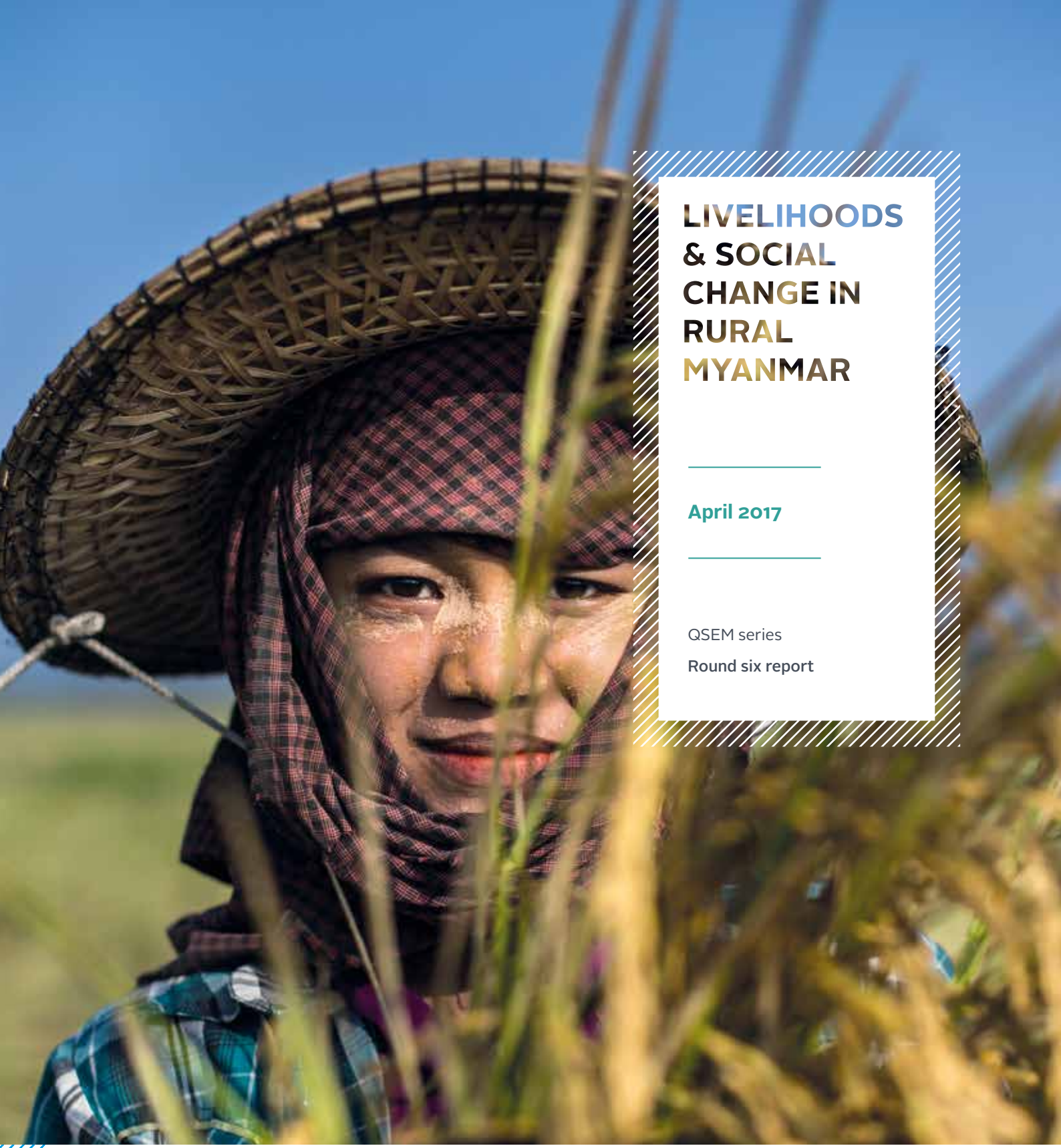

LIVELIHOODS & SOCIAL CHANGE IN RURAL MYANMAR

April 2017

QSEM series

Round six report

Enlightened Myanmar Research Foundation and World Bank

WORLD BANK GROUP

LIFT Livelihoods and Food Security Trust Fund

EMReF Enlightened Myanmar Research Foundation

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Qualitative Social and Economic Monitoring Series

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Ayeyarwady Region
Soe Soe Lynn (Team Leader); Ni Ni Wai; Zaw Paing; and Yan Naing Tun

Chin State
Su Su Hlaing (Team Leader); The Phyu Tun; Thaw Zin; and Zang Khan Thang

Kachin State
Zin Mar Aung (Team Leader); Khin Moe Khaing; Nyein Paing Oo; and Myoe Thu Tun

Magway Region
Ei Ei Khaing (Team Leader); Khaing Thwe; Myat Thura Swe; and Aung Chan Thar

Mandalay Region
Yi Mon (Team Leader); Nay Ye Nway; Nyan Tun Aung; Wai Lin Htet

Rakhine State
Yin Min Phyo (Team Leader); War War Lwin; Wai Phyo Aung; Pyae Phoe Kyaw and

Shan State
Phyo Thitsar Kyaw (Team Leader); Kay Thi Khaing, Mary Paw; Zar Yar Phyo

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The lead authors were Matthew Zurstrassen, Samuel Pursch, and Andrea Woodhouse. Polina Polianskaja managed the ethnographic research. QSEM 6 was managed by Andrea Woodhouse, Senior Social Development Specialist, and Reena Badiani-Magnusson, Senior Economist.

Lift Disclaimer
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ABBREVIATIONS

DALMS	DEPARTMENT OF AGRICULTURAL LAND MANAGEMENT AND STATISTICS
DRD	DEPARTMENT FOR RURAL DEVELOPMENT
EAG	ETHNIC ARMED GROUP
EMREF	ENLIGHTENED MYANMAR RESEARCH FOUNDATION
FGD	FOCUS GROUP DISCUSSION
GAD	GENERAL ADMINISTRATIVE DEPARTMENT
KI	KEY INFORMANT
KIA	KACHIN INDEPENDENCE ARMY
LIFT	LIVELIHOODS AND FOOD SECURITY TRUST FUND
LUC	LAND USE CERTIFICATE
MADB	MYANMAR AGRICULTURAL DEVELOPMENT BANK
MMK	MYANMAR KYAT
MOGE	MYANMAR OIL AND GAS ENTERPRISE
NCA	NATIONWIDE CEASEFIRE AGREEMENT
NGO	NON-GOVERNMENTAL ORGANISATION
NLD	NATIONAL LEAGUE FOR DEMOCRACY
QSEM	QUALITATIVE SOCIAL AND ECONOMIC MONITORING
SEZ	SPECIAL ECONOMIC ZONE
TDSC	TOWNSHIP DEVELOPMENT SUPPORT COMMITTEE
USDP	UNION SOLIDARITY AND DEVELOPMENT PARTY
VA	VILLAGE ADMINISTRATOR
VDC	VILLAGE DEVELOPMENT COMMITTEE
VDSC	VILLAGE DEVELOPMENT SUPPORT COMMITTEE
VERP	VILLAGE ELDERS AND RESPECTED PERSONS
VTA	VILLAGE TRACT ADMINISTRATOR

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EXECUTIVE SUMMARY

The Qualitative Social and Economic Monitoring of Livelihoods in Myanmar (QSEM) research programme is a longitudinal panel study of rural life in Myanmar. It examines people's livelihood strategies and activities, the wider factors that shape those strategies, and how the broader social and institutional features of community life affect livelihood choices and outcomes. The study covers 63 villages in four states (Chin, Kachin, Rakhine, and Shan) and three regions (Ayeyarwady, Magway, and Mandalay) across Myanmar. The research, which has been running since 2012, is now one of the largest and longest-running panel studies of its kind. It provides a unique lens through which to understand how Myanmar's transition is playing out in rural villages and affecting how people make a living, cope with and adapt to shocks and stresses, and engage with village institutions and the state.

This report presents findings from the sixth and final round of research and incorporates work from previous research rounds to provide retrospective analysis. Fieldwork was undertaken from January to March 2016; the report also draws on ethnographic research conducted in three villages in June and July 2016.

Since the research began in 2012, households in QSEM villages have seen significant change and faced much uncertainty. Between 2012 and 2015, the government passed new land and village governance laws, liberalised telecommunications, and increased investment in infrastructure and public services. Access to credit in rural areas increased, and private-sector investment in agriculture grew. In 2015, the government reached a nationwide ceasefire agreement with several ethnic armed groups, held democratic elections, and transferred political power peacefully to the opposition party. These changes have provided opportunities for rural households. Yet such households have also faced deep uncertainty caused by a range of shocks and stresses mainly related to climate and the rural economy.

LIVELIHOODS

It is amid this change and uncertainty that households in QSEM villages have had to make decisions about their livelihood strategies and activities. Over the course of the QSEM panel, one of the most frequently reported decisions has been for households to try and diversify their income beyond agriculture. The seasonality of agricultural income, as well as its vulnerability to weather shocks, has prompted this diversification. Since the beginning of the research, poor households, which often are landless or gain part of their income from casual labour, have consistently reported a shortage of job opportunities for much of the year, whereas farmers have reported being exposed to the vagaries of bad weather and facing labour shortages during peak times. Such problems have prompted QSEM households to progressively balance a more diverse range of income streams. Although diversification of income streams occurs across wealth groups, the poorest households have diversified somewhat less than others. Alongside economic imperatives, diversification has also been motivated by non-financial considerations, including family responsibilities, lifestyle, and social norms.

Households have frequently diversified out of agriculture by setting up non-farm enterprises within their villages. Since the research began in 2012, there has been a steady increase in non-farm rural enterprises in QSEM villages, mostly of micro-enterprise size. They have rarely employed people outside the family and households have been relatively risk-averse in expanding them. Most wage labour opportunities remain in agriculture: although private sector enterprises have set up near QSEM villages, it has been rare for people in QSEM villages to get jobs with them, which communities have attributed to lacking the necessary skills.

People in QSEM villages have also increasingly sought to diversify their incomes through migration, the levels of which have increased steadily across rounds. Remittances can enable households to reinvest in agriculture and non-farm businesses and overcome income volatility. These are important migration drivers, but so too is the desire for a more modern lifestyle as well as other, non-monetary factors. The QSEM ethnographies affirmed the importance of social networks in enabling migration, as well as the risks and challenges migrants can face: namely, that although they may earn a steadier income, they may not earn enough to remit much money to their families, can be poorly treated, and can find life difficult away from their families and social structures.

Meanwhile, broader changes in Myanmar have enabled farming households to start to move up the value ladder in agriculture. Since the research began, rural credit has increased significantly, particularly through MADB. Although the evidence on the impact of credit on household livelihoods is mixed, it has often enabled farmers to increase crop diversification and otherwise improve productivity and/or market their crops differently. Other factors include strong demand and learning from leading farmers, from advisory services, and through experimentation. However, in QSEM villages smallholder farmers were significantly more risk averse than medium or larger landowners, and tended to invest in new crops only upon seeing better off farmers adopt new technologies and approaches successfully.

SHOCKS AND RESILIENCE

Since the research began, households in QSEM villages have experienced a range of climate, economic, health and other shocks. Households' efforts to absorb and adapt to these shocks has varied by wealth and livelihood. When attempting to absorb shocks, poorer households were more likely to utilize coping measures that undermine their longer-term welfare**.** Whereas wealthier households reported relying on savings, poorer households reported selling land or other productive assets, removing children from school and asking them to work, and, in extreme cases, reducing their food intake. When adapting to shocks, rich farming households most frequently responded with altered farming techniques—such as investing in mechanization, changing to less labour-intensive crops, relying more on family labour, or developing new payment structures for labourers. Poorer households were more likely to emphasize migration as a way to adapt to shocks. Efforts to increase savings were found across socioeconomic categories, with households investing in goods, especially gold, that could be sold for cash.

FACTORS AFFECTING LIVELIHOODS

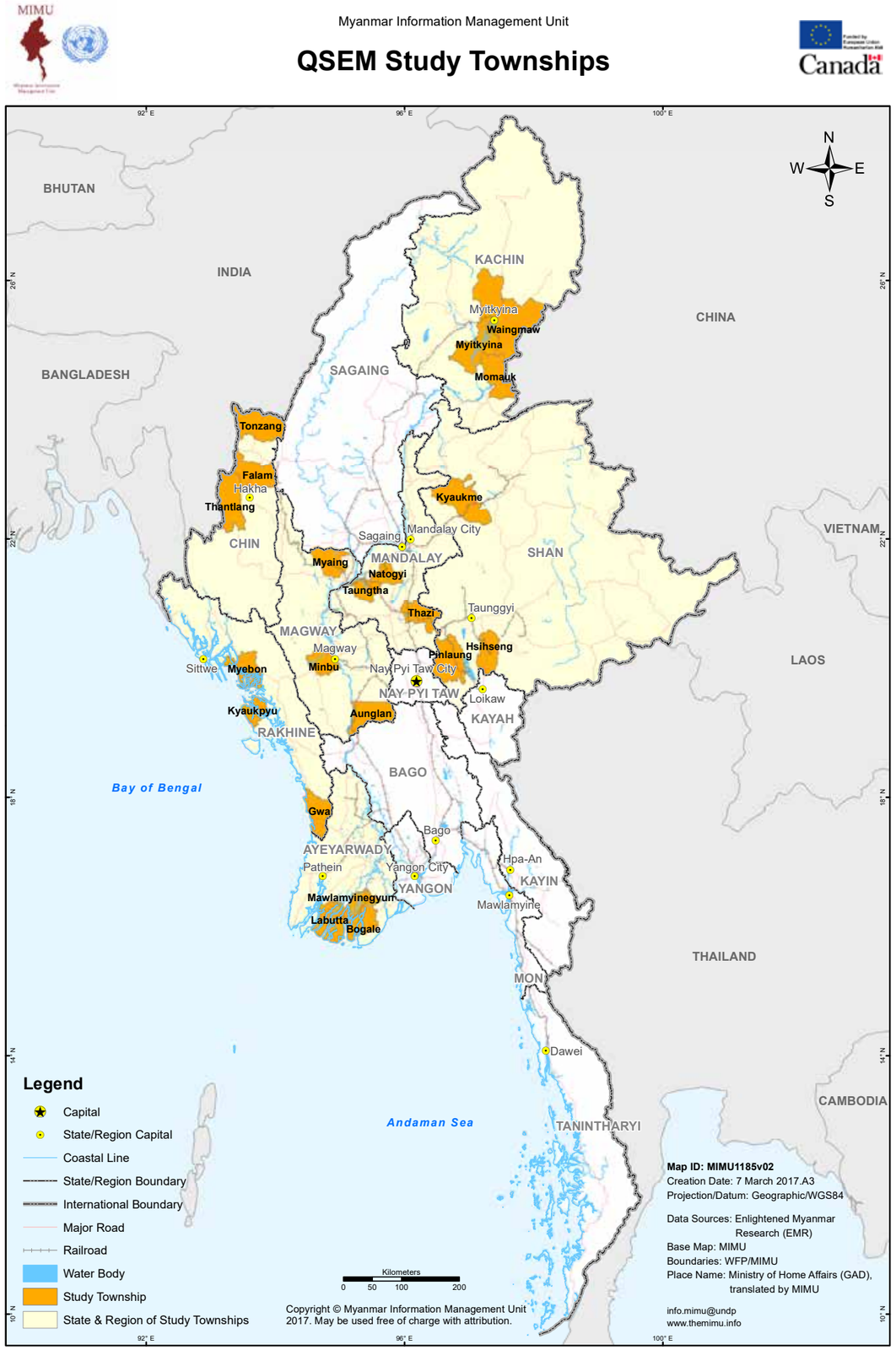
Two of the most significant areas of change since the research began have been in credit and land. As credit availability has expanded, poorer households have begun to rely less on high-interest loans from private moneylenders who charge higher interest rates. Despite expansion, however, credit remains more accessible to landowners than to the landless. Although households highlighted the importance of credit for developing non-farm enterprises, they also used credit to pay down other debts and for household consumption. Such use of credit, even where not invested in income-generating activities, did lead to improvements in household well-being.

Land tenure insecurity continues to affect households in QSEM villages. Since 2012, the roll-out of land registration has provided farmers in some villages with land use rights, but its impact on security of tenure has varied based on context, coverage and implementation. Land registration has taken place relatively smoothly in many QSEM villages, and has enabled farmers to begin to borrow against their land, using their land use certificates as (often informal) collateral. Yet the lack of protection for communal land and shifting cultivation has led people in some QSEM villages to feel insecure about their land tenure, and has led communities to adapt land use practices in order to be able to register land. Meanwhile, in some areas, land registration has been delayed. Land issues in certain QSEM villages continue to be highly contentious.

VILLAGE GOVERNANCE AND ENGAGEMENT WITH THE STATE

Since the QSEM research began, the landscape of village governance has also changed. In early rounds of the research, villagers saw village administrators as their key leaders and primary interface with the state. Reforms introduced in 2012 enabled village tract administrators (VTAs)—a higher position—to be indirectly elected, which led to them assuming the lead governance role. QSEM rounds 3 (2013), 4 (2014) and 5 (2015/6), found that, as a result of these reforms and elections, VTAs had assumed greater importance within communities at the expense of the village administrator. Villagers were accordingly less interested in becoming village administrators. However, in the most recent round of research, which followed the second nationwide local election for VTAs, respondents reported a decline in interest in VTA positions as well. This manifested itself in low competition during the VTA election; in a number of villages, the previous VTA declined to stand for re-election. Communities also expressed a view that as the national government had changed, so should village governance, and in some places expected the new government to further reshape local governance institutions.

Over time, the way villagers engage with the state has evolved, though local decision-making autonomy remains limited. When QSEM began, government service provision in villages was limited. This has increased in QSEM villages over time, particularly in health and education, but services are still mostly delivered in a top-down manner. However, QSEM 6 has found that though decisions about the types of services to be provided are still made centrally, there are initial indications of community-directed implementation, most notably through local electrification committees in Mandalay Region and Kachin State as well as the Evergreen project committees found across the panel.



Disclaimer: The names shown and the boundaries used on this map do not imply official endorsement or acceptance by the United Nations.

CHAPTER 1: INTRODUCTION

The Qualitative Social and Economic Monitoring (QSEM) research program aims to monitor and understand rural livelihoods in Myanmar. The research examines how people in rural Myanmar make a living, the wider factors that shape their ability to do so, and how the broader social and institutional features of community life affect people's livelihood choices and outcomes. The QSEM series is a partnership between the World Bank and EMReF (Enlightened Myanmar Research Foundation) with technical guidance and funding from the Livelihoods and Food Security Trust Fund (LIFT).

The core of the research program is a longitudinal panel study of life in 63 villages in seven states and regions in the country. The study has been running since 2012. Since then, researchers have conducted six rounds of research, returning periodically to the same villages to understand how life in them has changed over time. The research is now one of the largest and longest-running panel studies of its kind, and so provides an unique lens through which to understand how Myanmar's transition is playing out in rural villages and affecting how people make a living, cope with and adapt to shocks and stresses, and engage with village institutions and the state.

This report presents findings from the sixth and most recent round of research, fieldwork for which was undertaken from January to March 2016. The report also draws on ethnographic research conducted in three villages in June and July 2016.

THE CONTEXT

Since QSEM was first designed, Myanmar has undergone several changes. Between 2012 and the end of 2015, the government passed new land, foreign investment, and village governance laws, liberalized the telecommunications sector, developed a pro-poor rural development policy, and increased investment in local infrastructure and health and education service delivery. Private sector investment in agriculture grew. People in rural areas continued to diversify their livelihoods and to migrate. Donor assistance to Myanmar increased rapidly.

In 2015, during the lead up to the sixth round of research (QSEM 6), three significant events took place in Myanmar. In July and August 2015, 12 out of 14 states and regions experienced flooding and landslides related to Cyclone Komen. The floods and landslides displaced 1.6 million people and caused an estimated $1.51 billion in damage and loss, equivalent to 3.1 percent of Myanmar's gross domestic product.[1] In October 2015, the government signed a nationwide ceasefire agreement (NCA) with eight of fifteen ethnic armed groups (EAGs), bringing to an end much of the country's conflict. Seven

[1] See (Myanmar, 2015).

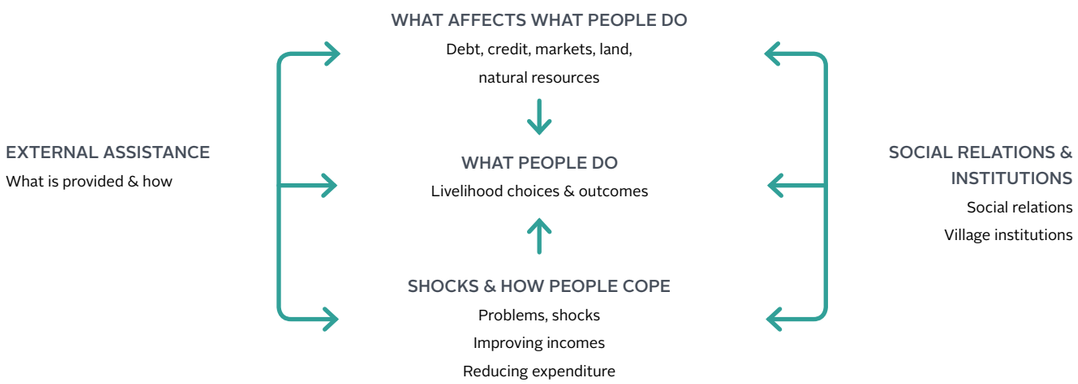
groups did not sign, though, and conflict continued in parts of Kachin and Northern Shan. Finally, in November 2015, Myanmar held democratic elections in which the National League for Democracy (NLD) won large majorities in both national houses of parliament and all but two states or regions.[2] Power was subsequently transferred to the new government on 1 April, 2016. The fieldwork for the QSEM 6 core research took place after the elections but before the establishment of the new government. The ethnography research took place in June and July 2016, after the new government assumed office.

RESEARCH DESIGN

The QSEM Series is designed to support LIFT's broader monitoring of how the rural livelihoods context in Myanmar is changing. The aim of QSEM's qualitative research is to understand why such changes are occurring and how different groups are engaging with these changes. It aims to monitor and understand the changing context of village life and rural livelihoods in Myanmar, help LIFT identify and respond to new and emerging challenges, and inform key stakeholders, including LIFT, the World Bank, the wider donor community, and the government, about how this changing context is playing out and what implications this has for policy and programs.

The research adopts a semi-structured approach. Teams of researchers visit a panel of villages across rural Myanmar on an annual basis to document changes in rural livelihoods and in the village's social and economic context. In each village, research teams collect data on several topics, as outlined in Figure 1. The teams use several qualitative research tools, including detailed in-depth interviews, focus group discussions with a range of key informants in each village, observational research, and a social mapping and wealth ranking exercise. Researchers are also encouraged to probe deeper into specific issues or follow lines of analysis that appear relevant even if they do not stem directly from the analytical framework. As researchers stay in villages that they have visited on multiple occasions, they have developed relationships and built up trust with community members over time, allowing them to gain deeper insights into the realities of their lives.

Figure 1: QSEM analytical framework



[2] The exceptions were Rakhine State, where the Arakan National Party did well, and Shan State, where a number of parties were split.

THE ANALYTICAL FRAMEWORK

The QSEM research collects information across five topic areas, as shown in Figure 1. As QSEM is a longitudinal study, each report focuses on changes over time—both since the previous round and across the full QSEM series. QSEM also aims to understand the relationship between the topic areas, to provide a deeper understanding of why livelihood choices are made and the outcomes that result.

STUDY LOCATIONS

The core QSEM research covers a panel of 63 villages selected to represent variations across 21 townships in four states and three regions.[3] There were some changes in the composition of villages on the panel between QSEM 5 and this round. First, Kachin State was added to the panel, with nine villages across three townships selected. Second, a few villages from the original panel were replaced on the grounds that the benefits of continuing the fieldwork were outweighed by the challenges in doing so. Despite these changes, efforts were made to ensure the longitudinal value of the study was not compromised. Appendix A provides a full description of the panel and changes in QSEM 6.

The expansion of the QSEM panel to include Kachin means that almost one in five villages in the panel are either currently affected by conflict or are located in areas where EAGs are active. This dimension adds richness to the analysis of how conflict affects village life, and provides a snapshot of how the persistent threat of conflict can alter people's livelihood choices and change village dynamics.

RESEARCH METHODOLOGY AND ANALYSIS

FIELDWORK

Research was conducted from January to March 2016 following the monsoon harvest in the second half of 2015. In many regions, this coincided with the off-season crop cycle of early 2016. Research involved seven teams of four researchers. Each team covered one state/region, spending approximately three days and four nights in each of the nine villages covered by QSEM research there.[4]

The research teams used a range of data collection methods, including:

- Two social mapping and wealth ranking exercises conducted in each village;
- Key informant interviews with a wide cross-section of villagers;
- A small number of key informant interviews in each township to cross-check relevant data;
- Focus group discussions with representatives from specific groups;
- Village information sheet completed with inputs from village leaders;
- Documentation of observations during time in the village.

[3] Research in this round ultimately covered only 62 villages. An active conflict restricted access in Kyauk Me Township, Shan North. The research team was able to visit two of the three villages but security concerns precluded access to the third village.

[4] Research in two villages in Kachin State was limited to two days in the village due to security concerns in those villages.

Table 1: Overall respondents (key informant and focus group) by gender

Interview Type	Total Interviews	Male	Female
Overall Key Informant Interviews (KI)	738		
Social Mapping Key Informant Interviews	395	197	198
Other Key Informant Interviews	343	214	129
Focus Group Discussions (FGD)	263	787	525
Total Participants		**1198**	**852**

Appendix A provides a fuller description of the QSEM approach.

In total, approximately 2,000 men and women participated in this round's research.[5] Table 1 provides a breakdown by gender and type of interview.

The report this year benefits from two new research modalities. First, wealth ranking and social mapping exercises were conducted in each village to better understand poverty, wealth,[6] livelihoods, and shocks and stresses. During these exercises, separate focus groups of men and women in each village drew a social map of their village; categorized all households in their villages as 'rich', 'average', 'poor', or 'poorest of the poor'; identified what differentiated those categories to give a picture of the perceived importance of differences in natural, financial, physical, human, and social/institutional capital; identified the biggest challenges faced by households, to give an overall picture of the kinds of shocks and stresses considered significant by each group; and identified what households in each category did to cope with shocks and stresses. The exercise was used to select respondents for key informant interviews from different wealth categories to be tracked across rounds.

Second, senior researchers conducted ethnographic research, piloting a series of livelihood profiles to dig deeper into household decision-making processes. In June and July 2016, small teams returned to three villages and conducted ethnographic research targeting two households in each village. Findings from the ethnographic studies are integrated into this report.

DATA CAPTURE

During the core field research, the teams operate in pairs, with a dedicated note-taker for each interview or focus group. Each day, raw notes are rewritten in Myanmar language into QSEM-specific data format sheets, which are then coded. QSEM utilizes a 'semi-open' coding process that is strongly linked to focus areas within the analytical framework, but allows researchers to capture or highlight new and emerging issues. These coded notes, along with village information sheets and villager-created social maps, are the basis for the post-fieldwork analysis.

ANALYTICAL PROCESS AND DATA QUALITY ASSURANCE

Following the fieldwork, the teams create village summary reports structured on the analytical model and highlighting key findings. Development of these Myanmar language documents is the first step of the analytical process. Two sets of workshops are then held in Yangon with research teams and the World Bank. First, state and region teams present their findings, drawing on the village summary reports to show how each component of the analytical framework has changed in their state or region, how that change has manifested itself within communities, and to what stimuli that change can be attributed.

The second set of workshops consists of the World Bank team presenting the findings back to the researchers, using the analytical framework to structure the presentations. These presentations synthesize the previous, state/region-specific findings into cross regional findings. Each component of the analytical framework receives a day-long workshop to discuss changes, exceptions to change, drivers of change, and how changes are perceived. Through this iterative workshop-based process, a narrative of the findings emerges and a draft storyline for the annual QSEM report developed. This narrative is once again checked with the research teams before drafting begins.

Alongside this collaborative analytical process, the research teams compile a number of key data sources that illustrate and deepen the findings. These include village-level data such as number of migrants from key interview households or the number of credit sources available in each village, case studies that demonstrate findings, and quotes that highlight how research respondents view the changing livelihoods and social context. A full report is then drafted by the World Bank team and submitted for internal and external peer review.

[5] A small number of respondents may have participated both as key informants and in focus group discussions in the same villages. Research teams strive to ensure that a diverse range of views are collected, but on some occasions it is difficult to restrict participation in focus group discussions.

[6] The concept of 'wealth' in this context is a broad one. It covers different types of capital including financial and physical capital but also human, natural and social capital. See, for example, (Khandker, 2009). Resilience focuses on capacity at the household or village level to cope with and respond to shocks and stresses. These include stresses arising from climate change and broader economic pressures. See LIFT, "Annual Report 2015", LIFT, 2016. Whereas respondents may classify some households as being better-off relative to others in a village this does not necessarily mean that those households are wealthy or better-off in general. The research does not focus on the levels of the perceived incidence of being better off or poor, since what it means to fall into either of these categories will vary across locations, but rather examines the broad correlates of what it means to be better or worse off.

ETHICAL CONSIDERATIONS AND STUDY LIMITATIONS

QSEM researchers are trained to understand the ethical considerations of undertaking qualitative research. As QSEM research is not tied to specific development projects, research teams spend time managing communities' expectations by explaining the aims of the QSEM research. Respondents are informed of the objectives of the research, how findings will be used and their rights in relation to participating in the research. Every effort is made to ensure that the research does not harm the safety, dignity or privacy of respondents. Exact locations and identities of households are not revealed in this report.

As with any research method, qualitative research of this nature has a number of limitations. Appendix A outlines the main limitations and approaches taken to address these.

REPORT STRUCTURE

The report is structured to address a series of questions, as follows:

How do people earn a living and how has this changed?

Chapter Two examines the main livelihoods across the QSEM panel, focusing on what kinds of livelihood strategies households in QSEM villages pursue, and how they balance income from various sources. It examines how they attempt to diversify into non-farm activities or migration or increase their productivity in agriculture.

How do households/communities reduce the risk of or respond to shocks?

Chapter Three examines resilience. It documents the types of shocks faced by villagers across the QSEM panel and examines what households in QSEM villages do to absorb such shocks or adapt their livelihoods to better face them.

What factors affect how people earn a living?

Chapter Four examines how changes in context affect people's livelihoods. It mainly examines changes in access to credit and issues around land, as well as changes in private-sector investment and telecommunications.

How do changes in social structures and leadership affect livelihoods?

Chapter Five examines changes in how villages are governed and how people engage with the state, identifying three key factors influencing social structures: village governance and local leadership; changes in networks between villagers and external actors; and changing expectations around the relationship between villages and the state, particularly focusing on changes in expectations around government service delivery.

Conclusions and recommendations

The final chapter puts forward the main conclusions from this round of research in an effort to improve the contextual awareness of organizations and programmes working to improve livelihoods in rural Myanmar.

CHAPTER 2: CHANGING LIVELIHOODS IN RURAL MYANMAR

Over time, the way people make a living in QSEM villages has begun to change. Although people still mainly work in agriculture[7] and face a wide range of shocks and stresses,[8] changes that affect the rural economy have taken place. These include an increase in access to credit, investments in infrastructure, changes in the land laws, and an expansion of telecoms access and private-sector investment.[9] Such changes have the potential to help people in QSEM villages increase productivity and to diversify[10] further into local non-farm[11] activities or migration and to earn a better or steadier income throughout the year.

This chapter examines how households in QSEM villages make a living. What kinds of livelihood strategies do they pursue to make use of their asset endowments, and what drives their decisions? How do they balance different income streams? How are they attempting to diversify into non-farm activities or migration or increase their productivity in agriculture? The chapter seeks to answer these questions by using broader data from the QSEM panel to examine how households in QSEM are making a living, namely:

- What drives decision-making about livelihoods?
- Who is diversifying?
- How do diversification patterns differ by wealth?
- How are households engaging in non-farm activities?
- How are households migrating?
- How are households attempting to diversify within agriculture and improve their productivity? What enables them to do this successfully?

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[7] This is reflected in the 2014 Myanmar census, which identified skilled and non-skilled agriculture as the primary employment sector for the majority of Myanmar's rural workers: Of employed people aged 15 years and over, 56.6 percent were identified as "skilled agricultural, forestry and fishery workers". This includes subsistence agriculture, livestock and fisheries. A further 17.9 percent identified as working in "elementary occupations," which includes casual agricultural. Government of the Union of Myanmar, "The 2014 Myanmar Population and Housing Census. The Union Report: Occupation and Industry," Myanmar, March 2016.

[8] These will be discussed in the next chapter.

[9] These have been documented in previous QSEM reports and will be examined in a later chapter of this report. For example, see (World Bank, 2016).

[10] Griffiths, et al, 2015, "Dimensions of Poverty, Vulnerability and Social Protection in Rural Communities in Myanmar", September 2015, indicates that approximately half of all households in Myanmar have access to more than one source of income. The composition of household income in rural areas usually becomes more diversified as countries go through economic transitions. See (World Bank, 2008).

[11] For the purposes of this report, non-farm refers to employment in the non-agricultural sectors, be it self-employment (e.g. through non-farm enterprises) or wage employment (e.g. in road construction).

The chapter also presents a case study of how one household in Rakhine State makes a living. This illustrates how a household has designed and adapted its livelihood strategies amid a changing context, accumulating and reinvesting assets and pursuing non-farm activities, migration, and agriculture in order to create a diverse livelihood portfolio. This case study is presented first.

The chapter uses data from key informant interviews carried out in the villages and from the focus group discussions. It also uses data from the Rakhine ethnographic case study, other ethnographic case studies, previous QSEM reports, and the 126 social mapping and wealth ranking exercises that were held in villages in order to gather data on poverty, wealth, livelihoods, and shocks and stresses.

CASE STUDY: A RAKHINE HOUSEHOLD WORKS TO DIVERSIFY THEIR INCOME

FAMILY MEMBERS

Parents and four children
Daughter-in-law and grandson

LOCATION

Kyaukpyu
Rakhine

A couple live with four of their seven children, their daughter-in-law, and one grandson in a fishing and rice-farming village located near the new Special Economic Zone (SEZ) in Rakhine's Kyaukpyu township. Twenty years ago, the family was one of the poorest in their village, and remained so until the eldest children reached working age. From that point, a combination of non-farm employment and migration enabled them to start building their assets. Eventually, assisted by remittances, an inheritance, further non-farm employment, and land speculation, they earned enough money to buy a small plot of land.[12] This in turn enabled them to farm, attempt to improve the productivity of their land by mechanizing and also diversifying their crops, and use their remittances to open non-farm businesses and invest in fishing. They are now one of the richest in their village. Their story illustrates how one family has pursued several strategies, often simultaneously, and has used the labour of different family members, to create a diverse livelihood portfolio and become better off, while also demonstrating the challenges they faced along the way.

For many years, the family was one of the poorest in the village. They had no land, and, because the husband was absent for several years, the wife was left to feed their children alone. She did so by scraping together a living through fishing while the middle children cared for the youngest, but life was tough. Things were no better after her husband returned. He too began to fish to earn money, but got the family into debt through drinking and borrowing money. The family managed to survive, but, over a long period, did not manage to improve its wellbeing. Eventually, in 2008, the wife asked her husband to stop fishing, as she believed it was creating demerit (akutho) and contributing to bad karma.

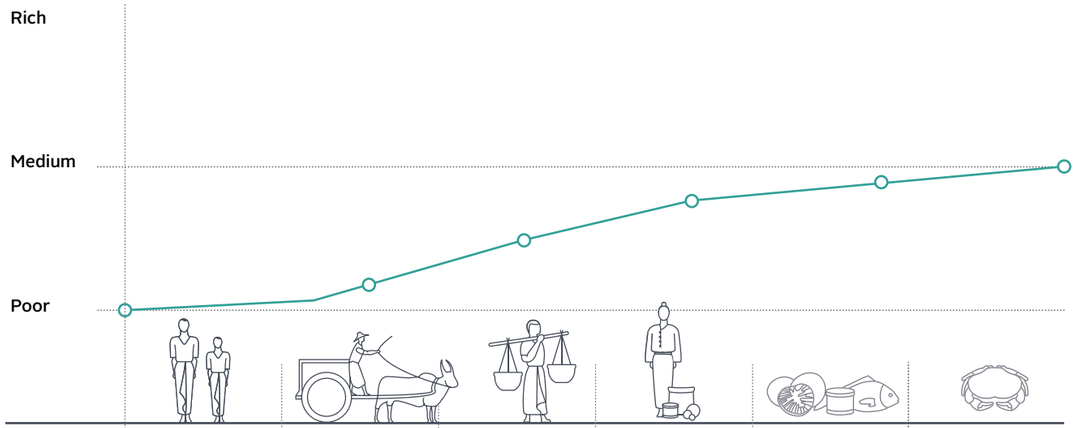
Not much changed until two of their children grew up and left the village. The eldest son had been eager to leave the village for a long time and so, when he was old enough, began fishing, saving everything he could from his earnings. Eventually, he managed to save about 30,000 kyat (around USD 22). With these assets, he moved to the local township capital, Kyaukpyu, where he began an apprenticeship as a mechanic. He later opened a generator repair business there, which enabled him to send 10 lakh (around USD 730) back to his parents during his first two years.

[12] This household was selected as a case study because it exemplifies the challenges, opportunities, and activities that surround successful livelihood diversification. Although the household benefited from several context-specific variables (such as a high level of family labour and an ability to benefit from land speculation), they also exhibited a range of 'standard' household behaviours observed across QSEM villages that make them an effective and illustrative case.

In 2008, his sister also left the village to work in a garment factory in Yangon, which employed other young women from their village. But she didn't like it. During her two and a half years there, workers reported strange events. "Many workers fainted and we thought they were possessed by ghosts," she said. She quit after two events: a supervisor died in mysterious circumstances, and the factory manager locked up workers after a fire to prevent them from reporting it to the police. She also found it difficult to save money. Despite her salary having gone up to one lakh (about USD 73) a month by the end of her time there, she did not have much left after paying for her hostel fees and food. So she returned to the village.

Around this time, road construction enabled her father to get a job. In 2008, a large conglomerate built a road near the village to allow materials to be transported to build the Shwe oil and gas pipelines, built to carry oil and natural gas from the Bay of Bengal to China. The road, however, caused pollution in the village. When her father complained, the conglomerate hired him for six months to organize people to water the road to reduce dust. He made up to eight lakh (approximately USD 580) a month for this.

Figure 2: Rakhine case study family timeline



Based on perception data

The family was able to accumulate some savings through this windfall, which they saved in the form of gold. Although the husband spent most of his earnings on alcohol, the family was nevertheless able to save three lakh a month (about USD 220) for six months.

> "Every month, he gave me three lakh and I bought gold; the rest he drank away," recalled his wife. Although they were not able to save all the money her husband earned, nevertheless, these savings—combined with remittances from their son in Kyaukpyu—meant that their financial asset base expanded considerably.

The family was able to use this expansion of their financial assets to take greater risks, and enable another child to migrate internationally. The wife sold some of the gold to pay for a clandestine passage for her son to join an older cousin working in Thailand. The lack of social structures and familial support there, however, meant her son struggled. He moved from factory to factory, and spent much of his earnings on beer and whisky. But nevertheless, he managed to send 20 lakh (around USD 1500) back to his parents during his first three years. Eventually, he returned to the village and married, but found life in the village difficult, so returned to Thailand with his wife. But they could not save much money on one salary, and his wife did not have proper documentation and felt unsafe and lonely. So they returned to the village in 2016. Meanwhile, another migration attempt—of the family's fourth child—was also ultimately unsuccessful. He went to Yangon to work in a factory, but spent his money drinking with friends. After he broke a leg in a fight, his mother sent money to bring him home.

During the same period, the family made a little more money through speculating on land with other villagers. In 2010, amidst expectations that the special economic zone being set up in Kyaukpyu would drive up land prices, the husband, along with nine other villagers, cleared a large land plot near their village and planted mangrove, allowing them to register the land in their names as agricultural land. He was assisted by his brother-in-law, who had connections with the land registration office. Within a month, the villagers were able to sell this land to outside investors and split the profits between them.

At the same time, the family inherited an acre of land from the wife's mother and, using assets from road construction, land speculation, and remittances, bought an additional acre of land and began farming. Land is scarce in the village, with the average farmer owning only one to two acres. The family bought their second acre for 12 lakh (about USD 960), with the long-term future in mind.

> "We cannot eat gold, but if we have farmland, our children will always have something to eat,"
> the husband said.

This land enabled them to get agricultural credit from MADB, which they used to pay for seeds and labour. They now borrow about 2-3 lakh (USD 150-220) a year from MADB. They planted paddy and sticky rice, keeping the

paddy to consume and selling the sticky rice. They are only able to plant one crop a year, and do not use pesticides or fertilizer. Because some of the land is hilly and some is flat and wet, they have to use three or five different kinds of seeds, but do not use four, because they believe even numbers bring bad luck. The family now employs ten casual labourers at peak times for planting and harvesting.

In the years that followed, the family experimented with ways to improve their productivity in farming. One strategy was to mechanise. Over time, they had acquired seven oxen, which they rented to other farmers to plough their fields. They sold four of them and, along with four other farmers, bought a tractor for 20 lakh (about USD 1470). But this attempt to mechanise failed, so the family abandoned the strategy.

> “None of us knew how to drive [the tractor], so we hired a driver, but he was lazy,”

the husband said, adding that their land was uneven so the tractor was difficult to use.

> “We did not want to depend on anyone, so after one season, we sold it again and bought more oxen.”

Their attempts at diversifying their crops, in contrast, were more successful. The family began to grow and sell long beans, roselle, eggplant, chilies, and okra, which they grew on their land after the paddy harvest. They also began to sell mangoes from their tree. About four years ago, they started to plant betel behind their house. The betel is now one of their main income sources, and brings in about 15 lakh (about USD 1200) a year. The wife collects the leaves from their 1000 plants every two weeks and sells them at the market in Kyaukpyu when the yield is good, and in her daughter’s shop when it is not so good. The price of betel varies throughout the year.

The family has since managed to open two non-farm businesses (a fish paste business and grocery shop), each run by a different family member. The fish paste business came about by accident when someone who owed them money repaid them with fish paste, which they then resold. When they did well out of this, they decided to make a business of it. Buying and reselling fish paste is now one of their most stable income sources, and earns them about 10 lakh (about USD 800) a year. Meanwhile, the daughter who returned from the garment factory in Yangon was also able to use her small savings and some capital from her mother to open a grocery shop selling soft drinks, beer and snacks to workers at a nearby road construction site. She later moved the shop to the village when the road was complete.

The daughter has used microfinance credit in order to do this, and also participates in a savings scheme. She took a two lakh (about USD 160) loan from PACT Myanmar microfinance with a six per cent interest rate to buy more supplies for her shop, which she repays in bi-monthly instalments of 9,200 kyat (about USD 7). She also saves 20,000 kyat (about USD 15) a month in a revolving microfinance fund run by Save the Children. Her parents have also borrowed money through a government rural credit program, but with

Figure 3: Rakhine household: sources of income throughout the year

Income source	Income (annual net)	Who	Season/working period
Paddy	For consumption	Husband and wife	June to January
Betel	1,530,000	Wife	June to February
Fish Paste	1,000,000	Husband and wife	Year round
Grocery Shop	1,200,000	Daughter	Year round
Crabs	60,000	Youngest son	June to August
Casual Labour (farming)	85,000	Fourth son	July
Vegetables	200,000	Wife	January to February
Sticky Rice	40,000	Husband and wife	June to February
Irregular income sources			
Contracting work in road construction	4,200,00	Husband	6 months
Land sale	1,500,000	Husband	
Land sale	1,850,000	Husband	

less success. Like most other villagers, they took a five lakh (about USD 370) loan through a program implemented by the Ministry of Livestock, Fisheries, and Rural Development, which they used to buy an ox. But like other villagers, they misinterpreted the repayment conditions.

> They said the money was for the village and we only had to pay interest, but now have been sent a letter saying we have to repay the loan next month,” the father said.

Meanwhile, the brother who returned from Thailand used his savings to buy crab traps and a small boat, and started catching crabs. However, the price of crabs dropped when fighting in Shan State caused the road to the Chinese

border in Muse to close, so he stopped catching crabs, choosing instead to make a living through casual labour. He did not sell his crab traps, but instead gave them to his youngest brother, who now uses them to catch crabs, giving half of the profits to their mother.

The mother, in turn, manages the family finances and makes all decisions about household expenditure, but discusses all loan and investment decisions with her husband. Whenever there is extra money, she buys gold, as she says it is easy to sell when they need cash. They have been able to save more money now that her husband has stopped drinking alcohol. Yet alcohol is a problem in the village: There are four bars in the village, none of them licensed. Most men in the village drink regularly, and fighting is a daily occurrence. The son who has returned from Thailand drinks with his friends four times a week, and fights with his wife, who stays at home, taking care of cleaning, washing, and cooking.

The livelihood aspirations of family members differ across generations and gender. The husband, unlike most other villagers, is optimistic about the opportunities the special economic zone will bring, expecting that any land confiscated for it will be compensated, enabling them to open a teashop or other business. He plans to buy more farmland, expand their betel leaf plantation, and build a rainwater pond to enable them to irrigate their betel and vegetables throughout the year. His son, the returnee from Thailand, plans to keep on trying farming, but says that if the income is not good, he will return to Thailand, where he has connections and can find work easily—but his wife does not want to accompany him if he does. Meanwhile, the daughter would like to stay in the village. With her savings in the revolving fund, she hopes to be able to expand her grocery and teashop and support her parents in their old age. The youngest son in the family, meanwhile, dreams of moving to Yangon. He is the only one of his siblings to have studied to grade 10, but failed the matriculation exam three times. Still, he hopes for a better life in Yangon.

> “The city is much better for young people. There is nothing here for us,” he said.

WHAT DRIVES HOUSEHOLD LIVELIHOOD DECISIONS?

HOW ARE HOUSEHOLDS MAKING A LIVING?

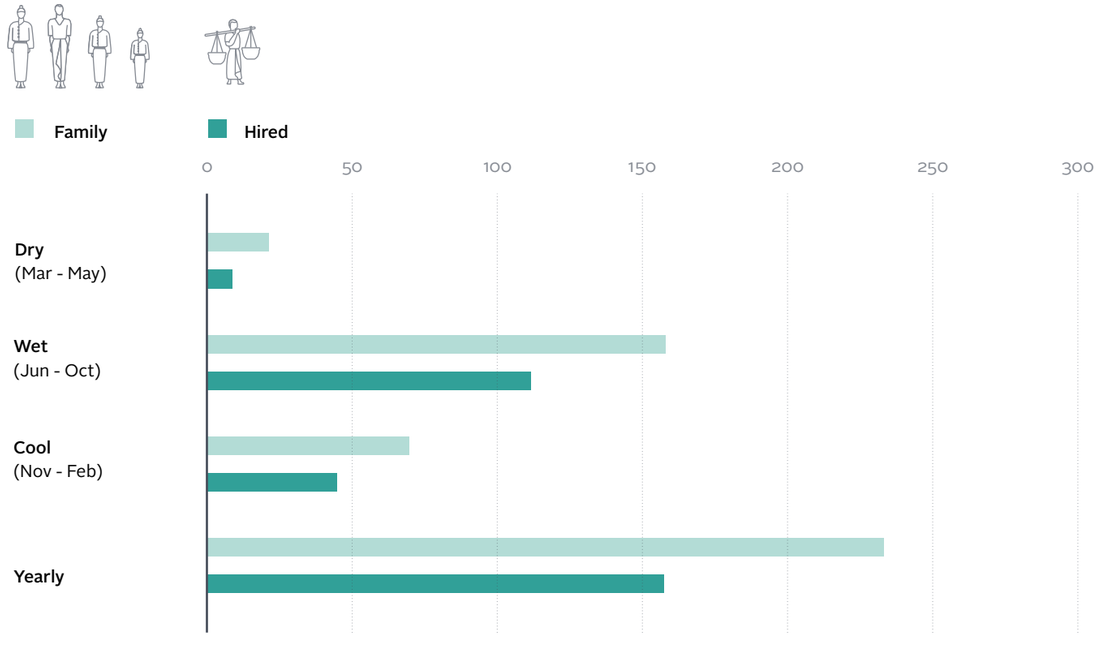
The ethnographies highlight some of the drivers of household livelihood decisions in QSEM villages. These considerations also emerged during the focus groups and key informant interviews.

The first is the importance of managing income volatility. Households studied in the ethnographies consistently tried to build regular, even if small, income streams throughout the year in order to better match their consumption and investment needs and overcome the irregular and highly seasonal patterns of agricultural income. “We grow paddy for the family [to eat],” said one farmer. “We plant betel leaves so that we can have a regular income all year and the children can get an education.” Engaging in non-farm activities to have a steadier income throughout the year was perceived as important even when the profit margins of these activities were low.

The Myanmar Poverty and Living Conditions Survey (MPLCS) finds stark seasonal differences in agricultural labour patterns, highlighting why diversification into non-farm activities is important. The survey finds significant seasonal variation in the number of days worked per cultivating household, with 68 percent of agriculture days worked being in the wet season.[13] The case study family’s agricultural income reflects this: all their agricultural or fishing income streams (paddy, betel, crabs, vegetables, and sticky rice) were between June and February, with only their non-farm income coming in at other times of year.

A second, related, driver is the importance of managing risk. In QSEM villages, the need to decrease vulnerability to shock, particularly bad weather, has been an important driver of livelihood diversification.[14] Many of the livelihood behaviours displayed by interviewees can be understood as adaptations to better manage shocks and stresses.[15] For example, during QSEM 6 research, landless and smallholder households in a Mandalay township disproportionally identified non-farm activities as their primary income source compared to other townships in the region. They had switched to these activities after years of poor harvests. This prompted them to diversify out of agriculture, though in ways that still drew on locally available resources. Thatch-making businesses developed in one village, which had easy access to nipa palm, whereas another village developed a wig making industry.

Figure 4: Average days of labour per cultivating household in the last year, MPLCS



[13] There are regional variations within these patterns.

[14] This will be discussed in more detail in the following chapter.

[15] This will be discussed in more detail in the following chapter.

A third driver is the importance of non-financial considerations—including family responsibilities, lifestyle, and social norms—to livelihood decisions and outcomes. The ethnographies highlighted the importance of investing in non-farm activities, such as opening village shops, which did not require much labour and could be balanced with other household responsibilities, such as taking care of children. Young people were motivated to migrate as much by factors relating to perceived lifestyle choices as by economic necessity. Social norms and practices also had a significant influence. Religious beliefs, for example, were identified as the explanation for ceasing fish-trading activities in two of the six ethnography households. Social problems also affected the ability of households to reinvest their income; for example, the case study household featured in this chapter was initially limited in its ability to invest in new income streams because of spending on alcohol. Similarly, a lack of alcohol consumption was perceived by villagers as an explanation why another household covered by the ethnography in Ayeyarwady Region was able to move out of poverty whereas other villagers struggled.

WHO IS DIVERSIFYING, AND TO WHAT EXTENT?

Over time, households in QSEM have progressively balanced a more diverse range of income streams.[16] This diversity was reflected in the data from the wealth ranking exercises and household interviews held in this research round, in which between 44 and 69 percent of households in each wealth group had more than one income source (see Table 2).[17] These patterns are broadly consistent[18] with the MPLCS, which also finds significant diversification: 35% of rural households nationwide get income from non-farm businesses, 27% from non-farm wages, and 24% from remittances (see Figure 5).

The households studied in the ethnographies mostly diversified by combining the incomes of individual household members, each of whom who usually concentrated on one type of livelihood activity (non-farm, agriculture, migration). Some family members, though, did more than one activity within each category. This practice of combining individual income streams meant that household livelihood strategies often varied along the life cycle of the family.

The income streams of the poorest households in QSEM villages were somewhat less diversified than others. As highlighted in Table 2, over half of such households reported relying on only one income source. This might partly be explained by the importance of family labour to diversification. Both poor and 'poorest of the poor' households were defined as those with a limited asset base: for example, they usually had small or no landholdings, little or no savings and limited credit, a poor quality house, and low levels of

[16] See, for example, QSEM 5.

[17] After categorizing all households in their villages by wealth during the wealth ranking exercises, those who participated in the exercises identified six to ten households from across these wealth groups to be key informants. Researchers then interviewed these households about their livelihoods, enabling them to gather information on diversification across wealth groups. The data do not include Ayeyarwady and Shan because of inconsistencies in how migration data were documented.

[18] The QSEM figures are not, however, directly comparable with the MPLCS, and are not generalizable to the broader population. They are presented instead to give context to the findings on diversification from the ethnographies, focus group discussions, and key informant interviews.

Table 2: Sources of income by wealth
(key informant households from wealth ranking, five regions/states)[19]

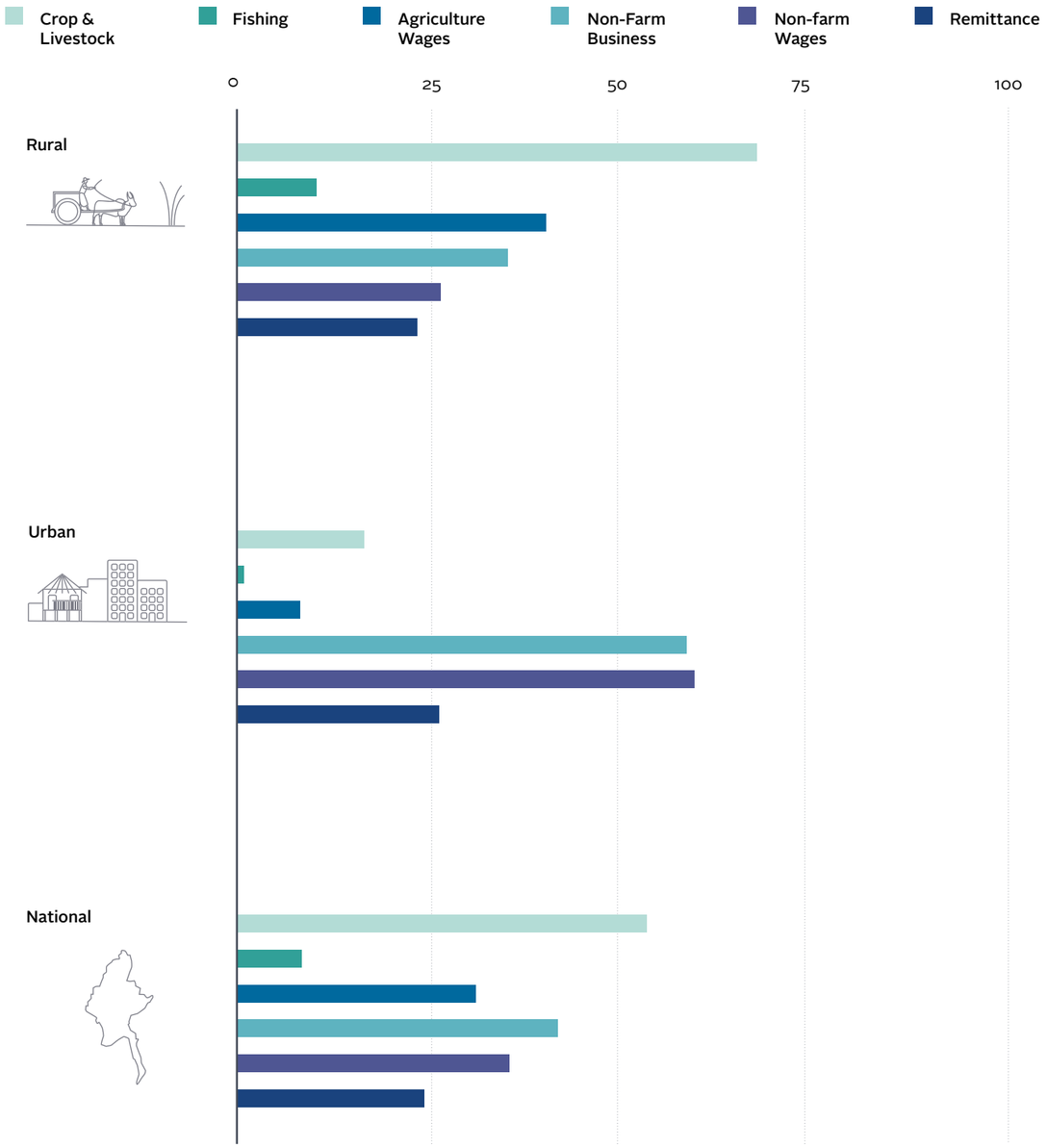
	Poorest of the poor	Poor	Average	Better-Off
Multiple Income Sources	**44%**	**63%**	**69%**	**52%**
Agriculture & Migrant Income	10%	7%	13%	11%
Agriculture & Nonfarm	26%	32%	41%	32%
Agriculture, Nonfarm & Migrant Income	3%	15%	11%	8%
Migrant & Nonfarm Income	5%	8%	4%	2%
One Income Source	**56%**	**37%**	**31%**	**48%**
Agriculture	33%	24%	18%	27%
Migrant	5%	1%	1%	0%
Nonfarm	18%	12%	12%	21%
	N=39	**N=97**	**N=93**	**N=63**

education. Those who were 'poorest of the poor', however, commonly were defined as those who additionally lacked family labour: they had no or only one adult capable of working, as well as many mouths to feed. "There are only eaters in the family. No workers," said one casual labourer in Shan State, describing such a household.

This experience of the case study family in this chapter reflects this. In its early years of poverty, the family was unable to improve its lot through non-farm employment or migration. During this time, particularly when the husband was absent, the family had few assets, many mouths to feed, and only one adult capable of working. It was not until the eldest children grew up

[19] N = compilation of all key informant households selected from social mapping exercise for Chin, Kachin, Magway, Mandalay and Rakhine. The socioeconomic categories were defined by the communities themselves through the social mapping exercise. Each social mapping FGD classified households in the village into the categories of rich, average, poor or very poor. They subsequently identified the broad characteristics of households within each category. These exercises yielded fairly consistent differences between categories in terms of their natural, financial, physical, human, and social capital (the differences that were identified during the discussions were centred around their landholdings, investment capacity, credit status, the kind of house they owned, whether they owned a business and what type, whether they owned farm machinery or had other productive assets, what livestock they owned, their family structure, their health, their voice and participation in community affairs, and their access to markets, institutions, and services). After the exercises, key interviews were conducted with two households from each socio-economic category.

Figure 5: Percent of households earning income from different sources, MPLCS



that the family was able to begin to improve its wellbeing. They were notably only able to do so once the eldest son had accumulated a little savings from fishing, enabling him to pay his way to go to the township capital to begin an apprenticeship. These assets gave him the investment he needed to begin to step out. Later, once the family was able to accumulate assets, they were able to diversify considerably, and build up several income streams across different family members.

ENGAGING IN NON-FARM ACTIVITIES

As indicated above, QSEM has identified a steady increase in village non-farm enterprises since the research began in 2012.[20] In QSEM 6, these consisted mostly of the processing of agricultural products or natural resources, local-level retail trade, and services such as transport, carpentry, or mechanics.

These activities differed by wealth group. The capital requirements of setting up family businesses means that, as might be expected, the kinds of businesses set up differed by household wealth. Members of poor households, who lacked capital, usually engaged in a broad range of activities with low profits, such as producing jaggery[21], and weaving thatch. They were not able to make much money off these activities, and were focused on making ends meet. Members of households identified as 'average' during the wealth ranking exercises frequently reported setting up small family businesses, such as village grocery shops, which enabled them to earn extra money without too significant an imposition on family labour.

Such businesses were usually micro-enterprises, and only occasionally created jobs outside the household. Of the ten non-farm enterprises set up by households studied in the ethnographies, only one, a machine rental business in Ayeyarwady, employed outside labour. This was in contrast to agriculture, in which households did employ non-family labour. The case study family reflected this: at times they employed ten casual labourers on their farm, but did not employ others in their grocery shop or fish paste business.

Households with such enterprises were relatively risk-averse in expanding them, preferring instead to expand their economic activities to the extent possible using family labour. This may be because of the weaknesses in the rural credit market and the repercussions of being unable to pay debts to private moneylenders in case of business failure. Households studied in the ethnographies reported accessing loans from private moneylenders only as a last resort, preferring to curtail expenditure or borrow from relatives instead.

However, although such households could not bear much risk, they were opportunistic and adaptive in the way they behaved, changing their strategies as their circumstances changed and as new opportunities emerged. For example, the case study family set up and continued a fish paste business that came about by accident, while changing or abandoning livelihood activities that were unsuccessful.

MIGRATING

Migration levels have also increased steadily over the course of the QSEM, though there were few overall changes in this round.[22] Yet the rates and type of migration in villages in close proximity to one another can vary. By comparing the characteristics of villages with high migration rates to nearby villages with lower rates, QSEM 6 has identified three village-level variables that affect migration patterns:

[20] See, for example, QSEM 5, which reports that some villages, benefiting from improved markets for specific goods, saw dramatic increases over time.

[21] A kind of brown sugar.

[22] See previous QSEM reports and also (World Bank and LIFT, 2016).

- The presence of established social networks between people in the village and people in potential migration destinations;
- The availability of local employment opportunities;
- The kinds of shocks affecting local livelihoods.

Box 1 below highlights how local context leads to significantly different migration patterns even within a single township.

The experience of the case study family highlights how a lack of local employment opportunities can drive the decision to migrate, and how social networks can enable migration. These factors, along with managing vulnerability to shock, also emerged in the wider QSEM research, which also

Box 1: Local context influences migration patterns in Mandalay [23]

TOWNSHIP MIGRATION RATES

This township, several hours drive south from Mandalay City, produces primarily oilseed and pulse agricultural crops. Migration rates across QSEM villages in the township have steadily increased across rounds, but patterns differ significantly. This box highlight how village-level variables lead to different levels, types of, and destinations for migration.

Migration rates for each village (percentage of villagers who had migrated at the time of research).

LOCALIZED MIGRATION PATTERNS

Table 3: Village migration rates by round

	QSEM 1	QSEM 2	QSEM 4	QSEM 5	QSEM 6
Village A[24]	n/a	n/a	n/a	n/a	19.8%
Village B	8.3%	8.3%	10.9%	12.3%	14.6%
Village C	16.4%	17.5%	17.9%	23.5%	26.1%

Village A, near the township centre, was added in QSEM 6 and has a high proportion of landless households. Nonetheless, because people from the village had migrated internationally, sent home remittances, and developed their networks for fifteen years, the education levels, social networks, and capacities of people in the village were relatively high. Migration remains a key income source for many households. Until recently Malaysia was the main destination (Thailand second), but more recently villagers have become aware of and interested in emerging and better-paid opportunities in Korea.

Village A, with its strong international networks, has a very different migration pattern than its peers in the same township. Although migration rates are below village C, the ability of landless households to invest in international migration has led to positive migration outcomes for the villagers.

Village B has the lowest migration rate, at just under 15 per cent. The village is relatively small with approximately 60 households, the vast majority of which have access to agricultural land. People from the village are also well known for their bricklaying skills, which enables them to get work in neighbouring villages after the harvest. Those who do migrate are invariably young men who leave in small groups to work in jade mines in Hpakant or on the Chinese border. Interviewees reported that 'adventure' was as much a driving force for such migration as economic need. They also reported that migrants negotiated contracts of three to six months, drawing on networks established by previous migrants. In recent years, this form of migration has increased, due to a reduction of work available in a nearby marble quarry.

Village B demonstrates how local employment opportunities (a high percentage of households with access to land and job opportunities in bricklaying) have contributed to relatively limited migration, but how a decrease in the availability of local employment (reduction in quarrying) can cause migration to increase.

In village C, the most remote of the three, migration has been much higher. Close to 60 per cent of households are landless and local employment opportunities are limited. Villagers have a long-standing relationship with watermelon plantation owners in a nearby township who employ approximately 30 villagers for 2-3 months every year. This provides dry season employment with reasonably good wages of 3,000 – 3,500 *kyat* (approximately USD 2.20-2.50) per day. A few villagers have migrated to China, Malaysia and Thailand, though their networks there are not yet established enough for other villagers to use them to find work and also migrate.

This village, given the fewer livelihood options locally and the well-established relationships with plantation employers, tends toward higher migration levels than village B. However, migration remains almost exclusively domestic.

[23] No research was conducted in Mandalay region in QSEM 3, as the original QSEM design up to and including QSEM 3 consisted of staggered rounds of research.

[24] Village A was a replacement village for this round and as such no data was collected in previous rounds

highlights the challenges migrants can face in their destinations. For example, domestic migration attempts may not earn migrants much money, despite helping their families overcome income volatility and reducing the number of mouths to feed at home.[25] The daughter in the case study family, for example, faced challenges in the Yangon factory she worked in, and eventually returned home. In QSEM villages, international migration through legal avenues has, in contrast, been a more predictable pathway to improved economic wellbeing. The research has documented numerous households benefiting from the remittances of family members migrating overseas.

Yet migration can be risky. This is particularly the case for poor households who may not have the social networks, skills or capital to migrate successfully, but it can also be risky for better-off households. Furthermore, the lack of family structures in migration destinations may make it difficult for migrants to succeed there, as indicated by the failed migration attempts of the case study family's youngest son to Yangon and their elder son on his second migration attempt to Thailand. Illegal international migration was particularly risky; migrants lacking work permits often have difficulty finding safe and reasonably paid jobs. In QSEM villages in Rakhine State, for example, where researchers found more evidence of illegal international migration to Thailand and Malaysia than in other areas, one interviewee was detained in Malaysia for several weeks before being repatriated, having lost the money paid to a trafficker and having been unable to send remittances home. Examples of households in Rakhine State failing to benefit financially were frequent; of the thirteen key informant households interviewed with international migrants, only four said they had received any form of remittance.

IMPROVING PRODUCTIVITY WITHIN AGRICULTURE

Farming households are also attempting to improve their returns from agriculture. The case study in this chapter, along with cases below from Ayeyarwady and Shan, provide some insights into how households are diversifying their crops towards those with better margins or yields, selling to different markets, using new technologies, or adapting their farming practices.

Box 2: Farmers in Ayeyarwady and Shan start growing new crop varieties aimed at different markets

Farmers in a village in Ayeyarwady are excited about the upcoming off-season harvest. Whereas in the past farmers only grew a monsoon paddy crop, in the last three to four years they have started planting in the off-season. As paddy fields in this village are affected by increasing salinity, farmers are planting sticky rice, which is more resilient to salt water intrusion. They have benefited in two ways: First, having two harvests instead of one significantly increases income. Second, this year, farmers are talking about the doubling in price for sticky rice, which is largely exported to neighbouring countries such as China.

One of the largest landowners in the village says farmers have benefited enormously from the farming techniques and knowledge gained through an NGO. Farmers learned about the salt-water seed selection technique, a method of soaking rice seeds in a salt-water mixture and selecting the seeds that sink to the bottom. It is simple and cost-free and results in a yield increase averaging 10 to 15 per cent. The farmer says the NGO also taught farmers how to sow seeds systematically at a specific width apart and about the disadvantage of improper use of chemical fertilisers, which deplete the land in the long run. This farmer first attempted growing sticky rice four years ago. The first crop failed after salt water intruded his farm. He then travelled to other villages, where crops had succeeded, to learn and adopt the good practices he saw.

> "Besides hard work, a farmer must be open to adopt new techniques."
> Farmer (male), Ayeyarwady

In a QSEM village in Shan State, a similar process of learning from peers combined with technical guidance is taking place. In 2012, a large tobacco company encouraged farmers to plant an international strain of tobacco there and in neighbouring villages. Farmers in the QSEM village decided to hold off and see how the experiment worked in neighbouring villages, continuing to grow pigeon pea, corn, and local tobacco.

In 2015 the company returned, asking the village administrator to encourage farmers to plant the crop. Seeing the outcome in neighbouring villages, eleven larger landowners signed up, negotiating as a group with the tobacco company. Each farmer agreed to grow three acres of tobacco. The company covered upfront costs of 4.25 million MMK for six drying houses, to be repaid from profits over five years, inputs including seeds, fertilizers, pesticides, spray equipment and coal for the dryers and extension services. Once the crop was dried, the tobacco company collected the harvest and paid the farmers. Fifty per cent was deducted for repayment of the drying house and other inputs, leaving each farmer with approximately 2.5 million MMK in profit, a significant improvement on returns compared to other crops. Farmers want to expand production if more drying houses are built.

Smaller landowners in the village were less keen to participate. Some who were interviewed expressed concern about the potential instability of tobacco prices. They also saw how larger farmers had to pay for better quality coal and casual labour for a week during the harvest and decided they did not have the capital to support the change in crops.

[25] See (World Bank and LIFT, 2016).

The changes in agricultural patterns seen across QSEM villages have been affected by a number of factors helping farmers improve their returns from agriculture. These include:

Strong demand and price signals: Over previous rounds of QSEM, farmers have been able to diversify successfully when market demand for a new crop exists and is stronger than the demand for current crops. Prices for crops such as corn in Shan State or sticky rice, as in the case study above, have led in recent years to higher returns than traditional crops. Volatility in the prices for crops such as onion or garlic, as experienced in terraces in Chin State, has led to uncertainty and less investment in these crops.

Learning from leading farmers: Farmers report observing and learning from the experiences of their peers. Across QSEM villages, farmers have often invested in new types of crops upon seeing neighbouring farmers do well out of them. Peer-to-peer learning has been the most important source of information on agricultural practices across QSEM villages. Over previous rounds, learning from the experiences of leading farmers has often proved more successful for small- and medium-size farmers than learning from advisory services directly, partly because farmers feel less exposed to risk if they have seen new techniques successfully applied in their village.

Learning from advisory services: Advisory services can complement the peer learning process by encouraging risk-taking individuals to try new techniques. In QSEM villages, advisory services were invariably provided by NGOs, though in a few cases there were private sector initiatives. Respondents in villages where advisory services were available noted that, though they were generally accessible to all farmers, beneficiaries tended to be farmers with excess land available to try out new practices, and who had the human and financial capital necessary to enable them to participate. There were no examples of extension services provided by government in QSEM villages.

Learning by doing: Farmers are often risk-averse. As illustrated in the box above, they will try an approach and progressively increase investments dependent on results. Consequently, it can take time for them to adopt new crops or techniques. Small landowners are significantly more risk averse than medium or larger landowners.

CHAPTER 3: SHOCKS, STRESSES AND RESILIENCE

Households in QSEM make their livelihood decisions in an environment of considerable uncertainty. What shocks and stresses do households in QSEM villages face? What do they do to absorb them or to adapt their livelihoods to better face them? Why are some households better able than others to deal with their impact?

Previous QSEM rounds have focused on documenting shocks and coping strategies. This round has expanded this analysis by aiming to better understand these issues within the context of resilience. LIFT defines resilience as the capacity of individuals, households, and communities to cope with (i.e. mitigate the negative impact of) and recover from (i.e. return to equal or better conditions after being affected by) various shocks and stresses arising from climate change, and macro and micro (including those related to lifecycle) economic pressures. It examines:

- **Absorptive capacity:** this refers to the coping strategies used by households to reduce the impact of shocks on their livelihoods and basic needs, for example by drawing on savings, in cash or in kind.
- **Adaptive capacity:** this refers to the ability of households to adapt to underlying risks, such as climate variation, for example by diversifying household income. [26]

This chapter focuses on what people in QSEM villages do at a household level. It uses data from the wealth ranking exercises, which gathered information on the types of shocks and stresses faced and on household responses, as well as data from key informant interviews held with households in each village, the ethnographic research conducted in Ayeyarwady, Magway, and Rakhine, time-series data from previous QSEM rounds, and a review of previous reports.

WHAT SHOCKS AND STRESSES DO PEOPLE IN QSEM VILLAGES FACE?

People in QSEM villages face considerable underlying uncertainty. Since the research began, people in QSEM villages have reported facing a range of shocks and stresses. Some, such as economic pressures and climate volatility, have affected whole villages or groups of households within them. Others, such as illness, have affected individual households. The frequency and intensity of these shocks and stresses has varied significantly over the course of the panel.

Since QSEM began, some of the most significant stresses have been climate-related. This is reflected in the frequency with which weather-related

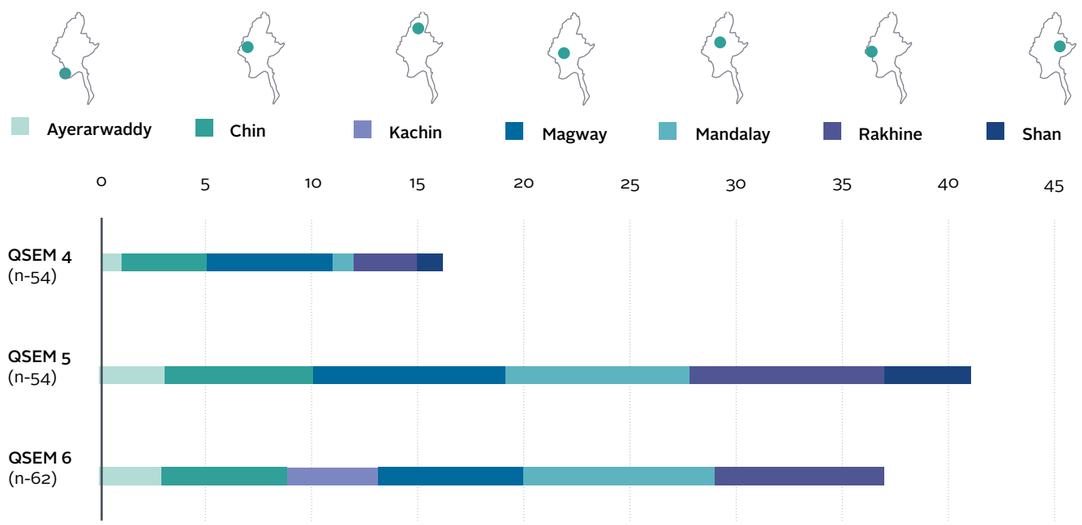
[26] The literature on resilience also emphasizes transformative capacities: see (Bene, 2012). But because the QSEM research instruments are not designed to capture this, we do not examine this in this chapter.

shocks (both rapid-onset, such as flooding, hail storms, and outbreaks of disease, and slow-onset, such as drought, irregular rainfall, and environmental degradation) have been reported over time, as seen in Figure 6 below.

This round was no exception. In this QSEM round, people in almost a third of villages reported that their villages had faced year-on-year weather shocks. Seven villages experienced floods and landslides associated with Cyclone Komen, which hit Myanmar in July and August 2015. People in affected villages reported facing crop losses, food shortages, commodity price increases, outbreaks of pests and livestock disease, and damage to embankments, roads, and irrigation systems as a result. But it was not only cyclone-type weather disasters that affected people's well-being: half the villages in Chin, Rakhine, and Magway in this round reported that irregular rainfall meant they faced drinking water shortages throughout the year.

Climate stresses included environmental degradation and a range of natural resource management challenges. These were often related to the availability and use of forest resources, such as in a number of villages in Kachin, Magway and Shan where villagers were engaged in negotiations with government and outside loggers to define permissible logging of nearby forests. A case in one Rakhine village exemplified the challenges of managing finite resources: there, a conflict emerged between landowners, who relied on mangroves to protect paddy land from storms and saltwater, and landless households, who were engaged in charcoal production, requiring the extraction of vast amounts of mangrove. This extraction has grown over QSEM rounds. Farmers have advocated for local mangrove management, but the charcoal businesses show no signs of slowing, despite people having to now travel up to three hours to find suitable wood, up from just 45 minutes two years ago. As one casual labourer commented,

Figure 6: Weather-related shocks by round



> "There are not even any more trees left here to hang notice boards from that read, 'Do not cut down the trees."

Despite the overall significance of climate shocks, when people were asked in this round to rank challenges by wealth group, it was more common for them to emphasize economic shocks and stresses. During the wealth ranking exercises, participants were asked to identify the biggest three shocks and stresses that rich, average, poor, and 'poorest-of-the-poor' households in their village found hardest to overcome. In almost every state or region, people identified peak season labour shortages as one of the biggest challenges for rich and average households. Pests, weather variation, and other climate shocks were also common, but unless very serious (floods or landslides), it was less common for them to be listed as the biggest challenge. Nor were they identified as the biggest problems for poorer households, who instead reported health shocks, a lack of non-peak job opportunities, food insecurity, and indebtedness as their main challenges. It was not clear why richer households were considered more exposed to climate shocks. However, in every region, households defined as 'rich' were those who owned larger plots of land, and were usually farmers. This is likely to reflect a perception that, having spent money on seeds, labour, and other farming inputs, richer households suffer the greatest losses from bad weather, and also a perception that poorer people simply face more pressing matters of survival.

ABSORPTIVE MEASURES

WHAT DO PEOPLE IN QSEM VILLAGES DO TO DEAL WITH THESE SHOCKS AND STRESSES?

Previous QSEM reports have highlighted the ways that households have attempted to absorb shocks by (i) reducing spending (ii) relying on friends, family, and social institutions for help, and (iii) seeking additional income by, for example, working longer hours or putting more family members to work. Yet some shocks have been too severe for certain households, most often the poorer households, to absorb without taking measures that compromise their overall welfare. In these cases, such households have resorted to measures such as eating less food, selling livestock and other assets, borrowing money at extremely high interest rates, taking children out of school, and doing other things that enabled them to weather the immediate shock but have weakened their asset base and made them worse off. Similar patterns were reflected in the wealth ranking exercises in QSEM 6, where, as might be expected, the capacities of different households to absorb particular shocks differed by wealth.

During the wealth ranking exercises, poorer households typically reported absorbing the impacts of economic shocks and stresses by seeking additional short-term income or relying on their social networks to cushion their impact. Such strategies included asking for wages in advance, asking for help from religious institutions, and living with, borrowing from, or otherwise relying on relatives and neighbours.

Yet such measures were rarely sufficient by themselves: it was much more common for poorer households to report resorting to additional measures that reduced their overall assets, such as taking high interest loans; taking

children out of school; selling livestock or land, and, among the poorest of the poor in some regions, eating less or spending less on food.

> “I can’t even count the meals which I had to skip during summer,”
> said one casual labourer in Shan State.

In contrast, rich and average households were better able to deal with the kinds of economic shocks and stresses they faced: with the exception of indebtedness and health shocks, negative coping strategies were not commonly identified for such households.

When faced with climate shocks, rich and average households responded by reducing spending and using existing savings from migration and other non-farm sources to pay for household needs or rebuild after disaster, highlighting the importance of diversified income streams for managing risk. Nonetheless, some reported feeling unable to cope with weather extremes. As one Magway farmer commented,

> “Heavy rain will turn us into slaves.”

As a farmer in Ayeyarwady, whose village had experienced pest outbreaks after flooding, put it,

> “We can’t even prevent pests by reciting the Than Boke Day (Buddhist scripture).”

Health shocks and stresses, as well as indebtedness, were particularly difficult to cope with. Almost all reported responses to health shocks were ones that compromised well-being: they involved getting into debt by borrowing money or taking wages in advance, or limiting care and accessing only traditional medicine. In one state (Chin), wealth ranking participants reported that one response to the problem of lacking medicine was simply “to die”. Indebtedness was similarly problematic, even for some average and richer households, who reported pawning land and selling livestock to cope.

> “We are sinking in debt up to our eyes,”
> said one farmer in Magway.

> “We try to finish farming our land and then we go work for others, This is the only way we will be able to pay back our debts,”
> said another farmer in Kachin.

ADAPTIVE MEASURES

Over the course of the QSEM panel, households have also adapted what they do to be able to better deal with changing conditions and better anticipate such stresses in future. Their strategies have fallen into four areas:

i. Adapting farming and labour patterns
ii. Diversifying income
iii. Compiling assets and savings
iv. Drawing on communal mechanisms

(I) ADAPTING FARMING AND LABOUR PATTERNS

Since QSEM began, the introduction of new agricultural techniques and technologies has enabled households to adapt their farming practices to better deal with risk. Previous QSEM reports have highlighted instances of medium to larger farmers being the first to experiment with new crops or techniques and to lead by example within their communities. For example, Box 2 in the previous chapter highlights how larger farmers in Shan State have begun to grow tobacco. Smaller farmers have tended to be more risk averse with smaller margins for experimentation: their inability to deal with crop failure drives them to focus on their main consumption crop despite this leaving them highly exposed to shocks to that crop. It is after leading farmers have succeeded with new technologies or crops that smaller farmers have gradually been able to do the same.

The data from QSEM 6’s wealth ranking exercised captured more comprehensively the capacity of farmers to adapt to changing conditions. During these exercises, people reported adapting what they grow, how they farm, and how they manage farm labour to help them deal with changing market conditions. These measures included mechanization, looking to other villages as sources of labour, increasing wages or changing the timing or method of paying them, growing more resilient crops, and using more family labour in an effort to reduce labour costs.

(II) DIVERSIFYING INCOME

As previously outlined, broader economic change has also allowed households greater opportunities in the non-farm sector, leading them to diversify into less weather-dependent sources of income. The contrasting experiences of three QSEM villages in Mandalay highlight the benefits of such diversification as an ongoing drought destroyed the main harvest—as it had in the previous year. In one village, households were less diversified: there, farmers relied on growing cotton, and, because their income was so weather-dependent, suffered heavily. In order to absorb the shock, they used their land use certificates to pawn land, getting heavily into debt. In contrast, households in the other two villages had previously adapted to poor agricultural conditions by developing small-scale, local, non-farm activities (wig-making and making palm thatch as described in the previous chapter), which ensured they suffered less from the drought.

During the wealth ranking exercises, people commonly reported diversifying in order to adapt to changing labour market conditions and to economic stresses. Migration was one of the most common ways of doing this. Wealth ranking participants in almost all regions identified migration to be the main strategy for poor households to adapt to job shortages and other economic shocks and stresses. This is consistent with the findings of the QSEM migration report, which highlights the way that people in Ayeyarwady and Magway migrate as a means of managing risk and ensuring less volatile income throughout the year. Households that lacked available family labour were, however, unable to do this.

(III) COMPILING ASSETS AND SAVINGS

There are also an increasing number of ways to save in order to be better prepared for shocks, though the extent to which households use them is mixed. The introduction of new forms of savings mechanisms in some villages, such as revolving funds and rice banks, including those run by NGOs, has enabled even poor households to set aside resources for times of need.

The most common means of saving, however, remains investing in assets such as gold or jewellery, as well as livestock, which are kept at home and can be rapidly exchanged for cash. Field research suggests that these forms of savings are used primarily to enable households to adapt and diversify their livelihoods rather than to absorb shocks. Researchers, for example, saw little evidence of households accessing savings following the impacts of Cyclone Komen-linked flooding in the small number of affected QSEM villages.

Households that are more effective at shielding themselves from shocks have often been those that have previously faced them. The ethnographic research allowed researchers to dig deeper into understanding saving patterns. Several of the households covered by the ethnographic research had previously faced significant health shocks and demonstrated a greater and conscious focus on preventative saving measures to overcome future shocks.

(IV) DRAWING ON COMMUNAL MECHANISMS

Previous QSEM reports, rounds three (2013) and four (2014) especially, highlighted how communal mechanisms have helped households deal better with shocks. These mechanisms include village organizations that manage access to and allocation of crucial natural resources, such as water for drinking and irrigation. They have also reported on the prevalence of rice banks, in particular in areas that commonly experience food shortages, and on the role of foundations and religious groups in providing health and education services. Similar mechanisms were reported in the QSEM 6 research, with little change from previous rounds.

HOW DO HOUSEHOLDS UNDERTAKE SUCH ABSORPTIVE AND ADAPTIVE MEASURES?

A description from the ethnographies of how one female headed household has, over time, coped with shock and adapted to change illustrates the non-linear ways in which a household makes decisions, using absorptive and adaptive strategies often in parallel to recover from shocks and build resilience, but also illustrates the ways that gender barriers can constrain livelihoods. The case is of a wealthy household from a rice-farming village in Ayeyarwady, which lost almost all its assets when faced with two huge shocks (Cyclone Nargis in 2008, and the diagnosis of one family member with cancer in 2009). However, because they had existing income streams that were less exposed to these shocks, good social networks, and few dependents, they were able to absorb these shocks and slowly rebuild their lives by living frugally, repaying their debts, and reinvesting their income into diverse income streams that used only family labour and brought in income at different times of year. At the time of the research, they were saving money, strengthening their house to make it more disaster-resilient, and preparing to diversify further. They have thus been relatively resilient, even though at times their efforts have been constrained by gender barriers.

Box 3: Case study: An Ayeyarwady household's efforts to build resilience

The household consists of three unmarried sisters in their 50s and their 22 year old niece. In the mid-1980s, the sisters' grandparents owned 32 acres of farmland. However, they lost half of this through being unable to meet the Ne Win government's quotas for paddy, illustrating how the impacts of land insecurity can deplete a family's assets. Nevertheless, they retained 16 acres, leaving them as one of the wealthiest families in the village.

Faced with gender barriers, the sisters did not inherit this land, but did inherit some jewellery and had some savings, which they then invested in land, enabling them to have productive assets. When their elder brother married, he received 10 acres of farmland and the youngest brother the other six. The daughters inherited gold jewellery when their mother passed away in 2003. With their savings and their mother's gold, the three sisters bought seven acres of paddy land. They also had livestock and some ducks.

In 2008, however, Cyclone Nargis devastated the village, and the sisters lost their home, paddy, and buffalos. Sixty villagers, or about 10 per cent of the population, lost their lives and only three houses were left standing. The sisters recall the aftermath with bitterness and shame. Nargis left them with few assets beyond their land and ducks. In the immediate aftermath of the disaster, they found themselves dependent on charity.

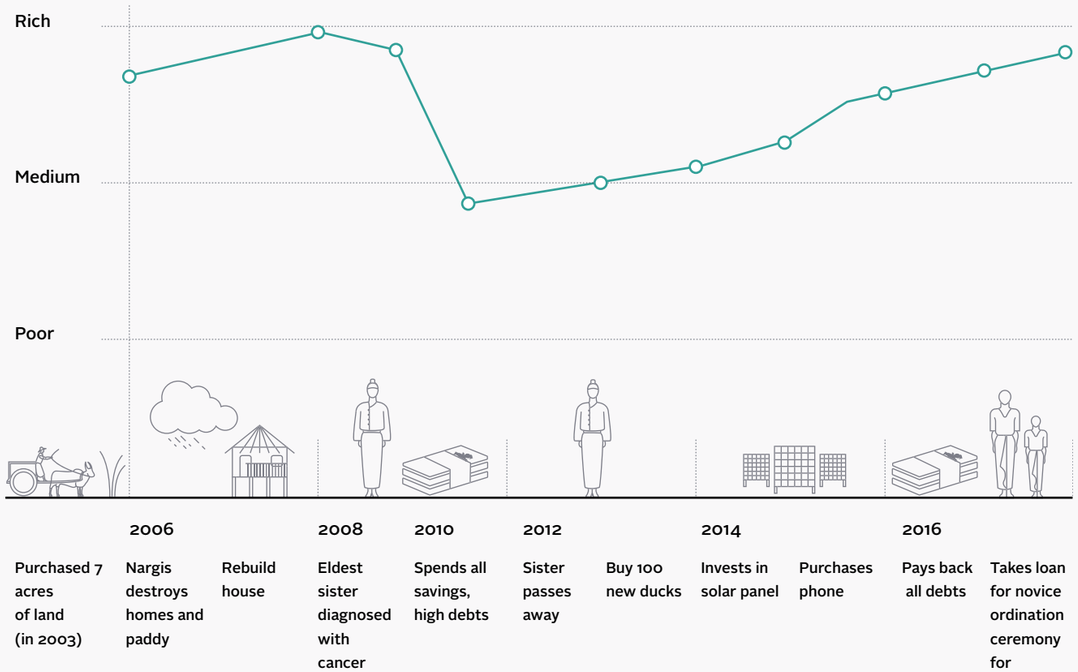
> "We had to sit and wait with outstretched arms for food, like beggars. It was humiliating,"
> one sister recalled.

They did, however, slowly rebuild their livelihoods: Their 150 ducks survived the cyclone. Duck eggs became the family's sole income source in the period after the storm. The sisters used their resourcefulness to rebuild their house to make it more disaster-resilient, reusing the bamboo and wood they were able to gather and building it smaller and lower to make it more stable during strong winds.

Yet only a year later, one of the sisters was diagnosed with cancer. This plunged them into debt. They found that this health shock was even worse for their finances than the cyclone. The sisters decided to send their sibling to Yangon for treatment. The hospital bills reached 70 lakh (over USD 5000), which was cripplingly expensive for the family and illustrates the catastrophic impact health shocks can have on family finances. They were forced to sell all their gold and also to take large loans (40 lakh, or about USD 2900) to pay these bills.

However, the sisters were able to use their social networks to reduce the impact of this shock, while reducing spending and saving to help absorb it. Although they were highly in debt after the cyclone, half of this was owed to their sister in Bogale, who only charged 4 percent interest,

Figure 7: Ayeyarwady case study family timeline



compared to the 6 percent interest charged by the local moneylender. Their social networks thus provided them with more capacity to cope with shock than a poorer family might have had. For the next four years, they worked very hard to repay the loans. They lived frugally, saving all their income from the duck egg sales.

They also began to adapt their livelihoods in careful ways, reinvesting revenue into income streams that were less vulnerable to weather shocks. The sisters used their duck egg money to sell mohinga (fish soup), run small grocery shops, and sold cold drinks. In addition, they opened a snack shop at the middle school. They also sold all their paddy immediately after harvest and bought rice only in small quantities for daily use. By 2014 they were able to settle their remaining debts and begin to improve their financial situation.

At the time of the research, the family had seven income streams covering agriculture and non-farm activities, providing them with a less weather- and season-dependent livelihood portfolio. Although three of their income streams (paddy, betel, and vegetables) were dependent on weather, the income from these is spread over different months of the year. They also have four other income streams; a grocery shop, a shop selling mohinga, cold drinks, and a fried rice and noodle salad shop at the nearby school. Each sister is responsible for different activities, enabling them to use all their available family labour in bringing in income. Their income from these streams now outweighs the income they get from paddy.

The family is now somewhat cautious with risk: they live frugally, invest in savings, and avoid getting into debt. Although they have diversified into several income streams, they do not take on loans that they cannot repay. Twice a year, one sister borrows MADB funds to cover advance labour costs, fertilizers, ploughing machine rental, and fuel for a threshing machine. This year, though, they borrowed from an NGO at lower interest rates in order to repay their MADB loans. They have decided not to expand their grocery shop too fast, because it required more investment, and they did not want to risk taking more loans. They are extremely cautious with loans, and, after their experience of repaying debt after cancer, go out of their way to avoid high-interest loans. They also are very cautious with their spending, and pay regularly into a women's savings group.

In order to better prepare for future health and climate shocks, the sisters are saving money and hoping to make their house even more

Table 4: Rakhine household: sources of income throughout the year

Income Source	Income (Annual)	Who	Season/Working period
Paddy	2,000,000	Middle sister	July- Nov (monsoon paddy) Jan- April (summer paddy)
Betel	360,000	Middle sister	Year round
Vegetables	300,000	Middle sister	October-April
Grocery shop	720,000	Youngest sister	Year round
Mohinga shop	720,000	Youngest sister	Year round
Cold drinks	720,000	Youngest sister	November-May
Fried rice and noodle salad shop at school	720,000	Eldest sister	Year round, except March-May

disaster-resilient. Having survived Nargis and encountered repeated health shocks, the three sisters worry about the future. They store rice, fish paste, oil, candles and lighters in a sealed plastic container buried beneath their house in case of disaster, and every few weeks they replace those supplies. Fearing future health-related shocks, the sisters are also saving both gold and cash. With their savings, they hope that next year they will be able to rebuild their house, as the wood has been damaged by termites and is no longer safe in strong winds. They also hope to replace the thatch roof with a tin roof.

They also plan to further adapt their farming practices and invest in more profitable income streams. Their niece, who also lives with them, would eventually like to migrate. They are hoping to be able to buy a ploughing machine to reduce dependency on permanent labourers, and, in the long-term, plan to transform the front area of their house into a teashop that would serve tea and snacks throughout the day, allowing them to bring in a better income than the noodle salad, fried rice and mohinga shops, and also to accommodate the sisters' aging. Eventually, the niece hopes to leave the village and find work in Yangon as she feels that life in the city is more attractive and more comfortable. At the moment, the sisters do not have enough savings to start the teashop. Nevertheless, they are optimistic and have already started to prepare for their new enterprise by learning how to make typical teashop snacks.

> "Once we have saved enough money, we will open our teashop. It will be a big success as it will be the very first teashop in [our] village,"
> said one sister.

WHY ARE SOME HOUSEHOLDS BETTER ABLE TO DEAL WITH SHOCKS AND STRESSES THAN OTHERS?

The QSEM data do not enable a definitive analysis of why some households have stronger capacities than others to deal with shocks and stresses. However, the case study illustrates broader findings from an examination of the characteristics of households defined as 'rich', 'average', 'poor', or 'poorest' during the wealth ranking exercises. Comparing wealth categories to their coping strategies suggests a handful of household characteristics were important. This is also exemplified by the case study household in Box 3.

The first of these was a strong asset base, the most important of which appears to be land. The importance of land to household wealth was consistent across the wealth ranking exercises. For example, although the case study household lost most of their other assets during the cyclone, they did not lose their land, and were able to re-invest in it once they had made a little money from their surviving ducks. Land also gave them access to credit through MADB. Although the relationship between wealth and shock exposure, or indeed wealth and resilience, is not completely straightforward (wealth ranking participants in QSEM 6 considered rich households to be more exposed to climate shocks),[27] nevertheless, the landholdings of this family and others in QSEM enabled them to recover over the long term.

The demographics of the household, as well as diversity of income streams, help determine their ability to recover from shocks. The family in the above ethnography had no dependents, and had three, and at times four, members of working age who were able to manage different income streams in the aftermath of shocks. Although the family suffered when one family member became sick, three family members remained who were able to earn an income. This is consistent with findings from the wealth ranking exercises. In those exercises, variation in household demography was not associated with whether a household was identified by people as being rich or average. However, it was the most commonly cited feature of households defined as being poor, or 'poorest of the poor. These groups were defined by having no or very few family members capable of working, and many mouths to feed. These were frequently families with elderly or disabled members and/or children, but no adults of working age. As outlined above, households in this category were much less able to absorb shock without compromising their well-being. Diversity of income streams also mattered. The case study family had income streams with different levels of exposure to shock—a factor the household considered in their efforts to diversify their income.

Social capital was also important. The wealth ranking material reveals the importance of social capital and other social factors to perceived household wealth: households identified as poorest are also ones that consistently reported not having voice in village meetings or that felt excluded from village affairs. The case study family had strong social networks, with family members who were able to lend them money, enabling them to avoid the penurious interest rates offered by private moneylenders.

A harder-to-capture set of behaviours also matters. The case study family may have had assets, several family members capable of working, diverse income streams, and strong social capital, but it also had an ability to coordinate decisions (such that each sister led a different income stream), an ability to experiment and be creative in creating new income streams, and also an ability to plan and make decisions with their longer term welfare in mind. This was reflected in their household behaviour: they lived frugally, saved, were aware of the risks of borrowing too much money, invested in their housing, and otherwise prepared for future shocks. They also lacked a set of detrimental behaviours. In contrast to some other families studied in the ethnographies, they did not spend lots of money on alcohol, gamble, or do other things to put their assets to unproductive use.

[27] Similar dynamics came through in the Post-Nargis Social Impact Monitoring studies done after Cyclone Nargis, as a function of farmers having taken out loans for farming related purposes and subsequently becoming indebted if crop losses ensued as a result of bad weather. See, for example, (Enlightened Myanmar Research, GFDRR, World Bank Group, 2014).

CHAPTER 4: FACTORS AFFECTING LIVELIHOODS

Since QSEM began, the context of the rural economy and policy environment has evolved. Access to credit has increased. Land registration has begun to provide farmers with formal land use rights. Telecommunications access has expanded rapidly. These changes have the potential to enable greater numbers of people to improve their productivity or engage in non-farm activities or migration. This chapter describes how such changes are being reflected in the QSEM villages.

ACCESS TO CREDIT

In all states and regions, access to low-interest government credit has increased.[28] More QSEM villages now have access to such programmes, and households can borrow larger amounts than before. At the time of the fieldwork, loan repayment periods for some programmes had not yet begun, so it was too early to tell how this expansion would affect people's livelihoods. However, there were some indications that lower-interest credit sources were beginning to replace privately sourced credit.

GOVERNMENT CREDIT SOURCES

Since QSEM 4, which took place in early 2014, access to government credit in QSEM villages has increased. There are three main sources of such credit:

- **The Myanmar Agricultural Development Bank (MADB)** was the early leader in expanding services and remains the most widely available source of government credit. It is present in almost two thirds of QSEM villages. It is accessible only to landowners with a Land Use Certificate (LUC or Form 7).
- **The Cooperative Loan Scheme**, administered by the Ministry of Cooperatives, provides low-interest loans to village cooperatives primarily for agriculture or livestock-rearing.
- **The Evergreen Village Project**, administered by the Department of Rural Development (DRD), aims to reduce rural poverty by enhancing livelihoods and increasing income. It provides lump sums to villages, with village-level committees then determining local access, loan size, and repayment models.

Table 5 provides a summary of these three government credit programmes and what respondents perceive as their strengths and weaknesses.

[28] During this round, people in QSEM villages did not report changes in how they use NGO or microfinance credit. As a result, there is limited discussion in this chapter on these forms of credit.

Figure 8: Proportion of villages with access to government credit, QSEM 4-6

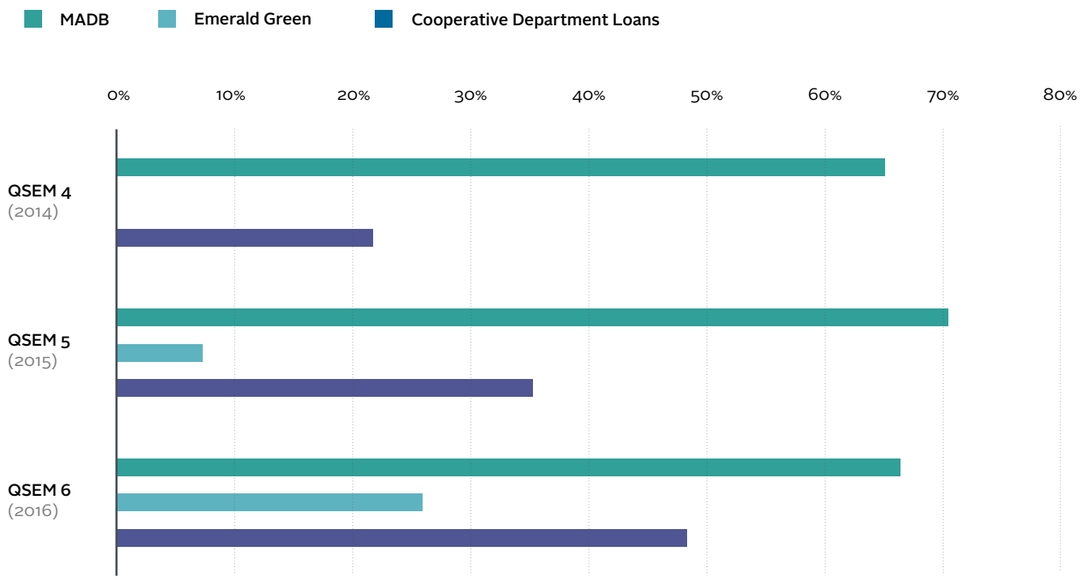


Table 5: Summary and perceptions of government credit programmes

	Myanmar Agricultural Development Bank	Ministry of Cooperatives Loan Scheme	Evergreen Village Project
Number of QSEM villages with government credit programmes across rounds	QSEM 6: 41/62 Villages (7 Regions/States) QSEM 5: 38/54 Villages (6 Regions/States)	QSEM 6: 30/62 villages (6 Regions/States) QSEM 5: 19/54 Villages	QSEM 6: 11/62 villages (4 Regions/States) QSEM 5: 4/54 Villages
Accessibility	Only for farmers, dependent on land ownership and possession of LUC. Group security although in some areas (Magway, Mandalay & Rakhine) this has decreased from 10-member groups to 3-member groups.	Two schemes: Group security for CB Bank scheme. In at least one area (Mandalay), respondents claimed Bank of China scheme did not require group guarantee. In some villages, village leader determines eligibility.	Criteria determined by village committee. Generally based on capacity to repay/collateral (7 villages). Equal access and equal loan size: one village. Equal access but size dependent on capacity to repay: two villages. Lottery system: one village.
Reported use	Primarily used for farming inputs during monsoon crop. Often used to pay back private money lenders or finance early wages to guarantee labour during harvest.	Wide variety of uses, including: Reducing reliance on private alternative loans. Investing in livestock. Meeting electricity connection fees (in Mandalay villages). Meeting household expenses.	Primarily used to reduce reliance on private lenders, meet household or agricultural needs. Meet electricity connection fees in Kachin. A few examples of investment in productive assets.
Perceived benefits	Loan size is relatively large compared to other options, especially for medium to large farmers. Reliable provider: farmers are used to dealing with MADB. Loan sizes for all crops have increased over time.	Increasing loan size especially for those accessing loans under Bank of China scheme. Encourages building up household savings.	Flexible, village-owned mechanism. Few external conditions on loan use or who can access (location dependent). In some villages, loan sizes sufficient for investment in productive assets (business/ machinery).
Perceived constraints	Much smaller loan amounts for crops other than paddy. Unavailable to communal/shifting cultivation, or small-scale upland farms. Delayed disbursement, so farmers still have to rely on private lenders. Administrative burdens: fees, transportation costs, reliance on village leaders.	Interest rates have increased over time. Loan conditions require enforced savings; membership fees viewed as onerous by some. Group lending is less popular than individual lending. Risks that funds are misused by local leaders responsible for disbursement (Shan).	Disbursement criteria at village level creates equity issues. Equity issues between villages: same block grant irrespective of population. At time of research, repayment not yet due but emerging questions about capacity of DRD (and village leaders) to enforce repayment.

DETERMINANTS OF ACCESS TO CREDIT

One determinant of whether households in QSEM villages had access to government credit was whether their village was targeted by the programme. Each government credit programme differed in the way it selected villages to participate. MADB loans varied in size depending on the type of crop grown. Within the QSEM panel, the Cooperative Loan program has mainly expanded within the dry zone, targeting both agricultural and livestock rearing. It was unclear how Evergreen was targeting its expansion.

Household wealth also affected whether a household could access credit. During the wealth ranking exercises, people in QSEM villages consistently identified better off households as those who could access both private and government credit at the township level. Poorer households, which lacked land or other assets they could use as collateral, depended more on NGO credit programmes or, in villages in Ayeyarwady, Rakhine and Shan, on advances on their wages. This is consistent with patterns seen in previous rounds of QSEM.

Poorer and landless households continued to face constraints in accessing low-interest, government credit despite the expansion of the Cooperative and Evergreen programmes, which do not require borrowers to own land. Respondents in QSEM villages reported that the guarantees frequently required by the Cooperative Loan programme meant that poorer households were often unable to take loans. Similarly, in most QSEM villages with the Evergreen programme, loan committees assessed people's capacity to repay [29] as a criterion in determining who could access loans, which limited access for poorer households. These constraints reflect patterns seen in previous rounds of QSEM. As one casual labourer in Ayeyarwady put it,

> "There is no credit for labourers. No organization ever provides loans for us."

The prospect of indebtedness could also be off-putting to poorer households.

> "We are scared of taking debts," said one casual labourer in Shan State. "We are daily wagers, and our incomes are only by the day."

Village governance and social norms also sometimes affected people's access to credit. As described in Box 4 below, this has sometimes led to reduced access for women-headed households.

Box 4: Women-headed households receive reduced loans

In one village in Myebon township in Rakhine State, researchers found that women-headed households received only half of the credit they were entitled to under the Evergreen Project. There, a local committee was established to manage loans. Credit was supposed to be available to any villager, with loans of between 100,000 MMK and 200,000 MMK. However, the village had a customary practice of exempting women-headed households from village contributions. In some cases, such households contributed half of what other households did. In others, such as providing offerings to the local monastery, they were exempted completely. This exemption was framed not as exclusion, but rather as a way to recognize that such households are less able to contribute than others.

The implication, however, was that such households also received less from programmes. Women-headed households in the village thus only received half of what they were entitled to under Evergreen. This limited the potential of the loan to improve one woman's well-being: The woman, a small-holder farmer and widow aged 57, had counted on the full Evergreen amount to pay off debt and pay for agricultural inputs. However, she received just 135,000 MMK, enough only to partially pay off old debts. She was unhappy with the situation, but expressed resignation in the interview, indicating she understood why she had only received half.

> "I had to accept this even though I wasn't happy with it," she said. "Because I am a widow, I contribute only half to community affairs, and so I received half the loan."

[29] The assessment criteria varied across location: research teams came across committees that based assessments on land ownership, size of houses, and education levels.

IMPACT OF LOANS ON HOUSEHOLD SPENDING AND INVESTMENT

In many QSEM villages, people have relied less on private moneylenders as lower-interest sources of credit have expanded. [30] This has been documented in previous QSEM reports, and continued in QSEM 6 research.[31] One farmer from an 'average' household in Shan State commented, "We've used the Evergreen money to buy seeds and fertilizer for the farm. So there is no need for us to use brokers who charge higher interest rates. With the savings, we can spend on basic things for the house."

Whether this will enable households to improve their livelihoods depends on if they use such credit for longer-term investments that deliver a return above interest. In QSEM villages, however, households often used loans for other reasons. In multiple instances, households used their loans to finance immediate consumption or for low-return investments that did not cover interest. As another farmer from an 'average' household in Shan State commented, "It's like a circle. Receive a loan from one organization and repay to another, but our condition does not change much."

Despite this, cheaper sources of credit can enhance welfare, even if respondents did not often cite livelihood improvements. For example, researchers observed that access to cheaper credit had allowed respondent households to more effectively minimize the impact of shocks that would otherwise require them to go into debt with a private money lender. For example, more affordable credit reduces the longer-term effects of borrowing for food, steps that households often must turn to in the short term following a climate shock.

[30] Qualitative research is not particularly well placed to measure trends in relation to debt and usage of credit. It is difficult to ascertain accurately debt levels and credit sources used by households and patterns are not linear across the year. As such, information provided at any given point of time may not accurately reflect overall credit or debt issues.

[31] QSEM 5, p. 39.

Loans for agriculture were primarily used to meet input costs such as fertilizer, seeds and labour and to reduce reliance on private moneylenders. There was limited evidence of loans put towards machinery, indicating that the size of the loans and staggered disbursements were insufficient to meet these larger costs. The evidence that landless households were able to invest in longer term productive assets was also limited. Researchers noted that key informants from such households reported receiving smaller loans, which were frequently used to purchase livestock, finance household consumption, or pay off higher interest loans.

The way landless and poorer households use loans highlights the challenges of using credit to improve longer-term livelihoods. Although affordable credit cushions shock and enables households to rely less on private money lenders, small loan sizes limits the longer-term impact of such credit. Landless households also face broader challenges, such as existing debt, limited opportunities to set up small businesses, and a need to minimize risk due to their existing vulnerability.

People emphasized the role non-agricultural credit had in stimulating non-farm investments, but there was limited evidence that credit enabled successful business. QSEM villages that are part of the Evergreen Village Project expansion and Cooperative loan programmes usually have greater investment in non-farm activities. Several respondents emphasized the role such credit had in their investment decisions, highlighted by Box 5's case study. However, given that Evergreen and Cooperative credit is frequently spent on consumption or house repairs, the connection between credit and non-farm livelihoods remains unclear.

Box 5: Using Evergreen loans to set up a new business

In September 2015 the Evergreen Project began in a village in Tonzang Township, Chin State. Almost all of the 200 households in the village applied for loans, but only 31 loans were granted, as the village loan committee felt that if all applicants were accepted, the loan sizes would be too small to be useful. The loans ranged from 500,000 to 1,500,000 kyat (about USD 360-1100).

One beneficiary was a young man, aged 22, who used the loan to set up a small business. At the time of the research, he lived with six other family members, only two of whom worked, mainly growing sesame and tenant farming. The young man occasionally also worked as a day labourer building houses in the village or traveling to the Indian border to work in a saw mill. Although his family was poor, he had attended university.

Evergreen lent the young man 1,000,000 kyat (about USD 730) to open a motorbike repair and spare parts shop. He got this idea from a friend living in Kale, a nearby town, who ran a similar shop and taught him some mechanic skills. The initial loan was insufficient, so he worked to save an additional 500,000 kyat (about USD360), trading groundnut and transporting fuel between his village and Kale. At the time of the research, the repair shop had been open for four months and was doing well, providing income of between 5,000 and 10,000 kyat (about USD 3.60 to 7.00) per day. With his father managing the finances he reported paying off the interest at the end of each month.

Other villagers who received the loans experienced mixed success. Many did not invest in livelihood activities, but spent the loan on home improvements, food consumption or paid down higher interest debt.

EXTERNAL PRIVATE SECTOR INVESTMENT

Externally financed, large-scale private sector projects have not provided much employment for people in QSEM villages, which villagers reported was because they lacked information and skills. Table 6 maps the major private sector enterprises near QSEM communities, a number of which are new villages to the QSEM 6 panel. Villagers identified two major obstacles to accessing livelihood opportunities with these enterprises: First, a lack of engagement between villagers and the businesses resulted in limited information being available at the village level about the enterprises. This was especially the case near the Kyaukpyu special economic zone in Rakhine, where limited information flows raised negative perceptions and concerns about land confiscation. Second, interviewees perceived that employment at these businesses required skills that they lacked, as was the case in Kyaukpyu or the steel factory in Magway Region.

> "We might not have the skills the factories will need. This is why I don't think there will be job opportunities for us," said one farmer in Kyaukpyu.

People had limited capacity to manage natural resources well in QSEM villages in areas of large-scale resource extraction. This observation draws heavily from villages in Pinlaung Township, Shan State, where the large Tigyit coal mine is located. Villagers reported visible impacts on agricultural water supplies and concerns about air pollution, but said they had had little engagement with or information from the mine's operators.

> "After a long period of time, the soil has changed from red to blue. The crops don't look good, and the price we get for potatoes is lower," said one farmer and village elder there.

Table 6: Private sector investment near QSEM villages

	Nature of investment	Effects on local livelihoods	Other impacts
Oil Drilling (Magway, three villages)	MOGE-managed oil production. Some small-scale informal drilling.	Job opportunities mainly in informal drilling. Significant decline as oil prices dropped.	Land controlled by MOGE. Limits ability to access loans from MADB. MOGE provides village development activities; extent and form decided on by MOGE.
Coal Mine (Shan, one village)	Village borders on Myanmar's largest coal mine	No job opportunities for the village. Villagers perceive that they don't have the right skills and report having never received information on the mine's activities.	Improved roads. Agricultural outcomes benefit from constant water run-off, but concern exists over environmental impacts of the mine's waste water, including on vegetable harvests.
Cement Factory (Shan, one village)	Cement factory exists in same village as coal mine.	No job opportunities.	Damage to houses and farmland from factory discharge and production. Assistance provided to neighbouring village.
Steel Factory (Magway, one village)	Steel factory built on village land in 2008.	Four to five residents from village benefit from semi-skilled employment. Perception that certain level of training required.	Improved road infrastructure in village. Land confiscated in 2008 to build road/railway. No compensation paid.
Special Economic Zone (Kyaukpyu, one village)	Planning for development of SEZ with borders close to QSEM village.	No guaranteed job opportunities. Township government proposed vocational training in 2015	Concern that SEZ will lead to pressure to divest agricultural land with limited guarantees of alternative employment
Commercial Fishing (Rakhine, one village)	Number of large-scale commercial boats.	Has provided consistent fishing labour for landless in two QSEM villages. Labourers contracted on seasonal basis.	Slight improvements in incomes in recent years as salaries linked to price of fish, which has increased.

LAND

The long history of insecurity of land tenure in Myanmar continues to affect people's livelihoods in QSEM villages. Since 2012, the roll-out of land registration has provided farmers in some villages with land use rights, but the impact of this on security of tenure has varied based on context, coverage and implementation. Land issues in certain QSEM villages continue to be highly contentious, reflecting long histories of land seizures, access and use changes, and village-level disputes. Land management and communities' experience of land rights, utilization of land, and transfer of land continue to be key challenges.

This section presents four interlinking sets of issues: [32]

- Land laws and their village-level effects, such as registration;
- Limitations in government land administration;
- Changes in land use, such as those occurring in response to land registration;
- People's perceptions of challenges to their land tenure security. [33]

LAND LAWS

The main observable change affecting QSEM villages has been the rollout of land registration under the 2012 Farmland Law. As previous QSEM reports discussed, this law enables farmers to formally register their land and receive a land use certificate. It aimed to strengthen land rights and provide farmers with the ability to buy and sell land use rights.

Although land registration has taken place relatively smoothly in many QSEM villages,[34] **two major constraints have emerged:**

- The lack of regulatory protection for communal or shifting cultivation land;
- Continued delays to land registration in some areas.

GAPS IN PROTECTION OF COMMUNAL OR SHIFTING CULTIVATION LAND

The lack of protection for communal and shifting cultivation land in the Farmland Law and the 2012 Vacant, Fallow and Virgin Lands Management Law has led people in some QSEM villages in the uplands to report feeling insecure about their land tenure. For example, in four of the Kachin villages, ambiguity over land rights, combined with demand for natural resources, has provided incentives for outside businesses to register what villagers say is communal village land. People in these villages reported that the Department of Agricultural Land Management and Statistics[35] (DALMS) officials and/or

[32] The framework draws from FAO, "Land Tenure and Rural Development"; 2002.

[33] The QSEM panel was designed to cover a number of geographical and agro-ecological zones. Village selection did not take into consideration land related issues or the presence of underlying land disputes. For this reason, the panel enables researchers to document implementation and effects of national land policy in the village context without a selection bias of villages facing land issues.

[34] This has been documented in previous QSEM reports.

[35] Respondents referred to the Land Records Department; however this body is now officially named the Settelement and Land Records Department.

village tract administrators (VTAs) had helped these outsiders register this land.

In response, communities have sought to strengthen their rights. The most common approach was for people to adapt their land use practices to meet Farmland Law registration criteria. This round, several Kachin State villages divided communal land into individual plots to allow them to register, as outlined below.

Box 6: Changing land designation for registration and strengthening of ownership rights

In one village in Kachin, where villagers felt insecure about the tenure of their shifting cultivation land, villagers changed how they used land in order to be able to register it under the Farmland Law and thus gain land use rights to it. Since 2009, farmers in a village in Myitkyina Township in Kachin State have replaced shifting cultivation practices with paddy cultivation and plantation agriculture. In 2015, villagers began a process to convert their remaining shifting cultivation land, which had lain fallow since 2009, in an attempt to register it under the Farmland Law.

The villagers reported taking this decision out of concern that they risked losing control of the fallow land to people moving in from other parts of Myanmar and concerns about the expansion of commercialized plantation agriculture. According to the villagers, about ten years ago a Chinese company purchased a large amount of land from a small group of villagers to establish a teak plantation. Hearing of land grabs in other parts of the state, village leaders expressed concern that failure to register might allow a company to take the fallow land as well.

Village leaders prepared a plan to strengthen ownership rights. The plan called for five acre plots to be allocated to 60 households in the village. Villagers worked collectively to clear the land. Four households were excluded from the plan because they could not contribute labour.

People reported that registration decisions were made by the village administrator and local pastor without involving other villagers. These two leaders informed the township-level land records department and the township administration office so that surveying and the process of getting written approval could begin. The township administration approved the land designation change. The village paid the DALMS's costs by collecting 10,000 kyat (about USD 7.30) per household and surveying costs at 35,000 kyat (about USD 25) per plot. At the time of the research, surveying had been completed but land use certificates had not yet been distributed.

A second approach was for community members to try to register such land through the community forestry mechanism created by the Vacant, Fallow and Virgin Lands Management Law (2012). Efforts to register communal forests existed in QSEM villages in Ayeyarwady, Chin, Kachin, Mandalay and Rakhine. The process was most advanced in a Rakhine village where, working with a local NGO, village leaders were working to register their mangrove forest. In 2014, the village received approval from the state government for an initial 80 acres, and a further 60 acres were added in 2015. The experience of a village in Kachin State reflects the extra complexity facing communities in conflict-affected areas. It is seeking to register 1000 acres as communal forest in order to reduce tariffs paid to both the government and the Kachin Independence Army (KIA) for cutting wood. Villagers also said they were concerned about the threat of outside companies taking ownership. To register, the village submitted applications to both the township administration and the local KIA leadership. As of the QSEM 6 research period, only the KIA had responded, granting approval.

DELAYS IN LAND REGISTRATION

In some areas, land registration continues to be delayed. QSEM villages in a township in Magway, which are in an area with oil reserves, face significant challenges. Previous QSEM reports have documented the way that villagers have conducted advocacy to enable them to register land. These efforts were less visible in this round as villagers acknowledged the low likelihood of change leading up to and immediately following the 2015 election.

LAND ADMINISTRATION

People in several villages reported problems in engaging with land administration officials. These problems were mostly localized, reflecting the uneven nature of registration across the QSEM panel and the varying capacity of local authorities. "We don't trust the land management department anymore," said one village elder in Shan State, reflecting some of these challenges. Reported issues with the roll-out of land registration are detailed in Table 7.

Table 7: Land administration challenges reported in QSEM villages

Location	# of Villages	Implementation Challenge	Impact/Implication
Kachin	2	Villages are located near conflict areas	DALMS refuses to visit the areas.
Kachin	3	DALMS and/or VTA transfer land to outside actors.	Land owners dispossessed; reduces confidence in DALMS / VTA officials.
Magway (Minbu)	3 (same township)	Village land above oil fields; MOGE prevented registration.	No registration has taken place.

Table 7: Land administration challenges reported in QSEM villages (contd)

Location	# of Villages	Implementation Challenge	Impact/Implication
Magway	1	Some ownership claims not recognized.	DALMS refuses to recognize ownership of some villagers due to unclear documentation.
Mandalay	3	Land incorrectly surveyed by LRD	Households cannot access MADB loans because names on LUC are inaccurate.
Rakhine	1	DALMS incorrectly surveyed land.	Complaints to DALMS but no follow up action.
Shan (Hsihseng)	1	Delay in receiving LUC.	Farmers frustrated by delay, but see it as normal.
Shan (Pinlaung)	3	Land difficult to survey and plots are very small.	Benefits of registration (namely MADB access) not worth registration expense.

Land administration in conflict-affected areas is more complex, requiring communities to navigate among different governance structures. Depending on where the village is located, people have reported that land administration officials have been reluctant to visit the village to undertake surveying or have reported having to liaise with both the Myanmar government and with ethnic armed group organizations. The clearest example is the Kachin village registering community forest land with both the government and KIA. However, more informal mechanisms were also reported, such as the relationship villagers in Northern Shan maintain with three armed actors (the military, Shan State Army-South, and Ta'ang National Liberation Army) to ensure access to their fields.

CHANGES IN LAND USE

Since QSEM began in 2012, several changes in land use have taken place, as new crops are cultivated, fallow land is used for other purposes, and contract farming has emerged. A number of these shifts, outlined in Table 8 below, primarily reflect households responding to market signals and reacting to environmental and climate shocks.

Table 8: Changes in land use across QSEM 6

Where	Old Land Use	New Land Use	Reason for the change
Ayeyarwady, two villages in Mawlamyinegyun Township	Second paddy crop	Winter crop: Sticky rice	A strong market for sticky rice has encouraged most farmers in the villages to grow it as a winter crop instead of a second paddy harvest. In one village, some farmers also invest in pulses and watermelon.
Chin, two villages (a village each in Falam and Thantlang)	Fallow	Housing	Two villages seeking to move location of village houses. One to improve access to roads and water. The other in response to landslides.
Chin, two villages in Thantlang Township	Mostly shifting cultivation	Plantation agriculture	Farmers have shifted to plantation agriculture to improve productivity.
Rakhine, two villages in Myebon Township	Prawn farming	Paddy fields	Following a season of very low prawn yields and recent higher paddy prices, groups of farmers are returning their land to paddy fields following a five-year investment in prawn farming.
Kachin, one village in Myitkyina Township	Shifting cultivation	Plantation agriculture	Farmers changed land use because they were experiencing poor returns from Taungya (shifting cultivation) land and due to increasing concerns over land tenure security from businesses buying unregistered land. They registered the land for plantation agriculture and started growing teak.
Kachin, three villages across two townships	Shifting cultivation	Contract farming	Farmers lease land to Chinese companies to grow bananas and watermelon. Villagers also engaged in casual agricultural labour.
Kachin, one village in Myitkyina Township	Paddy land	Housing	Approximately 10 acres of paddy had not been planted for five years because of a lack of access to water. This year the group of 5-6 farmers who owned the land sold it, with VA endorsement, to 7-8 people in a nearby village who wanted to build homes there.
Magway, one village in Minbu Township	Upland farmland	Housing	A village that floods regularly during the monsoon wants to relocate all the homes in the village to new land on higher ground. Township authorities have as yet been unresponsive.
Shan, one village in Hsihseng Township	Upland farmland	Contract farming	Farmers contract with tobacco company to grow and dry tobacco. Limited to wealthier farmers.

Farmers have also begun borrowing against registered land, using their land use certificates as an unofficial form of collateral. In previous rounds, such certificates were a prerequisite for accessing MADB loans; in this round, people used them to access private loans. Box 8 provides a case study of this process from a Mandalay township. The longer-term implications of this shift are not yet clear, nor the ability of moneylenders to seize land or force land transfers.

Box 7: Farmers in Mandalay pawn land using land use certificates as collateral

A village in Mandalay's Thazi Township has experienced two continuous years of drought, rendering farmers unable to repay their MADB loans. This year, for the first time, a group of 10 farmers, all of whom grow cotton, borrowed money from a large cotton broker in Meiktila. They were forced to use their land use certificates as collateral. Most then used this money to pay down MADB loans.

Borrowing from this source was suggested by the village cotton trader who each year buys the farmers' cotton and sells it on in Meiktila. The farmers went together to Meiktila to meet the broker. Each farmer borrowed one million kyat (about USD 740) at 8 per cent interest (monthly). Farmers perceived the interest rate to be reasonable for a private loan.

The accompanying restrictions were, however, more onerous. As part of the loan contract, farmers had to turn over their original land use certificate to the creditor. Second, the lender required that the loan be repaid as a lump sum rather than in instalments, a major challenge for most farmers. Finally, the lender included a number of incidental expenses that had to be paid for by the farmers, such as the costs of the contract document and witnesses.

Only 3-4 farmers have been able to repay the loan. The others are concerned about their future if they do not repay the loan and no longer have their land use certificates.

Farmers with large landholdings have reported registering land under the names of numerous household members, including women, in order to access more MADB loans, which are limited to 10 acres per registered owner. This has meant that, over time, the number of women holding land use certificates has increased. QSEM 6 research did not, however, find any evidence that having women's names on land use certificates led to changes within households in how decisions were made: although more certificates were formally registered in women's names, this did not lead to any visible increase in their agency within the household compared to men.

PERCEIVED CHALLENGES TO LAND SECURITY

Myanmar's long history of land confiscation is reflected in QSEM villages. Several villages continue to struggle for compensation for long-standing cases of land confiscation. This includes land in Magway seized to develop a railway line to a steel factory, and 500 acres of land in Kachin taken by a local military unit to create a rubber plantation (see Box 9).

> "They just confiscated the land without saying a word," said one farmer in Kachin State of this experience. "[They] did not even ask whether it was ours or not. [They] just confiscated it with no compensation at all."

During QSEM 6, people in some villages were more willing to mobilize than before, citing perceived opportunities for action under a new government.

Box 8: Advocating to reclaim confiscated land in Kachin State

People in one QSEM village in Kachin State reported that, in 2007 and 2008, a military unit seized 500 acres of land owned by 130 households in the village.

According to people in the village, this took place when a local commander, his relative, and the village tract administrator arranged to develop a rubber plantation to be run by the commander's relative. As the land initially suggested by the township didn't fit the plantation's needs, the relative used the military unit to seize unfarmed land surrounding the village's paddy plots. The land was cleared, fenced and closed to people from the village. If villagers tried to cross the land to access their paddy fields or the forest, they were threatened with violence and told to pay compensation for any damage caused. Meanwhile, the rubber project appeared to stall and no trees were planted.

Initially farmers took no action: the seizure did not directly affect their paddy fields, they did not know how to claim compensation, and they feared a claim would lead to retribution. However, by 2014, villagers were more prepared to voice complaints against the military and decided to prepare a formal complaint. One villager took the lead, forming a group to protest. All affected households joined the group while some people from neighbouring villages also expressed support. The increasing price of sesame was a big factor for driving the complaint. The change in prices meant farmers wanted access to the non-paddy farmland in order to expand their arable area.

The group submitted a written report to the township administration office and to the Land Records Department, but to no avail. They then submitted their report to the Union Farmland Management Committee, which responded by sending a representative to visit, accompanied by officers from the Settlement and Land Records Department, the township administration office, and the police department. Two further inspection trips were made to the village by Naypyidaw officials. After these meetings, the committee decided to return the farmland and referred the case to the Land Records Department with instructions to provide land use certificates to the claimants. At the time of research, land surveying had been completed and a formal handover process was expected in May.

A few QSEM villages have reported more recent cases of land confiscation. Several cases in QSEM villages in Ayeyarwady and Magway have been identified in the past several years, with villagers only now starting to advocate for compensation. Villages also reported ongoing rumours about potential confiscation of land in Rakhine, linked with the special economic zone at Kyaukpyu. In contrast to old cases, however, villagers have not reported any military involvement in these newer cases. Efforts to resolve more recent cases have involved direct negotiations with businesses, with government participation where necessary.

MARKET INFORMATION: THE TRANSFORMATIVE ROLE OF TECHNOLOGY

Across the QSEM panel, improvements in communication infrastructure are beginning to affect people's livelihoods and influence decisions about income and income generation. In earlier QSEM reports, the research found that farmers generally relied on brokers for price information and had little ability to evaluate price options. "[We were] like the blind elephant crossing the forest," said one farmer in Magway, describing what it was like to sell crops in the past by guessing at going prices. Despite a visible increase in mobile phone usage across most QSEM villages (with the exception of Chin), prior to QSEM 6 there was little indication that they were being used in relation to livelihood activities.

Throughout the QSEM 6 fieldwork, however, researchers found several examples of the increase in mobile phone penetration enabling better supply chain management, allowing previously isolated fishermen, farmers and livestock breeders to make choices about when and where to sell. Research teams found that brokers were now being contacted directly when villagers were ready to sell livestock (Magway), villagers were already aware of paddy prices prior to the broker arriving (Ayeyarwady), and farmers were investing in transport machinery in order to better access the township rice market (Mandalay) due to better price information. Box 9 describes some of these dynamics.

Box 9: Improved mobile networks affect trade from Rakhine to China

A village crab and prawn dealer in Rakhine's Myebon township has been able to take advantage of mobile communications to improve her household's livelihood. Her husband sells firewood and charcoal, while for the past five years she has traded seafood. They pay village crab trappers in advance and then sell the catch on to Muse, on the China-Myanmar border, via a broker in central Myanmar. Previously, the price was set by the broker, which in turn affected what they were able to pay to the crab catchers.

As mobile networks improved during 2015, an increasing number of villagers began using 3G internet. On the advice of the broker, the village dealer set up a Viber (social messaging app) group to rapidly exchange information on transport conditions, market prices, and other key information. The members of the Viber group include the local dealer, their broker, and the end buyer in Muse. The group was set up shortly before Chinese New Year in early 2016.

The Viber group's creation has led to tangible livelihood efficiencies. For example, when the road to Muse was closed, they were informed via the group and reduced the catch they bought and shipped north, preventing losses they previously would have suffered. The interviewee reported that her income had increased substantially, enough that she was planning to build a new home.

CHAPTER 5: VILLAGE GOVERNANCE AND ENGAGEMENT WITH THE STATE

Since QSEM began, changes have taken place in how villages are governed and in how people engage with the state. This chapter examines how these changes have unfolded. It also examines the influence of conflict on social relations and village institutions.

VILLAGE LEADERS AND INSTITUTIONS

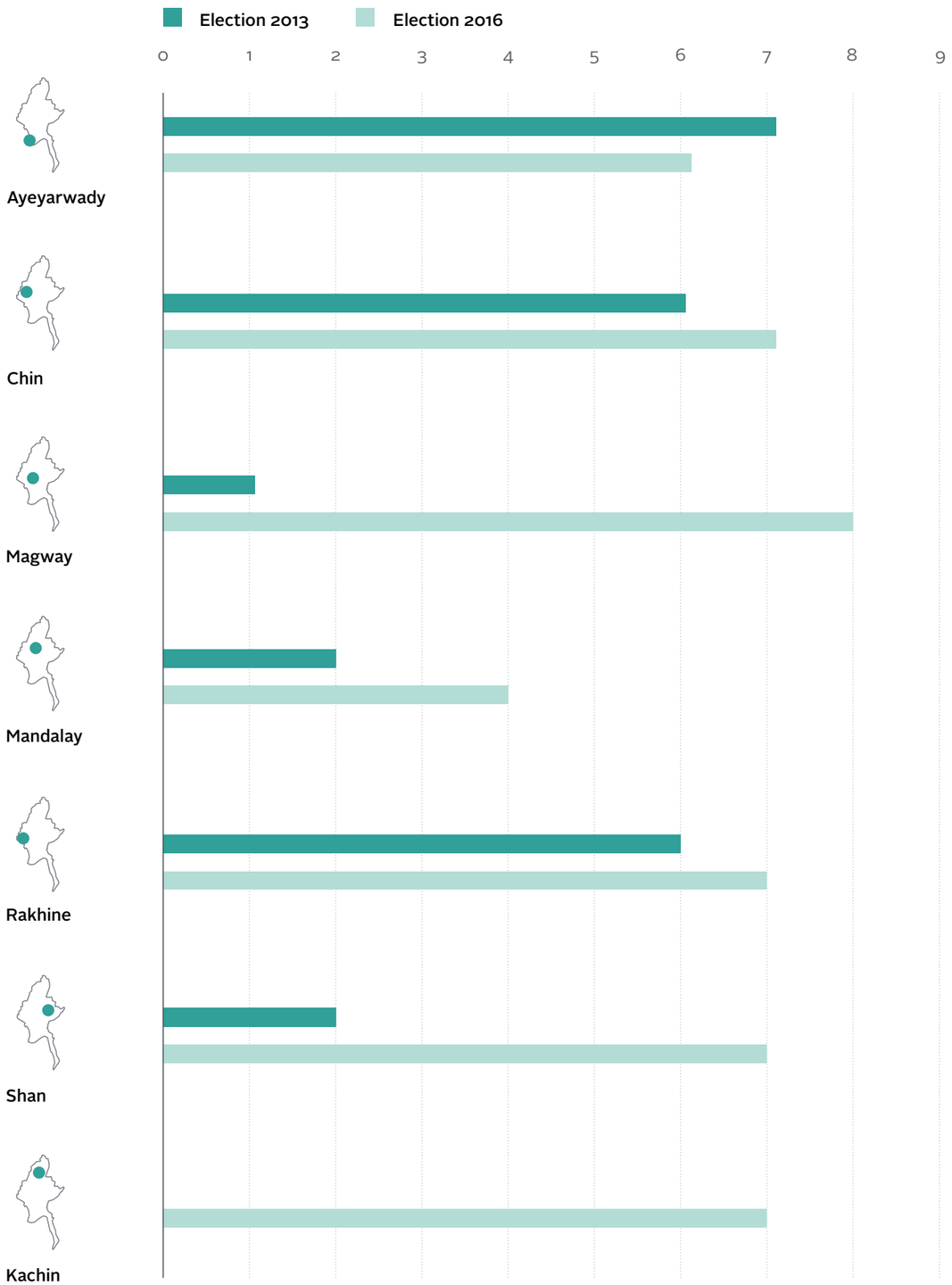
Village governance is in an increasing state of flux. Village leadership positions have less authority than before, which has made them less attractive. Previous QSEM rounds have reported that interest in village administrator roles has decreased, as expressed by one casual labourer in Mandalay, who said, "[The village leader is] hated by people, scolded by office, and scorned by his wife." In this round, this lack of interest extended to village tract administrator (VTA) roles.[36] The recent village elections saw limited competition for VTA positions in QSEM villages.

VILLAGE TRACT ADMINISTRATORS

For the most part, the 2016 VTA elections in QSEM villages went smoothly. Respondents in two Rakhine and two Magway villages, and in one village each in Chin, Kachin, and Mandalay, expressed concern about voting irregularities, but these were an exception. Overall, villagers reported that campaigning for VTA positions was subdued compared to the 2013 election.

[36] Village tract administrators are official positions under the Ward and Village Tract Administration Law. The VTA represents all villages in a village tract. The VTA position is important because he (across QSEM villages all VTAs are male) acts as the main interlocutor between communities and the state. The VTA represents villages at township-level meetings, submits proposals and takes responsibility for village development projects, engages with officials on matters including land and credit and plays a role in nominating representatives to different village-level committees. Villages in Myanmar are organized in groups of ten households and each of these groups select a representative (a ten-household head). VTAs are elected in secret ballots by all ten-household heads across the village tract. Until recently, each village was also represented by a village administrator (VA, otherwise known as a one-hundred household head). Although this position has officially been abolished, most people in any given village are able to identify a village leader who, in practice, continues to perform this role.

Figure 9: Number of new VTAs across QSEM panel, 2013 and 2016 elections



During this QSEM round, a high proportion of VTA positions turned over. Figure 9 above shows that 73 per cent of the QSEM villages elected a new VTA in 2016, compared to 44 per cent in 2013. Villagers reported limited campaigning for the positions in the 2016 elections. This contrasts with the election experience in 2013 when, as reported in QSEM 3, competition or social tension was observed in approximately a third of QSEM villages. Researchers noted based on their interviews that this turnover was mainly a result of incumbent VTAs not wishing to renew their positions. Two main reasons were put forward for this: an increase in the responsibilities of the role without increased authority, and an increase in downwards accountability, which made the job more difficult.

VTAs reported that the responsibilities of the role had increased, but not the authority. Research in QSEM 4 and 5 documented increases in the tasks required of VTAs. These have not, however, been accompanied by an increase in their authority. New directives from township officials have sought to reduce the involvement of VTAs in development committees. Committees established for implementation of the Evergreen project, for example, did not include a role for the VTA. Similarly, electricity committees were managed at the village level. In practice, this resulted in a reduction in the influence of the VTA in managing projects where resources were attached.

Village leaders also reported that they were much more likely to be held to account in these roles, which made them difficult. Previous rounds of QSEM have noted a trend of increasing downwards accountability emerging from an increasing confidence among villagers to express alternative views and criticism. In several places, villagers were using technology or information from their migrant networks to challenge the work of village leaders or to circumvent them, engaging directly with township officials. Box 11 from Magway Region below highlights one such example. "There are many complaints in the village, and if people complain too much, the township will stop listening to us," said one village leader in Magway.

> "Nowadays, when we make a mistake, villagers straight away make complaints. Villagers even uploaded information to Facebook just to choose the supervision committee for village elections."

Two examples from Chin and Ayeyarwady (Box 10 below) highlight some of these dynamics.

Box 10: Undermining authority leads to shake-up of village leadership in Chin and Ayeyarwady

A village administrator from Chin State reached out directly to the township administrator to resolve a problem concerning the location of local houses, bypassing the village tract administrator. People in the village had been advocating to relocate their houses, which are currently in a location that is difficult to access and where water is scarce. Villagers wanted to move the village closer to a newly completed road, which provided better access to the township centre. Using his own networks, the village administrator reached out to the township administrator to discuss the proposal. They met twice without informing the VTA.

The VTA was opposed to the proposed new location. His preference was for the village to move closer to another village (where he resided), despite villagers claiming that this would make them reliant on the old road to town, a significantly longer journey. Tensions arose when the township administrator raised the issue in a meeting, asked the VTA questions he was not able to answer, and subsequently publicly criticized him. In retaliation for this, the VTA replaced the village administrator. The relocation has been put on hold. As some village leaders noted, the experience has further confirmed to them that every village should have their own representative.

In a village in Ayeyarwady, the village administrator resigned after he felt his authority had diminished. There, a village dispute led to violence and a disagreement with the police. When an argument between two villagers became heated, the village administrator called them to his house. He wasn't able to resolve the argument and it subsequently turned violent. Wanting to teach the villagers a lesson, the village head called the police who came and arrested the two youths. A family member of one of the youths had connections with officers at the police station, however, and went and asked that they be released on bail. The village administrator was bypassed in this. When he found out, he complained to the police, saying,

> "You released them without me knowing. If you do that, I won't do what you ask anymore."

Eventually, he resigned, feeling that he could no longer command respect from people in the village.

In a number of QSEM villages, VTAs appeared to think that even though they had been elected, power would inevitably be transferred to people close to the current government. This was made explicit in several villages in Rakhine State where researchers were informed that members of a political party had visited the villages and argued that the VTAs should be replaced consistent with results of the national election. Elsewhere it was implied, with incumbent VTAs suggesting they had grown tired of the job or it was time for a change. As one former VTA in Magway stated,

> "I didn't run. I am getting old and want to spend time meditating."

Researchers noted views such as these were common among village leaders. As Box 11 shows, ordinary people also shared this view.

Box 11: Local politics and transition in a Magway village

Like many villages in the QSEM panel, this village in Magway Region has a handful of active local leaders, predominantly men, competing for positions and influence in the village. Prior to the village tract election, the VTA was an influential trader from the village. He presented himself as someone capable of working with township level officials and representatives from the Myanmar Oil and Gas Enterprise (MOGE). This was important because the village was located in an oil extracting area with complicated land issues and MOGE financing for local projects.

However, differences arose in the village about how to work with MOGE after other local leaders in the village participated in advocacy training supported by a local NGO. This led to different opinions on how to work with MOGE to advocate for land rights and handle a dispute over ownership of land earmarked for building a dam. The alternative leaders, using their advocacy knowledge, were also more forthright in raising questions about MOGE assistance, which was funding development projects in the village, including school renovations. In one instance, they uploaded photos of the school building on Facebook highlighting the poor quality. The VTA claimed he was reprimanded by township officials as a result.

The incumbent VTA chose not to stand again for re-election. He claimed the task was too burdensome and wanted to focus on his business instead for the sake of his family.

> "If your business is not going well, you won't get along with your wife. Being a village leader means you spend a lot but can't make an income,"

he said. There was little interest in the position from others, but his family had sufficiently strong networks throughout the tract villages to support the nomination of his nephew, who was in the end elected.

Since the general election, villagers with closer links to the NLD engaged more in village affairs. The nephew, however, had links to the USDP, the party of the previous government. Villagers were thus anticipating another election after the change in government. As one respondent noted,

> "Why haven't they transferred their tasks to the new elected party yet?"

OTHER VILLAGE INSTITUTIONS

The decline in interest in the VTA position did not appear to lead people to be more interested in other village leadership roles. As has been consistently reported in past rounds, the informal role of village leader or administrator remains important within some villages, particularly those in more remote locations. Filling those positions, however, continues to be a challenge. In villages where the position is still active, people reported viewing it as necessary, but onerous and with few benefits. "Our job is like herding someone else's animals for free but having to supply our own food," said one village leader in Ayeyarwady. Another leader from Shan commented, "It mainly involves collecting money from people, which you'd have to do until late in the evening, and reminding them to go to village meetings. It didn't interest me."

At the time of the fieldwork, the influence of village and township development support committees was on the wane. Previous QSEM reports have documented the creation of Township Development Support Committees (TDSCs) and Village Development Support Committees (VDSCs) to support government programs to be implemented. In most villages in this round, however, previously formed VDSCs were inactive. Village leaders across a number of states/regions reported receiving directives from the government to form new committees or broaden representation on other pre-existing committees. The influence of TDSCs also had diminished. Respondents claimed TDSC members realized that the time and effort required to participate actively in such meetings was not justified by the benefit. After the research, both kinds of committees were subsequently abolished by presidential regulation. [37]

As discussed in Box 12 below, policy initiatives aimed at encouraging participation may not have the desired effect.

[37] Village and Township Development Support Committees were abolished by the new government through a regulation of the President dated 9 June, 2016

Box 12: Negotiating a new bridge in Ayeyarwady

In a village in Ayeyarwady, the VDSC was active in initiating several new development projects, including the upgrading of an inter-village road and construction of a new bridge to a neighbouring, more well-connected village. The idea for the bridge was initiated through the VDSC. The chairperson, coordinating with village elders, prepared a proposal that included photographs of the village's needs and various land records and maps. This was submitted to the township through the TDSC. The VDSC chairperson played a key role leading negotiations at the township level and drawing on his strong networks. A second man was responsible for mobilising village support and organising financing and labour for the project. This person was using skills he built up as chairman of the local NGO development committee in the village.

Although the proposal was submitted to the TDSC only DRD officials were involved. The township administrator signed off on the project, but all direct negotiations and implementation were done by DRD. Construction of the bridge was completed in early summer 2015. The government contributed 5 million MMK with the village raising 1 million MMK and providing labour. The TDSC thus did not have much involvement in the project in practice.

Women continued to face challenges in participating in village governance, though their participation across the QSEM panel increased somewhat. The selection of ten-household heads in preparation for VTA elections provided some evidence of this shift. In two villages in Mandalay, two in Magway, and one in Ayeyarwady, a number of women were selected as ten-household leaders (three women in Mandalay, five in Magway, and one in Ayeyarwady). Although still vastly under-represented, this was a significant change compared to previous rounds, when not a single female ten-household leader, village administrator, or village tract administrator was reported.[38] Some respondents attributed this increase in participation to the effect of having a woman elected to a prominent role in national politics. "There are many women representatives in parliament. Even Daw [Aung San] Suu [Kyi] is in parliament," said one female ten-household head in Magway. "Women do not stay only in the kitchen for pounding chili anymore. They start to see the outside world now. Their perceptions are changing," said one female VDC chairperson. Overall numbers, however, were still low. As Box 13 demonstrates, women in leadership roles still faced resistance.

Box 13: Administrative challenge to a woman elected as ten-household head

In February 2016, people in a village in Magway were asked to select ten-household heads in preparation for the VTA elections. Being quite a large village with just under 300 households, 30 ten-household heads were selected. Of these, one was a woman. Her group of ten households put her name forward because she participated actively in community activities and was best placed to represent their interests.

Some village elders, however, complained. Part of the complaint was that they felt it was not the role of women to take these positions. They rejected her selection. The rejection was technically on the grounds that the address on her National Registration Card was not that village: the woman was born in a different region and moved to the village as it was where her husband was from. Yet of the 30 nominees put forward, this woman was the only one rejected.

[38] The number of ten-household heads varies significantly dependent on the population of the village and can range from three or four representatives to up to fifteen or more.

EXPECTATIONS OF THE STATE

Across QSEM rounds people's expectations of government have grown. Early QSEM reports had limited focus on public service delivery due to the few services delivered by government at the village level and limited expectations from villages.[39] As access to public services and information has increased, however, expectations have changed, as has been reported in more recent rounds. During this round, researchers noted that villagers were starting to focus not only on the level of support provided, but also the quality of services, citing the national elections and change in government as contributing factors.

NATIONAL ELECTIONS

There was little evidence that the national elections held in November 2015 had led to increased village competition or tension. [40] Although it is possible this was due to reticence or underreporting on the part of villagers, the findings are consistent with election monitoring reports.[41]

Researchers noted that, in most villages, people had put on hold efforts to resolve existing grievances leading up to election time. Research identified limited progress in efforts to resolve land registration issues in oil processing villages in Magway Region and in villages near the Shwe oil and gas pipelines in Rakhine, as well as efforts to resolve land compensation issues in villages in Ayeyarwady and Magway. Villagers appeared to understand that little would be resolved in the lead up to the elections.

Instead, expectations were being shifted to the new government. Villages with long-standing grievances such as those relating to land compensation expressed hope that the incoming government would address these grievances. Elsewhere, the expectations were more immediate. In two villages in Mandalay, respondents expressed hope that the new government would act to reduce the debt burden their village had incurred to access electricity from the public grid. In Chin, people reported hoping for greater investment in local infrastructure now that an ethnic Chin had been appointed as vice president.

ONGOING INCREASE IN GOVERNMENT SERVICE DELIVERY

> "Getting support (for a road) depends on luck. A lot of villages have asked for assistance." – Village administrator (male), Mandalay Region.

Government service delivery in QSEM villages has increased. This is mainly in the form of an increase in electricity and credit projects. Figure 10 below provides a summary of government assistance in QSEM villages between 2014 and 2016 (QSEM 4 to QSEM 6).[42] The levels of assistance are significantly higher than between 2012 and 2014 (QSEM 1 to QSEM 3).

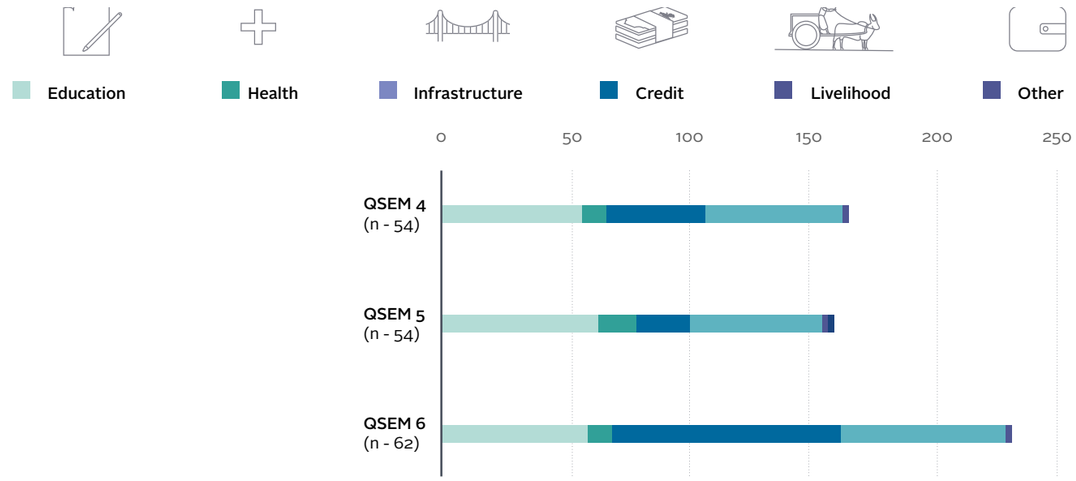
[39] See also Tripartite Core Group, "Post-Nargis Joint Assessment": 2008.

[40] The NLD government officially took office on 1 April, 2016.

[41] See European Union Election Observation Mission, "Preliminary Statement: A well-run Election Day and competitive polls mark Myanmar's critical 2015 elections, with key legal reforms and procedural improvements still required": 2015.

[42] Previous rounds of QSEM have also documented the level and type of donor assistance. There were few overall changes in donor programs across the QSEM panel in this round. Taking this into consideration, the report does not focus in detail on donor assistance.

Figure 10: Government assistance across QSEM rounds (QSEM 4-6)



In this round, villages in the central regions of Myanmar received more government projects than those in the states.[43] In this round, QSEM villages in Magway, Mandalay, and Ayeyarwady received almost double the number of projects per village than QSEM villages in Chin, Kachin, and Shan. This is primarily explained by the presence of multiple credit programmes (MADB and either cooperative or Evergreen Project loans) across a number of villages in the dry zone, education programmes throughout QSEM villages in Ayeyarwady and MOGE programmes in a township in Magway. Figure 11 below provides a breakdown of number of projects across QSEM villages in each region and state found during QSEM 6 research.

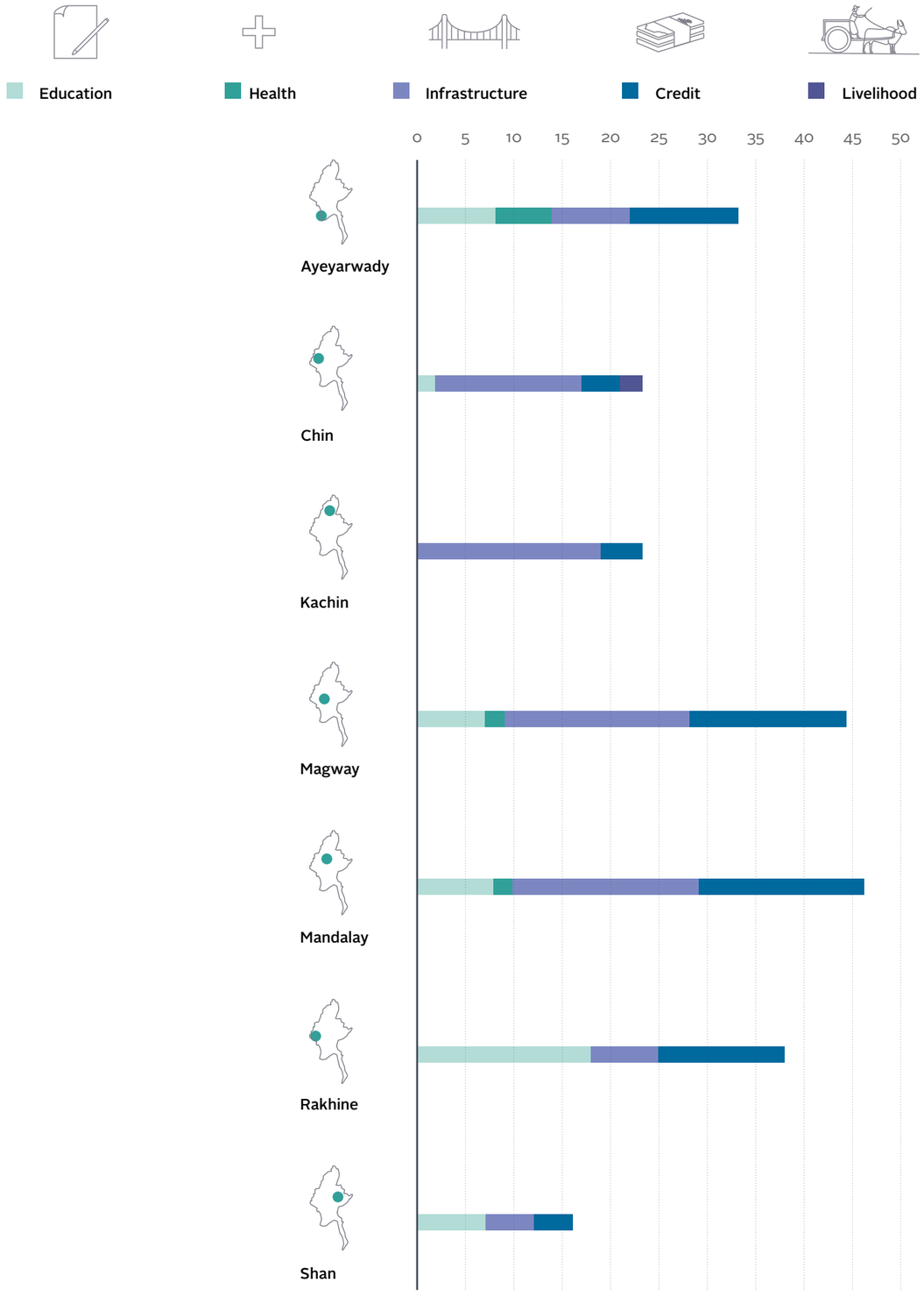
GREATER AUTONOMY IN DELIVERING SERVICES

The delivery mechanisms for government projects are changing, with several allowing for greater participation. In previous rounds of QSEM, government service delivery was predominantly centrally driven, with uniform implementation. In this round, there were state/regional and village-level variations. Examples from two national projects (electrification and rural credit) illustrate these variations.

In the national electrification project, the most notable variations came at the state/regional level. A majority of QSEM villages in Kachin and Mandalay were included in a Government of Myanmar project expanding access to the national power grid. Table 9 below compares differences in the level of infrastructure provided, village selection, payment mechanisms and information. In villages in both states/regions, village leaders made key

[43] It should be noted that this does not necessarily indicate levels of assistance in financial terms as QSEM is not well placed to collect information on the relative costs of different projects. It is possible that some villages will receive a large number of small projects whereas others are beneficiaries of a small number of projects with larger budgets.

Figure 11: Government projects by state & region



decisions and electricity committees disseminated information and collected fees. Even though costs for the project were higher in Kachin State, villagers thought more highly of the project there than in Mandalay because individual households were connected to the grid, and received comprehensive information.[44] In contrast, villages in Mandalay had greater choice in determining whether or not to accept the government project in their village, and took more varied approaches to levying fees. Even though their fees were less, people took loans to meet upfront costs, and so appeared to have a greater debt burden. At the time of the research, the electricity connection in Mandalay was still pending across all villages.

[44] This appears consistent with how the National Electrification Plan was designed. The project had three levels of connectivity, with National Government financing connection to the village and state/regional governments and/or villagers financing village infrastructure and connections to the household. See Government of the Union of Myanmar, "Myanmar: Achieving Universal Access to Electricity by 2030," 2015. Costs vary depending on accessibility of the village. Higher costs in Kachin State reflect that connectivity was provided to households rather than at the village level.

Table 9: Electrification in Kachin and Mandalay

	Kachin	**Mandalay**
Distribution	Six QSEM villages across nine total in three townships.	Five QSEM villages across nine total in three townships.
Village Selection	Government decides. Village plays no role in decision.	Meeting at township level. Villages invited to submit proposals.
Costs	Between 200,000 – 880,000 MMK for connection to household.	Between 100,000 – 400,000 MMK for connection to village.
	Government provides cost estimate. VA determines household contributions.	Two villages have fixed household rate. Varying rates set by VA in three other villages.
	Payment once households connected.	Payment upfront.
	Villagers primarily use own capital, sell livestock or take loans to cover costs. In two villages, Evergreen used to meet repayments.	Villagers take loans, use cooperative funds, and draw on remittances to finance. One village organized private financing through remittances.
Participation	Household costs determined by location of house in village and potential usage.	Where varying rates are applied, the rate is set based on socioeconomic standing in the village. Some households in one village decided not accept being characterized as better-off and withdrew participation.
	Poorer households in each village decided they could not afford contributions and did not participate.	

Table 9: Electrification in Kachin and Mandalay (contd)

Implementation & Perceptions	Completed in all villages. Villagers view costs as bearable because they could sell assets and information was provided upfront. Viewed as project of Kachin State Government.	Two villages have transformer at village level but no intra-village connection. No progress in three other villages. Concern about debts incurred and criteria used for assessing rates. In two villages, perception that new government would review project and reimburse costs.

There were also variations in how the Evergreen rural credit project was run. As discussed in Chapter Four the Evergreen Project expanded its reach from four to 11 QSEM villages in 2015 across four states: Chin, Kachin, Rakhine and Shan. At the state level, guidelines appeared to have been issued with slight variations, particularly in relation to number of committee members per village. However, the most important decisions, including selecting beneficiaries and loan amounts, were taken at the village level. Although villagers reported thinking highly of this approach, the fieldwork was conducted shortly after loans were disbursed, but before the repayment period, so it is unclear how this village-level autonomy will affect repayments.

The changes indicate that line ministries are providing greater autonomy to state/regional governments and village leaders to shape how projects are implemented. However, the changes should be monitored across future rounds to see if this represents a trend towards greater decentralization or was context specific, with the government focused on pushing out services in the lead up to national elections.

INFORMATION FLOWS

The expectations villagers have about the role of government are also influenced by the quality of information they get. Expanding mobile networks are providing villagers with access to alternative sources of information, which places pressure on the government to improve its own information flows. In QSEM villages, the quality of government-provided information on public services varied considerably. As highlighted in the delivery of electricity infrastructure discussed above, the quality of information provided could significantly influence how such projects were perceived. Information bottlenecks or a lack of transparency led to tension. Villagers reported that projects funded with the private sector or as compensation for private sector activity tended to provide less information. In QSEM villages near the Shwe oil and gas pipelines in Kyaukpyu, Rakhine, for example, villagers were confused about the conditions of funding from a block grant program that provided 30 million kyat (about USD 22,000) block grants to villages. In one instance, as described in Box 14, the confusion threatened to turn violent.

Box 14: A lack of information about a credit programme creates social tension in a village in Rakhine

In a rural loan program in Rakhine State, a lack of information led to social tension. Three villages in Kyaukpyu township, Rakhine State were included in the programme, which provided 30 million MMK (about USD 22,000) per village, which could then be distributed in the form of loans to individual households.[45] At the start of implementation, the VTA formed a committee to manage the loan but, it was claimed, failed to tell committee members that villagers had to pay interest on the loan. The committee members thus wrongly advised villagers that no interest had to be paid.

Yet at a separate township level meeting, committee members learned that households participating in the program did indeed have to pay interest (0.5% a month), and that the interest could be used by the village committees for village development. The committee members thus withheld 0.5% of each loan when disbursing it with the intention to use it to build six toilets.

However, because villagers were under the impression that the loans were interest free, this withholding of money led them to think the programme money was being misused. A petition was signed by 20 villagers and presented to the administrator. Committee members received a copy of the petition and confronted the petitioners who claimed their signatures had been faked by a small number of villagers. At a meeting soon after, the actual signees demanded that the petition be returned to them. After the administrator refused and threatened to forward it to the township, the signees returned with weapons, demanding that the petition be returned, as they realized it might cause wider problems. Eventually, a decision was taken not to report the petition.

[45] Most villagers believed the programme was part of the Evergreen Project, although some confusion existed around this: other villagers believed the funding was from CITIC, a company supporting the SEZ. Because of a lack of information, researchers too were unable to determine the source of the program.

The increased complexity in village governance and evolving expectations of government present opportunities and have implications for livelihoods in rural communities. Three potential scenarios arise: The first is that new actors will engage in village leadership as they see national politics open up, leading to greater inclusivity. This has the potential to result in more inclusive participation in village leadership positions, as seen by the small increase in women's participation in village politics. The report has documented a number of areas where this is already leading to greater oversight and accountability of officials at the village level and beyond. The second is that transition causes an increase in competition for village positions. Although the opposite happened in this round, it is possible that this will be temporary, with local

leaders taking a wait-and-see approach in the interim prior to contesting positions. As people's networks beyond the village continue to expand and their expectations of government evolve, there are already indications of an increase in broader contestation, as villagers voice complaints or undermine the authority of current leaders. The third is that apathy continues, and demand for village positions continues to decrease. This would have important implications. It would weaken the capacity of villagers to manage village affairs including maintaining social order, mobilizing communal action or determining targeting for government or donor services.

CONFLICT

Conflict adds another dimension to village social relations. Almost one in five villages in the QSEM panel either are currently affected by conflict or are in areas with active ethnic armed groups (EAGs). Conflict or the presence of armed groups adds complexity to how villagers relate to one another and the outside world. This has manifested itself in several ways in conflict-affected QSEM villages.

First, village leaders have needed to negotiate space for villagers in a more complex local political landscape. Villagers were reluctant to discuss this openly, but researchers noted after fieldwork in QSEM villages in Kachin and Shan that local leaders constantly negotiated between government and EAGs to find middle ground to enable villagers to go about their business. The state and EAGs both have some incentives to do this. Village leaders mostly undertake these negotiations on behalf of villagers.

In several conflict-affected QSEM villages, people have had to pay informal tariffs. These include payments to minimize the risk of conscription, taxes on the use of natural resources, and payments to seek approval from EAGs on issues such as land registration.

> "They eat rice just like we do. The only difference is they are armed. They collect money anyhow. It is neither a problem nor not a problem. It is something we cannot do anything about… We will be in trouble if they force us to join instead,"
> said one small farmer in a conflict area.

Box 15: Village 'contributions' in conflict affected areas

An area covering one of the QSEM villages has recently seen an increase in conflict. Villagers need to negotiate on a regular basis with one of the ethnic armed groups (EAGs) active in the area to enable villagers to go about their daily activities. All the negotiations are conducted through a village leader.

Villagers are required to contribute between 5,000 to 20,000 MMK per household per month as an informal tax. If a household doesn't contribute over three consecutive months they risk one of the household members being arrested and conscripted.

In 2015, the EAG approached the village and requested villagers to identify young men to join the group. Two villagers were put forward and were subsequently sent for six months training. In addition, the village needs to contribute one person per month to help in the camp, undertaking daily chores. Villagers contribute three bags of rice and 5,000 MMK per household to cover the expenses for that representative.

Capacity within villages to undertake land access, informal tariff or similar negotiations with governance actors, including ethnic armed groups, is weakened by conflict. In times of insecurity, villagers are reluctant to raise complaints and tend to reduce their overall visibility. After fieldwork in Kachin, researchers noted that although villages put on a united front when negotiating with outside actors, a degree of distrust between households was also present. As a result, fewer people are willing to take a role in negotiating village affairs, with otherwise capable and respected individuals choosing not to become involved.

QSEM villages in conflict areas have tended to be pragmatic in accepting government programs. In several QSEM villages in Kachin State, people expressed concern about the way they were treated by government and military forces during the conflict. These concerns included reports of land dispossession as well as more acute abuses such as rape, arbitrary arrest, and indiscriminate shooting. Despite this, however, people from those villages engaged with government departments and appeared to take a pragmatic attitude towards the delivery of government services such as electricity and land registration.

CHAPTER 6: CONCLUSIONS

Households in QSEM villages have seen significant changes since the research began in 2012. Between 2012 and 2015, the government passed new land and village governance laws, liberalized telecommunications, and increased investment in infrastructure and public services. Access to credit in rural areas increased, and private-sector investment in agriculture grew. In 2015, the government reached a nationwide ceasefire agreement with several ethnic armed groups, held democratic elections, and transferred political power peacefully to the opposition party.

Households have also faced a range of shocks and stresses. Since the research began, Myanmar has experienced regular weather shocks, including drought, erratic rainfall, floods, and landslides. These are common; indeed, agricultural productivity in Myanmar is the second most vulnerable in the world to climate change. Economic shocks and stresses have also been hard for households to overcome. Farming households repeatedly face peak season agricultural labour shortages, whereas poor households, which often are landless or gain part of their income from casual labour, report lacking job opportunities for much of the year. Finally, poor households also face ill health, accident, and other shocks related to circumstance. Health shocks have been particularly difficult for households to manage. Although poor households in particular report finding health shocks hard to overcome, the QSEM ethnographies highlight how the financial impact of health shocks can also reverberate over the life cycle of relatively well-off households.

LIVELIHOODS

Over time, QSEM households have progressively balanced a more diverse range of income streams. This has varied by socioeconomic group. Although there is significant diversification of income streams across wealth groups, the poorest households are somewhat less diversified than others. The need to overcome the seasonality of agricultural income and to better manage risk have emerged as prominent drivers of livelihood diversification decisions. These findings are supported by the MPLCS data, which highlight the seasonality of agricultural labour and high levels of rural underemployment. The QSEM research also found that non-financial considerations, including family responsibilities, lifestyle, and social norms, are influencing when and how households diversify their income streams.

The lack of jobs at non peak times for poorer households that depend on casual labour remains a key challenge. During QSEM 6, wealth ranking participants consistently identified a lack of job opportunities as the main constraint facing poor households. In a number of communities, where a local resource or market connection had been identified and developed, these challenges were reduced; households were able to diversify out of agriculture and build a steadier income stream by using locally available natural resources.

Agricultural outcomes in this round were fairly positive. Farming households in QSEM villages have pursued several strategies to try to move up the value ladder in agriculture. Several factors enabled farmers to diversify their crops successfully and otherwise improve productivity—or market their crops differently—in order to begin to do this. These included strong demand and price signals, learning from leading farmers, learning from advisory services, and learning by doing. In QSEM villages, smallholder farmers were significantly more risk averse than medium or larger landowners, and tended to invest in new crops only upon seeing better off farmers adopt new technologies and approaches successfully. This suggests that extension services are more likely to succeed if they help leading farmers to test new techniques and encourage smallholder farmers to replicate them once they have been seen to succeed locally. Non-farm rural enterprises in QSEM villages were mostly micro-enterprises, which—unlike agriculture—rarely employed people outside the family. Households were relatively risk-averse in expanding them. In some areas, households were able to get non-farm wage employment as a result of road construction and other investment. However, it was rare for people in QSEM villages to be getting work from nearby large-scale private sector enterprises, which they say is because they lack the necessary information and skills.

Migration in QSEM changed little in this round, but has gone up since the research began, and remains extremely important to rural livelihoods. Overcoming income volatility and managing risk are important drivers of migration in QSEM villages, but so too is the desire for a better lifestyle and other non-monetary factors. The QSEM ethnographies affirmed the importance of social networks in enabling people to migrate, as well as the risks and challenges migrants can face: namely, that although they may earn a steadier income, they may not earn much more money overall, can be poorly treated, and can find life difficult away from their families and social structures. The ethnographies also highlighted the ways households use remittances to reinvest in agriculture and non-farm businesses. The drivers and patterns of migration observed during this round of research were similar to those identified in the QSEM migration report, A Country on the Move, which examines such patterns in more detail.

SHOCKS AND RESILIENCE

The absorptive coping measures of poorer households were more likely to be ones that undermined their longer-term welfare. Whereas wealthier households reported relying on savings or sale of assets like gold, the poor more often took measures that hurt them in the long run, such as selling land or other productive assets, removing children from school and asking them to work, and, in extreme cases, reducing their food intake. Health shocks were particularly problematic, suggesting a need to build the evidence base on health and resilience.

Adaptive measures in the face of shocks reflected livelihood activities more closely, but also varied by socioeconomic category. Rich farming households adapted by changing their farming techniques; changes that include investment in mechanization, changing to less labour-intensive crops, increased reliance on family labour, or new payment structures for labourers. Poorer households adapted differently, emphasizing migration as an opportunity to diversify their income. Efforts to increase assets and savings were found across socioeconomic categories, with households investing in gold or jewellery-goods that could be rapidly exchanged for cash as needed.

Although QSEM does not definitively identify what enables certain households to be more resilient than others, several factors appear to be important. These are highlighted by the ethnographic research and include the asset base of households; household demographics, allowing for greater income diversity; social capital, socio-cultural institutions and support mechanisms; and behaviour such as an unwillingness to borrow beyond household means and being cognizant of risks.

FACTORS AFFECTING LIVELIHOODS

Access to credit and land continue to be identified as the most significant factors affecting household livelihoods. Chapter Four explores these issues in depth, as well as highlighting local natural resource management and the emerging impact of mobile technology on how people access market information. The major change in access to credit during the QSEM 6 research period was the expansion of government credit sources, particularly the Evergreen and Cooperatives programs, to new villages. As credit has increased, poorer households have relied less on private moneylenders, but whether such changes improve livelihoods will depend on whether such households use credit for longer-term investment.

The evidence on the use of credit in QSEM villages was mixed. Expanded access to credit is likely to help households improve their livelihoods if they invest in the kinds of activities that earn them a return above the interest rate. In QSEM villages, however, households often used loans for other reasons. Although households highlighted the importance of credit to developing non-farm enterprises, they also used credit to pay down other debts and for household consumption. Nevertheless, such use of credit—even if it was not used for businesses—led to improvements in household well-being. This suggests that there is thus a need to further build the evidence base on rural credit, and to monitor and adapt rural credit interventions carefully.

Land tenure insecurity continues to affect households in QSEM villages. The land tenure framework as it applies to land where individual ownership is not defined continues to place some communities in a vulnerable position. Limitations in regulations relating to communally owned land has led to misappropriation. As a result, villagers are changing use patterns to link these forms of land to individuals in an effort to strengthen tenure security.

Improving people's security of tenure and ability to transact land fairly can help provide them with the confidence to make the kinds of investments in their land, such as irrigation infrastructure and investing in multi-year crops, which are likely to boost their productivity. The QSEM experience highlights how the legacy of land confiscation, as well as the complexities of land administration, can constrain people's ability and willingness to make these longer-term investments. The current land system does not adequately provide security of land tenure in areas where communal land is prominent or where land plots are small and difficult to measure. Traditional land use systems are offered insufficient protection under the current legal framework. Villagers also struggled with resolving outstanding land confiscation cases.

VILLAGE GOVERNANCE AND ENGAGEMENT WITH THE STATE

At the time of the fieldwork, village institutions in QSEM villages were in flux. Chapter Five discusses how village institutions and people's expectations of public service delivery and the state are evolving. At the time of the research, a degree of apathy was visible within village government institutions. Competition during the most recent village tract administrator elections was weaker than in 2012. The work of village institutions was also being constrained as villagers were uncertain about how the change in government at the national level would be reflected in village governance arrangements.

Over time, government services in QSEM villages have increased, but information about such services was often lacking. In QSEM villages, there has been particular expansion of electricity provision and government credit and some increase in local autonomy over service delivery, for example the establishment of village committees to manage electrification. In recent years there have been notable changes to village governance, with ongoing policy changes affecting the roles and responsibilities of different committees, such as the recent abolition of township and village development support committees. In QSEM villages, these changes have generated uncertainty and decreased incentives for local participation. Without confidence in the future of local institutions, villagers and village leaders were unwilling to invest responsibility or trust in them. The QSEM research indicates that improved service delivery and sustained support can be more effective in building communities' trust in local institutions than relying solely on reform initiatives.

APPENDIX A: THE QSEM SERIES METHODOLOGY

QSEM is a longitudinal qualitative study monitoring changes in livelihoods and social relations in villages across rural Myanmar. By documenting how Myanmar's transition is affecting people at the village level, the research aims to inform policies that support equitable rural development. QSEM is implemented in partnership between the World Bank and Enlightened Myanmar Research with funding from LIFT.

This appendix provides information on the objectives and design of QSEM, the research approach, and a summary of the limitations facing this form of qualitative research and quality control procedures.

OBJECTIVES

The aims of QSEM are to:

i. Monitor and understand the changing context of village life and rural livelihoods in Myanmar
ii. Help LIFT identify and respond to new and emerging challenges
iii. Inform key stakeholders including the Government of Myanmar, LIFT, the World Bank and the wider donor community about how the changing context is playing out and implications for policy and programmes.

When QSEM was initially designed, in 2011, the research environment in Myanmar was restricted with limited data available on rural livelihoods and social structures, and variations across geographic areas. In this context, QSEM was purposefully designed to explore a broad range of issues and provide a platform from which to understand change over time and across a number of different aspects of village life.

The research environment in Myanmar has changed considerably since 2011. More focused quantitative and qualitative studies are now available across a range of issues and sectors. Building on this change in context and learning from the comparative strengths and weaknesses of QSEM's approach from previous rounds, the research maintains a purposefully broad framework whilst reducing focus on issues that are not best suited for village-level qualitative research.[46] Uniquely, the QSEM approach enables analysis of responses to national level reforms at the local level; 'why' changes play out in certain ways; 'how' different groups engage with these changes; and the interrelationship or indirect impacts of changes across economic and social domains.

[46] For example, issues relating to market prices (which depend significantly on township interaction), debt-levels (where changes occur over time within a given year and exploring requires significant trust from respondents) and inclusion of ethnic groups (in villages that are invariably homogenous) are not always best-suited to this form of qualitative research.

The QSEM approach benefits from a number of important characteristics. These are:

- **Living in villages rather than visiting.** Researchers stay overnight for several days in villages, interacting continually with villagers. To date QSEM teams have cumulatively spent over eight months in villages in each state and region.
- **Observing change over time through repeat visits on an annual basis.** Most villages in the QSEM panel have been visited five times since 2012, providing insight into how change happens over time.
- **Focusing on households and understanding decision-making about livelihoods at the household level.** Research teams revisit a core group of households selected to represent different socioeconomic groups to understand how different households experience change over time.
- **Listening to multiple views and triangulating information** to develop a more complete picture.
- **Acknowledging power dynamics.** The views of those who most commonly speak do not necessarily represent everyone in the village. The methodology includes specific steps to ensure a broad range of groups, including marginalized groups, participate in sharing their experiences.
- **Comparing** across regions/states. Adopting the same framework and approach across numerous locations enables similarities to be identified and helps explain areas where differences exist.
- **Observing** village life. In addition to more formal interviews, by staying in the villages researchers observe village life and social interactions providing them with a more complete picture.

RESEARCH

The report for this round draws primarily from research conducted from late January to late March 2016 as part of the core QSEM research. The report also benefits from the piloting of a small ethnographic study to dig deeper into decision-making processes around livelihoods. This section describes the research approach.

STUDY LOCATIONS

The core QSEM research covers a panel of 63 villages purposively selected to represent variations across 21 townships in four states and three regions.[47] This round of research uses the original core panel from QSEM 1-5 with several changes.

The original core panel covered two states or regions from each of the three agro-ecological zones within Myanmar: the dry zone (Magway and Mandalay); the hilly areas (Chin and Shan); and the coastal areas (Ayeyarwady and Rakhine). In QSEM 6, Kachin State was added with an explicit aim to better understand the influence of conflict dynamics on livelihoods in Myanmar. This is in line with LIFT's revised strategy that includes an enhanced focus on improving livelihoods in areas emerging from conflict.

[47] Research in this round ultimately covered only 62 villages as one village in Shan State was inaccessible due to the security situation. An active conflict restricted access in Kyauk Me Township, Shan North. The research team was able to visit two of the three villages but security concerns precluded access to the third village.

In each state or region three townships were selected with the highest poverty levels in those state/regions, conditional on planned or existing LIFT presence at the time of selection. Townships in the original panel remain with one exception: A township in eastern Shan State (Kengtung Township) was replaced with a new township (Pinlaung Township) on the grounds that the benefits of research in the former township were outweighed by the challenges in conducting research in those villages.48 As LIFT's operations in Kachin State are currently focused in three townships, those three townships were automatically selected.

Research in each township covers three villages, selected based on variation in proximity to a trade centre and access to water resources or roads, yielding 63 villages in total. In addition to the nine new villages in Kachin State and the three new villages in Pinlaung Township in Shan State, four other villages were replaced from the original panel. These villages were replaced as the research environment in the original villages was challenging with limited participation from villagers or active resistance from local leaders.[49]

RESEARCH APPROACH

Field research is undertaken by teams of four researchers.[50] Each team is responsible for one state or region. The team leader and at least one other member of the research team have experience with QSEM, including participating in QSEM research in that state or region previously.

Research is structured around a field guide that is reviewed and updated prior to each round of research. The field guide explains the QSEM analytical framework, village procedures, research instruments, documentation requirements, research ethics and safety among other topics.

Prior to commencing research, researchers are provided with intensive training. The training familiarizes researchers with the QSEM approach and basic tenets of qualitative research methods. It also provides researchers with a chance to practice critical skills required in fieldwork and become familiar with the different parts of the analytical framework. The training includes a field pre-test to practice skills.

Research teams spend 3-4 days living in each village.[51] The research adopts a semi-structured approach. For each village, research teams collect information across a number of topic areas that comprise the analytical framework. Research is framed around a series of core research questions, but researchers are also encouraged to probe deeper into specific issues or follow lines of analysis that may initially appear not to be directly relevant to the analytical framework.

[48] The new township was selected on the basis that it had the highest poverty levels among LIFT townships in Shan State.

[49] The replacements cover one village each in Ayeyarwady, Magway, Mandalay and Shan State. In addition, one village in Chin State was combined with a neighbouring village for research as the original village only had a very small number of households.

[50] Research teams in Chin State and a number of villages in Kachin, Rakhine and Shan State are accompanied by interpreters familiar with local languages spoken in QSEM villages.

[51] Research in two villages in Kachin State was limited to two days in the village due to security concerns in those villages.

A range of data collection methods are used to conduct research in each village.

- **A participatory social mapping exercise** is conducted with men and women's groups in each village. The objective is three-fold: It provides a method to better understand how villagers perceive the meaning of wealth[52] and resilience across different groups. It enables comparison of levels and definitions of wealth across locations and time. And the social mapping exercise is used as a basis for determining key informants across socioeconomic categories. The social mapping exercise is new to QSEM 6.
- **Key informant interviews** are conducted with a wide cross-section of villagers. This includes households selected to represent each of the socioeconomic categories identified through the social mapping exercise. These households will be re-visited across future QSEM rounds. Other key informant interviews are conducted with the village head and other village leaders; village elders and religious leaders; and other informants including representatives from vulnerable groups. In QSEM 6, 745 key informant interviews were conducted, comprised of 400 from households selected through the social mapping exercise and 345 additional key informants.
- **Focus group discussions** are conducted with representatives from groups including key livelihood groups (such as farmers, fishers, and labourers), youth and women. QSEM 6 covered 204 focus group discussions with 612 men and 388 women participating.
- **Researchers collect basic village data** and document their observations during their time in the village.

Researchers produce completed detailed notes for each interview and FGD while in the village. Teams spend 2-3 days in the township centre following completion of research in villages to meet relevant local government authorities or other stakeholders, triangulate information, and complete documentation.

Following completion of the field work and drawing on coded interview notes and other data collected in villages, the research teams produce the following documentation: a village summary report of 10-15 pages for each village; a database of key information containing data across rounds and organized by topic area is updated; a range of case-studies for each region/state; and two social maps for each village.

The analytical process relies heavily on a series of detailed structured workshops to draw on, check and cross-check data from research teams. The Myanmar context provides limitations in terms of analytical process. There are very few researchers with formal academic training in qualitative research and limited capacity to rely on software for data analysis. Experience across rounds shows that the most effective approach relies on a workshop-based peer debriefing process that analyses information at a region/state level in the first instance and then re-analyses the same information by topic or theme. The analysis is checked and cross-checked with research teams. An extensive peer review process is also undertaken prior to finalization of the report.

[52] Wealth is defined broadly to focus on forms of capital: namely physical, social, human, financial and natural capital.

THE ETHNOGRAPHIC STUDY

The ethnographic study covered one village each from the QSEM panel in Ayeyarwady, Magway and Rakhine. Villages were selected using the following criteria: likelihood of acceptance of ethnographic study by village leaders based on established relations through QSEM; presence of diverse livelihood opportunities; capacity of villagers to participate in research in Myanmar language; and ongoing presence of LIFT programmes.

In each of the three villages, three experienced QSEM researchers conducted ethnographic research over a five-week period, living with two households in each village. Households were selected on the basis that they had some degree of livelihood diversification[53] and were willing to participate in the research, and to ensure that several women-headed households were included in the study.

Researchers were provided with training, and field work was overseen by an experienced ethnographic researcher. The research was divided into two periods of a little more than two weeks each, with a review workshop in between each period to assess progress and provide guidance on finalizing research outcomes.

ETHICAL CONSIDERATIONS

Research conducted as part of the QSEM Series is not directly linked to any external intervention. The research is conducted in villages where LIFT has had a presence, although, in a number of villages, those activities have ended. Qualitative research of this nature is subject to normal expectations from villagers about likelihood that the research will result in material benefits for the village. To manage these expectations, research teams spend time explaining the aims of the QSEM research including that the research findings are targeted at broader policy objectives rather than influencing assistance for specific villages.

At a household level, QSEM researchers are trained to understand the ethical considerations in undertaking qualitative research. This includes ensuring that the research does not harm the safety, dignity or privacy of respondents to the research. Respondents are informed of the objectives of the research, how findings will be used and their rights in relation to participating in the research. Exact locations and identities of households are not revealed in this report.

QUALITY CONTROL PROCEDURES

QSEM is extremely large for a qualitative study. In each round, researchers conduct interviews and focus groups with over 1,000 people in 63 villages across a diverse set of states and regions. The scale and breadth of QSEM pose some unique challenges for managing data quality. These are magnified by the context in Myanmar, where qualitative research and analysis capacity

[53] Using terminology from LIFT's Strategy, they were 'stepping out' of a reliance on agricultural production.

is limited. This section identifies some of the research limitations and steps taken to ensure data quality. QSEM data quality methods are designed based on experience to be most applicable given the research environment in Myanmar.

FRAMEWORK FOR QUALITY CONTROL

The QSEM approach places emphasis on a variety of quality control mechanisms most suited to the context for qualitative research in Myanmar in order to ensure accuracy and trustworthiness of research findings. The main techniques QSEM uses to achieve this are as follows:[54]

- **Prolonged engagement: researchers spend 3-4 days in each village per round.** Collectively they have lived for 6-8 months in villages in each region over six rounds of research. This has enabled relations of trust and a detailed understanding of village context to be built.

- **Persistent observation: the longitudinal nature of QSEM supports ongoing observation over time.** At least one researcher per team is required to have had previous experience with QSEM in that state or region to review and re-assess identified issues over time. The introduction of ethnographic work in a small subset of villages further strengthens the review against this criteria.

- **Triangulation: triangulation of sources of information is embedded in QSEM through selection processes for identifying key informant and FGD interviews.** Research teams are required to validate information through a range of diverse stakeholders at the village level. QSEM is progressively expanding methods triangulation. This includes cross-referencing findings with secondary sources, review through technical experts and introducing ethnographic research and analysis through the MPLCS database.

- **Peer debriefing: this is done internally and externally in QSEM.** Internally, a debriefing process occurs through team review processes in the field and subsequently through robust analytical workshops. Externally, an official peer review process is undertaken and audience debriefing is undertaken through dissemination to disinterested peers.

- **Negative case analysis: the internal peer debriefing process includes an emphasis on identifying and exploring deviant cases to provide nuance to the analysis.** QSEM reports present exceptions to trends and findings highlighting the negative case analysis.

- **Audit trial: the raw data of QSEM are maintained across rounds and are progressively being transferred into electronic form.** Annual QSEM reports explain changes in methodology and research steps for each round providing transparency in the research process.

[54] These draw from criteria established by Lincoln, YS & Guba, ES, "Naturalistic Inquiry", Sage Publications, Newbury Park, 1985.

RESEARCH LIMITATIONS

As with any research method, qualitative research of this nature has a number of limitations. These include:

- **The scope of issues covered by QSEM is broad.** There is a limited amount of detail that research teams can uncover within any given village over a four-day period. Research teams and, in particular team leaders, need to balance a requirement to collect information across a broad range of topics with opportunities to explore in more detail issues of significance for the analytical framework.

- **Similarly, working with seven teams across different states and regions naturally leads to some differences in skills and emphasis across teams.** The use of an analytical framework with key research questions aims to ensure consistency. Findings are also validated through joint workshops including all research teams. In some areas of the report, however, limitations exist in comparability of data across all states or regions.

- **Managing village expectations and/or resistance to the research is a further challenge.** The act of undertaking research in villages can lead to increased expectations that research will be followed by external assistance. Inversely, as a longitudinal study, research teams are also faced with dis-interest or resistance as villagers realise they do not receive any direct benefit from participating. In most locations, researchers have built up trust in villages and understanding of the research objectives enabling ongoing research despite these limitations. A small number of villages were replaced in QSEM 6 as these limitations could not be overcome.

- **Language is an issue in a number of villages across the states covered by this research.** The research team uses Myanmar language for conducting interviews. Where local languages are present, the research team works with interpreters. This has some implications in relation to time, accuracy and ability of research teams to build trust.

- **A number of issues remain sensitive in Myanmar and are difficult to elicit responses on.** These include conflict dynamics, politics/government and local leadership and competition. Although researchers probe around some of these issues, ethical considerations are paramount with limitations as to how much information can accurately be obtained around these issues.

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