



DENMARK



Report

# Myanmar Micro, Small and Medium Enterprises 2018 Qualitative Study

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## Report

Central Statistical Organization  
Ministry of Planning and Finance

and

UNU-WIDER and University of Copenhagen





## Foreword

As part of the Micro, Small and Medium Enterprises sector development project, the Ministry of Planning and Finance has implemented the Myanmar Enterprises Monitoring System (MEMS). This project began in 2016 and phase I is expected to run until the end of 2020. This MEMS system was designed to support the thematic programme entitled



“Inclusive and Sustainable Growth”. The MEMS aims to foster transparency and openness and to strengthen evidence based policymaking and analysis. This is vital to support the country’s move through a challenging structural transformation and development process. The cornerstones of this project are two rigorous Myanmar Micro, Small and Medium Enterprises quantitative surveys, one completed in 2017 and the other to be carried out in 2019. The data from these surveys are enriched by two qualitative surveys, one in 2018 and the second to be conducted in 2020, focusing on private manufacturing enterprises.

The Central Statistical Organization under the Ministry of Planning and Finance conducted as planned, the nationally representing quantitative survey of Micro, Small and Medium Enterprises in the manufacturing sector in 2017, in cooperation with the United Nations University, World Institute for Development Economics Research and the University of Copenhagen. The findings of this survey were released in a report in 2018.

This report presents the results of first phase of the 2018 qualitative Myanmar Micro, Small and Medium Enterprises Survey. The frame of this survey is the quantitative Micro, Small and Medium Enterprises survey mentioned above, which sampled 2,496 enterprises across Myanmar. The enterprises in the survey are classified into their main business activity following the Myanmar Standard Industrial Classification codes, as well as into size category, being micro, small and medium and large, based on the number of employees. Using purposive sampling, this report focuses on firms in the food, textile, wood and

wood products industries, and other manufacturing sectors in the 15 Divisions of seven States and seven Regions, and the Nay Pyi Taw Council area. The findings provide information on registration, taxes, informal employment, payments and gender wage gaps.

With the huge amount of information collected in this first qualitative Micro, Small and Medium Enterprises survey, we would like to encourage readers, researchers, planners, decision makers and other users to take advantage of this work in developing a more complex picture of Micro, Small and Medium Enterprises Survey in Myanmar. Moreover, we would like to inform the reader that several in-depth studies on selected issues in the private sector economy of Myanmar, exploiting this database, are currently under process.

In conclusion, I would like to express my deep appreciation to all those who participated and worked so hard to produce this qualitative survey of Micro, Small and Medium Enterprises survey. I would particularly like to mention our development partners, the United Nations University, World Institute for Development Economics Research, the University of Copenhagen and the Embassy of Denmark, which have provided us with the essential support to allow us to put our commitment to quality statistics into action. Only through good data and good planning can we improve conditions in Myanmar for all the people of Myanmar. Better data, better statistics, better lives.



(Soe Win)

Union Minister

Ministry of Planning and Finance

## Acknowledgements

The first qualitative survey of Myanmar Micro, Small and Medium Enterprises (MSMEs) in the manufacturing sector was implemented in 2018, with crucial support from the Government of Denmark, and technical cooperation with the United Nations University World Institutes for Development Economics Research (UNU-WIDER) and the University of Copenhagen. A second qualitative survey will be conducted in 2020. The Central Statistical Organization (CSO) committed to conduct two qualitative MSMEs surveys and two quantitative MSMEs surveys in the period of 2017 to 2020. These MSMEs surveys aim to provide data that will support the government in its effort to assess and implement relevant industrial policies for the future.

This report provides the findings from the interviews with MSMEs in the manufacturing sector of Myanmar. The qualitative interviews were conducted with 97 firms, based on the largest industries identified in the 2017 MSMEs quantitative survey frame, with 11 support institutions in 15 townships using a semi-structured interview technique. The data collection period was from March to October 2018 and based on information gained from six different trips to various locations. The is focused on the topics of informal employment, gender wage gap, the challenges and opportunities for MSMEs, with an emphasis on textile, apparel and wood and wood products industries, and other manufacturing sectors. This report represents a great achievement and provides detailed information on key characteristics of firms that will allow the development of accurate policy advice.

Our work would not have been possible without the professional interaction, advice, and encouragement from a large number of individuals and institutions. The CSO would like to express its gratitude to the professional researchers of UNU-WIDER and the University of Copenhagen, for facilitating and supporting our work from start to finish, and for ensuring effective collaboration between all partners. Our sincere gratitude also goes to the

Danish Ambassador, H.E John Nielsen, and his staff for both the financial support and the professional engagement throughout.

Finally, I would like to express our most sincere gratitude for the time that survey participants (the MSMEs) made available during the interviews in 2018. We would also like to thank the many staff at CSO, from head office and all branches, including 'data teams', whose tireless effort in implementing the survey in the field and managing the reporting ensured productive and stimulating collaboration throughout the organization.

We hope that this present report proves useful to decision makers in improving planning, in both government and private industry.



San Myint

Director General

Central Statistical Organization

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## **Acronyms and abbreviations**

CSO	Central Statistical Organisation
DICA	Directorate of Investment and Company Administration
DISI	Directorate of Industrial Supervision and Inspection
FDA	Food and Drugs Administration
GAD	General Administration Department
GDP	Gross Domestic Product
MSME	Micro, Small, and Medium Enterprise
SME	Small and Medium-Sized Enterprise
SMIDB	Small and Medium Enterprise Development Bank
SSID	Small Scale Industry Department

## **Executive summary**

The purpose of this report is to give a nuanced picture of the SME business environment in Myanmar as a complement to the 2017 MSME quantitative survey conducted within the project 'Towards Inclusive Development in Myanmar'. This project is a collaboration between the Central Statistical Organisation (CSO) of the Ministry of Planning and Finance of Myanmar, the United Nations University World Institute for Development Economics Research (UNU-WIDER), and the University of Copenhagen, supported financially by Denmark. We build on quantitative results and explore in more detail a set of selected topics, as well as specific industries relevant for policy focus. We also identify areas in which our quantitative data leave room for improvement in explaining reality and specify guidelines for future modifications of the MSME survey questionnaire, as well as points of attention in future analysis of quantitative data.

The analysis uses qualitative data and responses from 108 in-depth interviews with enterprise owners, managers, employees, and officers from relevant government institutions. We conducted the interviews over the course of six weeks during the period from March to October 2018 in 15 townships from nine regions and states in Myanmar. The respondents were chosen from the quantitative survey data using a combination of purposeful and random sampling aiming to maximize the breadth and relevance of information. The interview team comprised both Myanmar and English language speakers, so the interviews were carried out with interpretation in both languages.

We focus on three topics. First, we provide a qualitative in-depth analysis of informality, putting forth the challenges SMEs face when interacting with different government institutions. Second, we analyse the gender wage gap, particularly focusing on occupational segregation. Third, we describe the wood sector and its particularities.

In general, we find that the SME business environment in Myanmar exhibits plenty of opportunities for improvement, both as regards government policy

and SME business strategies. The report notes that Government procedures in terms of firm registration and tax collection are complicated and non-transparent and there is no clear guidance on the type of registrations required for firm formality, accounting for the industry, location and size.

Similarly, business owners see tax collection as non-transparent, and this prevents firms to make accurate estimates of their tax contributions and to understand the purpose of tax collection.

Informality of employment is pervasive, so both employers and employees remain unprotected under the labour rules, which leads to high employment instability. However, to achieve employment formality, there must be increased trust in the legal system and legal protection that written contracts could potentially give to both employers and employees. This consequently calls for better efficiency in the legal system.

Access to credit remains one of the main challenges for SMEs. There is a general lack of information provided to enterprises with regard to loans. Enterprise owners are often overwhelmed by the complicated procedures. Conditions and requirements by banks are also in many instances big barriers for smaller firms that cannot provide the collateral or are unable to keep up with interest payments. Financial assistance to increase revenue should be based on investments in long-term assets rather than on inventory and raw materials.

The gender wage gap due to occupational segregation is present in many interviewed firms. While it remains difficult to tackle this issue directly, as it reflects deep-seated societal norms, this issue might be useful as a reference for future and current research. Policy focus on gender issues, such as women's education, might also support a decrease in the gender wage gap and occupational segregation.

In terms of specific industries, we find the wood sector to be a declining industry, facing lack of supply of raw materials due to conservation policies as

well as timber production procedures. The wood industry also faces a decline in demand for cut wood, due to changes in customer preferences of the type of construction materials. These factors increase the dominance of bigger firms with easier access to raw materials and bigger markets to the detriment of SMEs. This indicates a strong pressure for wood industry firms to diversify into other activities. Assistance with loans, technical knowledge, as well as help with foreign market access would be useful to ease the transition.

## 1 Introduction

This report presents findings from qualitative interviews with manufacturing SMEs in Myanmar. The report covers a selected set of topics of interest, including informality, gender wage gap, and challenges and opportunities for SMEs, with emphasis on the textiles, apparel and wood industries. These findings complement the results in the quantitative report *Myanmar Micro, Small, and Medium Enterprise Survey (MSME) 2017* (CSO and UNU-WIDER, 2018) in two ways. First, our qualitative report helps bring forward certain characteristics of businesses that could not be addressed in-depth in the quantitative survey questionnaire. Identifying these characteristics enables a more accurate and realistic questionnaire design and quantitative analysis in the future. Second, it brings forward certain topics of significance for the SMEs and their business environment, which might assist in developing more targeted and accurate policy advice.

The report is structured as follows: Section 2 presents the methods, including the sampling approach, data collection and management, as well as ethical considerations. Sections 3-6 present the results on the key topics of interest, as emerging from the data. Section 3 describes the qualitative results on informality, at par with the quantitative results from the 2017 MSME survey. Section 4 goes into the gender wage gap, particularly focusing on gender occupational segregation. Section 5 describes in more detail the wood sector and its particularities. Section 6 gives an overview of challenges and opportunities for the SME business environment in Myanmar, focusing on qualitative findings and comparing to quantitative figures. Conclusions follow in Section 7.

## **2 Methods**

### **2.1 Sampling approach**

The sampling approach for the qualitative study is structured around the 2017 MSME quantitative survey, which contains 2,496 firms across Myanmar. MSME 2017 data are representative of all manufacturing enterprises in the 15 administrative areas (states, regions and Nay Pyi Taw Union Territory) of the country. Firms in the survey are classified into their main business activity following the Myanmar Standard Industrial Classification (MSIC) codes as well as into size category, including micro, small, medium and large enterprises according to the number of employees.<sup>1</sup> For the purpose of the qualitative study, we followed some of these firm characteristics and applied relevant purposive sampling to select industries and locations. We then randomly sampled firms within the industry-size category. If there were several firms belonging to the same industry-size category, for instance several small textile or wood firms in one township, we selected one or two at random, depending on the total number of firms available. Similarly, if there were several firms of the same industry-size category in the industrial zone, we selected the desired number at random. The same approach was applied for firms located outside the industrial zone. The details of the sampling approach are indicated next.

#### **2.1.1 By sector**

Following purposive sampling, we targeted the largest industries in the 2017 MSME survey sample, namely, food (55.2 per cent of enterprise population), textiles (8.8 per cent), wood and wood products (8.1 per cent) and apparel (2.7 per cent) industries. Interviews with rice mills, which account for 28 per cent of all manufacturing registered firms in the country, were also included due to their high presence in the manufacturing sector.

We also included industries linked to the above industries through supply chains. For example, leather is linked with the apparel industry. Some other industries with outlier characteristics were included. For instance, firms in the

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<sup>1</sup> We defined micro enterprises as those with 1–9 employees, small-scale enterprises as those with 10–49 employees, medium-sized enterprises as those with 50–299 employees, and large enterprises as those with more than 300 employees.

tobacco industry, having a comparatively higher value added within the MSME survey as well as the pharmaceutical sector, due to its singularity.

### **2.1.2 Location**

Setting off with industry-size and differences in performance as motivating factors, we then chose townships with the highest concentration of firms in a particular industry-size category, followed by random sampling. When there were several townships in a region or state with a similar composition of industries, we conducted interviews in one sole township for cost considerations. If, however, the composition of industries in different townships was markedly different, we conducted interviews in more than one township per state or region.

### **2.1.3 By size and informality**

We also applied stratified random sampling within size categories in larger townships in order to have a more comprehensive picture of the conditions in particular sectors, some of which we assumed is related to differences between firms in terms of size. Similarly, a number of firms classified as informal were randomly selected for the same purpose, and members of associations and enterprises within industrial zones were chosen to assess the extent of their benefits.

## **2.2 Data collection**

Data collection was carried out during the period March to October 2018 in six different trips to varying locations, as described in the sampling above. In total, there were 20 days of active interviewing spread over six weeks. Respondents were mostly firm owners or managers, at times supported by other members of their family or employees in a position to answer some of the questions (e.g. the accountant or operations manager).

For the purpose of this qualitative study, we used the semi-structured interview technique to collect the data. This method “involves conducting intensive individual interviews” with a limited number of respondents (Boyce &

Neale, 2006). It follows an interview protocol including an interview guide in which certain elements were identified from the qualitative survey and incorporated in the interview questions, namely: production characteristics, supply chain actors, credit access, registration and informal payments, amongst others. Nevertheless, the format of semi-structured interviews remained open-ended, allowing for follow up questions and clarifications from the respondents and ultimately exploring respondents' perspectives.

The interviews were conducted jointly by UNU-WIDER, University of Copenhagen and CSO staff. The list of enterprises selected for interviews was sent to CSO central office staff who have transferred the list to the CSO regional office. All interviews were scheduled by CSO regional office staff.

In spite of very thorough preparation, some enterprise owners could not be reached on the day of the interview. In such cases, they were replaced by a firm from the same sector and the same location (village or town), as dictated by the circumstances. The compliance with interview requests was perfect in all apart from four townships. One out of nine enterprises was replaced in Myaungmya, one out of 10 in Shwepyitha, two out of eight were replaced in Pathein, and five out of six in Myitkyina. Such a high replacement rate in the last location was due to enterprises stopping to operate or to sensitive personal circumstances.

The number of interviews per day was between four and seven, but most commonly, there were six interviews per day. The interviews were conducted in English and Myanmar language with the help of an interpreter. Only two interviews were conducted fully in English. The interview duration was between 20 and 50 minutes. The interviews with companies followed the themes specified in the interview guide, as shown in the Appendix A. The interviews with other value chain actors, such as the Department of Forestry, followed another guide, also shown in Appendix A. The guide was slightly modified for interviews with representatives of other institutions, such as banks, tax authorities and business associations, but it overall covers similar

topics mainly related to informing about the activities and the relationship with the private SME sector.

The interviews were recorded with previous permission from the respondents. The interviewers also took notes by hand, which were later transcribed. The translation process presents one of the main limitations of this study due to possible misinterpretation of both questions and answers, or a lack of precise wording and sentence structures.

Table 2.1 shows an overview of the conducted interviews, indicating states or regions, townships, number of enterprises and respondents from supporting institutions in each location, as well as the total number of interviews. In total, we conducted 108 qualitative interviews, out of which 11 were with informants from institutions whose activities influence some part of the business activities, such as tax officers, municipality officers, bank officers and line ministry officers. The interviews were carried out in a total of nine states and regions and 15 different townships, as shown in Table 2.1. We conducted interviews with 30 enterprises in the textiles and apparel industries, 45 in the wood and furniture industries and 12 in the food industry, four out of which were rice mills. The overview of the 97 enterprise interviews by industry is shown in Table 2.2.

Reflecting the concentration of specific industries in particular locations, the highest number of interviews was in Wundwin Township, where a majority of enterprises produce textiles. The second highest number of interviews was conducted in Monywa, where the composition of industries is much more diverse, including wood, furniture, textiles and leather. The profile of the textile enterprises is different in the two townships. Whereas textile enterprises in Wundwin focus almost exclusively on traditional Myanmar garment called longyi, enterprises in Monywa mostly produce intermediates based on cotton and household textiles.

Table 2.1: Distribution of qualitative interviews by location

State/Region	Township	Number of enterprises	Number of supporting institutions	Total
<b>Kachin</b>	Myitkyina	6		6
<b>Sagaing</b>	Sagaing	9	2	11
	Monywa	10	2	12
<b>Bago</b>	Taungoo	4		4
<b>Mandalay</b>	Pyin Oo Lwin	5	1	6
	Wundwin	11	2	13
	Mandalay		1	1
<b>Magway</b>	Chauk	4		4
<b>Yangon</b>	Shwepyitha	10		10
<b>Shan</b>	Naungkhio	4		4
	Lashio	6		6
<b>Ayeyarwady</b>	Pathein	8	1	9
	Myaungmya	9		9
	Myanaung	6		6
<b>Nay Pyi Taw</b>	Tatkon	5	2	7
<b>Total</b>		97	11	108

Source: MSME qualitative study 2018

Table 2.2: Distribution of qualitative interviews with SMEs by industry

Industry	Number
Textiles	21
Apparel	9
Wood	40
Furniture	5
Food	12
Other manufacturing	10
Total	97

Source: MSME qualitative study 2018

### 2.3 Data management

Following data collection, all interviews were transcribed and reviewed. We then retrieved different themes and patterns throughout the interviews (Boyce & Neale, 2006), which were put together amongst the different interviewers. We then identified the most dominant themes or topics, as well as those topics particularly relevant to complement our quantitative data. This allows for a

more coherent picture of the SME business environment in Myanmar, both in terms of limitations and pitfalls, and areas in need of improvement. The next chapters go into detail in the chosen topics: informality in all its forms (e.g. registration, taxes, payments, and employment), gender wage gap and challenges, with special focus on the wood, textiles and apparel industries.

#### **2.4 Ethical considerations**

As part of our qualitative study, we must reflect on the ethical limitations and constraints as to have more nuanced and accurate conclusions of our findings. Firstly, a qualitative analysis is often subject to the researchers' expectations, as part of wider structures which might result in bringing certain ideas or assumptions into the study (O'Reilly, 2012). Similarly, the presence of researchers might have an impact on the daily practices of respondents, as well as researchers' own understanding of those practices (O'Reilly, 2012). Lastly, respondents are chosen to take part in this qualitative study solely based on sampling objectives, which do not give them the power to "authorize or object to the field research being done" (Reyes-García & Sunderlin, 2011).

With that in mind, the interview protocol as carried out during this study intended to have the maximum regard for all respondents involved and minimum impact on the daily practices of firm operations, adapting to the firms' schedules and preferences. All respondents were informed of the objectives and purposes behind the project. Prior agreement from regional CSO offices with the respondents, as well as in-situ agreement to record the interviews were requested and given on all occasions.

The analysis and conclusions, as described in this study, intend to mirror what respondents perceive of their own structures and the dynamics involved within. Thus, we try to separate our own expectations, focusing on what we 'saw' and what we 'heard' merely offering an informed perspective from SMEs about main issues and potential space for improvement.

We use quotes to convey a message from respondents as directly as possible. In selecting quotes, we have mainly chosen to present the ones that offer a

unique explanation of the situation or as evidence for our understanding. We have selected the ones that do not appear to be ambiguous. However, the readers should keep in mind that the text has been translated so the quotes may not be suitable for the analysis of subtle nuances in opinions and meanings.

We have assigned a unique code for each enterprise by industry (and they are listed in parentheses after each relevant statement).

### **3 Parallel economies and ‘tea money’: Informality in Myanmar**

The following section explores the informal economy in Myanmar. We set off from the MSME quantitative survey’s findings and expand towards a more comprehensive picture of the actors, mechanics and structures behind the informal economy. We start with depictions of formality in terms of official registrations and the tax process and conclude with informal employment and payments.

#### **3.1 Registration**

Following the MSME 2017 quantitative survey report, we consider an enterprise to be formal when it is licensed (under the municipality), registered (under any other authority) or both. The number of informal firms in Myanmar remains unclear without any records on the informal sector. Thus, informal firms in the MSME survey and those portrayed in this qualitative study have been sampled using a snowballing technique, visually identifying the non-registered or non-licensed firms within each sampled township by CSO staff.

The qualitative study reveals that Myanmar’s regulatory environment is complex, comprising many different government authorities at the national and local level without any clear distinctions on which are the most relevant or suitable registrations for enterprises. These authorities comprise DICA (Directorate of Investment and Company Administration), DISI (Directorate of Industrial Supervision and Inspection), GAD (General Administration Department), SSID (Small Scale Industry Department), municipality and others,

which include industry-specific registrations such as the Forestry Department. While DICA is under the current company law regarded as the sole authority responsible for registration, the MSME quantitative survey showed that only 4.5 per cent of all enterprises in Myanmar are registered under DICA. Meanwhile, licensing with the municipality is widely extended, up to 70 per cent.

The MSME survey shows differences in the rates of registration among enterprise size categories, in which 19 per cent of micro firms, 8 per cent of small firms and 1.7 per cent of medium firms operate informally. Qualitative results confirm these findings as micro firms often do not feel the need to be registered or are somehow exempted from it. On business registration, one firm owner admits that previously he had to register, but since two years ago, due to him being the only one operating the business, officers “understand the situation” while another firm owner simply stated that she has no registration as she believes her firm is too small.

As regards the industry, Table 3.1 designates up to one third of enterprises in the textiles and leather industry as informal. Moreover, one-half of textiles and two-thirds of leather enterprises in rural areas are also informal. Among the sectors with a higher degree of formalization, the MSME survey identifies the tobacco, wood and furniture, and chemicals industries.

Table 3.1: Informality by sector and location

	<b>Per cent</b>	<b>Rural</b>	<b>Urban</b>
All	16.0	41.3	11.3
Textiles	33.7	50.5	22.4
Leather	29.2	66.7	23.8
Wood	6.9	20.0	5.1
Furniture	5.5	5.6	5.5
Tobacco	3.7	0.0	3.8

Note: Figures for category All do not include rice-mills.

Source: The 2017 MSME Survey.

Our qualitative research confirms the heterogeneous quantitative survey findings on the nature of informality in Myanmar. Interviewed firms in rural

areas are often not registered due to their remote location and licensing from municipalities is at times seen as unnecessary, as rural firms often do not benefit from public services such as paved roads or electricity (W14). Informality within the wood industry is found to be limited to firms dealing with illegal wood, as formal firms are heavily restricted in their raw materials and operations (W15, N4, W33) (more on the wood industry in Section 4).

In general, the qualitative survey results summarized in this report show that small and medium firms are often licensed by the municipality. Similarly, we find that these licensed firms are very likely to be registered by some other government authority. This corresponds very well with the findings in the quantitative report (CSO and UNU-WIDER, 2018). The tables in the quantitative report show that 80.8 per cent of firms with any type of registration have at least a municipality license, and 99.7 of formal firms have multiple registrations. We also observe here in the qualitative context that the different registrations are more predominant in certain states or regions, and in certain industries. For example, many interviewed firms reported to be registered by SSID in the Ayeyarwady region. This again aligns with quantitative data showing that 22.85 per cent of all SSID registrations are found in this region (CSO and UNU-WIDER, 2018). Qualitative findings also support that micro and rural firms are often not registered due to the small scale of operations or remote locations; occasionally being overlooked by the authorities.

### **3.2 Taxes**

Myanmar's tax collection process runs independently of company registration. This is reflected in the MSME 2017 survey data, which show that while all tax-paying companies are in fact registered, only 42 per cent of formal firms pay tax. About 80 per cent of all enterprises report that they pay any tax or fee, out of which only one-third pays corporate income tax and 7 per cent value-added tax, indicating that payment of different fees is more thoroughly enforced. As expected, tax payments also vary in general by profit level, which is not inconsistent with the lack of clarity about the underlying tax base as

discussed below. The MSME survey report shows that 21, 62 and 65 per cent of micro, small and medium enterprises respectively, pay taxes (CSO and UNU-WIDER, 2018).

There are two types of tax collection procedures in Myanmar: (1) a self-assessment system (SAS), by which enterprises (primarily large ones) self-assess how much to pay and (2) a township level official assessment system (OAS) system, by which inspection teams visit the enterprise and determine how much they need to pay (I8). We found that the latter is the most common among our interviewed enterprises. Interviewed firms often report that Internal Revenue Department (IRD) officers visit their production site and after an inspection of the ground, determine the amount to be paid, and leave a tax form accordingly.

In this manner, the determination of the list of enterprises by IRD – those who receive the IRD officer – plays a significant part in tax collection coverage. This is done either through ground inspection or by inviting businesses to register at the tax office. On this basis, we can assume that enterprises in more remote locations, for instance, are less likely to be on the list. During our qualitative study, the interviewed tax officers stated that, while they cannot cover all enterprises, they use different tools at their disposal to achieve the most complete list possible. They match and compare local lists with regional level IRD offices, as well as with other institutions, such as DISI and municipality.

In terms of inspection, IRD appoints one tax collector to every ward who is responsible for visits of firms and updating the list with new firms when necessary. Inspectors classify firms in three different categories by size, where the third class is too small and does not qualify for inspection. There are some exemptions from tax contributions. If the net profit is under 10 million Kyats, SMEs are exempted from taxes for three years, after which they must pay in accordance with the Union Taxation Law. In addition, enterprises located in industrial or special economic zones are not required to pay taxes in the first five years after starting to operate.

The lack of inspections of micro or small (third class) firms might explain the low share of micro enterprises reporting to pay any taxes in the 2017 MSME survey. Furthermore, our qualitative study shows micro enterprises justifying their lack of tax payments precisely by their size (T17). It must also be noted that as micro firms are less likely to be registered, they automatically become harder to identify within IRD lists and inspections.

As the 2017 MSME survey showed, only 33 per cent of enterprises keep regular financial records of sales of a particular product, while only 3 per cent actually submit financial reports. In this manner, adequately determining the tax level appears to be highly difficult and subjective. According to the interviewed tax officers, tax levels are determined through checks of on-the-ground situation, followed by announcements at the end of each year, in which enterprises are due to report their cash flow to IRD (either directly to the office or by sending it post). Firms also have the possibility of attending 'hearings' with IRD, in which they can express their concerns and challenges and potentially get tax exemptions.

This informality of tax collection and determination of the tax base gives way to a flexible tax scheme; open to modifications but also to subjectivities. In this manner, business owners are often unclear on how tax amounts are determined and whether it is completely fair to them, which does not contradict that there is a general positive relation between tax amount and profit level. Many business owners admit not knowing how the rate is set (O1) or why they experience a tax increase from one year to the next (W11). Also, enterprises note that IRD asks for the same amount of tax every year, irrespective of whether the business is good or bad (N2) or that the tax scheme is not fair, as it does not account for, among other factors, business size and production volume (T11, T12).

**Box 3.1: Quantitative pitfall – taxes**

Regarding taxes, we find that some enterprises located inside industrial zones benefit from tax exemptions for a limited period. Similarly, newly registered firms with capital investments under 10 million Kyats enjoy exemptions for the first three years of operation. For further analysis, we need to include tax exemptions in the survey questionnaire to adequately differentiate between those enterprises exempted from paying from others that do not pay taxes.

**3.3 Informal employment**

Informal employment can be understood in the context of employment in an informal firm or lack of social and legal protection for both formal and informal firms (Chen, 2012). The 2017 MSME survey showed that less than 5 per cent of all enterprises offer contracts to their employees. This is extremely low. Within the qualitative study, enterprises providing formal contracts were only limited to larger firms in the textiles sector.

In some instances, while enterprises do not provide any formal contract, they still provide contributions to social security funds and/or to a township social security programme (A3, O1, F8, and W40). In other instances, they informally commit to taking care of their employees in some way or another. For example, some respondents claim to pay for medical bills or to accompany their employees to the doctor if needed (A4, A7, A8, and T9).

The qualitative study reveals that enterprises do not seem to regard formal contracts as necessary or as a requirement and often rely on personal agreements between the parties; more so in family-owned enterprises that only employ close relatives. In addition, enterprises highlight the benefits of informal employment as it allows for some flexibility as regards holidays, taking leave or working hours. For instance, in an enterprise employing mothers, contracts with fixed working hours might be an obstacle such as when the child gets sick, they might have to do housework, etc. (O9) so they would be absent from work. This also applies to enterprises employing sporadic, seasonal or peak production workers.

Conversely, the lack of contracts can also be conducive to certain conflicts between employer and employees. In the event of labour shortage and a highly competitive environment, we observe firms facing severe difficulties when it comes to keeping a stable workforce. In the next particular cases, we intend to show how these difficulties are managed under the informality of employment.

### **Box 3.2: The textiles and apparel industries dilemma**

During our qualitative research, the textiles and apparel industries have shown very particular characteristics and difficulties in terms of informality of employment. Thus, we highlight two particular events within this qualitative study.

#### **1. Wundwin's curse**

We visited Wundwin Township in Mandalay Region on two occasions: April and June 2018. This location was chosen for our qualitative study due to the homogeneity of its manufacturing sector, as 84 per cent of firms (161 in total) operate within the textiles industry. The main product of these enterprises were longyis (traditional Myanmar garment) for both men and women, made out of cotton or silk in some particular cases. According to Wundwin's Development Office, this specialization emerged due to the township's location in the dry zone, which prevents relying on agriculture as the sole source of livelihoods. The specialization started in the late 1950s and resulted in a weaving cluster in which the "entire population is skilled at weaving" (I6).

When asked why she chose this line of business, a weaver and business owner responded that it was a natural skill for her and she had no other alternative (T14). The multitude of family businesses (96 per cent of all textiles enterprises) portrays this tendency to pass on the weaving skill to the next generation, reinforcing the township's specialization. Textile enterprises in the town vary in size and production capacity. The smallest firms showed a high tendency to operate as subcontractors.

Throughout the interviews, we quickly identified a paradox of a community "skilled at weaving" (I6) with a serious skilled labour shortage. The shortage of skilled labour is so severe that newly employed labourers demand an advance payment as a precondition for their employment. In return, they commit to stay for a period. This advance payment varies from 500,000 to 1 million Kyats, and it is paid in full at the start of the employment. While all enterprises have to submit to this demand in fear that the skilled labourer would choose to work somewhere else, they oftentimes face the consequences when these employees choose to leave without honouring the agreement on minimum employment duration.

In some cases, owners turn to legal action against employees but complain that the procedures are costly and time-consuming, and sentences are often in their view too gentle (e.g. 3,000 Kyats per month until the entire debt is paid, T11). It was also mentioned that even when a receipt of the advance payment is presented in court as

a proof of contract, it does not help bringing the defaulters to justice (T8). Owners further highlight that these disputes are currently dealt with through civil law instead of criminal law, which might be why the sentences are perceived as mild. In general, we found a lack of trust in government institutions and processes as allies, further reinforced as the local dispute resolution committee, temporarily set by the Township Development Office, stopped operating.

Business owners are aware of some possible solutions, yet they still find the problem unsolvable (T10). For instance, increasing or upgrading machines would decrease the need for skilled workers, yet it needs capital investment. Attracting skilled labour from other regions was attempted but again, it failed, as workers did not remain in the township as promised (I6). Another possible solution would be to request formal commitment from workers through written contracts. Yet, workers do not accept the use of contracts. Business owners then face a 'we all do it or none of us do it' situation, in which a consensus among all textiles enterprises to require formal contracts would be collectively beneficial.

Evidently, there is a need for stronger legal enforcement. New regulations that give local authorities the capacity to intervene might also ease procedures and decrease costs. Business owners also call for representation of businesses at the union level to raise awareness of these types of conflicts. While textiles businesses in Wundwin are currently able to maintain their production level, the decreasing demand for longyis, dependence on domestic market and the increasingly problematic workforce management seem to indicate that Wundwin could benefit from a more diversified manufacturing sector. Support in technical expertise and machine upgrading to produce other textile products, for instance, might help relieve enterprises of the weight of Wundwin's curse.

## **2. Yangon's double identity**

Interviews in the township of Shwepyithar in the Yangon Region were conducted in August 2018. We aimed at visiting firms within the apparel industry, which comprised 15 per cent of all manufacturing firms in the township. We targeted both large and small enterprises to assess adequately differences between firm size categories.

We interviewed, among others, three apparel enterprises with similar production levels. Firm A (A5), exporter, has about 700 employees; firm B (W37), also exporter, has 300 employees and firm C (A3), with 10 employees but employing several subcontractors (with 10-30 employees each).

Firms A and B, which were exporters located inside an industrial zone, were registered with DISI (A also with Myanmar Investment Commission (MIC)), as well as in the municipality. They also adequately followed labour laws, namely all employees worked under formal contracts and were paid social security. Firm C was outside the industrial zone and was solely licensed by the municipality. While it paid social security to employees, it did not offer formal contracts. Wages also varied from one firm to another. For example, for a minimum wage (basic skilled seamstress), firm A paid 250,000 Kyats per month; firm B 7,200 per day (approximately 175,000 Kyats per month) and firm C paid between 200,000 and 250,000 Kyats per month.

When asked about workforce issues, firm B mentioned absenteeism and unstable workforce, while firm A seemed to be unconcerned. Firm C also faced severe complications to keep employees, which justified why they had to start working with subcontractors. They also ascribed the problem to the *mind-set* and not to salaries, as workers often try to work with their relatives and friends, easily being persuaded to switch employers. At the end of the interview, they also mentioned difficulties to match wages of their more profitable competitors, such as the exporters. Written labour contracts were not appealing, as employees do not want them.

It is difficult to adequately evaluate the underlying causes for differences in these firms, but we can hypothesize potential reasons. In first instance, firm C is not located within an industrial zone. One might argue that firm C indirectly works outside the legal frame, relying on unofficial subcontractors. This could mean that laws and regulations are not as easily enforced by the authorities, thus labour laws are more easily avoided. In addition, the lack of formal registration prevents them from regular inspections. While firm C attributes its reliance on subcontractors to the impossibility to keep the workforce, they also benefit in terms of tax, registration and licensing fees. The question remains whether firm C has any incentives to switch to more formal operations, including full formal employment and registration. Looking at firm B, which follows regulations, yet also faces workforce instability, one would tend to answer in the negative.

In light of these examples, the qualitative study points towards wage differences as a main reason for workforce instabilities. Wage imbalances might also restrain enterprises from following labour and registration requirements, as they do not offer further benefits such as providing legal protection. This issue also does not limit itself to competition between large enterprises in the township; owners of other informal apparel firms in the township indicated their inability to compete with export firms in terms of wages, experiencing large workforce instability. In short, firms (such as B) that feel obliged to follow labour and registration laws do not seem to have any advantage unless they are able to match wages to the more profitable firms.

The examples shown above, both in the apparel and the textiles industries are characterized by the overlap between informal employment and workforce instability. Contracts as a means to solve these issues might not be sufficient, as underlying conditions such as actual enforceability and trust of enterprise owners in the legal system might limit its resolve. Firms in these industries face an on-going struggle to match wages of the more profitable firms while being completely vulnerable to workforce instability.

### **3.4 Informal payments**

According to (World Bank, 2017a) making informal payments is a widespread practice in Myanmar. The 2017 MSME survey identified so little informal

payments that it created significant concern about the reliability of the data. We therefore carefully carried out in-depth qualitative interviews and found that informal payments are common.

Table 3.2 illustrates the average amounts of informal payments respondents in the qualitative survey stated they pay in a month or in a year. The amounts range from 5,000 to 100,000 Kyats per month. This money is paid to government officials from a number of different public offices. However, it does not seem that the number of bribes increases in proportion to the firm size as suggested in Table 3.2. The huge variation in terms of industries, quantities of payments and institutions make it challenging to establish a consistent pattern for informal payments.

Table 3.2: Amounts and purpose of informal payments

Amount	Purpose	Size category	Number of employees
20,000 per month	To avoid being caught in possession of illegal wood	Small	10
80,000-100,000 per month	To access illegal wood	Micro	9
20,000-50,000 per month	To operate informally	Micro	9
50,000 per year	To reduce the amount of tax payment	Small	15
100,000 once-off	To speed up documentation processing	Small	15
5,000-30,000		Small	20
10,000-15,000 per year	For 'stationery purposes'	Micro	5
80,000-100,000 on 4-5 occasions per year	Some government staff ask for tip money, for example, if they need to attend some training, they need to pay for transport costs	Micro	6
50,000-100,000 per year	To reduce the amount of tax payment	Small	30

Note: It was difficult for some respondents to remember how many times per year they paid

Source: MSME qualitative study 2018

Generally, many respondents refer to informal payments as a voluntary payment, e.g. 'tea money'(F1, O9) or 'tip money' (W23). Such wordings seem to serve the purpose of normalizing the practice<sup>2</sup>. In other words, informal payments are seen as a voluntary donation that officers do not ask for, but enterprises nevertheless offer (T1). Many enterprises state that it is 'not as bad

<sup>2</sup> Conclusions about exact wordings might be prone to interpretation, as it solely depends on direct translation. However, the authors believe these distinctions play a significant part in the qualitative analysis.

as with previous regimes' (F1) or they feel 'it is better with the new government' (W24). This reflects a situation in which informal payments are often a voluntary action or a sign of hospitality or generosity. When asked, some respondents seem to reflect on their answer arguing that the practice is common in Myanmar (O5, W33) and in line with existing norms.

Obligatory payments although seen less often, remain a frequent practice in some sectors or regions. For instance, some informal payments are requested through associations (encountered in two different townships from different regions during qualitative fieldwork). In this context, certain institutions request 'contributions' by association members. Enterprises often express their aggravation, as they do not receive any benefits from the exchange (W31, W33, W34, R2, R4, and W36).

Summing-up, the discrepancy between the MEMS quantitative and qualitative results can be due to a number of different reasons. Firstly, accompanying CSO staff attributed the openness of enterprises to speak in the qualitative survey about informal payments (and any other topic) to the interviewer being a foreigner. They expressed that enterprise owners were more keen to speak and expand on the issue solely due to the interviewer being a foreigner whom 'they want to impress'.

The differing results may also be related to the difference in methodology. Benefitting from a long and open dialogue between the interviewer and the interviewee, in-depth interviews offer a more personal and trust engaging experience for the respondents. Similarly, the manner in which the question was posed in the quantitative survey questionnaire or the manner it is expressed in the qualitative interview might have played a part both in how the question was received and, in the willingness, to respond with honesty.

#### **4 Sawmilling: Complexities and future of the wood sector**

As mentioned in the methods section, this qualitative study targeted the wood and wood related industries. In the following section, we describe these industries in more detail, including all actors involved as well as the dynamics

that make these industries particularly difficult and singular for SMEs across Myanmar.

#### 4.1 **Setting the scene**

Myanmar's forest area now accounts for 44.5 per cent of the land area (World Bank, 2017b). Although it remains one of the highest shares in the Asia-Pacific region, deforestation has accelerated from 1975 to 2000, only decreasing slightly in the 2000–2010 period (FAO, 2010). The damage due to deforestation is not spread evenly across country. For example, geographers have identified that one of the most rapid intact forest losses in the world since 2000 is taking place in the Bago Region (Potapov et al., 2017).

Drivers of this rapid deforestation include production and consumption of fuelwood, increased commercial agriculture, urbanization, infrastructure, mining and illegal logging (Linn & Liang, 2015). Most common types of forest in Myanmar include: tidal, beach, dune and swamp; also notably, Myanmar forests comprise 38 per cent of total forest area in teak, a high-quality and much valued timber with 20-25 year rotations (Kaung, 2016; Ladrach, 2009). In terms of value and quality of forests, forest degradation has become increasingly critical in Myanmar and remains one of the principal national environmental concerns, which explains why it is now one of the most regulated industries in the country.

Forest has historically always been owned by the state, with the exception of community forests (CF), which have 30-year long-term lease contracts. In 2010, 99 per cent of forest ownership was still in public hands (FAO, 2010). The Myanmar Selection System established an annual allowable cut (AAC) which was followed up to the 1980s, but in instances in which the government needed to boost the forestry sector to contribute to regional and national GDP, the annual cut exceeded the AAC at the expense of immature trees (Kaung, 2016). Illicit logging due to increased demand, high prices and corruption, has also been common, specially by forest dwellers and small merchants (Kaung, 2016).

In 2016, a temporary national logging ban (until March 2017) as well as a regional (Bago Region) 10-year logging ban was put in place to counteract years of over-exploitation (EIA International, 2016). Other measures still in place include the export ban of raw timber since 2014 (EIA International, 2016). Also, a ban on private sector involvement with a production sharing system in harvesting of timber was set for the 2017-2018 financial year, leaving the government's Myanmar Timber Enterprise as the only permitted producer (The Myanmar Times, 2016).

## 4.2 Regulation

During our qualitative study, we interviewed both wood industry firms (and wood-based furniture firms) and Forestry Department officers in several townships. The interviewed firms within the wood industry are in their entirety sawmills. They only vary in size, type and quality of raw materials, and the extent of production.

In general, many respondents criticize the amount of regulation needed to operate in this industry, expressing that "government procedures are too complicated" (W2), "regulations are too hard" (N4), "they need many permits" (W35) or go through many "unnecessary procedures" (W34). Firm W21 expands on these procedures as: (1) win the auction, (2) submit form to Forestry Department, (3) pile wood in their compound, (4) obtain certificate for cutting, which might take weeks, and after cutting the wood, they need to (5) submit a form for all cut wood. One of the interviewed Forestry Department officers in Pyin Oo Lwin (I10) concurs that sawmills need to follow many regulations, including the submission of both the sawmill and the cutting licenses. Additionally, sawmills are frequently inspected by the Forestry Department, which checks whether the wood is legal, registration, licenses, and size of saw.

License fees for sawmills are dependent on their production capacity. Big sawmills state that they pay a license fee of 100,000 Kyats per year, while small mills state they pay 50,000 Kyats per year to the Forestry Department (I10),

while the DISI mandated figures for the registration fees are as follows: for large industry 50,000 kyats, medium industry 25,000 kyats and small industry 12,000 kyats per year. In addition, mills state they are also liable to pay municipal fees, which vary by location.<sup>3</sup>

In the Ayeyarwady region we observed that many sawmills were registered by SSID instead of with the Forestry Department. Officers from the Forestry Department in Patheingyi (I11) explained that the difference between those registered with the Forest Department and SSID is the size of the saw. Small saws are supposed to be registered by SSID and bigger saws by the Forestry Department. However, we did not find this distinction in any other state/region, which indicates either that requirements for registration vary across different regions/states or that the registration requirements may be interpreted and applied differently in different locations.

In the case of infringement of regulations, there are two relevant Articles within the Forestry Law of 1992:<sup>4</sup>

- a) Article 40 states that, if a business breaks Forestry Department regulation, the owner will need to pay a fine of 5,000 Kyats, go to prison for up to 6 months or both;
- b) Article 41 A states that depending on the degree of the crime, the owner will need to pay 10,000 Kyats, go to prison for one year or both (1992 Forestry Law; refer to Appendix B for full articles).

The Tatkon regional Forestry Department office (I12) explains that according to their experience, businesses are mostly charged according to Article 41 A. They also explained that sentences depend on the region or state. For instance, while in most states/regions infractions get a fine, an equal offense in Shan State might result in prison. In addition, if a sawmill is ever fined for possession

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<sup>3</sup> Yangon has much higher municipal fees than any other region.

<sup>4</sup> We are aware of the new 2018 Forestry Law but it was obviously not in force at the time of the qualitative interviews.

of illegal wood, it is shut down and it is not likely that it can ever obtain a permit to operate again.

The 1992 Forestry Law (Article 23) also refers to the transportation of forest products from one township to another and calls for the need of permits to do so. In this regard, interviewed firms also expressed their discontent with these restrictions (W2, W30, W34, W36, and N4) as they further complicate the access to raw materials. These restrictions apply to auction wood, however Form-8 or 'captured' wood (as explained in section 4.3.) cannot be transported outside of the state/region (W6).

Qualitative results show a general discontent with the amount of regulations and hurdles that firms within the wood industry, specifically sawmills, must overcome to have consistent and profitable businesses.

#### **4.3 Illegal logging and 'captured' wood**

Due to the strong restrictions for wood production and forest conservation objectives, tackling illegal logging has become of major importance for Myanmar's government. Both the Myanmar Timber Enterprise (MTE) and Forestry Department take part in actions to prevent but also to penalize illegal logging across the country. This is hardly surprising, as the value of illegal timber seized by the government has grown over the past five years. According to media reports referencing Myanmar government data, the value of illegal timber seizures has increased from 168.51 million Kyats in 2013 to 15.14 billion in 2016 (The Myanmar Times, 2017). Over the past 10 years, 50,000 to 60,000 tonnes of illegal logs are seized each year (The Myanmar Times, 2016). There was an overall increase in the number of seizures by the Forestry Department between 2007 and 2014, when seizures reached an all-time high, but the volume per seizure appears to have been declining (UNODC, 2016). Illegal logging is often linked with unauthorized sales abroad. The highest incidence is reported in Kachin State, Sagaing Region and Tanintharyi Region, while the illegal logging occurring elsewhere is claimed to be mainly for local consumption (The Myanmar Times, 2016).

When illegal timber is discovered, the Forestry Department must act following one of two different processes, depending on whether the owner is apprehended or not. If the owner is present, he is taken to the police and a court case is opened. While the trial is active, the captured wood is kept untouched by the Forestry Department until the court determines the sentence and what to do with the wood. The MTE then decides how to manage the wood, keeping it for auction, using it in development projects or transferring it to the Forestry Department, which would then sell it as Form-8 wood. The whole process is lengthy and avoided solely if the owner is not detained so the wood does not need to wait for the court's decision.

This process might vary slightly from region to region. For instance, in Sagaing Township, Form-8 wood is auctioned monthly, while in the townships of Kata or Kalaw it might not be auctioned at all due to the difficulties and costs of transport (I3). This was corroborated in our interviews with enterprise owners in rural areas or certain regions who reported not having access to Form-8 wood in their township and having to travel 45 miles away (W29).

In terms of wood quality, Form-8 wood is regarded as of very poor quality compared to auction wood; perhaps due to being held by the local Forestry Department office for '4-5 years in the rain and the sun, so it becomes poor quality' (W21). These differences are most likely, as firm W21 explains, due to a lengthy procedure from capturing to auctioning wood as Form-8. However, Form-8 wood was believed to have better quality than MTE auctioned wood (W7) in the Bago Region. These differences in quality perceptions may indicate different personal preferences, but also that the efficiency with which the sales of wood are organized in some regions could be higher than in others. In terms of price, some firms also mentioned that the price of Form-8 wood is lower than auction wood; however, there is no standard basic price, so it is set by every regional Forestry Department.

While procedures for the management of captured wood seem to be similar across different states or regions, the final product auctioned as Form-8 seems

to vary significantly. Our qualitative study points towards an unequal and potentially inefficient supply of Form-8 wood across different states/regions, further highlighted by restrictions on transport from one state/region to another. Even though access to Form-8 wood may seem appealing for small, financially constrained firms, its irregular availability and unpredictable quality and price illustrate a lack of comprehensive solution for the wood supply problem.

The unreliable access to raw materials is a likely reason for why some of the interviewed enterprises from the wood sector remain informal, that is, unregistered, and why some source wood illegally. In several townships, formally registered sawmills would mention that there is a substantial number of illegal mills in the same township and that they represent unfair competition (W17). Illegal mills are, however, subject to bribe requests from forest rangers or police officers from the Bureau of Special Investigation (BSI), which is, among other duties, in charge of investigating economic crimes. The bribe amounts seem very high in comparison to the costs of operating legally.

#### **4.4 Value chain and challenges**

As shown in previous sections, restrictions and regulations on timber directly affect the availability of raw materials for the enterprises within the wood industry. Thus, the value chain in the wood industry presents strong limitations both on the supply and demand side.

Available sources of raw materials are shown in Figure 4.1. Sawmills may obtain raw timber through direct access to government-owned institutions: (1) MTE auction and (2) Forestry Department Form-8 auction, or obtain cut wood through (3) MTE sawmill. Enterprises might also obtain raw timber from legal secondary sources such as (4) MTE auction winners or (5) licensed cut wood through other sawmills. They might also obtain raw timber from (6) their own

plantations<sup>5</sup> or (7) plantations owned by others. Finally, they might obtain wood through (8) illegal means.

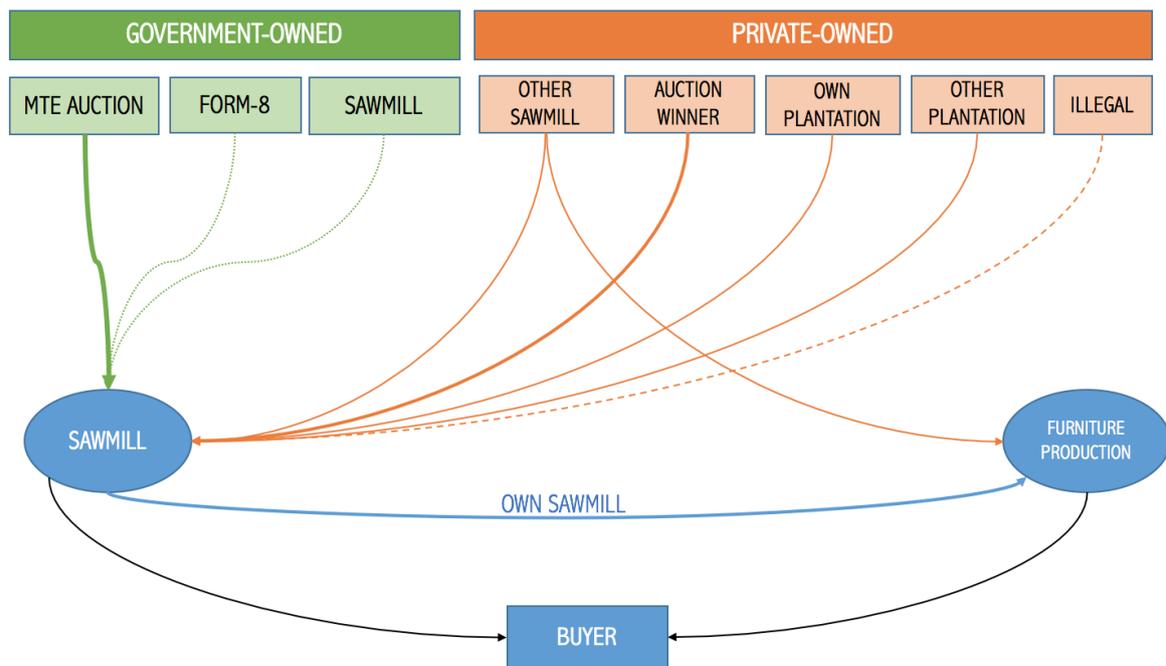
The auction system comprises a national auction in Yangon, in which the won materials can be transported across the country and other regional auctions (13). However, regional auctions do not take place in all regions/states, which again limits enterprises depending on their location. Similarly, auctions are accessed by firms of all sizes and different wood-related businesses, which increases competition and ultimately prices. Smaller sawmills, for instance, complain that it is difficult to compete against big firms with huge profits such as wood floor firms (W21).

The main source to obtain a legal supply of raw materials is through MTE auctions. However, firms are in many cases unable to access these auctions due to increasing bidding prices, transportation costs of raw materials, travel costs to their nearest auction location, etc. The auction system inherently harms the smaller sawmills, disproportionately raising barriers of entry and raising prices for small and medium enterprises, which are unable to match the biddings of larger firms who also buy in larger quantities, or even foreign firms. One enterprise owner states that in the past, he was satisfied with raw material availability in the auctions, yet in the past three years, the price rose up approximately 250,000 Kyats per ton, which makes it difficult to win the auction (W9). In these cases, formal firms resort to other methods to obtain raw materials, mostly buying from auction winners (W1, W11).

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<sup>5</sup>We are unclear on the terms and legality of own plantation-sourced wood. We only encountered this in certain areas of Ayeyarwady region. When asked, the local Forestry Department had no knowledge nor comments on the matter. Chapter V of the 1992 Forestry Law is dedicated to the "Establishment of Forest Plantation" by which is understood that a person might obtain the "right to extract forest produce on a commercial scale" under a permit. We might understand interviewed firms obtaining raw materials from plantation fall under this category.

Figure 4.1: Available sources of raw material for the wood industry



Source: Authors' elaboration based on MSME qualitative data

Not even the formal auction process guarantees access to high quality wood, as prices for good quality wood sometimes reach unattainable levels (W21). The quality of Form-8 wood, or 'captured wood' also seems to vary across different states/regions. Associations of wood producers and processors have a potential for improving access to auctions but are in practice far from achieving any real coordination among firms in the industry (W9), except in a few townships or when mediating access to 'captured wood' (W24, W7). There is also a lack of trust in said associations, which in certain locations request 'contributions' or 'bribes' without any real return.

Another main challenge, which was mentioned on multiple occasions among interviewed firms, was the decrease in the demand for woodcutting. The main reason given was that while in the past wood was used as the main building material, today it is only used for repairs or extensions (W10, W3), as metal has substituted wood in the construction of houses.

Evidently, the wood industry seems to be at a crossroads. The government-controlled supply of raw materials seeks a balance between forest conservation as part of one of the union's major policy objectives while trying to provide an adequate amount of raw timber to national and regional auctions. Access to auctions is in itself limited to certain locations and firms able to match the increasingly high prices. On the demand side, firms also face the challenge of decreasing use of wood for construction. If both of these trends remain to coexist, the wood industry will most likely disappear or stagnate for small and medium enterprises in Myanmar. The survival of firms in the industry might be limited, for instance, to those firms with development contracts, with secure supply of raw materials or highly profitable business, such as wood floor businesses.

This section has given an overview of the wood sector in Myanmar, as well as illustrated how government policy might affect industry growth. The environmental consequences of the wood industry, however, have not been addressed. Further research on the overlap between conservation regulation, limitations of the wood industry and affected actors might shed light on the equality of distribution of forest resources. This includes the question of whether the SME business environment is negatively affected by these restrictions while 'bigger players' and exporters within the industry are benefitting.

## **5 The seamstress and the dyer: Gender wage gap**

MSME quantitative data show an underrepresentation of female workers and enterprise owners, as well as a statistically significant difference in wages between male and female workers. The MSME 2017 quantitative report estimates the gender wage gap using a Blinder-Oaxaca decomposition method, controlling for key employee and enterprise characteristics such as demographic data, education and experience, location, size of firm and industry. Results show that females receive, on average, 23 per cent lower wages than male employees do. All else equal, and accounting for differences in firm characteristics, the report concludes that the gender wage gap is almost

entirely due to firm differences. The qualitative survey was implemented to help us understand these differences.

There is also an evident gendered distribution of labour in industries in Myanmar. Female workers are more prevalent in the textiles and apparel industries, with up to 65.8 per cent and 85.9 per cent of the workforce being female respectively. The same can be said of the tobacco industry (77.2 per cent) and pharmaceuticals (70 per cent). In turn, the male workforce is larger in sectors such as fabricated metal (97.1 per cent), machinery (97.5 per cent), motor vehicles (100 per cent) and wood related industries (more than 90 per cent). Quantitative results allow us to assess this trend between industries, yet we are unable to establish whether this trend is also reproduced within industries or within enterprises, which could potentially explain to some extent the wage differences. The qualitative study allowed us to explore further occupational segregation within industries.

We observe occupational segregation in two ways. First, there exists horizontal segregation. In this way, females do not occupy the most physically demanding jobs, which are then considered 'more difficult' thus deserving of higher wages. Second, there is evidence of self-selection, whereby female workers seek jobs that allow them to have more flexible working hours. Self-selection also arises from cultural standards, including that women must take care of the children and the house.

For instance, we can look at the following cases, which perfectly portray occupational segregation:

- a. In two different cotton production firms (T15 and T1), females and males carry out different tasks: men carry the raw cotton bales while women pick and classify the cotton. In this differentiation of tasks, male employees earn 120,000 Kyats per month, while female workers earn 80,000 Kyats per month. Another firm pays Kyats 6,000 per day to male and 7,000 Kyats to female workers, as men "carry a heavy burden" while operating the machine and weighing on the scale.

- b. Within a longyi-producing enterprise (T12), there are two main skills needed: weaving and dyeing. While weaving is predominantly a task left to female workers, we also find some men carrying out weaving tasks. In turn, the skill of dyeing is solely left for male workers. The principal motive given for this separation of tasks is that dyeing demands high physical strength, as the threads need to be manually drained after dyeing. Inherently, physical strength is regarded as a higher effort skill, thus dyers are paid more than weavers are. By observation, we assessed weaving as a highly laborious task, requiring the worker to be under pressure in a highly noisy and hot environment. This task differentiation affects the wages such that females earn on average less than 5,000 Kyats per day while males earn between 7,500 to 8,000 Kyats per day. In another textiles firm (T8) men make 30,000 Kyats more per month, as in addition to the tasks women do, they must carry heavy loads.
- c. In the wood industry, a highly men-populated industry, we also observe such differences. In one of the enterprises, men's and women's wages are respectively: 8,000 Kyats/day and 6,000 Kyats/day (W10). The enterprise explains that this difference depends on the difficulty of the job; as males operate the sawmill, while females collect woodcuttings and clean, implying again a less physically demanding job for women.

In terms of self-selection, we can look at a subcontractor in the textiles industry. One female owner expressed her satisfaction with her business specifically because she can make money and stay at home (T14). We observe how self-selection in certain jobs or tasks might arise due to the need for women to tend the household, and their gratification in doing so. In another case, we observe how self-selection in a bakery enterprise negatively affects women who earn a lower salary than male employees do solely because female employees are more easily available and males do not want to work in this business (F4). The owner of a leather industry enterprise also reflects on the majority of female workers as follows: "This is mainly a business for women. They can take the materials home and produce there after taking care

of daily tasks” (O3). Finally, in the tobacco industry, female workers mostly work in the afternoon and leave to pick up the children after school (O9).

Again, we observe the perception of females’ main responsibility to be the caretakers of the household, salaried jobs being a secondary responsibility. In this context, self-selection arises from their prioritization of, for instance, flexible hours. One enterprise pays on average 7,000 Kyats/day to males and 3,000 Kyats/day to female employees, as the salary is not fixed, but depends on the amount produced (T3). Female employees work part-time and combine their employment with cooking, childcare, and other tasks at home (T3). As our qualitative study shows that a high share of employees’ wages is set according to individual amount of production, this would indicate that the female workforce is directly and negatively affected by their two-job workdays.

Solely looking at one particular case, it would be difficult to assess whether gender has a significant effect on the allocation of tasks and consequently, wage; or whether it is purely coincidental that the female often carries out the less skilled (thus less remunerated) task. However, as we have seen in multiple enterprises across different industries, female workers tend to be automatically left out of more physically-demanding tasks or carrying out tasks which “justify” their lower wages compared to other male employees.

Occupational segregation by sex seems to be a highly common experience amongst our interviewed enterprises, especially in certain industries such as textiles and wood. Occupational segregation by sex has played a significant role in female-male pay differentials, which may account for differences in pay for ‘equal value; work, the desired jobs and the available jobs (Anker, 1997). Beyond the economic consequences such as economic inefficiency and labour market rigidity, occupational segregation is inherently harmful to women (Anker, 1997). It also allows the perpetuation of gender inequalities and setting women in disadvantageous positions both as part of the workforce and in the general society.

### **Box 5.1: Quantitative pitfall – employee wages**

If we were to further analyse the gender gap among equal tasks, we should allow for task differentiation in the future survey questionnaires. While task differentiation may explain differences in wages, it still might reflect unequal pay for males and females as mentioned in this section.

## **6 Challenges**

The 2017 MSME survey showed that the share of enterprises in the manufacturing sector facing serious constraints to growth adds up to 70 per cent. This is a significant share. The level of perceived constraints decreases with firm size for formal firms, yet it remains similar for informal firms and sawmills. The MSME survey also determined differences in perceptions according to location and industry of the firm. More than 90 per cent of firms perceived constraints in Kayah, Kayin and Kachin state; while the figures in Bago Region and Nay Pyi Taw rounded at 50 per cent. Industries with the highest share of firms perceiving constraints were coke and refined petroleum and motor vehicles, as well as the wood and textiles sectors with about 80 per cent.

Affecting almost 30 per cent of all enterprises, the most important constraint to growth perceived by enterprises in all industries was access to capital or credit, followed by the lack of technical expertise and the lack of raw materials. Similarly, in terms of constraints to doing business in their state or region, access to markets remains the most common, along availability of skilled labour, infrastructure and outward youth migration to Thailand and neighbouring states.

Within the qualitative study, we asked enterprise owners and managers to indicate their main challenges, as well as about the way in which the government could help overcome them. We noticed that some owners were reticent at times to openly discuss their own circumstances. Moreover, when

asked about infrastructure, one owner maintains he is content with what they have, as it is “a part of their culture”(T13).

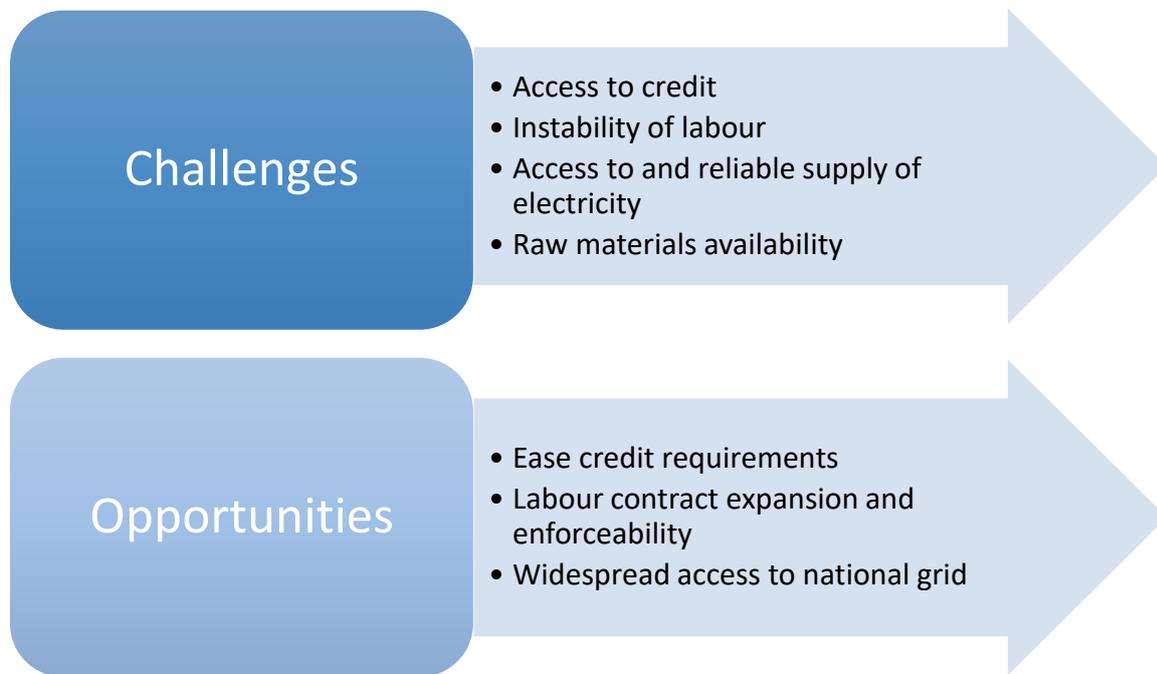
Qualitative findings are in line with quantitative figures, particularly as main challenges given by our interviewed firms are access to credit, electricity and raw materials. Electricity access remains very low, and even in areas with power access, voltage is often deficient and power failures are very common which particularly hits manufacturing industries (Kapteyn & Wah, 2016). Frequent power failures might increase up to five times the cost of production for power-sensitive industries that have to use generators to reduce wastage (Kyaw, 2008). MSME quantitative findings showed that up to 12.6 per cent of firms had no access to electricity, with high regional variations. However, electricity access, as shown by our quantitative findings, does not secure stable production. For instance, the states or regions of Tanintharyi, Yangon, Kayah, Sagaing and Magway with grid accessibility above average, all report frequently having insufficient power for production (CSO and UNU-WIDER, 2018).

Our qualitative findings illustrated in Figure 6.1 support the quantitative survey evidence. Firms complained that electricity supply is not regular (O2), due to which firms had to use own generators and incur extra costs (O7, W35). More surprisingly, firms within industrial zones are also affected by irregular electricity supply. A firm from Sagaing Region notes that even in the industrial zone, there is no electricity, so they have to use their own generator for production (O2); and in Ayeyarwady Region, although improving from 3-4-hour power cuts to 2-3-hour cuts per day, firm F6 asks for regular electricity supply for improved production.

As expected, rural areas are affected even more by poor electricity access. Firms in rural Ayeyarwady call for infrastructure improvement, such as roads and electricity (W29) while in rural Shan, expecting the national grid to reach the villages by 2020-2021, firms run their businesses from generators or use them during the frequent power breaks (F5, O8). The Myanmar's National

Electrification Plan targets to electrify 100 per cent of all households by 2030 (World Bank, 2015), and it is expected that electricity access and regularity will improve in the coming years. Perhaps arising from the national plan, many firms mentioned to experience a more regular or better electricity supply than in the past (N4, T11, T14).

Figure 6.1. Main challenges and opportunities for interviewed firms



Source: Authors' own elaboration based on MSME qualitative data

Another widespread challenge as described by enterprises is the access to credit. Firms ask for better loan schemes, also pointing out the lengthy and complicated process and the difficulty in presenting the required collateral (W13, R4, W14, W29, W6, W8, and T14). For instance, several firms mentioned the need for a “brick house” as a collateral, which they are unable to provide (W9, W12, and W31). Among those who do not have loans, many believe that they would obtain bank loans if they had the possibility or if conditions were more favourable, for instance, longer maturity or lower interest rates (W27, W5). Others yet do not want to try at all due to the procedures or lack of trust in the credit system arguing: ‘the procedures are

really hard, that's common knowledge, so I don't want to try' (N4) or 'we don't want to, we want to live peacefully' (W25).

As an example of required documentation, we can look at SMIDB's requirements. They include: a copy of the national ID card, a business license (issued by local municipality), other licenses (such as from DISI, FDA, etc.), IRD receipts from the past three years, property and land deeds, a business plan (how they want to use the loan), and a bank inspection report (situation of enterprise and cash flow account). SMIDB also explains that the size of loans varies and is not usually the amount businesses request, as business conditions, value of collateral and the potential of the firm, determine the size of the loan. Ultimately, for SME loans, collateral is always a requirement. Other financial institutions have similar requirements so informal firms<sup>6</sup> are left out as creditors, as are firms without any property ownership, as land seems often not to be sufficient. Enterprises in certain industries also seem to face even greater constraints than the average-firms illustrated by the wood industry. A sawmill and furniture production owner mentions that while he was able to obtain a loan for his furniture business, he was rejected for his sawmill business (W28) and another sawmill owner conveys that bank loans to wood-related businesses are comparatively much lower (W34). This might be due to the unreliability of the wood industry to obtain constant profits, as mentioned in Section 4, adding even more constraints to growth on the wood industry.

Among those who obtain loans, the majority invest the money in stocks of raw materials (F2, A1, T15, R2, R4, W26, and W28). This is mostly due to enterprises facing seasonal availability of raw materials (e.g. fruits, cotton) or general market availability (e.g. wood). This manner of investment inherently prevents enterprises to grow and locks their revenues in the repayment debt. Financial education and improved credit access might motivate enterprises to invest in long-term assets and not to feel like they are 'going in a circle:

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<sup>6</sup>Defined as lacking registration or tax compliance

borrowing, buying stock, selling, re-paying loan and then again'(A1). This would still depend on the duration and the amount of loan, as well as interest rates.

Another general challenge for SME business owners in our study is the seasonality of demand and production, to which respondents referred to as slow or 'cold' market during the rainy season. We find that seasonality of production is often due to the nature of the business and climate (e.g. fruit preserves, cotton) and potential buyers (e.g. in the wood industry, as the main use of cut wood is for construction, demand slows down in the rainy months). It also might be due to infrastructure (e.g., business being slow during rainy season due to transport conditions (T21)). Firms facing seasonality of production often rely on other sources of income, mainly agriculture: 'I operate 4-5 months per year. The rest of the time I grow paddy, tomatoes and chili' (W1); or switch their customer base: 'In summer, I sell for building houses and during the rainy season I sell to hotels and boats that are doing maintenance' (W35).

Again, seasonality of production directly affects firms' savings and investment strategies, as well as their labour management. Firms then tend to stock up when raw materials are available: 'the major problem is the availability of raw materials. It is seasonal. If you cannot purchase the entire year, production will be on and off'(F5). In other cases, firms operate 'solely for the workers' (T10) during slow season, thus having low or hardly any profits which limits their options for saving and developing further (T13).

#### **Box 6.1: Quantitative pitfall – balance sheets**

The 2017 MSME survey does not account for certain characteristics of enterprises that might affect their profit and revenue data. For instance, we find a number of enterprises with zero costs of raw materials, as they either only offer a service (especially relevant for rice mills located in rural areas); use their own raw materials (such as dig up sand or water tanks); or keep a stock of raw materials lasting several financial years.

Wood (and wood-related), textiles and apparel industries face multiple challenges particular to their industries. The wood industry experiences huge constraints in the supply of raw materials due to restrictions on timber production. They also experience a decrease in demand for wood products, due to metal and plastic substitutes in construction as more available and inexpensive options. Labour instability stands out as a prevalent and serious challenge for textiles and apparel enterprises, mostly due to wage competition. In addition, longyi producers are exposed to a big dependence on the domestic market due to their highly specialized production.

## 7 Conclusion

The purpose of this qualitative study is to give a more complete and coherent picture of the SME business environment in Myanmar. We build on quantitative results from the 2017 MSME survey carried out throughout the country, exploring in more detail a set of selected topics as well as specific industries we find relevant for policy focus. We also raise certain issues where our quantitative data might fall short in explaining reality. These issues, as described throughout the report, are key in the development of guidelines for future modifications of the MSME survey questionnaire, as well as being points of attention in future analysis of quantitative data.

In general, we find that the SME business environment in Myanmar has plenty of space for improvement, both with regard to government policy and SME business strategies. Government procedures in terms of firm registration and tax collection are in need of simplification and transparency.<sup>7</sup> There must be a clear distinction in relation to the type of registrations required for firm formality, accounting for the industry, location and size. Similarly, tax collection must be transparent to business owners, allowing firms to estimate accurately their tax contribution and to understand the purpose of tax collection. Informality of employment must also be tackled, so both employers

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<sup>7</sup>The new Myanmar Company Law was enacted on 6 December 2017 and came into force on 1 August 2018. According to the new law, a Myanmar Companies Online (MyCO) registry has been established. The aim is to simplify firm registration, save time and cost and being able to link the registration number with the tax code.

and employees are protected under labour rules and instability minimized. However, to achieve employment formality, there must be an increased trust in the legal system and legal protection that written contracts could potentially give to both employers and employees. This consequently calls for a better efficiency of the legal system.

While government provides some loan and micro-finance options, access to credit does remain one of the main challenges for SMEs. According to the interviewees there is a general lack of information provided to enterprises with regard to loans, thus enterprises are often too scared or think procedures are too complicated to go through. Conditions and requirements by banks are also in many instances big barriers for smaller firms, who cannot provide the collateral or are unable to keep up with interest payments. Financial assistance to increase revenue should be made with a view to investments in long-term assets rather than with a view to inventory and raw materials only.

This report also highlights the current gender wage gap due to occupational segregation in many interviewed firms. While it remains difficult to directly tackle this issue, as it is often a reflection of the state of society, this issue might be a useful focus in future and current research. Policy focus on gender issues, such as women's education, could also support a decrease in the wage gender gap and occupational segregation leading to increased efficiency.

Finally, in terms of industry-specific characteristics, we find the wood sector to be a declining industry, facing lack of supply of raw materials due to conservation efforts as well as timber production procedures. The wood industry also faces a decline in demand for cut wood, due to changes in the preference of construction materials. These events increase the dominance of bigger firms with easier access to raw materials and bigger markets to the detriment of SMEs. This indicates a strong pressure for wood industry firms to diversify into other activities. Assistance with loans, technological knowledge, as well as help with foreign market access might be useful to ease the transition. In turn, the textiles and apparel industries seem to be on the rise,

operating under high competitive pressure. Policy should be focused on formality of employment as well as enforceability of contracts, such that labour instability does not limit firm production and growth. Within the textiles industry, specifically longyi production, diversification to other types of textiles might release the pressure of the oversupply of longyis to the domestic market.

## References

- Anker, R. (1997). Theories of occupational segregation by sex: An overview. In M. F. Loutfi (Ed.), *Women, gender and work: what is equality and how do we get there?* Geneva: International Labour Office.
- Boyce, C., & Neale, P. (2006). *Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input.*, 16.
- Chen, M. A. (2012). *The Informal Economy: Definitions, Theories and Policies*. (WIEGO Working Paper 1.). Cambridge, MA: WIEGO.
- CSO and UNU-WIDER. (2018, May 28). Myanmar Micro, Small, and Medium Enterprise Survey 2017. Retrieved October 16, 2018, from <https://www.wider.unu.edu/publication/myanmar-micro-small-and-medium-enterprise-survey-2017>
- EIA International. (2016, August 4). Myanmar logging ban a major step to forest sector reform. Retrieved October 15, 2018, from <https://eia-international.org/myanmar-logging-ban-major-step-forest-reform/>
- FAO. (2010). *Global Forest Resources Assessment*. Rome. Retrieved from <http://www.fao.org/3/a-i1757e.pdf>
- Kapteyn, A., & Wah, S. H. (2016). Challenges to small and medium-size businesses in Myanmar: What are they and how do we know? *Journal of Asian Economics*, 47(C), 1–22.
- Kaung, B. (2016). Forest restoration at the landscape level in Myanmar (Forest landscape restoration for Asia-Pacific forests) (p. 79).
- Ladrach, W. (2009). *Management of teak plantations for solid wood products*. ISTF News, Special Report.
- Linn, K. M., & Liang, W. C. (2015). Analysis of Forest Policy in Myanmar. *International Journal of Sciences*, 4(2015–03), 16–28.
- O'Reilly, K. (2012). *Ethnographic Methods*. Routledge. <https://doi.org/10.4324/9780203864722>
- Phyo, P. T., & Sway, K. K. (2016, November 16). Private firms still barred from logging next year. Retrieved October 15, 2018, from <https://www.mmtimes.com/national-news/23696-private-firms-still-barred-from-logging-next-year.html>

- Potapov, P., Hansen, M. C., Laestadius, L., Turubanova, S., Yaroshenko, A., Thies, C., ... Esipova, E. (2017). The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000 to 2013. *Science Advances*, 3(1), e1600821. <https://doi.org/10.1126/sciadv.1600821>
- Reyes-García, V., & Sunderlin, W. D. (2011). Why do field research? | Center for International Forestry Research. Retrieved October 16, 2018, from <https://www.cifor.org/library/3428>
- The Myanmar Times. (2016). Ministry struggles to control illegal logging. Retrieved December 6, 2018, from <https://www.mmtimes.com/business/21130-ministry-struggles-to-control-illegal-logging.html>
- The Myanmar Times. (2017). Value of seized illegal timber rising yearly. Retrieved December 6, 2018, from <https://www.mmtimes.com/news/value-seized-illegal-timber-rising-yearly.html>
- UNODC. (2016). Criminal justice response to wildlife and forest crime in Myanmar: A rapid assessment (p. 30). New York, NY: United Nations Office on Drugs and Crime.
- World Bank. (2015). Electricity to Transform Rural Myanmar [Text/HTML]. Retrieved October 12, 2018, from <http://www.worldbank.org/en/news/feature/2015/09/16/electricity-to-transform-rural-myanmar>
- World Bank. (2017a). Myanmar 2016 Country Profile. Washington, DC: World Bank.
- World Bank. (2017b). Share of Forest Area. Retrieved from <https://data.worldbank.org/>

## Appendix A

### Interview guide for enterprises

1. What does this enterprise produce?
2. How and when did you start the business?
  - a. Where have they acquired the skills to do this?
3. What quantity (per day or per month, whichever is easier to recall)?
4. Is it a seasonal or year-round activity, that is, does the firm operate every day per year or there are some breaks?
5. Who are your buyers (e.g. other enterprises, households, etc.)?
  - a. Do you produce in advance and store finished product or after receiving orders?
6. Who are your suppliers (individuals, enterprises, etc.)? Where do the raw materials come from?
7. Does the enterprise have many competitors?
  - a. If yes, are they local?
  - b. Does the enterprise compete with quality, design, price, etc.?
8. How many employees work in your enterprise?
  - a. How many men? How many women?
  - b. Do employees have written contracts?
9. What is the average salary? For men? For women?
  - a. If male and female salaries are different, why?
  - b. Do the employees have adequate skills?
  - c. Are there any other challenges with employees?
  - d. How many hours per day do the employees work? How many shifts?
10. Are you a member of a business association?
  - a. If yes, do you pay fees? How much?
  - b. Are there any benefits?
11. Do you have loans? Formal or informal?
  - a. What are the loan terms: interest rate, maturity, amount borrowed?
  - b. If no, have they ever considered getting a loan?
12. Is the firm registered?

- a. Do you pay municipal license fees, DISI (industry) fees, electricity, fire department fees?
  - b. How much are the fees?
13. Do you pay taxes (IRD)?
- a. How much?
14. Is the enterprise ever inspected by the authorities (e.g. IRD, municipal officers, forestry department officers)?
- a. What do the inspectors look for?
15. Have you ever been required to make informal payments 'under the table' to speed things up or to get some documents from the officials?
16. In general, are you satisfied with how the business is going?
- a. If no, what are the main challenges?
  - b. If no, do you consider changing your type of activity? What would you rather do?
  - c. Do you have plans to expand the production?
17. How could the government help with overcoming some of the challenges that affect your enterprise?

#### Interview guide for Forestry Department

1. How is the process of wood sales organized in this region? [here, I mean auctions and sales of capture wood]
2. How frequently do you have auctions or sales of capture wood?
3. Is the auction for individuals or business associations?
4. How do sawmills know that there will be an auction? [e.g. is it announced in some way]
5. What is the amount of wood sold in this region?
6. Do you have a logging plan for the region? [e.g. the amount of wood that can be cut]
7. What is the number of sawmills in this region?
8. How frequently do you inspect sawmills in this region?
9. What do you look for during the inspection?

10. Do you conduct any reforestation initiatives in this region? [e.g. community forestry]
11. Is the problem of illegal logging in this region severe?
12. What is the amount of capture wood in this region in a year?
13. What is the procedure when you discover illegal logging or illegal wood?
14. Compared to 5 years ago, is the amount of illegal logging different?
15. On the one hand, Myanmar has a problem of deforestation. On the other hand, sawmills cannot get enough wood for production. Should the government do something to help the sawmills?

## Appendix B

### 1992 Forestry Law (Articles mentioned)

#### CHAPTER V ESTABLISHMENT OF FOREST PLANTATION

13. The Director-General may, with the approval of the Minister, establish the following plantations on a forest land or land at the disposal of the Government:

- (a) commercial plantation;
- (b) industrial plantation;
- (c) environmental conservation plantation;
- (d) local supply plantation;
- (e) village firewood plantation;
- (f) other plantation.

14. If permission is obtained from the Government:

- (a) the Government and any person or any organization have the right to carry out in joint venture;
- (b) any person or any organization has the right to carry out in accordance with the stipulation, cultivation and maintenance of forest plantations with the exception of village-owned firewood plantations cultivated by the villagers for their use.

15. The Director-General may grant permission to establish with stipulation the following village-owned firewood plantations in a reserved forest or protected public forest or on land at the disposal of the Government in the vicinity of the village:

- (a) firewood plantation established by the Forest Department for a certain period and then transferred to be maintained and used as village-owned;
- (b) village-owned firewood plantation established, maintained and used by the villages by collective labour.

16. A person having obtained the right to extract forest produce on a commercial scale who has the responsibility of establishing forest plantations or carrying out natural regeneration under a permit for the State shall carry out the same at his own expense and in accordance with stipulation.

23.

- (a) Whoever is desirous of moving any forest produce from one township to another within the country shall apply for a removal pass from the Forest Officer empowered by the Director- General for this purpose.

- (b) The provision of sub-section (a) shall not apply to the following cases:
  - (i) moving forest produce within the area permitted for extraction thereof;
  - (ii) moving minor forest produce not exceeding the prescribed quantity and not on a commercial scale;
  - (iii) moving from one township to another in a City Development area.

40. Whoever commits any of the following acts shall, on conviction be punished with fine which may extend to kyats 5,000 or with imprisonment for a term which may extend to 6 months or with both:

- (a) trespassing and encroaching in a reserved forest;
- (b) pasturing domestic animals or permitting domestic animals to trespass in a reserved forest;
- (c) breaking up any land, clearing, digging or causing damage to the original condition of the land without a permit in a reserved forest;
- (d) causing damage to a water-course, poisoning in the water, using chemicals or explosives in the water in a reserved forest;
- (e) catching animals, hunting or fishing in a reserved forest;
- (f) kindling, keeping, carrying any fire or leaving any fire burning which may set fire to the forests in a reserved forest;
- (g) moving forest produce without submitting to examination at the revenue station;
- (h) violating any provision of the rule, procedure, order, directive or notification issued under this Law.

41. Whoever commits any of the following acts shall, on conviction, be punished with fine which may extend to kyats 10,000 or with imprisonment which may extend to 1 year or with both:

- (a) extracting, moving, keeping in possession unlawfully any forest produce, with the exception of timber from teak and reserved tree, without a permit;
- (b) selling or utilizing in other works, forest produce extracted under section 18 sub-section
- (a) (c), without the prior permission of the person authorized to grant permission for extraction.