shrimp value chain

Research indicates that, following the implementation of COVID-related school suspensions, children were more involved in shrimp drying, often serving as their parents' aides or assistants.<sup>48</sup>

### Major challenges and constraints

- The biggest challenge in the shrimp subsector exists at the earliest stage of the value chain: ensuring a sufficient supply of shrimp seed. According to the Myanmar Shrimp Association, there are only about seven shrimp hatcheries in the country, five for freshwater aquaculture and two for coastal aquaculture.
- The use of mangroves for charcoal production and mining, contaminating potentially lucrative shrimp culture sites and the habitat of post-larvae shrimp, contributes to diminishing output.

<sup>48</sup> Peter Bellen, *Post-COVID Recovery of Rakhine State's Shrimp Sector* (Mercy Corps, 2021).

- The giant river prawn has been identified as the most promising species for increased production. There is a need for support by the de facto authorities for shrimp farmers, at least for non-recurring expenses, including facilitating the construction of much needed storehouses, dykes and gates, and providing funding or subsidizing purchases of equipment such as pumps, aerators, shutters, screens, nets and traps.
- No standardized quality checks and controls have been put in place in the shrimp subsector. Regular quality testing and systematic controls need are also required for shrimp sent to domestic markets. At present, the Department of Fisheries inspects and carries out laboratory tests on export produce before certifying it.
- Another challenge is the limited involvement of NGOs and the private sector in generating funds desperately needed to improve the shrimp industry with a view to increasing exports which, in turn, would bring in foreign exchange earnings.

## Recommendations for My-PEC

► **Table 10. Recommended activities for My-PEC in the dried shrimp value chain**

Activity	Target group			Absorption capacity of the value chain (low, medium, high)	Support required from My-PEC		
	Youth	Women	Men		Training needed	Financial support needed	Local training providers
Support vulnerable groups with sorting, sizing, and packaging dried shrimp	√	√		Medium (My-PEC can train more than 100 members of vulnerable groups)	Skills training on cold storage and post-harvest processing  Skills training on hatchery operations that require feeding and sorting abilities  Training on processing shrimp/prawns into finished products such as shrimp paste, shrimp crackers, including skills related to drying, canning, etc.	Initial business startup financial support (100,000 kyats per group with 5 members)*	Local trainers, CSOs

Note: \*This amount is estimated based on current My-PEC support.

### 3.4.1.3. Mud crab value chain

Myanmar is the largest producer and distributor of soft-shell crabs in the world.<sup>49</sup> Soft-shell crab production has been receiving considerable interest from aquaculture producers, as soft-shell crabs fetch a higher price, almost twice the price commanded by mud crabs.

<sup>49</sup> USAID, *Rapid Market Assessment of Aquaculture Sector in Myanmar*, 2021.

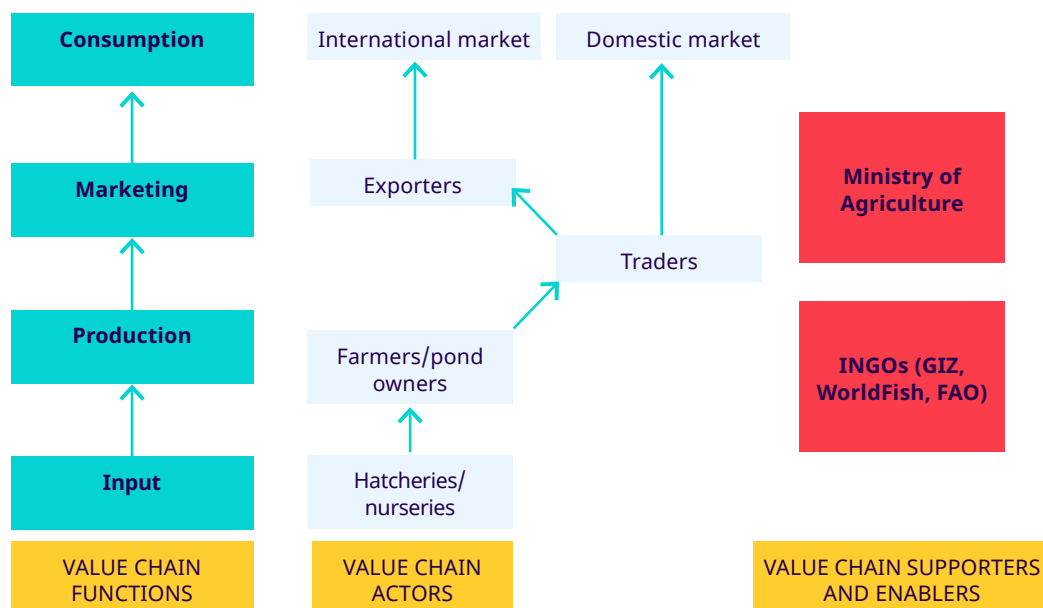
Landless households – in some communities, up to 70 per cent of households in the lower delta of the Ayeyarwady Region – rely heavily on catching mud crabs and shrimp from mangrove forests.<sup>50</sup> Mud crab farming is regarded as less vulnerable to water quality degradation and the effects of climate change.<sup>51</sup> Mangrove restoration can be combined with crab aquaculture as an environmentally-friendly approach.

Two types of mud crab culture have been distinguished in the Ayeyarwady Delta: aggressive aquaculture, or fattening, and extensive aquaculture, or grow-out.<sup>52</sup> Additionally, farming practices for rice fisheries, silvo fisheries, poly cultures and monocultures have been observed. Although rice and fish culture have been observed since the middle of the 1990s, the method has gained popularity only recently. In 2003, to supply 2,200 acres of paddy fields with 2.75 million fish juveniles, the Department of Fisheries undertook a pilot programme.

Fattening practices can be developed with or without mangrove trees. However, developing crab fattening practices together with mangrove cultivation is recommended, in order to obtain a greater degree of integration between mangrove ecosystem services and aquaculture practices. Most mud crabs in Myanmar are exported and sold to large domestic hotels and restaurants. Exporters are reported to reside in the capital, most of whom are private agents who run their trades with joint ownership.

This assessment’s findings indicate that the wholesale pricing differential per unit at the level of mud crab fishers, or the overall gross marketing margin, is 11 per cent for wholesalers. At the fisher level, retailers establish the price per unit of mud crabs, although their gross marketing margin is 15.7 per cent. Major concerns include low prices paid by buyers, often linked to costly transportation expenses and market disruptions when collectors stop purchasing from fishers. These disruptions are more likely to be related to climatic conditions, pandemics or political situations than to a saturated market.

► **Figure 5. Mapping of the mud crab value chain**



<sup>50</sup> Sang Phan et al., *Economic Appraisal of Ayeyarwady Delta Mangrove Forests* (Global Green Growth Institute, 2020)

<sup>51</sup> Manzura Khan Carina van Weelden, *Hatchery-based Mud Crab Production at BFRI Paikgacha Station, Bangladesh: Experiences, Lessons Learnt and Way Forward* (GIZ, 2017).

<sup>52</sup> Khin Yadanar Oo, “Small-scale Mud Crab Fishery of Ayeyarwady Delta: A Case Study of Bogalay Township” (MSc thesis, Asian Institute of Technology School of Environment, Resources and Development, 2014).

## Child labour in the mud crab value chain

Children involved in the mud crab value chain tend to work on fishing boats for family members, sorting seafood, selling the catch in their villages, gathering crabs, or hauling loads of fresh or processed mud crabs. According to past ILO research, children involved in fisheries are exposed to some level of danger.<sup>53</sup> Many children work in intense heat or cold, during storms, in strong currents and tides, near disease-carrying insects and poisonous snakes, and with potentially harmful equipment, such as knives, fish hooks and boat motors. While children involved in family fishing operations frequently sleep on riverbanks, children employed by seafood brokers and fish farms have been observed sleeping at these facilities.

## Major challenges and constraints

- In most coastal villages in Myanmar, there is no public fisheries extension system at all, despite the Department of Fisheries' recent partnerships with development organizations and regional associations to establish three fishery training centres in Ayeyarwady, Sagaing and Yangon.<sup>54</sup>
- Catching crabs involves hazards and difficulties, such as coming into contact with bacteria that can cause gastric-related disease, notably among women.
- Declining stocks of the most commercial fish species is an especially important constraint, followed by challenges related to buying, maintaining and replacing damaged mud crab traps.
- The number of hatcheries is insufficient to produce sustainable seeds.
- Challenges are also caused by unsustainable harvesting practices, such as catching young, female or egg-bearing crabs from their native habitats, as well as the illegal export trade of tiny crabs which weigh less than 100 grams.
- Other challenges include inadequate product management training, a lack of access to finance from formal sources, and a reliance on prices set by traders.

## Recommendations for My-PEC

► **Table 11. Recommended activities for My-PEC in the mud crab value chain**

Activity	Target group			Absorption capacity of the value chain (low, medium, high)	Support required from My-PEC		
	Youth	Women	Men		Training needed	Financial support needed	Local training providers
Support women, landless persons and poor villagers	√	√	√	Medium (My-PEC can train more than 300 vulnerable groups)	Training on preventing and ending the unsustainable harvesting of crabs (young, female or egg-bearing crabs) from their native habitats		Local trainers, Myanmar Fisheries Federation

<sup>53</sup> ILO, *Agricultural Sub-Sector Child Labour Surveys: Children Working in the Cultivation and Processing of Inland Fishing Stocks, Sugarcane, and Beans and Pulses in Myanmar*, 2017.

<sup>54</sup> Sara Imbach, "Assessing the Potential of the Mud Crab Value Chain as a Sustainable Livelihood Option in the Gulf of Mottama, Myanmar" (MSc thesis, Bern University of Applied Sciences, 2022).

Activity	Target group			Absorption capacity of the value chain (low, medium, high)	Support required from My-PEC		
	Youth	Women	Men		Training needed	Financial support needed	Local training providers
(continued)	✓	✓	✓		Technical training on hatcheries to produce sustainable seeds  Training on handling and transportation techniques  Training on maintaining and replacing damaged mud crab traps		

## 3.4.2. Selected value chains in Mon State

### 3.4.2.1. Rubber value chain

Myanmar’s annual rubber production is estimated at around 300,000 tonnes.<sup>55</sup> The southern part of Myanmar, including Mon State, Taninthayi Division, and Kayin State, are major locations for rubber resources. Mon State accounts for about 30 per cent of Myanmar’s rubber plantation area and, each year, the state produces over 100,000 tonnes of rubber, accounting for up to 49 per cent of the country’s total rubber production.<sup>56</sup> A significant portion of the rubber produced in Myanmar is exported. As of November 2023 during the 2023/24 financial year, Myanmar exported over 94,435 tonnes of rubber with an estimated value of US\$116.79 million. Approximately 70 per cent of the rubber produced in Myanmar is exported to China, while other export destinations include Singapore, Indonesia, Malaysia, Vietnam, the Republic of Korea, India and Japan.<sup>57</sup>

In 2006, the military regime launched a rubber planting campaign, forming the Department of Industrial Crop Department (DICD) to grant land concessions to private Myanmar companies. The 30-year Master Plan allocated nearly 2 million acres to 204 companies, targeting the Chinese market in a bid to increase exports. Private Chinese companies, including Gaoshen Group, Yunnan Hongyu Group and Dongfeng Tianyu Co. Ltd, have significantly impacted rubber production in northeast Myanmar, leading to a significant shift in export destinations.<sup>58</sup>

Large-scale land concession programmes for rubber plantations, without focusing on the sustainable development of an efficient rubber value chain, would have devastating consequences. It would yield “loss-loss” in all aspects of economic, social and environmental degradation. To prevent this, it is important for Myanmar to learn from its southern neighbours in terms of developing a sustainable pathway for rubber value chain development.

<sup>55</sup> Nyein Nyein, “Myanmar Exports 76,000+ Tonnes of Rubber Worth US\$94 mln in 5 Months”, *The Global New Light of Myanmar*, 31 October 2023.

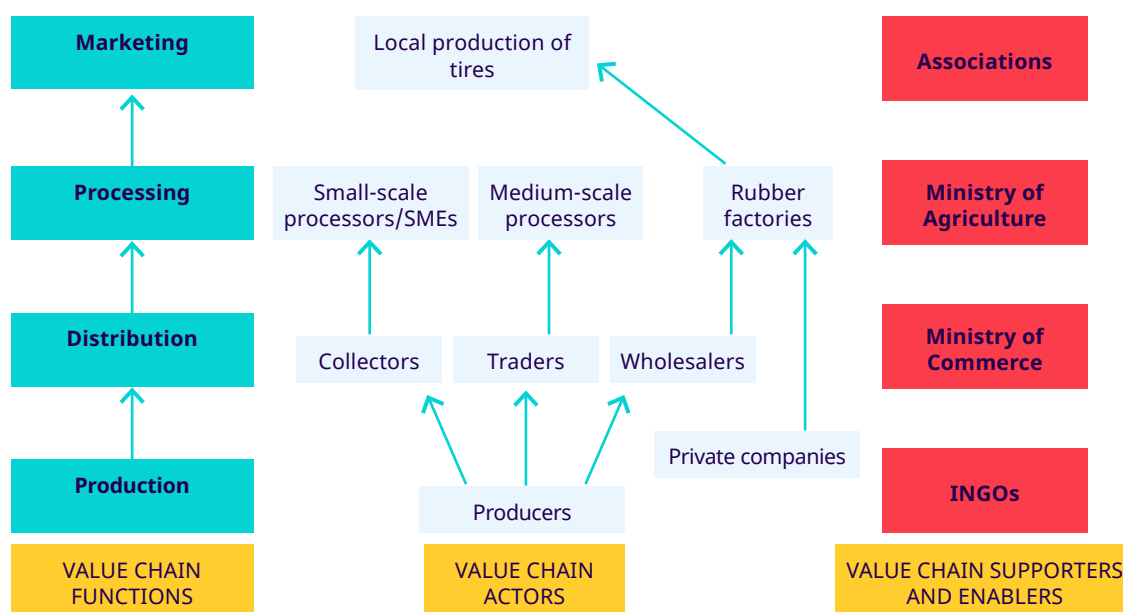
<sup>56</sup> “Export Demand for High-quality Rubber Increases”, *Independent Mon News Agency*, 1 July 2021.

<sup>57</sup> “Myanmar Bags US\$116 mln from Rubber Exports in 7 Months”, *The Global New Light of Myanmar*, 3 December 2023.

<sup>58</sup> United Nations Office for South-South Cooperation and UNDP, *Sustainable Rubber Value Chain Development: Analyzing Myanmar’s Opportunities and Challenges for Green Transformation through South-South Cooperation*, 2019.

There are both horizontal and vertical linkages in Myanmar’s rubber sector. Vertical links are links between various players in a value chain, such as those between input providers and farmers and other small and medium-sized producers, collectors, processors, and end users. Horizontal links are links between value chain actors and other supporting institutions and embedded service providers of the value chain, such as those between rubber farmers and input providers, public extensive services and rubber plantation research services, agriculture-related universities, or microfinance institutions that lend to farmers. Examples of these links include links between smallholder rubber farmers, casual labourers, skilled and semi-skilled rubber tappers, and village collectors.

►Figure 6. Mapping of the rubber value chain



This assessment finds that the total gross rubber marketing margin for wholesalers, or the difference between the wholesale pricing per unit of rubber at the level of producers, is 25 per cent. The gross marketing margin for retailers is 12.5 per cent, and the price per unit of rubber at the producer level is set by retailers.

### Child labour in the rubber value chain

There have been reports of forced labour in Myanmar’s rubber industry involving children as young as 9 years old. Reports by non-governmental organizations indicate that villagers – including children – are made to work in nurseries and on plantations growing rubber for military camps. In addition to facing physical punishment if they refuse to work, children forced into child labour are often not compensated for their work.<sup>59</sup>

### Major challenges and constraints

- Investments in the rubber sector largely lack adequate support for smallholders, which would enable them to benefit from technology transfer or market access to global value chains. They also lack sound safeguards to mitigate any adverse effects on local communities.

<sup>59</sup> United States Bureau of International Labor Affairs, “List of Goods Produced by Child Labor or Forced Labor: Burma – Rubber”.



- Rubber prices have decreased in recent years,<sup>60</sup> making rubber tapping unaffordable for smallholders. Smallholder rubber manufacturing will not be viable if prices keep declining or wages rise. Although rubber prices are expected to rise gradually, significant adjustments are required for Myanmar to benefit from any improvement in the global rubber climate.

## Recommendations for My-PEC

► Table 12. Recommended activities for My-PEC in the rubber value chain

Activity	Target group			Absorption capacity of the value chain (low, medium, high)	Support required from My-PEC		
	Youth	Women	Men		Training needed	Financial support needed	Local training providers
Support smallholder farmers	√	√	√	Medium (more than 300 smallholder farmers)	Training on post-harvest loss mitigation options		Other local based agricultural groups Mon Rubber Association GRO project (Generating Rubber Opportunities in Myanmar)
Support the diversification of market destinations	√	√	√	Medium (300 smallholder farmers)	Training on linking smallholder farmers to new markets		Professional training centres in Mawlamyine/ Mon state

### 3.4.2.2. Durian value chain

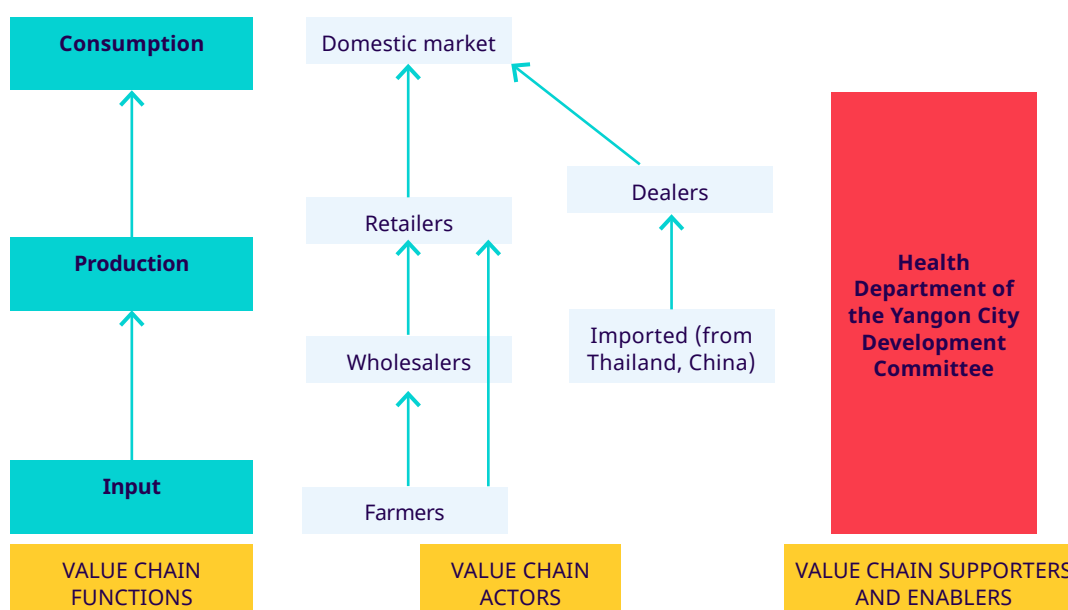
The crops farmed in Mon State are primarily perennials, such as durian, pomelo, rambutan, and mangosteen. Seasonal vegetables are planted as “intercrops”. Some fruits are in limited supply even before the season ends, according to one fruit vendor interviewed for this assessment. The prices of durian, mangosteen and rambutan and durian have all increased, a trend linked to labour costs, rising gas and fertilizer prices, and other factors.<sup>61</sup>

While durian is grown in Mon State, during the hot wet season, the fruit is often imported from China and Thailand. In Mawlamyine in Mon State, which lacks sufficient local production of durian to meet demand, the fruit is imported from Ye Township, also in Mon State, and from the town of Hpayarthonesu and Kayin State. According to fruit dealers, there is a need for more local production given the challenges of importing durian from Thailand.

<sup>60</sup> United Nations Office for South-South Cooperation and UNDP, *Sustainable Rubber Value Chain Development: Analyzing Myanmar’s Opportunities and Challenges for Green Transformation through South-South Cooperation*, 2019.

<sup>61</sup> “Decrease in Fruit Yield Raises Price in Mon State”, *BNI Online*, 12 May 2023.

►Figure 7. Mapping of the durian value chain



Farmers’ ability to make money is influenced by the marketing channels through which they can sell their produce. Farmers in Mon State use four main marketing channels. Local retail marketplaces serve as the initial route, whereby farmers sell their produce to shops through pre-existing relationships. Farmers can transport their harvests to wholesale markets in Mawlamyine or Yangon if their output is fairly large, or to wholesalers in their home towns. Wholesalers will often travel to farms to buy produce if yields are even higher.

Producers also set up roadside shops where they sell their own fruit, usually staffed by family members. This is a popular marketing channel for producers who farm in Kyaikto, since hundreds of Golden Rock tourists pass through every day. Moving from the first marketing channel to the last generally results in an increase in farmers’ price-setting power.

This assessment finds that the total gross durian marketing margin is 22.22 per cent for wholesalers and 17.8 per cent for retailers, with the price per unit set by the retailer.

## Recommendations for My-PEC

►Table 13. Recommended activities for My-PEC in the durian value chain

Activity	Target group			Absorption capacity of the market (low, medium, high)	Support required from My-PEC		
	Youth	Women	Men		Training needed	Financial support needed	Local training providers
Support smallholder farmers	✓	✓	✓	Low (Training for 200 vulnerable farmers)	Technical training to improve the production efficiency and techniques		CSO/local trainer team network

Activity	Target group			Absorption capacity of the market (low, medium, high)	Support required from My-PEC		
	Youth	Women	Men		Training needed	Financial support needed	Local training providers
Support women and vulnerable groups	√	√		Low (20 women and youth groups with 5 members each)	Value added technical training, such as on packing, jam processing, etc.	Initial working capital of 100,000 kyats per group	CSO/ community-based organization (CBO)/local trainer team network

### 3.4.2.3. Betel nut value chain

In Myanmar, betel quid is known as *kwun-ya*. The most popular chewing combinations are areca or betel nut (from *Areca catechu*/palm), slaked lime (calcium hydroxide) and certain spices.<sup>62</sup> Areca/betel nut is grown across Myanmar, including in Mon State. While betel nut is often produced for households' personal consumption, most is sold at busy markets in towns and cities. Chewing betel nut has become increasingly popular in metropolitan areas, where workers earn more than their rural counterparts. Betel quid is also frequently combined with tobacco leaves. Refrigerated goods consisting of pre-made betel nut preparations with tobacco wrapped in plastic bags or metal containers are available. Street sellers sell inexpensive items made from betel nut in their communities.

The practice of chewing betel nut has a long history, and is frequently served to guests and consumed during formal events, such as weddings. In rural Myanmar, people often chew raw tobacco leaves because they believe these clean the mouth and refresh the breath. There is also a widespread belief that betel quid is not as harmful as smoking.<sup>63</sup>

One survey in 2021 found that chewing betel quid is more common among both sexes than smoking tobacco, although men chew betel quid more frequently than women (58.7 per cent vs 20.7 per cent) and also use tobacco more frequently than women (41.7 per cent vs 5.1 per cent).<sup>64</sup>

#### Child labour in the betel nut value chain and related health risks

Farm owners who grow areca palm often engage young workers or children, who use sharp cutters to peel and slice the nuts. Boys predominate among youth/children engaged as climbers or harvesters, while girls tend to be engaged in peeling, slicing and soaking betel nut to prepare it for betel nut chewing. Children as young as 10 years old begin working in these roles, while those between 13 and 17 years old usually work 8–10 hours per day, with some working at night (between 6 p.m. and 6 a.m.).

According to the World Health Organization, the risk of oral cancer is more than seven times higher for persons who chew tobacco-laced betel quid on a regular basis over an extended period of time, than for those who do not. However, many people in Myanmar downplay the dangers.

<sup>62</sup> WHO, "Betel-quid and Areca-nut Chewing and Some Areca-Nut Derived Nitrosamines", *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans* 85 (2004).

<sup>63</sup> Nyo Nyo Kyaing et al., "Smokeless Tobacco Use in Myanmar", *Indian Journal of Cancer* 40, No. 4 (2012): 347–351.

<sup>64</sup> Chandrashekhar T. Sreeramareddy, Saint Nway Aye and Sunil Pazhayanur Venkateswaran, "Tobacco Use and Betel Quid Chewing Among Adults in Myanmar: Estimates and Social Determinants from Demographic and Health Survey, 2015–16", *BMC Public Health* 21, No. 1 (2021).

Some studies indicate that betel nut may have benefits for certain conditions – provided its intake is limited, regulated and is not used as an alternative to modern medicine – such as:

- managing skin irritation and providing relief from allergies;<sup>65</sup>
- inhibiting the growth of bacteria, viruses, fungi and parasites, such as tapeworms and ringworms; and
- potentially removing “excess” salt and water from the body to help it manage oedema (fluid accumulation).<sup>66</sup>

## Recommendations for My-PEC

► **Table 14. Recommended activities for My-PEC in the betel nut value chain**

Activity	Target group				Absorption capacity of the market (low, medium, high)	Support required from My-PEC		
	Children	Youth	Women	Men		Training needed	Financial support needed	Local training providers
Raise awareness		√	√	√	High		Finance media campaigns, television and radio programmes addressing the age-old habit of chewing betel quid	ILO/other CSOs
Support children working on betel nut farms	√				Medium (My-PEC can train 300 children)	Training on occupational safety and health for children		ILO/other CSOs
Support persons with betel nut drug use disorders		√				Training on starting businesses after rehabilitation	Initial capital	Other local agricultural groups and professional training centres
Support small-scale medicinal betel nut businesses		√			Low (My-PEC can train 50 youths)	Trainings on the medicinal uses of betel nut  Business training	Initial capital to start businesses	ILO/other CSOs

**Note:** Bottles need to be labelled with the relevant information and precautions.

<sup>65</sup> Wei Peng et al., “*Areca Catechu L. (Arecaceae): A Review of its Traditional Uses, Botany, Photochemistry, Pharmacology and Toxicology*”, *Journal of Ethnopharmacology* 164 (2015):340–356.

<sup>66</sup> Arvind Kumar et al., “*Assessment of Areca Nut Use, Practice and Dependency Among People in Guwahati, Assam: A Cross-sectional Study*”, *Ecancel Medical Science* 15 (2021).

### 3.4.3. Selected value chains in the Yangon Region

#### 3.4.3.1. Street food value chain

Many people in Myanmar, particularly during commutes to work or lunch breaks, buy ready-to-eat meals and beverages. The customers of street food vendors span all social classes, with businessmen frequently seen having lunch next to construction workers. Street food has many advantages – it is affordable, available, frequently nutrient-dense and comprises a variety of dishes given Myanmar’s varied cuisine, including Chinese, Indian, Thai and Vietnamese influences.

Yangon – Myanmar’s capital, most populous city and commercial hub – provides jobs for a sizable portion of the country’s labour force and is filled with street food vendors. Street pancakes, fried chickpea tofu, tea leaf salad, quail egg snack, and mohinga are just some of the popular delicacies available on the streets of Yangon.<sup>67</sup> Many people migrate to Yangon to sell goods, with street vendors selling seasonal fruit, vegetables, snacks and cheap clothes in crowded areas. Street food vendors in Yangon offer low-priced goods and services to the urban poor, contributing to other sectors. However, food safety inspection and regulations are considered inadequate.<sup>68</sup>

Over 70,000 street vendors are estimated to live in Yangon, partly due to lack of employment opportunities leaving the poor with few options, making selling food on the street a convenient occupation.<sup>69</sup> Selling food and drink on the streets provides an initial source of income for many migrant workers looking for jobs. The street food sector also offers women job opportunities and source of income, given their key role in the preparation, promotion and sale of street food. This makes street food an important micro-industry that enables women to support themselves financially. Changes in eating habits are also contributing to the growth of the street food sector.

The unhygienic handling of food can cause outbreaks of food-borne illnesses. In order to prevent food-borne illnesses, it is important for street food vendors to be aware of and follow food safety regulations. According to one study, 73.3 per cent of vendors wear gloves to mitigate the dangers of contamination, and 65.3 per cent replace damaged gloves with new ones.<sup>70</sup> Moreover, 74.7 per cent of street food sellers in that study report using hot water to clean equipment and lower the risk of contamination, and 90.7 per cent understand that washing cooking tools can reduce contamination. The study indicates that most street food vendors have an understanding of food safety, but their hygiene practices could be further improved.

In line with international health recommendations, the Department of Public Health and Yangon City Development Committee should provide specialized food safety training for street food vendors. It should be mandatory for vendors to possess up-to-date food safety training certifications, and local authorities should oversee related paperwork, such as medical certificates, and improve available infrastructure.

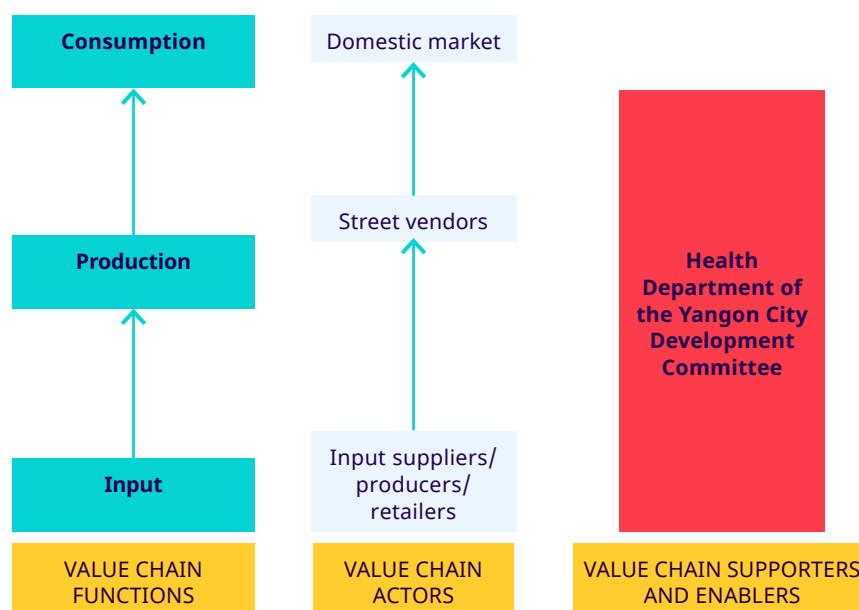
<sup>67</sup> Myanmar, Ministry of Hotels and Tourism, “Useful Tips”.

<sup>68</sup> Tin Aung Soe Htway and Kraiwuth Kallawicha, “Factors Associated with Food Safety Knowledge and Practice among Street Food Vendors in Taunggyi Township, Myanmar: A Cross-sectional Study”, *Malaysian Journal of Public Health Medicine* 20, No. 3 (2020): 180–188.

<sup>69</sup> Chit Zaw Myo, “An Assessment on Food Safety Knowledge, Attitude and Practices of Street Food Vendors in Sanchaung Township, Yangon Region” (MDevS thesis, Yangon University of Economics, 2022).

<sup>70</sup> Chit Zaw Myo, “An Assessment on Food Safety Knowledge” (MDevS thesis, Yangon University of Economics, 2022).

►Figure 8. Mapping of the street food value chain



### Major challenges and constraints

Unsanitary food handling by vendors is a common cause of food-borne illnesses. This can be attributed to three factors: (1) ignorance of foodborne infections, (2) a lack of awareness of the consequences of unsanitary food handling, and/or (3) their inability to modify their behaviour.<sup>71</sup>

### Recommendations for My-PEC

►Table 15. Recommended activities for My-PEC in the street food value chain

Activity	Target group			Absorption capacity of the market (low, medium, high)	Support required from My-PEC in collaboration with TVET institutions/NGOs		
	Youth	Women	Men		Training needed	Financial support needed	Local training providers
Support street food vendors to improve food hygiene	✓			Medium ( My-PEC can train more than 200 vulnerable groups)	Training on safety standards and regulations	Initial capital	World Vision Livelihood Department Trainers
Support cooking, marketing and engagement with clients	✓				Business training on food vending businesses	Initial capital	Business Eye Opener trainers

<sup>71</sup> Lin Wai Yee, “Integrated Food Control Systems Toward Food-Safety and Trade Promotion in Myanmar” (PhD thesis, Hiroshima University, 2016).

### 3.4.3.2. Pig farming value chain

Pork, which accounts for about 30 per cent of all meat produced in Myanmar, is the second most significant meat after poultry in the country.<sup>72</sup> In 2022, 285,000 tonnes of pork were produced in Myanmar, remaining relatively stable against figures in 2021.<sup>73</sup> The amount of pork consumed in Myanmar is increasing annually by 0.4 per cent, and the expectation is that 680,000 tonnes of pork will be consumed by 2026. This indicates a gap between the production and consumption. In 2018, 5.8 million pigs were farmed on 22 per cent of holdings, averaging 2.6 pigs per holding, according to the National Livestock Baseline Survey.<sup>74</sup> The survey finds that most pigs in Myanmar are owned by households in upland regions, such as Chin State (57 per cent), eastern Shan State (52 per cent), Kayah State (48 per cent), and Kachin State (43 per cent), followed by the Ayeyarwady Region, northern Shan State, and Myanmar's dry zone. In rural areas, the practice of pig rearing to supplement the family income is widespread among both landed and landless households.<sup>75</sup>

When it comes to mediating the sale of piglets and adult pigs, brokers play an important role. One-third or more of piglets are sold directly to other farmers, while two-thirds are sold through township-level brokers, village-level brokers, and other traders.

Some 33 per cent of pigs are bought by traders in Yangon's wholesale marketplaces, while 10 per cent are sold directly to slaughterhouses in Yangon.<sup>76</sup>

Traders do not frequently visit pig farms because brokers tend not to provide them with farmers' contact details. Traders usually employ brokers to sell pigs, as this is considered convenient. However, using a broker requires payment from the seller as well as the buyer. Farmers would not have to pay broker fees if they contacted traders directly. Brokers keep a portion of the profits across the pig farming value chain due to information asymmetry. Compared to merchants and slaughterers, brokers know more about the specifics of pig health, such as the medical history and current state of health of the pigs they deal in.

Licensed traders manage the pig supply from slaughterhouses located in Yangon. Since farmers have limited options for selling their pigs, slaughterhouses offer them low prices. Slaughterhouses are considered socially taboo and involve very poor work environments. Official inspections are more erratic in smaller slaughterhouses but constant in larger ones. As pig carcasses are treated, they may become contaminated. While cooking pork for an extended period of time during the day is generally safe, there are some risks if the meat is treated too rapidly or if the heat does not suffuse it.

A number of international businesses and aid-related programmes are investing in Myanmar's pork sector. Pig breeds of Myanmar C.P. Livestock Co. Ltd are the most popular, accounting for 51 per cent of all swine in the market. The company also dominates the pig feed supply, accounting for 48 per cent of the market share, followed by Sunjin (16 per cent) and New Hope (11 per cent).<sup>77</sup>

<sup>72</sup> International Food Policy Research Institute, "Myanmar's Livestock Sector: An Overview of Production and Consumption in 2022", IFPRI Strategy Support Program Working Paper No. 41, 2023.

<sup>73</sup> Index Box, "Production Pork Myanmar".

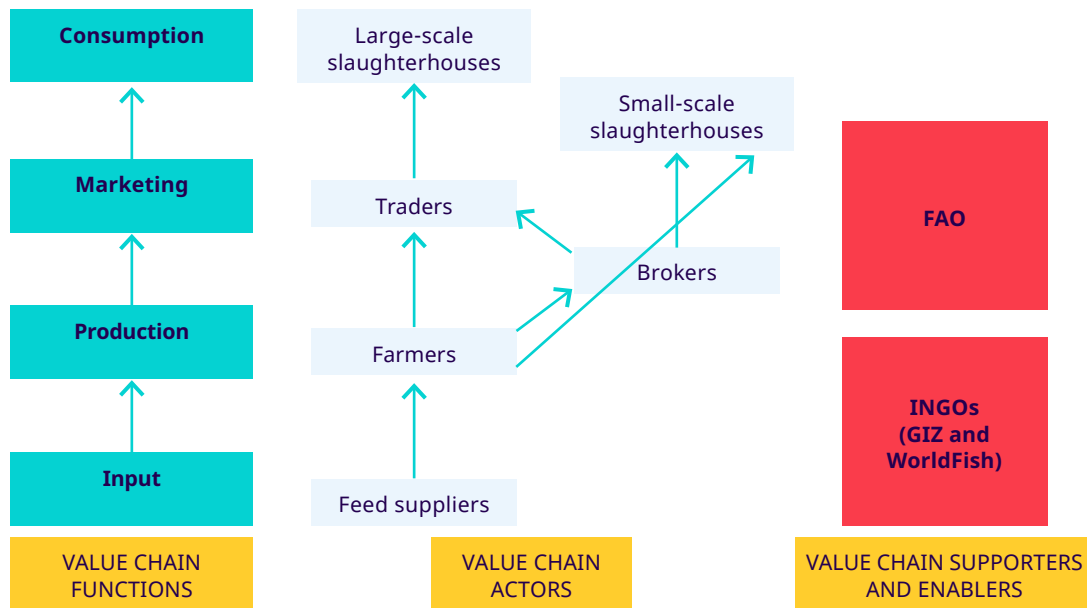
<sup>74</sup> Myanmar, Ministry of Agriculture, Livestock and Irrigation, and FAO, *National Livestock Baseline Survey 2018: Report*, 2019.

<sup>75</sup> International Food Policy Research Institute, "Myanmar's Livestock Sector: An Overview of Production and Consumption in 2022", IFPRI Strategy Support Program Working Paper No. 41, 2023.

<sup>76</sup> Ben Belton et al., "Commercial Poultry and Pig Farming in Yangon's Peri-Urban Zone", Feed the Future Innovation Lab for Food Security Policy Research Paper No. 174, 2020.

<sup>77</sup> Ben Belton et al., "Commercial Poultry", Feed the Future Innovation Lab for Food Security Policy Research Paper No. 174, 2020.

► Figure 9. Mapping of the pig farming value chain



### Child labour in the pig farming value chain

Child labour in raising and selling pigs is particularly common in rural areas, which lack the capacity to enforce minimum age standards for employment or education. Poverty is among the key drivers of child labour. Children’s earnings, although low, tend to account for a large portion of poor households’ income.

### Major challenges and constraints

- There is a lack of initial feed and veterinary support, as well as of technical guidance and awareness raising.
- Women are primarily responsible for household chores and childcare, leaving them with limited time for animal husbandry. Women may also have less access to education and training programmes that can enhance their skills and knowledge in animal husbandry. This gap can hinder their ability to adopt modern practices and technologies.



## Recommendations for My-PEC

► **Table 16. Recommended activities for My-PEC in the pig farming value chain**

Activity	Target group			Absorption capacity of market (low, medium, high)	Support required from My-PEC		
	Youth	Women	Men		Training needed	Financial support needed	Local training providers
Support pig farmers/ producers of pork products (youth)	✓	✓	✓	Medium (My-PEC can train more than 500 members of vulnerable groups)	Provide technical guidance on livestock husbandry	Finance (100,000 MMK per beneficiary)  Veterinary services	World Vision Livelihood Department and technical professional (TP) staff  FAO

### 3.4.3.3. Home-based enterprises

In most developing countries, micro, small and medium-sized enterprises (MSMEs), particularly home-based and cottage industries, are the backbone of the local economy. Despite their small scale, home-based enterprises create or provide employment, especially for women with low levels of education. The inclusive, gender-responsive growth of home-based and cottage industries can advance women’s empowerment and, in turn, advance sustainable development in Myanmar.<sup>78</sup>

Women account for 51.7 per cent of Myanmar’s population and the literacy rate among adult women is approximately 95.8 per cent.<sup>79</sup> In the Yangon Region, Ayeyarwady Region and Mon State, women undertake a range of home-based economic activities, such as food preparation, tailoring, weaving, fabric painting, services and retail sales.

### Major challenges and constraints

- Women have few opportunities to gain practical knowledge and skills related to work through education and training.<sup>80</sup>
- Women entrepreneurs struggle to obtain the capital needed to start their own enterprises. Most women entrepreneurs rely on microloans or funds from family members.
- A lack of knowledge and skills limits home-based enterprise owners’ ability to grow their businesses. They lack opportunities to improve their understandings of the state of the industry, customer satisfaction, value addition, and logistics.
- It may be more challenging for women to negotiate contracts and locate new suppliers than it is for men.

<sup>78</sup> OECD, *Strengthening Women’s Entrepreneurship in ASEAN: Towards Increasing Women’s Participation in Economic Activity*, 2017.

<sup>79</sup> Asian Development Bank, *Gender Equality and Women’s Rights in Myanmar: A Situation Analysis*, 2016.

<sup>80</sup> Japan International Cooperation Agency, *Data Collection Survey on Women’s Economic Activities in Myanmar: Final Report*, 2016.

## Recommendations for My-PEC project

► Table 17. Recommended activities for My-PEC in the home-based enterprises' value chain

Activity	Target group			Absorption capacity of the market (low, medium, high)	Support required from My-PEC		
	Youth	Women	Men		Training needed	Financial support needed	Training providers
Support home-based grocery stores, handicraft producers, and purified drinking water suppliers	✓	✓		Medium (My-PEC can train more than 300 members of vulnerable groups)	Business Eye Opener training  Start and Improve Your Business (SIYB) training	Provide initial capital	Business Eye Opener master trainers  Start and Improve Your Business trainers
Support women's groups engaged in producing cultural garments		✓		Medium (My-PEC can train more than 300 members of vulnerable groups)	Training to enhance understandings of the state of the garment industry, customer satisfaction, value addition and logistics  Training to develop bargaining/ negotiating capacity on contracts and locating new suppliers	Initial capital	World Vision Livelihood Department and technical professional staff  Business Eye Opener trainers

## ► 3.5. Capacity building support

According to business owners and associations interviewed for this assessment, labour force skills and competencies need to be strengthened – particularly in terms of life skills and entrepreneurship skills – to boost employability, incomes and the productivity of value chains as a whole. They consider these qualities necessary for managing market-related challenges, such quick shifts in the labour market, varying industry demands, as well as uncertainties and vulnerabilities in employment. These abilities would also strengthen employees' capacity to bounce back from internal and external shocks.

Government-provided training programmes and extension services (technical assistance) have been considered inadequate in terms of both coverage and quality.<sup>81</sup>

<sup>81</sup> UNDP, *Strengthening Food Security in Myanmar: A Roadmap for Localized Action*, 2023.

Past research finds that the Ministry of Agriculture has lacked sufficient senior-level skilled personnel to offer widespread technical help, that there have not been enough skilled field workers to reach the majority of smallholders, and that extension employees have lacked sufficient transportation and incentives to perform their roles.<sup>82</sup>

Since the military takeover in 2021, extension and support services have decreased and non-existent in many areas. Most of the capacity building gaps have been filled by partners, principally international organizations.<sup>83</sup> As of 2022, access has worsened due to bureaucratic and administrative requirements for humanitarian agencies and restrictions on the movement of their staff. Expired Memorandums of Understanding (MoUs) and delays in renewals have impacted visa issuance and the movement of international staff within the country.

As a result, many projects have suspended capacity building activities and financial support, including due to cash flow problems that make money transfers and withdrawals exceedingly challenging. Reliance on local actors has increased for the provision of critical support, including emergency assistance, and created increased risks for local actors when projects are put on hold. Many international NGOs, such as the Australian Centre for International Agriculture (ACIAR), have redirected their support towards meeting the needs of the most vulnerable people in Myanmar, focusing on development assistance through trusted partners who are not affiliated with the de facto regime, instead of directly supporting efforts by the authorities.<sup>84</sup>

### 3.5.1 International NGOs and development partners providing support in Myanmar

The **ILO** opened its Liaison Office in Myanmar in 2002, by an agreement between the International Labour Office and the Government of the Union of Myanmar. Initially, the office's focused on assisting efforts to end forced labour in Myanmar, and to put plans in place to address its underlying causes. The ILO's mission in Myanmar expanded to include all decent work agenda items as of June 2012. The training offered by the ILO since 2014 specifically targeted producers, but did not focus on empowering value chain participants as a whole, or on enhancing the sustainability of value chains by addressing issues of human rights abuses, climate change, pollution, shrinking forest cover, environmental degradation, and ethical labour practices. Myanmar's Government, apex employers' organization and workers' organizations signed the first Decent Work Country Programme (DWCP) agreement with the ILO in September 2018.

The tripartite development of the programme reflected areas of interest for the ILO's technical assistance and support for Myanmar's commitment to achieving the Sustainable Development Goals (SDGs) by 2030. After the military takeover in 2021, no tripartite consultations have taken place. As a result, initiatives run by the ILO Liaison Office do not interact with the military authorities, in line with the United Nations' engagement guidelines.

In September 1950, the first United States-Myanmar Economic Cooperation Agreement was signed. The mission of the **United States Agency for International Development (USAID)** in Myanmar closed twice, in 1962 and 1988, following a military coup and crackdown on the democratic opposition, respectively. In 1998, USAID resumed targeted programmes in Myanmar. On 23 December 2022, President Biden signed the "Burma Act", ushering in a new era and providing aid to Myanmar. The act authorizes the kind of cross-border, targeted assistance desperately required in Myanmar. Congress is now required to provide the necessary funding for the act, and USAID and its partners are required to implement it.

<sup>82</sup> UNDP, *Strengthening Food Security in Myanmar*, 2023.

<sup>83</sup> UNDP, *Strengthening Food Security in Myanmar*, 2023.

<sup>84</sup> Australian Centre for International Agriculture, "Myanmar".

The **Livelihoods and Food Security Fund (LIFT)** is a multi-donor fund established in Myanmar in 2009. Managed by the United Nations Office for Projects Services (UNOPS), the fund aims to assist individuals to realize their full economic potential, in order to strengthen the resilience and sustainable livelihoods of poor households. With US\$539 million in funding, LIFT has reached almost 12.4 million vulnerable individuals in 269 townships across all 14 of Myanmar's states and regions.<sup>85</sup>

**FAO**, in the context of its Country Programming Framework for Myanmar 2017–2022, focuses on technical cooperation and emergency assistance to support communities that depend on agriculture. Interventions include enhancing agricultural production, nutrition-sensitive agriculture, sustainable land management, pest management, livestock production, sustainable forestry and fisheries, climate change adaptation, disaster risk reduction and resilience, as well as reducing post-harvest losses.

The **European Chamber of Commerce in Myanmar (EuroCham Myanmar)** represents European businesses in the country and advocates for their interests with stakeholders. Established in 2014, it offers support to European businesses in Myanmar through advocacy, business services, research and networking activities.

**Winrock International** supports farmers in Myanmar's productive agriculture sector, facilitating American expert visits and supporting the development of strong value chains to help achieve food security and alleviate poverty.

The **International Rice Research Institute (IRRI)** and its partners in Myanmar have implemented a variety of projects. These include (1) Educating the Next Generation of Rice Scientists, funded by the Lee Foundation from 2013 to 2020; (2) Policy, Climate Change and Rice in the Association of Southeast Asian Nations (ASEAN), funded by the Chartered Institute of Architectural Technologists (CIAT) from 2014 to 2016; (3) Reducing Risks and Improving Livelihoods, funded by the International Fund for Agricultural Development (IFAD) from 2014 to 2018; (4) Transforming Rice Breeding, funded by the Bill and Melinda Gates Foundation from 2013 to 2018; (5) Rice Diversification and Intensification in Lower Myanmar, funded by the Australian Centre for International Agriculture from 2012 to 2017; and (6) Stress-tolerant Rice in Vulnerable Environments, funded by USAID from 2013 to 2016.

**WorldFish** works on projects that focus on developing small-scale aquaculture, genetic improvement programmes for farmed tilapia and rohu carp, increasing micronutrient-rich indigenous fish and vegetables and improving Myanmar's food basket, involving women, small-scale farmers, entrepreneurs and marginalized groups, and recommending sustainable fisheries management policies and legal reforms.

**World Vision Myanmar's** affiliate, **Vision Fund Myanmar**, provides financial services to disadvantaged groups to help people reach their full potential economically and benefit from inclusive finance. World Vision and Vision Fund Myanmar work together to coordinate efforts, promote the sustainability of communities, and assist them in meeting their requirements, especially those related to livelihoods. Vision Fund Myanmar's US\$27.5 million loan portfolio reaches 3.7 million people annually, and 77 per cent of beneficiaries have dependent children. In the 2022 fiscal year (FY22), it assisted 125,225 active borrowers and 202,904 savings clients – 64 per cent of these borrowers are rural residents and 85 per cent are women – helped generate and maintain 163,191 jobs, and its support benefitted 192,720 children.<sup>86</sup>

<sup>85</sup> Livelihoods and Food Security Fund, "About Us".

<sup>86</sup> Vision Fund Myanmar, *Annual Report 2022*, 2022.

## Recommendations for My-PEC

Several development organizations, including FAO, are already cooperating with My-PEC. Some entities, such as the International Rice Research Institute and WorldFish, have specific missions that could help to implement My-PEC initiatives. The table below outlines possible areas of cooperation between international organizations and My-PEC.

► **Table 18. International organizations currently providing value chain-based support**

Organizations	Current portfolio	Intervention areas	Potential areas of collaboration with My-PEC
International Rice Research Institute	Development and promotion of improved rice varieties, alongside a range of agricultural innovation efforts	Agriculture/ rice	Provision of improved varieties Provision of Technical support and training
FAO	Resilience-building and emergency assistance to meet unexpected and immediate needs Technical cooperation and emergency assistance, including direct support for agriculture-dependent communities	Agriculture	Provision of technical training, agronomy and extension services
EuroCham Myanmar	Representation of 151 European companies operating in Myanmar in various sectors, from agribusiness to construction and logistics	Garments and textiles	Provision of timely, reliable market information, Provision of guidance on how to navigate a high-risk market Provision of market networks for My-PEC beneficiaries
Winrock International	Development strong value chains and achieving its agricultural potential	Agriculture	Technical support for value chain development
Organizations	Current portfolio	Intervention areas	Potential areas of collaboration with My-PEC
WorldFish	Development and promotion of fishery and aquatic technologies and practices	Fisheries and aquaculture	Provision of improved technologies for fisheries, the mud crab and dried shrimp value chains  Provision of technical training related to mud crab and dried shrimp
World Vision	Provision of financial services to disadvantaged groups to help people reach their full economic potential and improve livelihoods	Overall livelihood improvement	Provision of technical training to strengthen livelihoods

## ► 3.6. Access to market information

Access to market information helps farmers choose which markets to sell to, how much to sell for, and when to sell their commodities. This makes access to market information crucial. This assessment finds that information on prices is the most important factor guiding respondents' decisions on whether to enter the market. The primary sources of pricing knowledge are respondents' own observations, and their family, neighbours, friends or co-workers. About 63 per cent of respondents know the final consumer price of their product, while 28 per cent are aware of the price at which their competitors sell their products.

Most traders in the assessment's target areas face challenges due to inaccurate market and pricing information. Although Commodity Exchange Centres provide pricing information and the private sector publishes weekly prices for different crops, access to price forecasting data is restricted, particularly for farmers, due to its relatively high cost (starting at 5,000 kyats per month). Since farmers must decide what to sow long before market information is released (if it is released at all), farmers are the stakeholders who most suffer from this information gap.<sup>87</sup> Minimizing market information asymmetry among stakeholders is crucial for price discovery. The table below presents suggestions for potential interventions by My-PEC related to market information.

### Recommendations for My-PEC

► Table 19. Interventions recommended for My-PEC to improve sources of market information

Source of market information	Rural	Urban
Organizing market information desks around or in major market centres	✓	✓
Establishing urban call centres		✓
Strengthening Commodity Exchange Centres	✓	✓
Organizing call centres	✓	✓

## ► 3.7. Ease of doing business in Myanmar

A relatively small proportion of respondents report the existence of markets other than those they currently operate in – 18 per cent of respondents in the Ayeyarwady Region, 18 per cent of respondents in Mon State, and 7 per cent of respondents in the Yangon Region. Examples include the Jade Market, Ruby Market, Morning Market, Bogyoke Aung San Market, Fish Market, and Da Nyin Gone Market. However, entering new markets is not considered easy. In Ayeyarwady, 20 per cent of respondents rate business entry as “difficult”, as do 21 per cent of respondents in Mon and 4 per cent of respondents in Yangon. Reasons cited for this include limitations related to financial and technical capacities. The ease of doing business in Myanmar has worsened with the withdrawal of high-profile foreign companies after October 2022, when the Financial Action Task Force (FATF) decided to add Myanmar to the list of high-risk jurisdictions subject to action (also known as the blacklist) because of slow progress on action plans to combat money laundering and terrorist financing.<sup>88</sup>

<sup>87</sup> World Bank and Livelihoods and Food Security Fund, *Myanmar Rice and Pulses: Farm Production Economics and Value Chain Dynamics*, 2019.

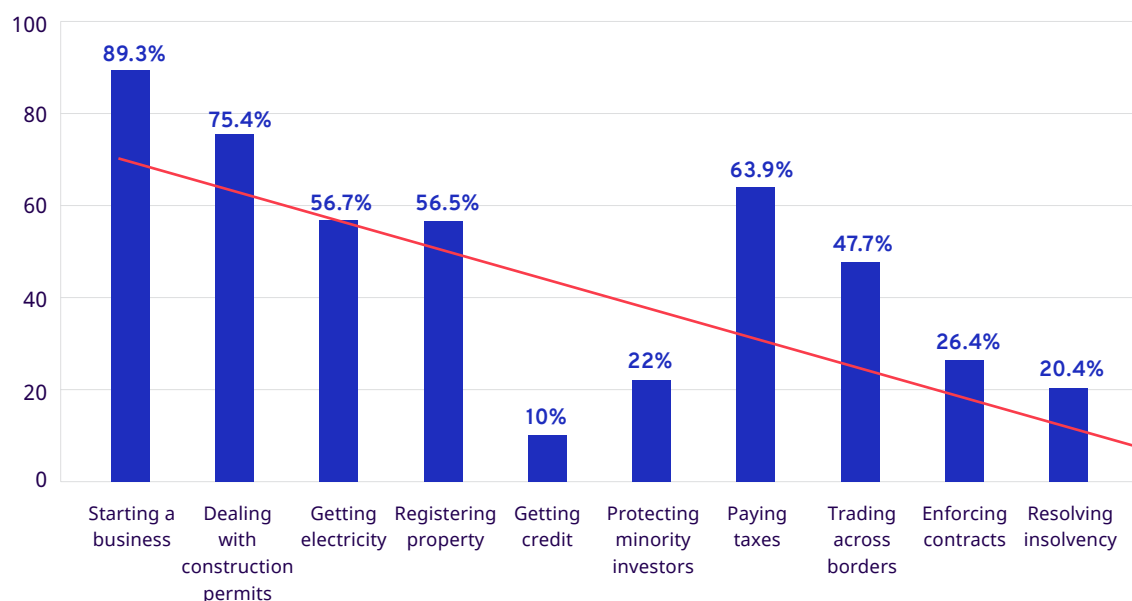
<sup>88</sup> United Kingdom, Department for Trade & Business and Foreign, Commonwealth & Development Office, “*Overseas Business Risk for Myanmar (Burma)*”.

### ► 3.8. Access to finance for business startups

Since 2016, only 16 per cent of this assessment’s respondents in the Ayeyarwady Region or their family members have taken out loans, as have 9 per cent of respondents in Mon State and 6 per cent of respondents in the Yangon Region. For most small-scale farmers, formal credit and loans from microfinance institutions is either not available, or the amounts provided are insufficient. Where provisions by the Myanmar Agriculture Bank exist, these are generally insufficient to finance farmers’ access to all the inputs they require. Suppliers of agricultural inputs and buyers of agricultural products are often reluctant or unable to provide credit to farmers. As a result, farmers tend to rely on informal credit to purchase inputs. These informal loans are largely unregulated, and some sources, especially traditional money lenders, may charge usurious interest rates. Alternative credit arrangements include:

- **Input supplier credits:** Under this arrangement, farms get access to inputs (seeds and feed) on credit, which they repay after the harvest. Input supplier credits are an appropriate tool for input sales to customers, provided that effective guarantee schemes are in place in which a guarantor shoulders the default risk.
- **Buyer/processor credits:** Under this arrangement, a processor or another downstream buyer finances farmers or local traders with a cash advance to be used for working capital during the production process.
- **Leasing:** This arrangement is used to finance machinery, vehicles and equipment in both agriculture and aquaculture. The lessee (farmer) usually makes a down payment and can use the asset while making periodic payments.
- **Low-interest non-collateralized loans:** These are loans for processors that are well-suited to their financing needs, since the amounts required by processors can only be provided by banks.

► Figure 10. Ease of doing business in Myanmar, 2020



Source: World Bank, *Doing Business 2020: Economy Profile of Myanmar*, 2020.

## ► 3.9. Strategies, laws and regulations

Myanmar has developed and implemented a number of policies and regulations in both agricultural and non-agricultural value chains. The Ministry of Agriculture, Livestock and Irrigation has developed the Agriculture Development Strategy 2018–2020, the second five-year plan for the agriculture sector, a strategy for the growth of the rice sector, and a Climate-Smart Agriculture Strategy. The goal of the Agriculture Development Strategy is to enhance food security and agricultural competitiveness. The objectives of the second five-year plan for the agriculture sector are improving irrigation, agricultural production, agro-industry, markets and research. By 2030, the Climate-Smart Agriculture Strategy aims to advance food and nutrition security, climate resilience and a globally competitive agriculture sector.

However, limited policy implementation is a major constraint to empowering value chains. For instance, the new Myanmar Companies Law of 2017 and the Myanmar Investment Law of 2016 have reduced regulatory barriers to foreign direct investment, and established a modern legal framework for businesses. Nevertheless, the implementation of these laws lags behind in several areas, and some important complementary reforms have not kept pace.<sup>89</sup>

► **Table 20. Regulatory framework for agriculture in Myanmar**

Year(s)	Law/regulation/strategy
2016–2021	Five-Year Plan, 2016/17 to 2020/21 Myanmar National Action Plan for Food and Nutrition Security Myanmar Climate Smart Agricultural Strategy Myanmar Rice Sector Development Strategy White Paper: From Rice Bowl to Food Basket White Paper: Vegetables Food Value Chain Road Map
2016	Myanmar Investment Law
2015	National Export Strategy
2014	National Water Policy
2012	Farmland Law
2012	Vacant, Fallow and Virgin Lands Management Law
2011	Seed Law
2002	Fertilizer Law
1993	Plant Pest Quarantine Law
1990	Pesticide Law
1990	Myanmar Agricultural and Rural Development Bank Law
1982	Water Tax and Embankment Tax Law
1962	Regulation for Purchase of Crops and Agricultural Products
1941	Agricultural Produce Markets Act

<sup>89</sup> OECD, *OECD Investment Policy Reviews: Myanmar 2020*, 2020.



Despite protracted trade bans put in place as a result of the military regime and fluctuating exchange rates, the scale of cross-border trade has been substantial, conducted both legitimately through border posts and illegally over porous land borders with Bangladesh, China, India and Thailand. Myanmar's main exports through border checkpoints include fish and livestock, alongside rice, maize, green mung beans, sesame and rubber.<sup>90</sup>

Uncertainty and barriers to conducting business persist due to changes in the policy environment. The numbers of licenses needed for imports and exports has increased, as has the regulation of fuel imports and administrative limitations on outgoing financial transfers. In a bid to encourage the replacement of imported items with those made domestically, the authorities have declared that imports will be the focus of closer inspection. In spite of efforts to lessen reliance on the US dollar in favour of other foreign currencies, access to foreign exchange still limits businesses' capacity to acquire essential supplies. Moreover, the shift from a market-based system to a discretionary system has led to rent-seeking activities, distorted resource allocation, and environmental degradation, all of which undermine productivity and efficiency.<sup>91</sup>

### ► 3.10. Technical and vocational education and training

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Technical and vocational education and training (TVET) has been viewed as a top priority for sustainable human resource development in Myanmar. Therefore, there is a need to improve vocational training systems through consulting projects, information and communication technology (ICT) services, research and development (R&D) support, and relevant training programmes.<sup>92</sup> The TVET sector in Myanmar can play a role in advancing socio-economic development, workforce development and skills development. However, Myanmar lacks TVET research institutions, making it difficult to pinpoint opportunities and innovative projects for, and obstacles to, socio-economic development.<sup>93</sup>

The Ministry of Education established a forward-looking TVET chapter in 2016, and included TVET in the National Education Strategic Plan 2016–2021. According to the plan, the main objective of TVET is to equip learners with the knowledge, skills and competencies that will enable them to find employment and achieve their career aspirations. Therefore, TVET needs to respond to labour market needs and strongly align with national socio-economic development plans.<sup>94</sup>

TVET institutions in Myanmar that fall under the Department of Technical and Vocational Education and Training (DTVET), under the umbrella of the Ministry of Science and Technology, offer a broad range of TVET programmes. These include secondary education (lower secondary and upper secondary), post-secondary non-tertiary education and tertiary education, training courses for workers and youths who need to reskill or upskill, competency-based training courses for young people under 18 years old who have been out of school for a prolonged period, and lifelong learning programmes for adults.

<sup>90</sup> David A. Raitzer, Larry C. Y. Wong and Jindra Nuella G. Samson, "Myanmar's Agriculture Sector: Unlocking the Potential for Inclusive Growth", ADB Economics Working Paper No. 470, 2015.

<sup>91</sup> World Bank, *Myanmar Economic Monitor: A Fragile Recovery*, 2023.

<sup>92</sup> Simona Milio, Elitsa Garnizova and Alma Shkreli, "Assessment Study of Technical and Vocational Education and Training (TVET) in Myanmar", ILO Asia-Pacific Working Paper Series, 2014.

<sup>93</sup> Maw Maw Tun and Dagmar Juchelková, "Preliminary Approach toward Development of the TVET Research and Development (R&D) Sector for Sustainable Development in Myanmar", *Sustainability* 14, No. 9 (2022): 5474.

<sup>94</sup> Myanmar, Ministry of Education, *National Education Strategic Plan 2016–21*, 2016.

A number of development partners have supported TVET in Myanmar through grants, loans and technical assistance for the sector. These include the Asian Development Bank (ADB), the Danish International Development Agency (DANIDA), the European Union (EU), the Government of Finland, the German Agency for International Cooperation (GIZ), the ILO, the Japan International Cooperation Agency (JICA), the Japan Fund for Poverty Reduction (JFPR), Kreditanstalt für Wiederaufbau (KfW), the Norwegian Refugee Council (NRC), the Government of Singapore and the Swiss Agency for Development and Cooperation (SDC).

Three periods can be used to classify the development of TVET in Myanmar – the period before 2011, the period between 2011 and 2021, and the period after 2021. Before 2011, the economy stagnated due to decades of military rule and was largely reliant on low-skilled, rural sectors. TVET programmes lacked industry relevance, and teachers were kept apart from global trends in education. The reinstatement of civilian government in 2011 offered a chance for reform. The decade between 2011 and 2021 was one of change for TVET, marked by optimism as the country embarked on a process of political, social and economic revitalization.<sup>95</sup> After 2021, the systemic shock brought on by the confluence of the COVID-19 pandemic, the military takeover and political unrest, may cause Myanmar’s development trajectory to be permanently disrupted. TVET has also been heavily affected in terms quality and enrolment.<sup>96</sup> This is mainly due to the following developments:

- The education system was forced to close for an academic year (2021/22) due to the military takeover. Most university students chose not to attend during the 2022/23 academic year.
- Many TVET teachers and young people joined the Civil Disobedience Movement (CDM), compelling various levels of education to close. There are reports of more than 125,000 educators being suspended for their participation in the movement.<sup>97</sup>
- General mismanagement is another challenge. For example, TVET teachers are frequently tasked with maintaining campus property and security, which includes serving as gate guards.
- Neither the private sector nor vocational training has been linked to education in a significant way, especially after the military takeover.

To reduce and eventually end child labour in Myanmar, economically empowering youth is an important strategy. One pivotal long-term motivation for pursuing an education – both for children and their families – is the expectation that this will equip them to secure decent work, either as employees or entrepreneurs. Children are more likely to drop out of school early and become engaged in child labour if there is little chance of achieving economic empowerment through decent work. TVET can support the economic empowerment of youth and the achievement of the United Nations Sustainable Development Goals (SDGs), particularly SDG 4 (“Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”) and SDG 8 (“Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”).<sup>98</sup> It can also support the achievement of the Myanmar Sustainable Development Plan 2018–2030, particularly Goal 3 (“Job creation and private sector led growth”) and Goal 4 (“Human resources and social development for a 21st century society”).<sup>99</sup> However, a joint study by the World Bank, the ILO, and the United Nations Educational, Scientific and Cultural Organization (UNESCO) finds that TVET systems in many low- and middle-income countries do not match skills and labour market needs.

<sup>95</sup> Karina Veal, “Vocational Education and Training in Myanmar”, in *International Handbook on Education in South East Asia*, ed. Lorraine Pe Symaco, Martin Hayden (Singapore: Springer Singapore, 2021), 1–22.

<sup>96</sup> Global Coalition to Protect Education from Attack, *The Impacts of Attacks on Education and Military Use in Myanmar*, 2022.

<sup>97</sup> “More than 125,000 Myanmar Teachers Suspended for Opposing Coup”, *Reuters*, 23 May 2021.

<sup>98</sup> United Nations, “The 17 Goals”.

<sup>99</sup> Myanmar, Ministry of Planning and Finance, *Myanmar Sustainable Development Plan (2018–2030)*, 2018.

These TVET systems are not equipped to meet the large rise in demand for TVET in the coming years.<sup>100</sup>

### Major challenges and constraints

- TVET providers have limited capacities to identify, develop, support and follow up on agricultural and non-agricultural value chains which are inclusive of young people and have significant potential to advance youth employment and entrepreneurship.
- TVET institutions tend to have insufficient teaching materials, teaching aids, training laboratories and computers to support students and teachers.
- In Myanmar, TVET is often considered to be “inferior” to and of lower quality than higher education, such as universities.<sup>101</sup>
- There are weak linkages between public-private partners in terms of TVET governance.
- Myanmar lacks a research policy required for the TVET sector’s expansion and sustainable enhancement. Other factors that need to be considered include an institutional framework, skilled labour, collaboration, and sustainable research funding from the authorities, businesses and development agencies.
- As TVET institutions prioritize practical experience over theoretical components, graduates tend to lack sufficient theoretical knowledge.
- TVET teachers lack short- and long-term opportunities for capacity development.
- Capacities for implementing information and communication technologies-based TVET research are limited.
- TVET providers currently play a limited role in identifying capacity building needs, supporting technological development and offering solutions across value chains.

### Recommendations for My-PEC

Activities that should be prioritized to enable TVET to contribute to My-PEC’s objectives include building the capacity of TVET teachers and staff, providing students with relevant training and skills aligned with evolving market needs, and fostering coordination mechanisms and platforms between stakeholders (see the table below).

<sup>100</sup> Victoria Levin et al., *Building Better Formal TVET Systems: Principles and Practice in Low- and Middle-Income Countries* (World Bank, 2023).

<sup>101</sup> Win Htein Win, “The Status of Perspectives and Challenges of TVET for the National Human Resource Development (NHRD) in Myanmar”, *Thai Jo* 14, No. 2 (2022): 116–146.

► **Table 21. Recommended interventions for My-PEC to support TVET**

Suggested activities and objectives		Support needed from My-PEC	Target
<b>Support capacity building for TVET teachers and staff</b>			
1	Strengthen the capacities of TVET teachers and management personnel, including by providing scholarships, and organizing conferences and training workshops	Financial support	Junior staff members of TVET providers (induction trainings and experience-sharing)  TVET providers' staff members (long-term training and scholarships)
<b>Ensure students have relevant training and skills, aligned with evolving market needs</b>			
1	Strengthen the capacities of CSOs/NGOs and private TVET providers to mainstream the needs of youth, women and children through training of trainer (ToT) initiatives in Myanmar's regions	Financial and material support (office equipment)	CSOs/NGOs and private TVET providers
2	Support the development of soft skills (e.g. skills on addressing conflict within the workplace, communication skills for the training of trainers in the regions)	Financial support	
3	Undertake a labour market survey to analyse the needs of the labour market	Financial support	TVET providers
<b>Ensure students have relevant training and skills, aligned with evolving market needs (continued)</b>			
4	Raise the awareness of, and advocate with, communities, employers and families for disability inclusion and gender-sensitivity through CSOs/NGOs	Financial support	TVET providers, local CSOs/NGOs
5	Provide training for local CSOs to ensure that they are able to design TVET programmes that are responsive to the needs of the labour market	Financial and technical support	Local CSOs
<b>Foster coordination mechanisms and platforms across stakeholders</b>			
1	Facilitate and strengthen knowledge-exchange through a regional TVET coordination platform	Financial and technical support	Public and private TVET providers
2	Create a regional stakeholder platform of TVET providers, local CSOs/NGOs and private sector stakeholders	Financial and technical support	TVET providers, local CSOs/NGOs





# 4

## Conclusion

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The lack of knowledge, inadequate information sharing in the value chain, financial constraints towards sustainable initiatives, insufficient governance in the value chain, and lower marketing margins for producers are common constraints found in value chain studies.

Producers who participated in this assessment receive the skills and livelihood training provided by My-PEC, while other value chain participants receive none. This affects how well value chains function. Only 29 per cent of respondents overall have secured loans from different sources, compared to approximately 35 per cent of respondents who attended business eye-opener training courses. The training offered by the ILO since 2014 specifically targeted producers, but did not focus on empowering value chain participants as a whole, or on enhancing the sustainability of value chains by addressing issues of human rights abuses, climate change, pollution, shrinking forest cover, environmental degradation, and ethical labour practices.

A lack of policy implementation in Myanmar poses another constraint to empowering value chains. For instance, although the Myanmar Companies Law and Myanmar Investment Law technically reduce regulatory barriers to foreign direct investment and establish a modern legal framework for businesses, their implementation lags behind and important complementary reforms have not been introduced.<sup>102</sup>

Another challenge is Myanmar's lack of fully functional infrastructure. This particularly affects the agriculture sector, due to its extreme sensitivity to delays. It also undermines efforts to attract investment for light manufacturing projects linked to high-tech international value chains.

For both agricultural and non-agricultural value chains with substantial potential for youth employment and entrepreneurship, there is a need to strengthen TVET providers, and equip them with the skills needed to identify, create, support and monitor youth-inclusivity.

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<sup>102</sup> OECD, *OECD Investment Policy Reviews: Myanmar 2020*, 2020.



## **Assessment of value chains in pilot areas of the Myanmar Programme on the Elimination of Child Labour (My-PEC) in the Ayeyarwady Region, Yangon Region and Mon State**

This assessment examines selected value chains, and identifies emerging or potential economic opportunities within them, in pilot areas targeted by the Myanmar Programme on the Elimination of Child Labour (My-PEC), a 10-year project funded by the United States Department of Labor and implemented by the International Labour Organization (ILO). This assessment focuses on value chains identified in Labutta Township in the Ayeyarwady Region (the rice, dried shrimp and mud crab value chains), Ye Township in Mon State (rubber, durian and betel nut) and Dagon Seikkan Township in the Yangon Region (street food, and home-based enterprises). The assessment highlights the critical need for coordinated efforts to strengthen value chains in Myanmar. By addressing identified constraints and leveraging opportunities for collaboration, My-PEC can contribute to sustainable local economic development and the reduction of child labour through improved livelihood opportunities.

### **ILO Liaison Office in Myanmar**

No.1 (A), Kanbae (Thitsar) Road  
Yankin Township  
Yangon, Myanmar  
T: + 95 1 7336538 ~ 9/579956/578925  
F: + 95 1 7336582  
E: yangon@ilo.org

[ilo.org/myanmar](http://ilo.org/myanmar)