WHAT HOLDS VEGETABLES FARMERS BACK?
Conflict, Governance and Markets Assessment Making Vegetable Markets Work for Smallholders Program

Mercy Corps
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This research was funded through the Making Vegetable Markets Work (MVMW) Program, implemented by Mercy Corps in partnership with Swisscontact and East-West Seed International. MVMW seeks to improve farm incomes from vegetable production, and subsequently household livelihoods, in Southern Shan and Rakhine States, Myanmar. MVMW also seeks to improve competitiveness of the vegetable sector as a whole and to improve the policy and enabling environment in order to promote sector growth.

MVMW is funded by the Livelihoods and Food Security Trust Fund (LIFT). LIFT is a multi-donor fund established in 2009 to improve the lives and prospects of poor and vulnerable people in rural Myanmar. Current governmental donors are Australia, Denmark, the European Union, France, Ireland, Italy, the Netherlands, New Zealand, Sweden, Switzerland, the United Kingdom and the United States of America. From the private sector, the Mitsubishi Corporation is a donor. The donors contracted UNOPS as the Fund Manager to administer the funds and provide monitoring and oversight for LIFT. So far, LIFT support has reached nearly 2.8 million people, or roughly five percent of Myanmar’s population.

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Contents

Acronyms .............................................................................................................................................................. 2

Summary ............................................................................................................................................................... 3

Overview of approach and methods .................................................................................................................. 7

1. Challenges facing farmers – a bottom-up view .......................................................................................... 9

2. Business actors, power dynamics, and smaller farmers ............................................................................ 21

3. Local government and conflict .................................................................................................................. 30

Recommendations ............................................................................................................................................... 39

Annex 1 Research methods ............................................................................................................................... 46

Annex 2 Research questions ............................................................................................................................... 49

Annex 3 Four identified research topics for interviews .................................................................................. 51

Annex 4 Interview methods guidance .............................................................................................................. 58

Annex 5 Sample interview template ................................................................................................................ 62
## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
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<td>CGMA</td>
<td>Conflict, Governance and Markets Assessment</td>
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<tr>
<td>LIFT</td>
<td>Livelihoods and Food Security Trust Fund</td>
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<tr>
<td>MFVPA</td>
<td>Myanmar Fruit and Vegetable Producers’ Association</td>
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<tr>
<td>MVMW</td>
<td>Making Vegetable Markets Work for Smallholders Program of Mercy Corps</td>
</tr>
<tr>
<td>SAZ</td>
<td>Self-Administered Zone</td>
</tr>
</tbody>
</table>
What Holds Vegetables Farmers Back?
Conflict, Governance and Markets Assessment
Making Vegetable Markets Work for Smallholders Program

Summary: what holds vegetables farmers back?

Context and background

The Making Vegetable Markets Work (MVMW) Program, funded by the Livelihoods and Food Security Trust Fund (LIFT)¹, is a three-year initiative that aims to increase incomes for smallholder vegetable farmers and improve the functioning and inclusivity of the larger market system. Using a market development approach, MVMW seeks to facilitate improvement in the functioning of the entire market system and along the entire value chain. MVMW works from the farm level up to national policy level, strengthening the vegetable market, enabling environment and supporting markets in financial services and agricultural inputs.

All too often, development programs rely on transplanting “best practices” from one environment to another, relying on assumptions about the problems and solutions, past experience or a quick scan of the market in question. When working on markets, interventions can be designed in a ‘market vacuum’ that fail to understand the relationships, power and politics that affect them. MVMW was keen to address this. The program has committed to conduct a series of ‘Conflict Governance and Markets Assessments’ (CGMA) using political economy analysis to provide a nuanced, contextual understanding of the vegetable market system.

The CGMA process was employed to provide MVMW with a deeper understanding of the context in which the program will be implemented. We understand that markets do not exist in isolation, so have undertaken this analysis to identify incentives, disincentives and the political, social, economic and governance dynamics that support or constrain ambitions to improve the smallholder vegetable sector.

Vegetable farming is the most common economic activity across southern Shan State in areas where the climate is moderated by altitude and the soil is amendable. The sector has been relatively successful since partial market liberalization in the early 1990s. The government has generally left the sector to operate with few interventions and little support.

While this benign neglect has had some benefits, it also means that the government is not well positioned to provide support or remove bottlenecks that limit production. Opportunities exist to improve and expand vegetable farming to serve the growing domestic market and in some cases for export. However, farmers face many challenges that currently limit their capacity to increase yields and improve quality.

¹ The Livelihoods and Food Security Trust Fund (LIFT) is a multi-donor fund established in 2009 to improve the lives and prospects of poor and vulnerable people in rural Myanmar. Current governmental donors are Australia, Denmark, the European Union, France, Ireland, Italy, the Netherlands, New Zealand, Sweden, Switzerland, the United Kingdom and the United States of America. From the private sector, the Mitsubishi Corporation is a donor. The donors contracted UNOPS as the Fund Manager to administer the funds and provide monitoring and oversight for LIFT.
Main findings

Overall, the research finds that vegetable farmers in southern Shan State are highly vulnerable to a range of factors that limit their willingness to take on risk. This reduces the scope to innovate and to buy good quality inputs. Unless this vulnerability is tackled, it is unlikely that smaller farmers in particular will be able to respond optimally to new market opportunities. Technical advice on better farming methods may not be heeded for rational reasons of risk avoidance.

**Volatile market prices** make farmers reluctant to invest in case they end up in debt. Price fluctuations stem largely from limited and unstable markets, including both domestic and international trade, and associated barriers including a lack of cold storage. Farmers may also not be able to get a higher price for higher quality crops and so fail to recoup their investment.

**Relatively smooth local market processes.** Local market conditions are relatively free. There are many small players who generally have little individual political or market influence. Collusion and monopolistic practices are not generally distorting the market price of vegetables or undermining farmers’ profits. In the absence of formal contractual relationships, trust and relationship-building are essential aspects of local transactions.

**Major agricultural input suppliers have more scope to influence market conditions and increase profit margins.** Evidence suggests that farmers are hurt by the high cost and inconsistent quality of fertilizer, seed and pesticide. The high prices of legitimate products encourage illegal and grey imports. Other concerns exist over marketing and sales methods adopted by input companies. The steeply rising cost of labour, exaggerated by outward migration and possibly also by demand from upland opium production, also hits farm profitability.

**Weak demand, especially for higher-quality vegetables.** Problems addressed in this report include minimal investment by commercial concerns in building up the relationships needed to generate both demand and supply for higher-quality vegetable production. Contract farming arrangements are limited, although there is scope for growth. Exports are unstable, typically follow informal channels and benefit little from the government facilitation offered to exporters in many neighbouring countries. Other efforts to add value through off-farm processing, and promotion of off-farm income opportunities, are limited.

**Information.** Farmers are typically knowledgeable and make rational choices but have limited access to impartial information on new methods or the effectiveness of different inputs. Market information is generally available, with some specific exceptions in remote areas or where short-term fluctuations are impossible to predict.

**Limited access to affordable credit** is a further major constraint for farmers and for farm-related businesses.
Weak farmer and sector associations. Until recently, most non-governmental or civil society group activity was banned including unions and farmer networks. There were few initiatives to support farmer groups outside sanctioned (and often derided) government bodies and small, informal community structures. This legacy is a serious constraint.

Managing the environment and additional constraints. Land and water two major factors for farming and in both cases concerted action is needed if vegetable farming is to progress significantly. Further constraints include transport, the differential treatment of some minority groups, and a general lack of government support for rural households. All of these factors make most farmers understandably conservative. The risks of crop failure that could lead to intractable debt or the loss of inherited land are too great for many farmers to bear. As a result, technical solutions to farming methods or improved information provision may not be effective without other steps that reduce the risks facing farmers.

Little political interest or support. For vegetable farmers, one challenge is how to raise their profile and the scope to influence government decision-making. While the vegetable sector has managed to develop in an environment of relative neglect, the limits to that growth are apparent. It is not a politically influential sector, with few powerful individuals engaged (input companies excepted). More widely, the government of Myanmar has historically done little to help most farmers when compared with the policies followed by many other countries such as land reform, concessional credit, price guarantees, export promotion, and so on.

Local government is in cases more concerned than national bodies about the vegetable farming sector. Vegetable farmers make up a significant proportion of the electorate in southern Shan State. Growing decentralization and democratic processes generate incentives for leaders to offer support, especially in the Self-Administered Zones of Danu and Pa-O where ethnic ties are strong. Local investors in processing or contract farming may also have more scope to gain support from local than central government.

Conflict concerns still exist, most notably but not only in some remote or upland areas where militiaremain in authority and opium is grown. Tensions remain, with some risk of escalation in an uncertain wider environment, between national and state level leaders as well as more local groups. Local politics are still shaped by ethnic tensions and a legacy of conflict. Nationwide anti-Muslim discrimination also affects southern Shan State and is a further concern, especially in some urban areas and markets.

Overview of recommendations and options for future engagement

Reducing the risks that farmers face

- Recognize the constraints that farmers operate under
- Improve communication between farmers and extension services so that information responds to farmers’ needs
• Consider ways to benefit from comparative experience of vegetable farming in similar environments
• Farmer groups and networks may be valuable when focused on specific objectives
• Pilot or support ways to increase demand, especially for higher quality vegetables, such as off-farm processing
• Consider how to promote sustainable and just contract farming
• Targeted, researched support for selected exports to identified markets
• Promote affordable credit
• Support effective and equitable land certification

Building coalitions and finding advocacy opportunities

• Continue to pursue multi-stakeholder approaches
• Recognize some conflicts of interest, especially between input companies and farmers
• Consider higher-level and more comprehensive efforts to promote farmers’ livelihoods and rights as a political priority
• Recognize the constraints that exist within central government departments and their local offices, focusing on specific issues where progress may be viable
• Consider engagement with relevant local government bodies including elected state parliaments and Self-Administrative Zones
• Advocate for measures that might smooth price volatility both locally and nationally
• Advocate for better management of imports and facilitation of specific exports
• Advocate for reduced input costs and better regulation of legal and illegal inputs

Conflict management

• Recognize that conflict and ethnic tensions are a core aspect of politics and governance in Shan state. Even currently peaceful areas can become more violent
• Consider how and whether to address concerted challenges in upland areas where militia operate and opium is produced
• Take steps to ensure that the project does not unwittingly further anti-Muslim discrimination such as boycotts of businesses
• Integrate concerns over local resource conflict management (water, land etc.) into approaches
• Take practical measures including staff awareness training and audits of employee diversity. Consider whether more staff from the project area can be employed
Overview of approach and methods

This study delves into the impact of conflict, governance and political economy on the vegetable markets. Without a nuanced understanding of these three elements (both independently and where they intersect) effective and equitable markets cannot be achieved.

Understanding governance (both political and economic) helps us to understand how authority, decision-making and accountability operate. Understanding conflict helps us to take into account how economic factors can drive and/or exacerbate conflict (and vice versa). Understanding political economy helps us to see how markets can be affected by power dynamics and relationships between market actors at all levels.

The specific information gathered in this assessment will be used to inform program activities and decision making, to ensure we are adapting to the context, needs and effects of our program. Recognizing that context is fluid, we will build on this assessment moving forward to continue developing our understanding of the market system. Future assessments will build on this current work or take up new issues relevant to the MVMW. While the main audience for this assessment is the MVMW Program and its management team, we also hope that the findings will help inform larger donor initiatives and demonstrate the value in applying political economy analysis to market assessment and value chain analysis work.

This assessment followed a political economy approach to solving practical problems. It focused on the context of Mercy Corps’ current Making Vegetable Markets Work for the Poor project that operates in southern Shan State\(^2\). This was a broad undertaking and the review assessed a range of issues beyond market-based analysis, providing an evidence base summarizing the political, social, economic and governance dynamics that support or constrain joint ambitions to improve the smallholder vegetable sector.

The approach was based on an overall methodology that responded to the specific task. It loosely followed the problem-driven political economy framework outlined in a recent ODI paper and derived from over a decade of similar efforts in the development field (See Annex Two). The study operated at different levels, from rural communities in the project area up to national and regional factors that affect smallholder vegetable production.

Research methods consisted of:
- Analysis of existing (secondary) data and summary of the overall political economy context.
- Semi-structured interviews with key informants and a purposively sampled cross-section of actors involved in the sector. In practice, this involved a total of over sixty interviews with:
  - 12 separate groups of farmers from different townships,
What Holds Vegetables Farmers Back?
Conflict, Governance and Markets Assessment
Making Vegetable Markets Work for Smallholders Program

The research team consists of one lead researcher, along with two international and two national researchers. Researchers’ backgrounds were varied, covering economics, agronomics, political science, social development and conflict. Regular discussions encouraged exchanges of ideas and enabled the research process to unfold. Further valuable input was provided by advisers within Mercy Corps. 3

Emphasis was placed throughout on local knowledge and on grounded perspectives. The research direction shifted over time in response to findings. Most notably, the emphasis on farmer choice enabled closer exploration of the vulnerabilities that appeared to limit the scope to improve vegetable quality and yield.

The outcomes of this study are intended to support efforts to improve MVMW value chain interventions. The assessment also aims to provide lessons to Mercy Corps and the wider development community, as well as domestic and international private sector actors, on the value of this type of assessment. A similar methodology may be used for future assessments to be conducted by the project.

Further detail on the research process can be found at Annex One, including constraints and limiting factors.

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3 The research team appreciates the support offered by Mercy Corps staff in Yangon and especially in the Aung Pan field office. Thanks in particular to Brian King, Min Thu Aung, Aye Kyawt Swe, and Sanjay Gurung. Research team: Adam Burke, Vincent Tang, Aung Tun, Myat Su Tun, Will Barron.
1. Challenges facing farmers – a bottom up view

**Key points**

Farmers in Myanmar face challenging conditions in a period of change. They are rarely able to access external support and have seen relatively few government policies or actions that enable them to operate effectively. Vegetable farmers in particular have little influence and have until recently received almost no attention from policymakers. While they have been able to benefit to an extent from benign government neglect, they are reaching the limits of what can be achieved without significant improvements to the enabling environment.

This section highlights seven major challenges confronting farmers:

1. **Volatile market prices** – this makes farmers reluctant to invest in case they end up in debt. Volatile prices stem largely from limited and unstable markets, including domestic and international trade.
2. **Relations between farmers and the market** – some barriers exist but they are less significant than may be thought given a relatively open environment, especially for lowland, accessible areas.
3. **High input costs** – fertilizer, seed, and pesticides are all seen as expensive while rising labour costs make planting and harvesting difficult.
4. **Information** – farmers are often knowledgeable and make rational choices but have limited access to impartial information on new methods or the effectiveness of different inputs.
5. **Access to credit** – this vital element is very limited.
6. **Weak associations** – until recently, most non-governmental group activity was banned and there were few initiatives to support association. This legacy is a serious constraint.
7. **Managing the environment** – Land and water are the two biggest concerns for farming and in both cases concerted action is needed if vegetable farming is to progress significantly.

Further concerns include transport, differential treatment of certain groups, and a general lack of government support. Combined, these challenges make farmers highly vulnerable and reluctant to assume risk. Technical solutions to farming methods or improved information provision may not be effective without other steps that reduce the risk that farmers take on. Farmers typically see the benefit of new inputs and methods but often prefer lower-risk, less expensive improvements.

**Overview**

Taking a long-term view, Myanmar is still undergoing a historical transition from a peasant economy to a more modern market-based economy. With little in place to support or empower the rural workforce, this generates immense strain for farmers as land becomes scarcer, indebtedness rises, water availability limits productivity, input costs increase, and so on. Even if families are on average considerably better off than they were a generation ago, it is unsurprising that farmers feel vulnerable and are as a result risk-averse. Vegetable farming in Myanmar is a difficult business. The government offers little or no direct support and has taken few steps to improve wider enabling conditions. There is limited mutual
What Holds Vegetables Farmers Back?
Conflict, Governance and Markets Assessment
Making Vegetable Markets Work for Smallholders Program

assistance through farmer groups or networks. Production costs appear to be rising, while market prices for farmers' vegetable crops are unstable.

Many vegetable farmers in southern Shan State have been able to take advantage of the opportunities that new technologies (like hybrid seed varieties) and improved access to markets have generated since economic reforms in the early 1990s. Along with other farmers growing economically viable cash crops such as beans and pulses across central parts of the country, they are in a relatively strong position to benefit from modernization. Vegetable farmers have been able to define their own ways to grow and market produce effectively despite many constraints. Higher levels of poverty are recorded in areas where farmers struggle to adapt to changing conditions, including upland farmers dependent on common land and those in more remote regions such as Rakhine State who cannot market crops at a competitive price.  

The barriers confronting vegetable farmers trying to improve their livelihoods beyond current levels confront many barriers are highlighted in the following sections. Seven main challenges are identified. Given that this study focuses on market processes, the challenges that relate most closely to markets are listed first. Each challenge generates significant risks that many farmers are poorly positioned to address effectively. The number and range of the challenges suggest that there is no single measure that can rapidly address farmers’ needs. Instead, long-term work is needed to build resilience and reduce obstacles.

Key Challenge 1: Volatile market prices

Market prices for vegetables fluctuate significantly on a short-term and long-term basis. Farmers, traders, government staff, and other respondents repeatedly stated during interviews that unpredictable prices were among the most serious challenges facing the sector. Farmers cannot be confident that they will even manage to cover their up-front costs for inputs such as seed, fertilizer, transport and labour, let alone generate any profit. The implications of harvest or marketing failures are significant. With little safety net to fall back on, and already relying on credit to buy inputs, just one bad year can lead to a major debt burden. Landlessness is already a major problem in rural Myanmar – in some parts of the country over half of the farmers do not own land – and the risks of losing land or livestock are very real.

- Supply fluctuations in southern Shan State are one main cause of huge price volatility in local and national vegetable markets. Growing conditions and factors like disease and pests are, unsurprisingly, a major factor contributing to variability in supply and therefore price. This is not the only cause, however. Variations also occur on a short-term basis when too many farmers bring their

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produce to market on a given day. The price is driven down, and once traders have filled their needs the local market price may plummet altogether.\textsuperscript{5} Farmer responses to market conditions can exacerbate the problem, as a high price for a particular crop in one season can lead to increased planting and a glut in supply the subsequent season, with a commensurate collapse in the price.

- Variability in the supply of vegetables grown elsewhere in Myanmar is also a significant factor behind national price fluctuations. A broker in Aung Pan gave an example of this: “During the monsoon season it is too wet in some of the lowland areas to grow tomatoes, so the price of tomatoes in Shan State is relatively high. But when they begin growing tomatoes their transportation costs to Yangon are lower so they are able to undercut the price of tomatoes in Shan State”. Imports of vegetables from neighbouring countries can also depress prices in national and local markets. Fluctuations in cheap imported produce, for example garlic from China, contribute further to price volatility.

- Variable demand for vegetables exported from Myanmar is a further major driver of uncertainty for farmers. The research team heard repeated examples of this. In many cases international demand rises and falls depending on production levels in those countries, for example in 2014 ginger production in Pakistan, India and Bangladesh was much lower than usual, resulting in imports of large quantities of ginger from Myanmar that pushed up the price in southern Shan State.\textsuperscript{6} Lax procedures and limited state support exacerbate variations. Garlic exporters have found that their exports to Thailand recently dwindled, possibly after Thai garlic farmers lobbied their own government to reduce imports from Myanmar. Without an export market, domestic produce flooded the local market. Meanwhile, a rise in lower-cost imports from China further increased supply, depressing prices for local producers.\textsuperscript{7} (See text box below for a further case study).

- Lack of market choice. Farmers’ products are usually channelled through the Aung Pan wholesale market before being sold on to purchasers in Yangon, Mandalay or elsewhere. If the market price in Aung Pan is low, there are few if any alternatives. Low prices may occur for a variety of specific reasons. In cases, it can be simply because several truckloads of the same harvested crop arrive at the market at the same time.\textsuperscript{8} Alternative markets might include merchants buying directly for export, vegetable processing industries, or supermarket chains. These channels have only a limited presence.\textsuperscript{9}

- Low and unreliable quality of vegetables. Potential alternative markets are constrained by a lack of quality control and limited knowledge of grading. This is a circular problem that is hard to break. Farmers complain that there is no point in spending the added costs required to improve quality,

\textsuperscript{5} Interviews with market traders and brokers, Aung Pan, late January 2015.
\textsuperscript{6} Interview with traders, Aung Pan, 4 February 2015.
\textsuperscript{7} Interview with U Aung Khaing, Chair of BaramiDevlopment Network, Taunggyi, 5 February 2015.
\textsuperscript{8} Interviews with market traders and brokers, Aung Pan, late January 2015.
\textsuperscript{9} Interviews with MFVPA representative for Kalaw Township, late January 2015.
\textsuperscript{10} Interviews with farmers and traders, Aung Pan and Pindaya, early February 2015; and with commercial representatives in Yangon, 6-12 February 2015.
while some commercial purchasers such as contract farming interests find that they are not guaranteed a regular, high quality supply of vegetables. At present, raising the quality of outputs does not guarantee farmers a better return given limited demand for higher quality goods in wholesale markets and rapidly fluctuating prices. Value chains that link production of high quality products with domestic or foreign demand must be in place before farmers will be willing to invest.

- No cold storage facilities. With no scope to store fresh produce, any supply that exceeds demand can lead to a rapid drop in price. This is the case not only in Aung Pan but also in the main wholesale market of Yangon, ThiriMingalar Market. Traders there regularly mention the lack of cold storage facilities as one reason for price fluctuations, often on a very short-term basis.

- Too many farmers chasing the same market. Farming areas surrounding Aung Pan often plant crops that fetched a high price in previous years. This group behaviour then leads to a subsequent collapse in the market price as supply outstrips demand. Localized exchanges of information or coordination between farmers may not solve this problem because the vegetable farming area is extensive, covering several large townships. Vegetable farmers in other parts of the country also present significant competition, especially from areas where irrigation is more widely available. In 2013-2014, the price of tomatoes collapsed in the Yangon wholesale market, leading to tonnes of produce being thrown away.

Chasing elusive markets and losing out – a short-lived Indian Leek boom

Farmers often find themselves chasing market possibilities one harvest too late. In some villages across Southern Pindaya Township, a group of buyers from Korea recently offered well above the local market price for an onion root crop known as Indian leek. The group were introduced to farmers by a local company, Htila Trading. Several farmers profited handsomely and many of their peers decided to grow the same crop for the next harvest. Farmers were then confounded when the Koreans did not return. With no exports, local market prices were depressed below their usually low level by the new glut in production and farmers lost out. Some farmers did not even bother to harvest their crops as their earnings would not have covered labour and transport costs. Their investment in seed, fertilizer and other inputs had to be written off entirely.

Similar stories can be found in many other fields. Irregular demand and informal trade of this type, exacerbated by farmers’ inability to attain sufficient standards to satisfy processors or exporters, cause major problems. It is not entirely clear why the Koreans did not return. One plausible rumour is that the Indian leeks failed to pass Korean phytosanitary standards owing to unregulated use of pesticides.

Farmers who do borrow funds to invest in seeds, fertilizer and pesticides in an effort to reach high quality and yield risk losing land or falling into serious debt if crop prices collapse. Other farmers notice these problems and, rather than taking on a huge risk burden, rationally select low-risk approaches. Tried-and-tested ways of growing a limited number of crops may offer low yields, low quality, and limited profit potential but at least they offer a fair likelihood of a basic return.

11 Interview with traders’ association, ThiriMingalar Market, Yangon, 11 February 2015.
12 Information from various interviews including: Nay Oo, Coordinator, Shwe Danu NGO, Pindaya, 30 January; and Saw Jackson, Agricultural Adviser to Netherland Embassy, Yangon, 11 February.
13 Mercy Corps staff interview, Aung Pan, September 2014.
Key Challenge Two: Understanding relations between farmers and local traders

This challenge differs from the others listed here as it is in part a programming challenge for governmental and non-governmental agencies aiming to support the vegetable farming sector. One initial priority is to recognize that local traders have not generally been able to fix prices to their advantage. It is easy – yet, as it explained below, misleading – to blame exploitative local traders for both high input prices and low output prices. Investigations suggest that price fixing is in practice rarely taking place despite commonly heard complaints, the local market being relatively competitive.

Farmers in more remote communities may have fewer options for marketing their produce, but for a clear majority of male and female farmers interviewed there was scope to choose between different traders or market channels at the local level. Most farmers do not have contractual arrangements with a large commercial business and typically sell their produce through one of three channels: through a trader or broker based in the local town; through collectors who buy at the farm gate; or directly at local markets.

At the local level, markets for both inputs and outputs are open and competitive. Aung Pan, the main regional market centre, has over 100 wholesale fruit and vegetable traders. A smaller town like Pindaya has seven or more retail providers of inputs (fertilizer, pesticides, other goods). There is little evidence of broad abuse of market power by traders in input and output markets at the local level. Trade associations and other bodies that might act to fix market prices in the vegetables sector are generally weak. Powerful local business and political interests tend to seek profit in other sectors where access is more limited and influence can be more effectively brought to bear. The lack of pinch points and the plurality of local actors selling inputs and purchasing outputs mean that there is limited opportunity for rent extraction and capture at the township level in this sector.

A need to remain competitive keeps traders and buyers fairly honest most of the time. One input retailer in Aung Pan explained how fifteen years ago he only sold products for cash, but then increasing competition meant he started providing credit with interest to avoid losing his customers. More recently, as the number of input retailers in the town has continued to grow, he stopped charging interest on credit altogether.

Different market channels offer options for farmers. Direct sales at local markets offer the best price but are time-consuming and only viable for small quantities of some products. Farm-gate collectors remove the need to pay transport costs and often purchase large quantities at a single price without demanding specific grading specifications. Brokers based in the local town, meanwhile, offer greater flexibility. They tend to operate through local outreach partners who build long-term relationships at the village level. Partly by developing individual and community-level relationships of trust with farmers and prominent village figures, they commonly offer credit to cover the costs of inputs.
These personal relationships can bring problems. Having borrowed funds from brokers, farmers may be tied to selling outputs through the same channel. Overall, though, these relationships suit farmers given the lack of alternative sources of credit as well as the typically low levels of trust concerning anonymous market transactions across Myanmar. The presence of many different traders and brokers also appears to moderate their profit margins. Traders gain several percent on each transaction, plus interest on loans offered, and at times may also profit from selling inputs on credit.

Traders benefit most clearly by operating at fairly modest margins but by minimizing risk as they do not suffer significantly from price volatility. Most price fluctuations are borne almost entirely by farmers, who receive a low return if the market price drops. In this way, traders can comfortably build steady if unspectacular returns from their percentage spread while farmers remain far more vulnerable.

**Key Challenge Three: High input prices, increasing labour costs**

Farmers increasingly depend on purchased seeds, fertilizer and pesticides for vegetable farming. The market for these inputs is growing fast throughout Myanmar and large, mostly domestic, agribusiness companies are growing fast. This sector is covered in more detail in Part Two (subsection ‘Adding value and stimulating stable demand’). For farmers, a critical issue is the cost of these inputs. Farmers complain that prices are rising fast. Meanwhile, agricultural experts state that the quality of inputs if often inconsistent.

Concerns over rising prices may in part be a historical memory of price rises following gradual liberalization of the sector in the 1990s and early 2000s, and also in part a reflection of rising global commodity prices from the mid-2000s up to around 2011. However, since then, international fertilizer prices have in general stabilized or fallen while farmers and agricultural experts state that prices in Myanmar have continued to rise beyond the rate of inflation.  

Farmers rely on several sources of information on inputs. Most commonly, they share knowledge of what brand works most effectively in specific situations. Some farmers speak to input retailers who recommend brands (roughly half of twelve farmer groups interviewed). Other information filters down from demonstration plots and extension services run by input companies in order to boost sales.

Some farmers also comment that they cannot replicate the performance of demonstration plots because the cost of the amount of high-quality fertilizer and pesticide used is too great. Various farmers and government extension workers felt that they wanted advice on lower-cost farming methods, for instance using local organic fertilizers and avoiding hybrid seed that has to be purchased...
What Holds Vegetables Farmers Back?
Conflict, Governance and Markets Assessment
Making Vegetable Markets Work for Smallholders Program

16 As is explained later in this report, the capacity of government extension workers and many other staff involved in rural development is considered low. This is especially the case outside key sectors such as rice and rubber. Most vegetable farmers have little engagement with government extension services (or non-governmental services).

17 Researchers have encountered similar comments during interviews in Rakhine, Kachin, Mandalay, and northern Shan States, among other areas.

18 Farmer group interviews, 4 February.

19 Department of Agriculture office heads, Kalaw (Township level), Taunggyi (State level), late January 2015.

The main concerns were over the unsustainable costs of inputs, again demonstrating how farmers are worried about over-extending themselves.

The high price of inputs creates space for illegal and grey imports from China, Thailand or elsewhere. These are readily available in local markets where they are sold at lower prices, typically half the retail cost of recognized and approved domestic brands. These imported products rarely have instructions in local languages and are of mixed quality. Some products from domestic companies are also unreliable, according to many informants, although farmers tend to recognize local brand names and regard them more highly. Some farmers with a relatively stable output market channel, such as groups growing tomatoes near Inle Lake, tend to say that they prefer fertilizer distributed by the largest national brands with the biggest marketing reach and budgets: Awba, Golden Lion, Diamond Star. Many other farmers rely on the illegally imported inputs.

Typically, farmers complain that they struggle to afford the rising costs of seasonal labour for harvesting and planting while remaining profitable. At the same time, mechanization appears fairly limited given a lack of capital among both farmers and businesses that might rent out equipment. Other research indicates that farmers across Myanmar commonly complain about high labour costs. The problem appears acute in southern Shan State for various reasons. First, the proximity of the Thai border means that many under-employed workers migrate to look for better opportunities. Second, opium farmers in nearby upland areas (including parts of Pinlaung) have distorted the local labour market given their ability to offer far higher wages – over five dollars per day compared with two to three dollars for manual labour elsewhere in the area.

Key Challenge Four: Information

Farmers themselves often recognize that their knowledge and skill levels are limited. This is especially the case concerning modern inputs and techniques. Sources of information that farmers mention include retail shops, input companies, other farmers, and government agricultural extension services.

Of these sources, government extension services rarely reach small farmers and are mostly geared to specific priority crops including rice and rubber rather than vegetables. Farmers commonly seek advice from shops selling inputs, some of which they regard as useful. However, agronomists working in the sector generally regard this channel as an unregulated and unreliable source of information. Further information is received from commercial extension services offered by large input companies such as Awba. This covers demonstration plots and some field visits where advice is offered.
Farmers recognize the value of good quality inputs but also repeatedly expressed reservations over services provided by commercial firms. In cases, they found that they were unable to replicate the quality and yield of demonstration plots but had little means or support to determine why. Various reasons emerged beyond the provision of information including the inability to purchase sufficient quantities of expensive inputs, lack of experience over adapting generic methods to specific field level micro-conditions, misuse of inputs, and problems over input quality and consistency. It is likely that the reasons vary from place to place.

In cases, improved communication may help solve some problems by: responding to farmers’ queries rather than simply providing technical information; reaching more farmers; recommending how to adapt to local conditions; and using local languages or dialects. However, more generally, there is little evidence that simply improving the quality of existing information channels will manage to address more than a small proportion of the numerous challenges that farmers confront.

Specific problems emerged where farmers entered into contract agreements with companies to produce vegetables including potatoes, cabbages and tomatoes. Farmers complained that yields were lower than they expected, while contractors complained that quality was not consistent. Improved communication and more interactive extension that responds to expressed needs may go some way to addressing these issues within contract farming arrangements.

Farmers’ general understanding of the challenges that they confront emerged from interviews as impressive. The views of officials, company representatives, and some agricultural experts tended to differ from those of farmers themselves over the extent of farmers’ understanding. Some practices regarded by experts as irrational and wasteful – such as overuse of fertilizer in some cases – make sense when viewed from the perspective of a farmer who cannot afford to see yields drop. In other cases, reluctance to use new technologies is both pragmatic and rational. Farmers on several occasions expressed a preference for improving traditional seed that can be reused rather than depending on purchasing expensive hybrid varieties every season. Department of Agriculture officials also referred to their policies for improving traditional seeds rather than depending on imported varieties. Similar concerns were expressed by farmers, government officials and NGO staff over how farmers were being encouraged to use commercial fertilizers instead of local, natural fertilizer that could be effective and was considerable cheaper (as well as environmentally more beneficial).

Finally, there was little evidence that farmers needed more information on markets and prices. They were generally aware of local prices and of the options available for selling outputs although some farmers, especially in more remote areas, may not be able to access up-to-date information. Overall, the problem is more around price fluctuation than lack of information.

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20 Various including interview with Farmers, ShweNyaung, 8 February 2015.
21 See main text and box on Contract farming in Chapter Two for further detail.
22 This is also reported from other countries including China: “When a family’s livelihood is at stake, it may seem safer to apply too much fertilizer rather than too little.” http://ngm.nationalgeographic.com/2013/05/fertilized-world/charles-text
23 Interviews with Shwe Danu, Pindaya, 30 January 2015; Department of Agriculture, Taunggyi, 28 January 2015.
These concerns and constraints have emerged in many countries as new technologies have been introduced since the start of the green revolution in the 1960s. There is no simple solution. Expectations that farmers can raise the quality and yield of cash crops without using modern inputs and methods are probably unrealistic unless intensive ground-level support is offered over many years to improve local methods. At the same time, relying on commercial promotion of inputs leaves farmers prone to poor use and lack of adaptation to local conditions. It also undermines local knowledge of farming methods and indigenous seed varieties.

Perhaps still more importantly, commercially motivated extension may further extend farmer vulnerability by promoting expensive inputs and in cases providing little additional advice. Given ongoing concerns over fluctuating prices and other sources of risk, the result is that many farmers are understandably reluctant to adopt new technologies.

Key Challenge Five: Credit

Limited affordable credit for vegetable farmers is a major constraint. Many farmers buy inputs on credit from input retailers and brokers. Loans, often provided over the relatively short growing season, are offered at typical rates of from 2% to 5% of more per month. Other sources include friends and neighbours, as well as local informal moneylenders who may charge up to 10% per month. These channels are informal and therefore often not recorded in data.

Formal credit channels are limited. They include the government’s Myanmar Agricultural Development Bank, which offers some low-interest loans but does not finance vegetable farmers. The Cooperatives Department has had some limited engagement in the sector, for instance working with potato farmers in one area. Compared with nearby countries such as Vietnam or Thailand, government agricultural credit support and savings cooperatives are sparse. Other channels include the NGO PACT, which offers some loans to borrower groups at a rate of around 3% monthly, and past programmes of UNDP.

Farmers are concerned about debt. Recent project data from a baseline survey indicates that over half of the 225 vegetable farmers surveyed were between ‘quite worried’ and ‘very worried’ about being unable to repay loans. Many farmers can’t access enough loans to completely cover their cost of production, and rarely have sufficient capital to invest themselves. They can often borrow some funds to
cover the cost of input purchases from retail outlets or traders. These loans may oblige farmers to sell outputs through the same channels.

As already described, relations with input providers and buyers revolve around personal ties established over time. While from an external perspective they may be seen as limiting for farmers, they offer the best conditions in the prevailing environment.

Key Challenge six: weak associations

Until 2011, groups and associations not established by the state were illegal. There are still very few farmer associations at all levels, from village groups to national networks or unions. Very few formal or even informal groups were encountered. Exceptions include some producer clusters based around specific products such as potatoes organized by government agencies, and small credit groups set up through NGO support. Trade associations such as the Myanmar Fruit and Vegetable Producers’ Association, linked with the Department of Commerce, connect some larger traders and commercial interests.  

The lack of groups or networks is a significant issue. Farmer groups still raise concerns given Myanmar’s past history. Farmers see them as associated with past government efforts that often failed or were aimed to control rather than empower, while government may still see them as a threat. Farmer groups could have many beneficial effects:

- Information on farming methods, inputs, and market opportunities could be improved by peer-to-peer networking. Although in theory groups could also organize their production to stagger harvesting and avoid depressing market prices, this may be challenging given the huge land area and high number of farmers involved in vegetable farming.
- Local farmer groups could have more scope than individuals to access credit from private banks and NGOs that demand collective borrowing, and potentially from government banks or cooperatives.
- Collective bargaining and marketing channels may help farmers gain a better price, although it would require considerable value chain integration to reduce the impact of fluctuating prices.
- Contractors looking to source produce may be able to benefit from farmer networks, while farmers themselves would be better positioned to negotiate terms. The potato cluster set up across five villages in Heho is one example that has been recently established with support from government and the private sector.  

Challenge Seven: the natural environment: land, water, climate

Much of Southern Shan State is well endowed in terms of climate, terrain and soil type, although challenges relating to human interaction with the environment are a major factor, as is explained below.

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30 Farmers do of course collaborate at the local level to share transport, information, water sources, and so on.
31 Interview with head of Myanmar Fruit and Vegetable Producers’ Potato Cluster, Heho, 10 February 2015.
Land: three main points. First, rural landlessness is common across Myanmar – in some areas over 50% of farmers own no land. The figure for vegetable growing areas of southern Shan State is likely to be lower but still a concern. Landless farmers rent land, work on other people’s fields, or seek off-farm income sources. They often have less financial security and less scope to borrow funds. For interventions promoting improved vegetable farming, there is some risk that landless farmers will be excluded.

Second, land registration or certification is ongoing. This is an important step to reduce vulnerability by increasing security of tenure, encouraging long-term investment in land productivity, and raising the scope to borrow funds. In some townships, government staff have sought to document land ownership at the village level while in others there is little progress. The process is important for vegetable farming as it can help to reduce farmers’ vulnerability. A survey conducted in early 2015 with 225 respondents in vegetable farming villages from the project area found that 23% of respondents had not heard of the land certification process, 36% had heard of it but were not involved in any way, and 40% were involved in ongoing certification of some form.

Many challenges emerge. In addition to ensuring universal registration, issues include a lack of knowledge among villagers of the process and why it is being conducted. Many assume it is yet another government information-gathering exercise associated with efforts either to control the population or to extract taxes. The sums that farmers are supposed to pay appear to be inconsistent. There is little data on how women as well as men are being registered as landowners, on how common land is being addressed, and how dispute mechanisms are managed. Overall, land certification is more than a simple mapping exercise.

Third, land confiscation concerns remain a live and politically high-profile issue. In upland areas of Pinlaung and other townships within the Pa-O SAZ, NGOs have accused militia associated with the SAZ administration of continued land confiscation to the detriment of local farmers. Elsewhere, the problem is chiefly a legacy of past land grabs, usually conducted by the military, rather than current actions. NGOs and opposition politicians are vocal on a range of cases. Many involve past confiscation close to the East-West road from Kalaw to Heho and beyond, where large military bases and military-run farms are found. Despite the prominent publicity that land grabs have attracted and the significant long-term loss of livelihoods for affected families, most vegetable farmers are not affected and do not have direct experience of confiscations.

32 Project baseline data may present better statistics on landlessness during 2015.
33 Respondents from a section of the project’s ongoing baseline survey. Sampling issues mean that these figures should be considered as estimates only.
35 On one case, some farmers from Pinlaung had already discussed with their village leader measures to register their land but little progress has been taken and the Settlement and Land Record Department has not yet formalized ownership. Jesse Baver et al. Securing livelihoods and land tenure in rural Myanmar with a case study on southern Shan State. UN Habitat and CIPA Columbia, May 2013. https://sipa.columbia.edu/sites/default/files/UN-HABITAT%20Final%20Report_17May2013.pdf
36 Interview with NGO, Taunggyi, 2 February 2015.
**Water:** This is the biggest constraint for many vegetable farmers. Lacking year-round irrigation, they often depend on seasonal rains. As in many other parts of Myanmar, public and private investment in irrigation and water management has been minimal for many decades. With much land currently left fallow for large periods of the year, improved irrigation would lead to large production gains. Both large-scale and small-scale water management projects could improve farming yields dramatically in many areas. Significant progress will depend on the political clout that vegetable farmers and the wider vegetable business have over national and, if further decentralization occurs, regional government. Given enough influence, major irrigation investments – possibly using international concessional loans and linked with wider economic management of the area including tourism around Inle Lake – may be viable.

Water is also a potential source of tension, with inter-village competition for access. Dispute resolution channels are mostly informal and local. They may support the resolution of small-scale disputes but there is little recourse to higher-level arbitration if problems persist or if an external body from outside the local community is involved. There are numerous cases where disputes have occurred and where local infrastructure is not being maintained, partly as a result of inter-village disputes.

**Climate:** This is a further factor limiting farmers’ confidence to invest. Many local sources in southern Shan State feel that the local climate has changed, with rainfall more sporadic and temperatures that are higher than in past decades making for more challenging farming conditions. If the observation is accurate, it may be a consequence of local deforestation and associated microclimatic shifts. It is also possible that global climate change could lead to more pronounced local fluctuations. Resilience in the face of variable weather conditions is limited as one poor harvest can create major problems for farmers.

**Further concerns**

**Transport:** while market access is generally good, farmers in more remote villages incur hefty transport costs. Public investment in roads is increasing although journey times remain long across many parts of the country including main routes to market centres and border crossings.

**Lack of government support** across many sectors. Mainstream national government structures have until recently shown little interest in promoting improved vegetable farming. There are some indications of greater interest at the national level although this has not filtered down to local line department offices. More interest is evident in decentralized government bodies (See Part Three). Beyond farming, government provides increasing but still limited support across fields relevant to the livelihoods of farmers including health, education, and off-farm employment generation. Safety nets and welfare support are not present.
2. Business actors, power dynamics, and smaller farmers

**Key points**

This section considers the wider economic environment that farmers operate in. It focuses on prominent issues that affect the scope to improve vegetable production.

**High input costs** restrict productivity, reducing the competitiveness of Myanmar’s farming domestically and as an export commodity. In a predominantly rural society, they affect the livelihoods of the majority of the population. Measures to reduce the costs of inputs would involve challenging the interests of well-connected domestic agricultural inputs companies that have considerable political influence and generate significant profits in the current environment. Further problems arise over input quality, especially for illegal or grey imports that are in demand given the high cost of domestically marketed products.

**Problems with international trade.** Both imports and exports can be sporadic and this affects price volatility. Problems include weak control over borders and a lack of assistance for exporters. These problems reflect limited government capacity and low political interest in supporting vegetable and fruit exports. More could be gradually done to manage imports better and support select exports of certain goods to regional markets.

**Investment** that adds value, increases or levels demand, and reduces the risks that farmers take on is important. This includes contract farming arrangements. Contract farming is not simple in a difficult business environment. It needs good technical advice as well as market analysis and at times can offer farmers a bad deal.

**Trust-building** is important for farmers and contracting parties. With little recourse to legal action and low expectations of fair business practices, good informal and often personal relationships are vital. Building this takes time, good communication, and care. This affects how farmers sell their produce and how contracting companies have to build bonds with farmers.

**Input costs**

Private involvement in the agricultural inputs sector took off as central government economic management was scaled back in the early 1990s. Subsidies were gradually withdrawn over the next decade. Large private companies benefited from taking over government-owned fertilizer production and, over time, through the removal of import tariffs for agricultural inputs.

The market for agricultural inputs is dominated by the largest four domestic companies, who collectively share around 75% of sales. Globally, the domination of a sector by a few large players is not in itself unusual. But if regulatory oversight is weak, it creates risks of non-competitive practices or collusion. This is a concern in Myanmar, where opaque association between policymakers and business leaders
has been a prominent feature since the liberalization of the economy in the 1990s. The use of concessions, cartels and monopolies by prominent leaders in order to generate wealth and reward allies led to the association of the military government with business ‘cronies’.

Over time, the economy has expanded further, while the government has become more open. Concerns still exist over market access and undue influence, however. One recent commentary stated that: “A critical component of the reform process is the creating of a competitive corporate community out of one that has previously been dominated by a relatively small group of connected persons.” 37

In southern Shan State, many businesses are run by well-connected individuals, from cement production to mining and fruit orchards. Similar, and in cases more extreme, patterns exist elsewhere in the country and across many other parts of Southeast Asia, especially in sectors where a small number of firms can control a large market share, benefit from close political links, and generate large profits.

The high price of agricultural inputs in Myanmar has led to accusations of profiteering by several large companies in particular. Levels of fertilizer use in Myanmar remain low by regional comparisons and in a market growing by up to 30% annually, the scope for generating profit is significant if prices can be kept high and market shares maintained. The major domestic input companies import generic fertilizer and other inputs before repackaging them and marketing the branded products. The cost of raw material imports as a proportion of final value is disputed. One study holds that the import costs are 77% of sales costs for fertilizer imported by sea and 64% for cross-border imports from China. Others contest these figures and estimate that import costs are in reality only around half of the retail value. 38 Either way, the profit margin is definitely significant and may be huge.

With domestically marketed inputs being sold at a higher price, demand for cheaper black market imports is buoyant. Many different products are available in markets and stores across southern Shan State. Illegal or ‘grey’ imports have no quality assurance, and no labelling in local language. However, they can cost as little as half that of mainstream brands. Regulating these products is a major challenge given porous borders and weak central government authority in some areas. With such a significant price differential, their wide availability is inevitable.

Evidence of collusion is not easy to identify and the presence of many smaller companies in the sector demonstrates that there is some open access. However, the smaller companies tend to operate in a similar manner to the larger firms, presenting little threat to general operating procedures even if they manage to capture some share of the market. Insiders with experience of working for input companies

38 Sources include Survey Report on Exporting Onions and Dried Chillies from Myanmar, U Saw Jackson, Agricultural Consultant of Netherland Embassy in Myanmar and U Naing Lin Oo, Programme Manager of Agribusiness and Rural Development Consultants, Feb 2015; and Hnin Yu Lwin et al., Role of Fertilizer Policy in Transforming Agriculture of Myanmar. Presentation for Yezin University, undated.
have stated that the sector trade association has been used as a closed forum to collude on specific issues. The most prominent point is over false recording of import costs in order to mask high profit margins from regulators. Collusion may also occur between input companies and government oversight bodies in order to register products quickly, avoid subsequent inspection, and possibly delay official permits to potential competitors whose presence might undermine the overall business model.

Marketing practices used by input companies have also come under scrutiny from agronomists and NGOs. These include uncontrolled advertising and fly-posting, the distribution of free enticements to farmers, and branding the same raw materials in different packaging to appeal to different segments of the market.\textsuperscript{39} Agricultural extension services clearly designed to promote the use of a particular set of products have been criticized. In addition, the role of input companies in enabling retailers to offer credit for purchases of particular products is unclear.

### Trade integration and government action

The local leader of a vegetable traders’ association in southern Shan State repeated commonly heard concerns when he complained that high input costs and cheap imports damage the competitiveness of Myanmar’s farm products domestically and across ASEAN (Association of Southeast Asian Nations). As trade barriers fall further in the run-up to the 2015 ASEAN Economic Community, this is a pressing concern.

While free trade may be a valuable common goal, what happens in practice across ASEAN is shaped by national level politics. Member countries back key economic sectors with different trade incentives and barriers. They seek ways to avoid specific aspects of free trade agreements and find alternative ways to offer support or protection where they are subjected to heavy domestic pressure. For instance, ASEAN-wide investment in timber plantations has been repeatedly blocked by the Thai Government. Concerns exist over both adverse impacts on local residents’ and perceived damage to the wider national interest.\textsuperscript{40}

The efficiency of vegetable production in Myanmar is a concern for many farmers and has wider implications for export opportunities. Yet the sector has little political influence. Even if producers had greater scope to push for government action, capacity limits including knowledge of appropriate policy measures would continue to put them in Myanmar at a disadvantage compared with competitors in neighbouring countries.

Further concerns were voiced over the implications of a lack of ongoing quality control by companies themselves or by regulators. Allegations of product inconsistency and adulteration during repackaging or reformulation of imports were repeatedly made by interviewees including agronomists, NGO staff and researchers. Without further independent research it is hard to verify these comments accurately.

International companies are not allowed to enter the agricultural input retail market unless operating through a joint venture, a step that they are reluctant to take given intellectual property concerns. They are able to market products via national companies without a joint venture agreement, and by doing so

\textsuperscript{39} Parts of southern Shan State, advertisements for inputs companies appear to cover all available surfaces.

they indirectly reach up to 10% of the domestic market. Many other countries apply similar restrictions and it is understandable that a government wishes to protect domestic business interests. However, if the net result is detrimental to farmers then alternative approaches to the role of foreign companies may be more beneficial to the country as a whole.

**Trade and price volatility**

Price volatility is a well-known source of major vulnerability for the poor as both producers and consumers of vegetables. As producers, it leads to conservative non-risk taking behaviour (undermining adoption of new technologies), and reduces the ability of market prices to act as reliable guides for which crops to plant and when. As consumers, unpredictable price spikes can reduce access to vegetables.

Agricultural price volatility is a global and regional issue, but its impact on any one country depends on its level of market integration, market structure, and its institutions and policies. Inappropriate market structures, institutions or policies may lead to market volatility even when international markets are relatively calm.

The vegetable market in Southern Shan state suffers from high price volatility. It is well connected across Myanmar, and the wholesale market in Aung Pan is open. Price transmission from the national level to the local level is strong. As there are no national policies to set prices explicitly (e.g. price floors/subsidies), volatility is rooted in supply and demand, and must be understood in a national, or at least state-regional context.

Rice production in Myanmar, a larger and more developed sector than vegetables, shows similar trends. A recent study found that rice price volatility in Myanmar is more profound than in neighboring rice net-exporter countries like Cambodia, Vietnam, and Thailand. Contributory factors include fragmented domestic markets, lack of information for traders on trends and stocks, and poor diversification of export markets. In particular informal export markets are especially volatile.

For vegetable farmers, supply fluctuations are a factor along with poor storage facilities. Fluctuating demand is also a concern. Efforts to increase and smooth demand are needed, especially steps to link farmers with higher levels of the value chain that create incentives to improve production standards. (See the text box below on experiences of contract farming as one important aspect of demand generation that has a direct impact on farmers.)

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41 For example, food price inflation in Asia-Pacific region has been less stable than general price inflation according to the FAO food price and policy monitor.
42 *Price Volatility in Food and Agricultural Markets: Policy Responses*, June 2011. Including contributions by FAO, IFAD, IMF, OECD, UNCTAD, WFP, the World Bank, the WTO, IFPRI and the UN HLTF.
43 Ongoing market analysis conducted by Mercy Corps confirms widespread sentiment over price volatility.
Given that domestic consumer preferences are unlikely to vary sufficiently to explain rapid price swings, the source of demand fluctuation is likely to originate in export and imports. Gradual trade liberalization and some improved cross-border access into neighbouring countries have increased flows of goods. Red tape and restrictions have been reduced significantly. However, current cross-border trade patterns are most often informal, loosely regulated, and prone to rapid variations over both imports and exports.

Examples offered are numerous, covering a boom and subsequent reduction in watermelon exports to China, or onions and garlic to Thailand. Exporters face problems including price fluctuations elsewhere, delays through inconsistent documentation demands, long storage times and spoiling, taxes imposed at times arbitrarily by other countries, poor land transport links, and the mixed quality of produce.45 Exports of some crops have declined considerably. For instance, far greater quantities of onions were exported to Thailand in the late 1990s than in recent years.

Trade agreements include steps to end tariff and non-tariff barriers between ASEAN countries at the end of 2015 along with associated reduction of trade barriers between ASEAN nations and China. These in theory give vegetable traders more open access to regional markets. However, the problems that exporters from Myanmar encounter hamper opportunities. Negotiating them often requires government support, both to reduce bottlenecks within Myanmar and to challenge any blockages experienced when entering neighbouring countries. These include some tariff increases by neighbouring countries (e.g. onion imports into Thailand) and the alleged use of phytosanitary standards as a means to control imports (e.g. watermelons into China). Even within a free trade zone, governments have a role to play in supporting exports and in preventing illegal dumping of produce from neighbouring countries.

**Government assistance**

Some success has been achieved in exporting specific goods such as mangoes to Singapore and other Southeast Asian countries. These often pass through more regulated channels via Yangon rather than informal and direct cross-border trade. The steps needed to access export markets consistently are complex, requiring supply chain coordination, quality standardization, and support from the government over regulation and other facilitative steps.

In the case of mangoes, government support may have been forthcoming given the influential position of some well-connected export companies and mango orchard owners.46 The mango cluster of the Myanmar Fruit and Vegetable Producers’ Association is particularly active. Recent steps include effort to create a trademark for creating a trademark for the Sein Ta Lone mango, Myanmar’s most famous variety.47

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46 Companies include Myanmar Golden Produce. Repeated accounts emerge of mango farms owned by or connected with influential individuals in Southern Shan State and elsewhere.
The experience of mango exporters shows that some successes are possible. Another example is ginger, exported mainly to South Asia. There are some signs of growing government interest in the sector and of greater willingness to engage. The roundtable meeting “Developing Myanmar’s Vegetable Sector” held in November 2014 is an example of constructive engagement across the private and public sectors.

More widely however, the fruit and vegetable sector has not been a pressing state priority for export promotion or for protecting domestic producers from better quality and cheaper imports. Overall, it is a relatively low-value and diverse sector that does not provide significant revenue to the state directly or to individuals with influence. Limited scope for lobbying by farmer groups and weak government capacity means that there is little of the state promotion of exports (or restrict imports) seen in other Southeast Asian countries.

**Adding value and stimulating stable demand**

Food processing represents a potential growth area given rapid expansion of the domestic consumer market, even if the challenges for investors are significant. Processing can generate stable demand, create jobs, and reduce risks for farmers. Authorities including national and state governments, and in particular Self-Administered Zone authorities, recognize that local value addition is important for rural economies and in cases have offered to support initiatives. Successful efforts that purchase large quantities of produce from farmers at decent prices require buyers that are large enough to absorb risk, have a stable source to sell to, and cannot get their required inputs from existing markets consistently at a better price.

Numerous examples of contract farming already exist in southern Shan State, often connected with processing companies. If conducted effectively, contracting companies can assume risk that farmers would otherwise have to shoulder and offer agricultural extension knowledge as well as new market channels.

**Contract farming – two short case studies**

Contract farming, if carried out effectively and fairly, has many advantages. It reduces farmers’ risks, enabling them to take on new approaches, and provides a channel for agricultural extension that can improve quality and yield. It expands stable demand for products, linking directly with farmers. It also improves export potential.

**Myanmar Belle Vegetable processing factory – incremental success**

Myanmar Belle is a relatively successful, mid-sized Myanmar-owned company. Its main business is the production and export of dehydrated vegetables, mainly to Korea and Japan. A factory in Heho employs around 250 people and they work closely with around thirty neighbouring farms. Packaged, dehydrated vegetables are sent to Yangon and from there on to export markets.
The contract farming model has developed over time. The company provides fertilizer, pesticides and seed to farmers. It also takes a proactive approach to extension, with five specialist staff and a dedicated training facility. It has developed a training curriculum and also benefits from a laboratory technician and laboratory located inside the factory.

The company assumes a degree of risk, thereby enabling farmers to operate. It offers a stable price that enables farmers to function effectively. Transport from the farm gate and sorting is undertaken by the company. Produce is tested for quality and the original costs of inputs are subtracted from the amount paid. Farmers are offered insurance against some forms of weather-induced crop damage but not a fully guaranteed return, meaning that it is still their responsibility to maximize yield and quality using the inputs and extension advice provided. Overall, farmers receive a net income of around $500 per acre – a decent if not spectacular sum.

The factory had to close temporarily in 2014, officially to allow for repairs and upgrading. Stories have emerged of a more complex reason for the closure relating to waste management. Local residents complained about unacceptable effluent and ended up sending a letter to the army, who temporarily closed the factory. The army’s involvement seems unusual. It is likely that they own land in the area, having requisitioned it many years ago, and so exert considerable local authority.

The problem now appears to have been resolved and the factory is open. The manager is hoping that orders from a new Japanese client will enable them to double production.

**Pepsi and Diamond Star – trials with potato contract farming**

In 2012, PepsiCo returned to Myanmar after a gap of fifteen years. The company formed a partnership with the Myanmar conglomerate Diamond Star covering a range of activities including soft drink distribution and agricultural investment. One initiative was led by Frito-Lay, a snack subsidiary of Pepsi best known for its potato chips, which saw potential for potato farming in Myanmar.

In addition to the emerging domestic consumer market, exports across the border to Thailand’s far larger savory snack market were a possibility. Under Asean Economic Community rules, potato imports into Thailand from other Asean countries including Myanmar will be subject to a tariff of just 5%, compared to 27% on potato imports from outside Asean.

Diamond Star has a major presence across many parts of Myanmar through its agricultural inputs business as well as other sectors. The chairman, Ko Ko Gyi, is a prominent figure who has been a member of the National Socio-Economic Advisory Council. Pepsi and Diamond Star began to establish contract potato farming in various sites across southern Shan State and in Magwe. In establishing pilots, Diamond Star worked with the potato cluster of the Myanmar Fruit and Vegetable Producers Association, a trade body affiliated with the Ministry of Commerce.

Official information states that potato growers should receive up to 30% above the market price for their crop. By 2013-2014, the pilot was under way in Heho Township. 38 potato farmers were contracted and Diamond Star opened a large, modern storage facility nearby. Between them, Pepsi and Diamond Star provided farmers with seeds, fertilizer and pesticides in addition to technical support and monitoring. Farmers provided land and labour.

Pepsi says that it takes several years to determine whether a pilot can be expanded to a commercial scale. As of late 2014, initial signs were not good. Farmers said that yields were below expected amounts. Instead of 8-12 tons per acre, they could harvest only 3-6 tons. What is more, quality problems meant that around half of the potatoes were rejected. Farmers were losing money and many pulled out of the scheme.
The problems appeared to have various causes. Perhaps most importantly, the potato seed variety did not appear to take well to local conditions and many did not sprout. Communication between farmers and the company did not seem flawed, with farmers blaming the seeds and others stating that farmers did not follow extension advice. Further problems emerged over who was responsible for transport costs and over inappropriate storage facilities.

For the next growing season, only sixteen farmers were contracted. Yield expectations were reduced, different potato seed was provided, and farmers no longer had to cover transport costs. Farmers are happier with the new seed and at the time of research expected some improvement over earlier harvests.

Overall, initial expectations for the potato contracting project have not yet been realized in Heho. Although the initiative is still at an early stage, export opportunities are for now a distant objective. Pepsi is continuing to work with Diamond Star but is also building relations with other agricultural companies.

This case demonstrates the challenges involved in contract farming. Problems seem to have emerged over technical aspects of seed type and adaptation to local conditions. What is more, mutual trust between farmers and the company has not yet been established. Communication problems or misunderstandings appear to have emerged over technical advice and who was responsible for transport costs. Improving the pilot exercise is likely to require more concerted investment in finding appropriate growing methods, communicate them effectively with farmers, and addressing other issues including transport and storage.

Building relationships – farmers and the wider market

In a difficult situation characterized by weak formal institutions and a lack of external support, farmers’ social networks can be a vital asset, enhancing their access to information, goods and services that might otherwise be unavailable. At the village level, vegetable farmers rely on social networks for a number of important of market-related services. Farmers regularly exchange labour with neighbours, share tools, and sometimes provide credit to peers. These informal interactions are built on close interpersonal relationships and trust between individuals within the village.

Beyond the village, trust is also a defining feature of many farmers’ interactions with other market actors, in particular with input retailers. While richer farmers often purchase inputs from a selection of suppliers, smallholder farmers in particular tend to build relationships with a single input supplier that lasts many years. Loyalty and trust is based primarily on the provision of credit by the input retailer and this takes time to develop. Local leaders often play a role in verifying deals, thereby encouraging all parties to remain committed.

At times such relationships may put farmers in a position of weakness, dependent on known local figures and prone to exploitation if prices fall and they incur sizeable debts. For example some farmers stated during interviews that even if they knew products were available from another retailer at a lower price they still would not change their retailer. But at the same time, in the absence of other viable mechanisms, these relationships represent an asset.

48 Interviews with farmer groups and individual farmers.
49 Interviews with farmers and input retailers/companies.
The ability of a community to organize themselves is another facet of social capital and is often a key determinant of their ability to advocate for public goods and exert market power. Vegetable farming communities in Shan State exhibit very limited tendencies to organize as groups, chiefly as a consequence of Myanmar’s legacy of top-down authoritarian control.

Trust and social capital are also defining features of the wider business environment. With a limited legal system and little recourse to justice, formal contractual business relationships are poorly developed in Myanmar. Firms, just like farmers, operate through finding trusted partnerships and building on common interests rather than expecting contracts to be honoured as a matter of course.

Limited experience of impersonal economic relationships generates some challenges for businesses investing in the vegetable farming sector. Repeated accounts emerge of insufficiently strong relationships between commercial businesses and villagers engaging in contract farming of crops such as potatoes and tomatoes. Farmers may not feel an obligation to follow specific instructions on how to grow a specific crop to a certain standard, while businesses may be reluctant to invest time and capital in extension services when their confidence in farmers is limited.

More generally, long-term business models that involve investment in training and developing mutual responsibilities are not a known phenomenon. The result is substandard crops that limit the scope for commercial agriculture and restrict opportunities for farmers to earn a steady return. Efforts to support better models of contract farming exist and have shown that, through concerted engagement between companies and farmers along with multi-year commitments, it can be done effectively.
3. Local government and conflict

Key points

Shan State has a complex and difficult relationship with Myanmar’s central government. Some areas still endure fluctuating armed conflict and others are not under full government authority. Conflict is caused by many factors and usually takes place along ethnic lines, typically between Shan or other ethnic armed groups and the military.

Ongoing tensions are strongest in more remote and upland areas within the project area where problems include the roles of local militia and the widespread growing of opium poppies. Complex dynamics link the military, political leaders, and militia groups in different areas. Economic interests, including the drug trade, maintain many of these relationships.

While the gradual trajectory of conflicts and of local government’s scope to address the needs of citizens is improving across Shan State and the rest of Myanmar, progress is far from guaranteed. Increased violence and a return to more repressive governance at the local level is one possible future scenario for parts of the project area.

New local government arrangements offer some scope to respond more effectively to citizens’ needs including the concerns of vegetable farmers who comprise a significant section of the population. Nationwide changes to mainstream local government mechanisms including elected state parliaments and restructured township level management offer new opportunities, especially where officials are drawn from the local community. New Self-Administered Zones provide specific arrangements for Pa-O and Danu ethnic groups in the project area.

Emerging local political space may lead to further tension. Authority and influence may be captured by powerful interests and local leaders may also seek to stir up animosities in order to build support. Greater scope to organize and campaign may increase the scope for local conflicts such as land disputes given a lack of formal legal and other conflict resolution mechanisms.

Further concerns include ongoing campaigning including consumer boycotts against Muslim minorities in towns across the region. Along with unpredictable national instability, this context furthers the vulnerabilities of small farmers and increases risks for potential investors.

Subnational tensions

Tensions between the center and the periphery persist across many parts of Myanmar. They are complex and enduring. Across Shan State, a range of armed groups and political affiliates are still active to a greater or lesser extent. These include: The Restoration Council of Shan State, the Shan State Progress Party (associated with the Southern and Northern Shan State Armies), The Kachin Independence Army,
The Ta’ang National Liberation Army, the United Wa State Army, the Myanmar National Democratic Alliance, The Pa-O National Liberation Army, various splinter groups, and many different militia.

Violence is not confined to one or two small hotspots, with clashes in various parts of Shan State as recently as 2014 and early 2015. Some areas previously presumed relatively peaceful have reverted to violence since 2008 including parts of the Palaung SAZ and the Kokang SAZ. Clashes occurred between the Pa-O National Liberation Army and the military as recently as 2009 close to the project area in Hsiseng Township, within the Pa-O SAZ. Much of this township and some other areas remain out-of-bounds for many visitors without special permission. With local militia also active in parts of Pinlaung Township within the Pa-O SAZ, and added tensions caused by the opium business, peace is not guaranteed.

Eruptions of violence since 2008 have generally been caused by changes in ground conditions. Unwritten agreements between non-state armed groups and the military have unraveled as both sides try to take advantage of political changes across Myanmar to strengthen their positions. Relatively close relations between the Pa-O authorities and the military make the area of the Pa-O SAZ less prone to violence than some other parts of Shan State but the situation can change rapidly if militia or other factions splinter from more mainstream groups.

Tensions, even if not converted into violent conflict, will continue to define political relationships between the central government and political leaders across Shan State. There will also be continued friction between Shan leaders and other minorities in Shan State including Pa-O, Danu and others in the project area. These inter-ethnic and core-periphery tensions do not normally lead to communal violence between local groups in most of Myanmar. They lead instead to conflict between leaders who raise armed groups on the one hand, and the military on the other. Civilians suffer from violent clashes in many ways: landmines, forced displacement, loss of livelihoods, and so on. The tensions also damage political processes and discourage long-term investment.

**Local government in Myanmar**

Since 2010, some budgets and authority have been delegated to more local levels. This has increased the space for local political activity and for more responsive local government. These changes are increasingly well documented. Main changes include: some deconcentration of functions by line ministries from central to state and township levels; stronger consultative mechanisms including township support committees and village or village tract structures; larger budgets earmarked for rural services and infrastructure; elected State and Region parliaments; gradual recognition of local political parties; and increased local constituency funds administered by Members of Parliament.

Changes are incremental and not radical. Some departments have been reorganized or have revised their priorities. For instance the Rural Development Department has increased budgets and influence. New committee and support committee structures offer increased opportunity for local consultation.

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50 See for instance a series of reports commissioned by The Asia Foundation on subnational government in Myanmar and UNDP’s series of papers on local governance mapping in selected states and regions.
across government agencies and with influential local figures. The Department of Agriculture at the state and township levels retains its longstanding structure. Main priorities tend towards identified strategic cash crops including rice and corn in many townships. There is some variety across the different townships in the project area, partly reflecting local priorities and partly reflecting township officials’ personal preferences. Other programmes and projects under the Department tend to be focused around managing disputes and implementing centrally devised policies. Officials recognize new tendencies towards local consultation and have received instructions to work more closely with local farmers but changes have been slow to implement and most officials feel obliged to follow centrally devised policy directives.51

Many challenges remain. Overall, government remains extremely centralized, with most key decisions channeled up to the highest levels within ministries or the president’s office in Naypyidaw, the capital. The military, a significant actor in many localities as well as nationally, follows its own internal processes and can still overrule civil institutions.

Increasing space for local politics also creates opportunities for inter-group conflict (as has been seen in Rakhine State),52 and capture of resources and power by local businesses, armed militia, and criminal groups. The military have relinquished many elements of their power monopoly and it is likely that local political contest will expand accordingly. In common with most other democratic or semi-democratic countries in South and Southeast Asia, Myanmar’s new local politics will not follow textbook models of governance. Features expected to increase include: ethnic polarization through the political use of group identity to gain appeal; opaque links between local business interests and politicians; and local political patronage structures that seek to use state resources to reward support networks. To date, these aspects of governance have been relatively low-key in many areas under a highly centralized and authoritarian regime. The Pa-O SAZ is one exception to this – see the text box below.

**Shan State politics**

As in other minority States of Myanmar, local ethnically affiliated political parties are more popular than the two main national parties, the NLD and the USDP. The largest party contesting state and national elections in Shan State is the Shan National Democratic Party (SNDP, known locally as the White Tiger Party). The Shan Nationalities League for Democracy (SNLD) is smaller and newer. It was only allowed to become legally established in 2012 but has grown significantly since. Suggestions have been made that the two groups should merge.53 These two groups support greater autonomy for Shan State, especially for ethnic Shans who are their main support base. Increasing the role, capacity and status of the state parliament is one objective. Another is achieving greater devolved authority within the main

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51 Department of Agriculture officials were interviewed at the State level and across several townships.
bureaucracy, including having a greater say in the selection of the chief minister for the state, and reducing the authority of military leaders.

Other minority groups in Shan State find themselves opposed not only to the central government and the military but also to the locally dominant position of Shan leaders. The SAZs are seen by some prominent Shans as a tool used by the central government to divide their territory. Leaders of minority groups including Danu, Pa-O and others seek to use similar channels as ethnic Shan leaders to further their goals. The Pa-O National Organization holds six seats and the Danu National Party two seats (out of a total of 143) in the Shan State parliament.54

The main challenge for these parties at the state level is similar to that faced by the opposition nationally. First, countering the overwhelming dominance to date of government-affiliated representatives who hold the majority of seats in the state parliament, including the 25% reserved for the military. Second, ensuring that elected representatives and their party leaders have access to power and budgets. So far, state parliaments have in practice had limited authority.

Danu Self-Administered Zone – an example of local governance

One of the project’s key target townships, Pindaya, lies within the Danu SAZ. The area is one of five SAZs in Myanmar established in 2010 and designed to offer an element of self-rule for minority groups concentrated in an identifiable territory and yet without a state of their own. Four of the five SAZs lie within Shan State, reflecting the State’s diversity.55

The Danu SAZ covers two townships within which the Danu ethnic group forms a majority of the population. Unlike most of Myanmar’s other SAZs, the area has little history of violent conflict. It has an appointed head who is associated with the ruling government-affiliated Union Solidarity and Development Party (USDP). This is not surprising as all SAZs, and almost all of Myanmar’s States and Regions, also have leaders who belong to the USDP. The Danu SAZ leader, HtooKoKo, is an ethnic Danu.56 Before taking office, he was a successful businessman working in Pindaya. He was “surprisingly” and controversially picked to become a leader for Danu SAZ.57

The ‘leading body’ of the Danu SAZ consists of a secretary, two other key administrators, and seven other representatives, all serving under the selected leader. They formally meet roughly every other month and conduct other business collaboratively on a more regular basis. The extent of their powers is not entirely clear. The central government has given them some capacity to pass local laws and limited budgets. The SAZ operates as a small government unit and it lacks the administrative back-up of

55 The Wa region, also within Shan State, is officially designated as Special Administrative Division, not a Self-Administered Zone.
56 Interview with Moe Moe Htwe, Pindaya, 10 Feb 2015.
57 As above.
longstanding line departments. Capacity to implement still rests primarily with these departments, in particular state level officials and the township level General Administration Department office. Township bodies, coordinated by the Township Administrator belonging to the General Administrative Department, retain considerable local authority and operate primarily as the local outreach for the central government.

The Danu SAZ is small and has limited budgets or influence. Along with other SAZs, it is seen by activist NGOs, political critics, and ethnic armed groups as being dependent on the central government. Cynics point out that the SAZs are special “in name only.” Other critics find that another ethnically defined layer of government is going to entrench rather than answer Myanmar’s political challenges, given the problems caused by decades of ethnically defined politics across many parts of the country.

Local political bargaining between government bodies

Interviews reveal a complex political bargaining process between State, District, Township, and SAZ officials. Local offices of line ministries have direct authority from their headquarters and capacity to operate, but they need to consult SAZ officials who also have a direct mandate from central government and can claim to have built closer links with the local population. Government staff are used to these complex bargaining processes since they have long had to balance the demands of their respective line ministries with the local coordination role conducted by the head of the General Administration Department (GAD) at the Township level. The GAD head wields considerable local authority as the key local representative of the central government and is typically a former military official. The State level parliament adds a further layer of complexity and unclear lines of instruction. On a daily basis, officials attempt to influence how elected representatives’ constituency funds (around 100 Million Kyat – or US$10,000 – per MP), township budgets, and SAZ budgets are spent.

New local politics, engagement and participation

If Myanmar keeps to its current path of measured reforms, local politics will become a livelier field over time. Until around 2010, most political parties except for those directly accepted by the military-led government were not permitted to operate freely. Parties still need to gain official permission to stand in elections or campaigns and many aspirational political groups are not allowed. The outreach of political networks into villages remains relatively limited but it is likely that the role of elected politicians will grow in importance over time. This is especially the case for state level parliamentarians, whose current role remains unclear.


Some residents affiliated with other ethnicities within the Danu SAZ, including Taungyo and Pa-O, report feeling marginalized by Danu-dominated local politics. (Interview with John Leake, and Sao Kyi Than, Yangon, 10 February 2015.)

Interview with official from Pindaya Township, February 2015.
In many ethnic minority areas, local politics are especially vibrant. One Danu-dominated local party, known as Danu National Democratic Party (DNDP), is expected to perform well in the 2015 elections. The party was formally established in late 2012. As in many other minority areas, one party appears to have managed to generate sufficient local strength and official recognition from Naypyidaw to be able to assume a dominant local position.61 It is rumored that the current SAZ head will retire after the 2015 elections, and there could be considerable pressure for the central government to appoint a head of the SAZ affiliated with the DNDP in future.

Ethnic Danu politicians and SAZ leaders claim close links to the local population, strengthened by a common cultural background and language. This means that they are able to gain the support of the lowest levels of government officials – village tract leaders and committee members – who are local residents. Township officials, by contrast, are often posted from other parts of Myanmar and may find it harder to earn loyalty at the village tract level despite formal reporting lines.

Danu leaders and commentators state that a more proactive SAZ leadership would be able to initiate many development activities. Leaders’ closer links to the population when compared with mainstream government agencies make the vegetable farming sector, perhaps the key livelihood source in the Danu SAZ, relevant to their concerns and ambitions. This covers potential investments in processing, marketing and related infrastructure as well as the direct concerns of smallholder farmers.62

Other new policies have increased the space for more participatory local planning. Village tract leaders are officially elected by local villagers, although the process is varied and depends on many local factors including the demands of the township administration. In some villages, village development or development support committees provide further channels. However, village committee mechanisms end to operate only when instructed to by higher authorities. Their key current tasks include managing national registration cards and the first steps towards formal land certification.63

At the township level, the management committee provides a forum for coordination among leading officials. Township development support committees play an auxiliary role. They include elected town elders (elected, often local business leaders or other respected figures) and departmental officials, acting as a facilitator between the government and the public. Final decisions are made through negotiations between senior SAZ and Township officials.64 It is important to consider committees as little more than occasional meetings in most cases, key decisions depending on seniority and bargaining processes.

61 See interview with Danu party, Ywangan, 11 February 2015.
62 As above.
63 Interviews with many village heads in Pindaya and Pinlong, early 2015.
64 Interview with U Khin Maung Win, Aung Pan, 9 Feb 2015.
Pa-O and Danu Self-Administered Zones

Many vegetable farmers in southern Shan State live within the Danu and the Pa-O Self-Administered Zones. The two zones share much in common, having been established by the Government of Myanmar around 2010-2011 as part of efforts to build stronger ties with ethnic minority areas. They also have distinct features.

The Danu SAZ consists of two townships with around 150,000 inhabitants, and the Pa-O SAZ consists of three non-contiguous townships with some 400,000 inhabitants. Both SAZs incorporate extensive upland areas as well as the lower land where vegetable farming predominates. The Pa-O SAZ has a longer history, originating in ceasefire agreements between ethnic armed groups and the military in the early 1990s. The former rebels became the mainstay of the Pa-O National Organization, established as the dominant political force in the SAZ.

Pa-O National Organization leaders emphasize their role as representatives of the Pa-O people. This extends to their development wing, the Parami Development Network, a body that has attracted foreign and domestic financial support for social improvements, basic services, and local livelihood initiatives. At the same time, leaders maintain links with significant business interests that were in the past associated with the military. In particular, founding member Nay Win Tun is a tycoon with interests in cement and mines in southern Shan State as well as jade and hotels elsewhere in Myanmar. His company was given mining concessions as part of the 1990s ceasefire deal, and later donated a giant slab of jade weighing more than 3,000 tons to military leaders.65

Upland areas of the Pa-OSAZ, including parts of Pinlaung Township, are still largely controlled by militia. In recent years opium growing and associated drug trafficking has expanded significantly. NGOs have suggested that Pa-O leaders have been complicit in enabling both militia leaders and some other well-connected local figures to grab land from smaller farmers.66

The Danu SAZ was formed partly in response to politicians’ complaints that while former ethnic armed groups were rewarded with SAZs, those ethnic groups whose leaders did not resort to violence received nothing. It has an overwhelmingly agricultural economy dominated by vegetable farming in particular, and a less complex political environment (see the main text for further details of the Danu SAZ).

Common features of both areas include:

- Continued strains between a fairly weak SAZ and administratively stronger regular local government mechanisms.
- SAZ leaders who have devised methods of jockeying for influence. Pa-O leaders initially aimed to distance themselves as much as possible from other local government, before recognizing the value of engaging selectively and tactically.
- For both SAZ leadership groups, local development is important. Ethnic ties between SAZ leaders and the local population generate bonds and give leaders an incentive to try to respond to local needs. Both SAZ authorities took part in participatory development planning exercises, with external support, and recognize the value of open consultation.67 Both SAZs have direct incentives to improve vegetable production, processing and marketing in their areas given the local economic importance of the sector.
- It is likely that ties between local businesses and local officials will continue to play a prominent role in both areas. The future political paths of both areas are hard to predict. In the short term it is likely that the dominant Danu political party will gain a strong hold over the SAZ administration, mirroring the current situation in the Pa-O SAZ. However, increased political competition if other parties are allowed to operate may take either area in unpredictable future directions. It is also possible that the overall structure of SAZs will change across Myanmar if further decentralization takes place.

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66 Interview with NGO representative, Taunggyi, January 2015.
67 Interview with John Leake, Director. And Sao Kyi Than, Senior Advisor, IID, Yangon, 10 February 2015.
Upland areas: drugs, militia, mines

Upland areas of the Pao SAZ including parts of Pinlaung Township remain under the effective control of militia groups, many of them loosely affiliated with Pao-O political leadership while also having some association with the military. Militia groups are accused by NGOs of land seizures that have adversely affected local farmers. These areas have also in recent years become the site of widespread opium poppy growing. While these concerns do not directly affect lowland farmers, they do impact on predominantly poorer upland farming areas. Other interlinked issues include criminality, seasonal labour demands of poppy farmers, drug trafficking, drug use and sales targeting local young people, and environmental damage. Outside the project zone itself, many other parts of southern Shan State (heading further East and South) are also controlled through uneasy relationships between militia, military, and non-state actors.

Local tension in lowland farming areas

Local sources of tension in lowland areas are addressed in Mercy Corps’ ‘Visibility vs Vulnerability’ report. Prominent concerns include disputes over water and land, two key resources essential for agriculture. Concerns in the project area are at present mostly low-key. Most village level disputes are solved locally through seeking compromise or by restraining people from acting on their own. Examples include numerous inter-village disputes over rights to irrigation water. These are often caused by small infrastructure initiatives such as weirs or ditches that fail to reach local agreement on how water will be allocated. Other small-scale development schemes remain unused given failure to arrange adequate local management mechanisms.

It is likely that incidents and tensions will increase with further commercialization of agriculture and development pressure. There is now greater space in Myanmar for local political activism, group organization, open use of media, and for voicing complaints. These positive changes also carry with them enhanced risks of conflict if coping mechanisms are not able to respond.

Land rights and ownership laws are also sources of tensions. The most vocal disputes concern compulsory land acquisition without significant compensation usually undertaken by the military or, in some areas, by ethnic armed groups. The military has mostly stopped these practices but a legacy remains, especially around areas near the road between Kalaw and Heho, where several large military bases are located.

For most farmers, land certification and proof of ownership is a large concern. Certification processes are under way in some areas (such as Pindaya Township). These measures in general have the scope to

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69 One example referred to during interviews was of neighbouring villages in Pindaya Township who failed to agree on how water should be shared following a small-scale project funded by UNDP’s Human Development Initiative.
improve farmers’ access to credit and scope to invest, as well as reducing conflict potential and limiting landlessness, but poorly conducted certification exercises can escalate tensions.\textsuperscript{70}

**Anti-Muslim discrimination**

Communal inter-religious tensions with a long historical legacy have recently been stoked for political purposes across much of Myanmar. Muslim minority groups, often in towns, have faced problems including mass displacement (Rakhine), violence and burning (Meiktila, Mandalay, Lashio), and lower-level discrimination. Investigations in Aung Pan, Kalaw Township (where the project office is located) revealed locally encouraged boycotts of Muslim businesses. Some residents stated that they flew Buddhist flags partly as a statement of solidarity against Muslims. In nearby Taunggyi, the state capital, some monks and local elders have organized communal anti-Muslim measures. In larger cities such as Taunggyi, civil society, religious and political leaders are more likely to be able to control extremist mobilizers although their actions can still have significant repercussions for Muslim residents. Violence may be more likely to flare up and persist in smaller towns.

**National level contest and tension**

Elections are due late in 2015. The most likely outcome is some form of coalition government. Other outcomes cannot be excluded including a delay to the poll itself. It is unclear how the election will affect politics in Shan State. Local political leaders will seek to gain a strong mandate and then use that to push for concessions from the national government. This process may create further, unpredictable tensions including a shift in conflict dynamics where ethnic armed groups are opposing the state. The ongoing peace process between ethnic armed groups and the military has made less progress than was originally hoped. Its direction is also unpredictable, with significant implications for conflicts across Shan State.

Regardless of the election result, vegetable farmers will confront the same challenges and constraints. It is possible that a new government will seek to limit to the activities of both INGOs and foreign companies.

Recommendations

Overall, this study finds that vegetable farmers in southern Shan State are highly vulnerable to a range of factors that limit their willingness to take on risk. This reduces the scope to innovate and to buy good quality inputs. Unless these vulnerabilities lessen, it is unlikely that smaller farmers especially will be able to respond optimally to new market opportunities.

Reducing farmers’ risk burden is not easy. It is not simply a matter of improving extension services or the quality of agricultural inputs such as pesticides and fertilizers. Since government intervention in the vegetable farming sector has been limited, there are also few ‘quick wins’ to be achieved through rapid policy changes. The low profile of the sector and capacity limits in official institutions are further barriers to advocating for change and galvanizing government action.

Reducing the risk burden for farmers

**Information and extension.** Reducing the risks that farmers face by providing information alone is challenging. This study has found that what holds farmers back is often a lack of scope to take further risks rather than knowledge alone. Government services are limited and while commercial extension agents provide some advice, it is inevitably angled towards increasing sales of specific inputs.

Farmer information needs to concentrate on understanding the constraints that farmers face and finding solutions to them. It also needs to respond to local variety; farmers have differing needs depending on their own situation and the specific physical conditions of their fields. Farmers need the knowledge and wherewithal to make empowered choices. Many farmers expressed a preference for lower-cost inputs such as natural fertilizers rather than increased dependence on high-cost commercial products. Information about market prices is generally available. There may be some exceptions to this, for instance concerning short-term fluctuations that are very hard to predict or in more remote villages.

These factors mean that agricultural extension staff need to listen to and respond to farmers’ concerns and needs rather than simply impact technical knowledge or promote certain products. There is potentially some common ground with reputable commercial agricultural input companies’ outreach efforts here, since unless farmers’ risks are reduced they are unlikely to want to buy greater quantities of seed, pesticide or fertilizer. Whilst seed extension is welcome, sustained and significant improvements in yield may require thorough and continued farmer education including dealing with plot specific issues. Extension efforts associated with groups such as East-West Seed may need to provide a sustained and broad level of extension that increase farmers’ scope to deal with plot-specific issues throughout the crop cycle.

At a higher level, overall knowledge of improved farming methods for smallholders in southern Shan State could benefit from decades of experience in northern Thailand, where bodies including Thai Royal Foundations have been working on vegetable production in a similar climatic zone with notable success. The amount of funding and body of agricultural research knowledge that has been generated would be
valuable for extension services in the area, an issue being explored by The United Nations Office on Drugs and Crime (UNODC), Taunggyi.

To summarize, information and extension services need to focus on understanding and responding to the broad concerns of farmers themselves.

**Price volatility:** There is little that can be done to calm international vegetable price volatility, but there is much that can be done at a national level to prevent volatilities being magnified. It is worth distinguishing between 1) policies/advocacy to respond to reduce price volatility that have roots at the national level, 2) policies/advocacy that mitigates its consequences and 3) programming that recognizes its impact on programme objectives. For international development agencies, the first category could focus on advocating the importance to relevant stakeholders of understanding where price volatility is being exacerbated by national policies or inappropriate market structures or actors and rent seeking behaviour. Under the second category, they can support local government and the private sector in fostering processing that stabilizes demand. For the third category, they can consider how the impact of price volatility might affect the assumed theory of change – particularly when it comes to changing farmer behaviour. Decisions taken by farmers must be understood in the context of their vulnerability and attitude to risk. Unwillingness to assume risk may limit intended programme outputs.

**Addressing the causes and effects of market fluctuations** is a priority to address at all levels. Concerned parties should find ways to advocate for policies at the local and national level that will stabilize prices and demand – chiefly with the aim of stabilizing the market price for vegetables. Policymakers should be aware of the very damaging effect of market fluctuations to farmers at the micro level. Efforts to coordinate production at the regional level could help prevent production spikes (village leaders could pin up production plans on a shared forum / board, or an association could monitor production plans across the region). It might also be possible to check whether production spikes are being created through one-off demand from foreign exporters. Local authorities and the central government should avoid encouragement of particular crops that create overproduction.

This recommendation is challenging to implement directly, given a lack of capacity or influential voices promoting such actions. What is more, efforts to encourage greater government involvement risk backfiring if they lead to centrally defined targets or other inappropriate interventions. It may be necessary to wait until coalitions or other advocacy bodies are able to pursue such issues on a more permanent footing. Other measures that may support this aim are outlined below. In particular, efforts to increase market opportunities for farmers span a wide range of fields and warrant closer attention.

**Increasing demand for high quality vegetables** at the main regional market in southern Shan State (Aung Pan) would present a much stronger investment proposition for farmers venturing into the high quality market. Helping to develop links from traders in Aung Pan to high quality buyers in Yangon or elsewhere could help generate demand. At present, there is little guarantee of selling better quality produce so farmers have little incentive to grow it. It may be necessary to narrow efforts down to specific crops, or establish pilot models, in order to build incremental change. Increased demand would encourage traders and farmers to grade produce more effectively.
**Encouraging processing** and other steps to add value locally is important. This includes small-scale processing at the village level as well as more capital-intensive investments. Some initiatives have already been taken, including processing facilities for tomatoes and cabbages.

**Contract farming offers major possibilities.** It can transfer some risks from farmers to buyers and processors by offering stable prices, credit for inputs, and technical advice. It is not an easy undertaking in Myanmar given a challenging operating context but the work of companies such as Myanmar Belle demonstrates that successful investments are possible. Concerns include the potential for unjust contractual arrangements that leave farmers worse off, and the need to invest time and effort in building effective working relationships between farmers and contractors. Contract farming can help transfer expertise and new methods which may then spread beyond directly contracted farmers to promote wider productivity improvements. It can link farmers with new domestic and international markets.

**Increasing exports** is also a challenging undertaking. The barriers are considerable. Efforts need to concentrate on specific crops and markets, basing work on careful market and institutional analysis to identify comparative advantages and opportunities. Most opportunities are likely to be regional (neighbouring countries plus other Asian markets). Given the lack of cold storage and rapid transport systems, root crops and other less perishable vegetables offer the greatest opportunities. Problems exist over facilitation, support and formalization of trade given limited government assistance in enabling both export from Myanmar and import into other markets.

**Stabilizing imports** is a further valid objective that should help limit price fluctuations that damage local producers. Again, measures require concerted government action that may not be forthcoming given limited capacity and weak central control over the actions of officials at some border posts. Efforts will need to identify entry points where influential local actors are likely to push for change.

**Credit** is a major concern for farmers. The lack of available formal channels means that farmers tend to avoid borrowing or use informal channels including traders and input sellers. Interest rates from these sources are far higher than most formal channels. Efforts to increase accessibility to formal government, NGO and commercial credit channels would increase farmers’ willingness to invest in improving their quality and yield.

**Land certification** is ongoing across some of the project area and is due to be extended more comprehensively. A positive step, the process merits attention as it can offer farmers greater security and access to credit. The quality and reach of current certification processes could both be improved if entry points exist.

**Input providers offer opportunities for partnership** but also have major limitations. Their comprehensive outreach and significant budgets generate potential to work on agricultural extension and to build advocacy coalitions on other issues. However, the high cost of inputs and the high profit margins enjoyed by the main domestic firms that dominate the market are likely to make them resistant to significant change if it threatens their core interests. Input companies continue to expand their markets and are unlikely to support efforts that reduce farmers’ dependence on expensive inputs such
as annual seed purchases, or to back efforts to increase regulation of product quality, marketing methods, and sales tactics. Reducing the costs of inputs and improving quality control would support the competitiveness and livelihoods of vegetable farmers. It would also reduce demand for unregulated and often illegal imports that are of mixed quality but are far cheaper.

International companies may offer higher quality inputs, more rigorous control, and greater willingness to fund farmer-focused agricultural extension. However, their main priority is to enter a market without the need for joint venture agreements, something that domestic companies are likely to resist. What is more, some international input companies promote products that are banned in Western countries on health grounds. In a country with a strong nationalist ideology, international development agencies need to be careful of close association with international input companies; they may become regarded by domestic actors as biased agents of external commercial interest.

International agencies can consider how the issue of input prices and the considerable profits accumulated by the big inputs companies can be addressed as a major political issue. It affects an overwhelming majority of the population of Myanmar. In some neighbouring countries the situation would be addressed by domestic advocacy coalitions and political parties seeking popular support.

Farmer groups including cooperatives, unions, and networks are generally weak, a legacy of top-down authoritarian control over many decades. Supporting more collaboration between farmers makes sense, although it needs to be carefully considered. Unless there is a specific goal that provides tangible benefits to farmers themselves, efforts to form networks, groups, unions or cooperatives are likely to flounder. The legacy of failed cooperatives and other imposed government efforts makes farmers especially wary. Specific areas where progress may be possible include groups addressing the needs of farmers growing and marketing specific crops, and local groups that enable access to credit. There may also be ways in which farmers can collectively link with new markets or explore options for adding value through measures including processing and grading. To summarize, collective organization is weak and there is high potential to improve collaboration around specific issues where the benefits to farmers are evident.

Building coalitions and finding advocacy opportunities

Vegetable farming is not an influential sector in Myanmar and is a low priority for national government departments. However, some recent signs of interest are a cause for optimism, while wider reforms and change across the board create space to engage.

Change is likely to depend on the vigour of domestic advocacy and political influence. International development support can encourage action and can lend technical support but is unlikely to be the sole catalyst of change. Two steps are needed. First, engagement with domestic actors likely to promote change, such as the ongoing development of Round Table discussions for the sector. Second, supporting long-term sustainable capacity to take relevant issues forward. Reliance on short-term or medium-term donor funded projects is not a viable change strategy. For this reason, interventions need to prioritize domestic institutional capacity.
Multi-stakeholder coalitions have recorded some success in pursuing challenging objectives in complex political environments. Examples recently pursued in Myanmar include environmental management at the national level and marine resource management in the delta region. Other regional examples include forestry coalitions in Indonesia and pollution control in Vietnam. Some realism is needed as different groups do not always hold similar interests, making it important to seek issues where common ground can be identified.

In the long term, improvements may depend on broad enabling steps as much as specific targeted interventions. These include government policies on credit for farmers, export support and import management, transport infrastructure, irrigation, farming associations or unions, land reform, environmental management, and accountable decentralized government. Related policy decisions may be beyond the reach of specific interventions in the vegetable farming sector but efforts to promote domestic bodies, from farmers to export companies, increase their scope to take advantage of wider changes.

Farmers across Myanmar are poorly served by the government and there is a need to continue promoting a stronger government focus on rural development and livelihoods. Many of the issues confronting vegetable farmers are shared by rural communities more widely. Most other countries in South and Southeast Asia have engaged in major rural support programs such as land reform, investment in irrigation and infrastructure, price guarantees, credit facilities, assistance for exporters, carefully measured import restrictions within the scope of trade agreements, and so on. This is done for various political reasons: in order to boost productivity, improve economic performance, build popular support, reduce the risk of violent insurrection or protest, respond to sector lobbies, or reward interest groups. Advocacy efforts and associated support need to grasp this broad perspective and respond accordingly.

Central Government departments are changing over time although it is important to recognize capacity limits and competing interests. Senior figures remain more attuned to the concerns of powerful individuals including business leaders than the wider interests of smallholder farmers and a diverse sector. It may be hard to appeal directly to high-level policymakers in a relatively non-strategic sector. Indirect approaches that tackle issues affecting a wider group of actors may offer more potential for change. Examples include the high costs of agricultural inputs and management of exports and imports.

Local government may offer greater potential for addressing specific issues. Vegetable farming is a big economic sector and a major source of livelihood for southern Shan State. This is especially the case in specific townships and in the Danu (and to a lesser extent the Pa-O) Self-Administered Zones. Some scope may exist to promote farmers’ organizations who can advocate and engage with local government. Further influence is likely to be brought to bear by trade associations or investors interested in the sector.

State, district and township administrations have to date shown only limited interest in vegetable farming. Reforms including the increasing role of state parliaments, greater consultation at the township level through committee mechanisms, and more emphasis on rural development will all generate some
openings and may generate measures to improve rural conditions. However, the top-down nature of main local government mechanisms is likely to remain a barrier for a sector that is not a national priority.

Efforts to work with local government may be more successful where there is a clear incentive to address concerns. Such situations can provide access for coalitions supporting vegetable farmers. One notable example is contract farming, processing or other major investments on a scale sufficient to gain access and interest from local political leaders. A further example is seen in the links between local farmers, officials and political leaders in Self-Administered Zones where vegetable farming is a key economic sector and local leaders have stronger ethnic ties with the majority of the population.

The relationships described here will change over time. There may be some more fundamental restructuring of local governance arrangements as part of future constitutional negotiations at the national level and as an aspect of peace discussions with subnational ethnic armed groups. The Self-Administered Zone administration, and elected state representatives, are expected to grow in influence after the proposed 2015 elections. Monitoring these local dynamics, in the Self-Administered Zones and in other project field sites, will enable interventions to identify the most effective entry points for engaging with local government.

To summarize, where vegetable farmers represent an interest group of some value to political leaders, or the sector is a source of government revenue, then related concerns may be taken into consideration. This may apply if vegetable farmers represent an interest group of some value to political leaders (as in the Danu Self-Administered Zone), or the sector is a source of government revenue (possibly through attracting inward investment for processing, or through taxes on markets). But in Myanmar and elsewhere, local elected office often becomes a channel for powerful (and at times criminal) interests to seek power, impunity, and access to budgets. Encouraging accountability at the local level, and responsiveness to farmers’ needs, is an important concern yet may not be a simple undertaking. Observers in Pindaya suggested that opaque relationships between senior officials and local businesses meant that the Danu Self-Administered Zone should be renamed a “Self-Contracted Zone.” More positively, supportive comments from local Danu politicians interviewed for this report suggest that there is space to promote innovative ideas from various stakeholders over development initiatives in the SAZ, especially where they support small farmers.

**Conflict and ethnic dynamics**

Shan State is the site of continued, ongoing insurgency and resistance to national authority across many areas. Some upland areas in the project area remain under the authority of local militia. More widely, Shan State politics and parochial concerns in many areas within the State are primarily defined by contested relationships between local leaders and the national authorities. Ethnic tensions remain significant. There is no guarantee that the context will continue on a peaceful trajectory given recent reversals in other relatively stable parts of Shan State. Other issues of concern include widespread discrimination against Muslim populations, chiefly in urban areas.

71 See interviews with Danu, NLD, and U Khin Maung Win respectively. Early February 2015.
These issues need to be monitored and implications for programming considered. Action to consider:

- Recognize ethnic tensions or difference and adapt approaches accordingly, especially in the Self-Administered Zones but also with other minority groups. Ethnic ties between local political leaders and the wider population are significant policy drivers that may affect how to select and pursue strategic partnerships. Politics at the state level are affected by similar dynamics, while tension can exist between officials sent from Yangon who dominate line departments down to the township level, and representatives native to the area itself such as state parliamentarians, Self-Administered Zone officers, and village tract leaders. Gaining the support of one official does not guarantee that others are on board.

- Be prepared in case the overall context deteriorates. A major breakdown is unlikely but not impossible. A less dramatic but still significant increase in tensions between the central government and local political actors is a stronger possibility.

- Local level land and water conflicts may emerge as pressure increases over time and space for local political activism may open up. Means for managing these tensions are important, including both traditional and mainstream justice systems.

- Consider how concern over Muslim discrimination is factored into work. Possible steps include: staff training on conflict awareness, tolerance, and international norms; and ensuring that the project does not unintentionally strengthen boycotts of Muslim businesses.

- Staff diversity is an important wider consideration. While most people in positions of influence and a high proportion of farmers in the project area speak reasonable central Burmese, local conversation is ordinarily conducted on other, local languages or dialects. Ethnicity is recognized rapidly and locally appointed staff may find it easier to build relationships on the ground or with local leaders. Ideally, projects should seek to counter the longstanding government trend of posting central Burmese staff to monitor and manage peripheral, minority populations.
Annex 1  Research methods

Political economy approaches draw on data from many sources and disciplines. They can draw from economic information and approaches but rarely follow formal economic methods or models. A focus on ‘agency’ (i.e. on why people act as they do) led this study to concentrate principally on farmers themselves, on the roles of agricultural traders, and on the actions of pesticide and fertilizer companies. Other key actors included local government at different levels. Structural considerations included: the role of local political and business interests; the role of and scope for collective organization by farmers; reorganization of local government including decentralization and its implications; conflict tensions including relations between minority groups and the central state; the wider business and policy environment affecting government involvement in the sector and the scope for exports; challenges and opportunities faced by processors and over investors; and the wider constraints affecting vegetable farming (See Annexes 2 and 3 for further details).

The research process involved several steps:

- Identifying key over-arching issues and institutions through the literature review and from existing sources including the list of problem statements / research questions already identified by the project in the initial proposal document (see Annex X). This stage built on existing material including work undertaken during the project inception phase, market assessments, Mercy Corp’s 2014 context analysis Vulnerability versus Visibility, and the recommendations of the 2014 Developing Myanmar’s Vegetable Sector’ Round Table Meeting.
- Defining initial research questions, which were tested and revised over time (See Annex XX). A flexible approach responded to initial findings and narrow down or adapted questions as the work unfolded.
- Devising interview templates and training interviewers (See Annex XXX)
- Identifying stakeholders and conducting initial interviews
- Taking stock of findings before pursuing further interviews. At this stage, the research was divided into four overlapping sub-fields (See Annex XXXX). For each field, target interviewees were identified and interview questions devised. The four sub-fields are:
  - farmers’ choices and the background conditions that affect them;
  - the wider context surrounding input companies (especially pesticide and fertilizer) along with issue surrounding vegetable export opportunities;
  - local governance in the project area, including decentralization since the 2008 constitution, conflict tensions, and the role of Self-Administered Zones;
  - Vegetable processing and contract farming, focusing on some prominent examples.
- Data was then sifted and collated, extracting key issues and pursuing emerging points in greater detail. Summary notes compiled for each sub-field supported this process, in addition to topic notes written by researchers as the process unfolded.

Research was conducted in a critical environment that encouraged researchers to challenge initial assumptions. One significant change was a rejection of initial expectations that influential traders might be routinely manipulating market prices. For the most part, prices appear in practice to fluctuate rapidly according to supply and demand, causing problems for farmers but not usually resulting from underhand business tactics or uncompetitive market control. Where market distortions were noted, they tended to occur elsewhere, for instance in high input prices).
In another important case, common perceptions that farmers suffered from a lack of knowledge were often found to be false. While farmers could benefit from further knowledge of ways to improve their crops or of how to optimally apply inputs such as pesticides, their inability to implement improved practices that involved additional expense or changes to tried and tested methods was more typically found to be a consequence of their reluctance to assume increased levels of risk.

**Constraints** included the need to work to a tight timetable between January and March 2015. Researchers also aimed to ensure that they supported (or did not undermine) ongoing project work, for instance avoiding lengthy interviews with farmers who had already been asked to provide information to the project on other occasions. Project staff were understandably already fully engaged in the project and had little spare time, yet still offered assistance where possible. The sensitivity of some of the issues being explored made rapid research challenging. Prominent examples include the close relationships between businesses and government policymakers, as well as conflict tensions and opium growing in some upland areas. All of these research challenges can be overcome, even in an environment where many people are still reluctant to talk openly, but it takes time and has resource implications.

Exploring in depth the impact of differences between farmers by gender, ethnicity, affluence and other measures was beyond the scope of this study. On a superficial level, barriers and discriminatory attitudes along lines of gender or ethnicity seemed minimal, with interviewers recording similar responses across male and female farmers from different ethnic groups. In practice, many inequalities inevitably exist and this field requires further consideration.

The research process also strove to recognize and respond to the variety of conditions across the project area. Researchers worked to access more remote villages as well as those by the roadside. They sought to interview people from different ethnic groups and economic status. Female and male farmers were interviewed. A thorough comparison or exploration of the differences across the project area was not possible, however. One key constraint is that the research concentrated on lowland villages in or near areas where the project is already operating. The context in upland zones of Pinlaung and other townships is very different. It is integrated into the contextual analysis underpinning this study but still requires further assessment. While the researchers attempted to address environmental concerns as part of the overall approach, there was little time to assess potential damage caused to farms by actions elsewhere, or ‘negative externalities’ that result from farming practices such as excessive fertilizer use.
Approach to Problem Driven Political Economy Analysis

1. Reflection
   Problem identification
   Key question: What is the specific ‘problem’ to be addressed?
   If there is more than one problem, can they be clearly distinguished (e.g. operational and developmental)?

   Identification of:
   1. Poor outcomes to which PE issues appear to contribute (for example, persistently poor development outcomes, repeated failure to adopt sector reforms);
   2. Theory of change underpinning previous interventions (if any) and their effectiveness.

2a: Structural Diagnosis: Context and institutions
   Key question: What are the systemic features in place that are relevant to the problem?

   Analysis of:
   1. Relevant structural features, including demography, geography (e.g. natural resource endowment), geopolitics, culture and social structure, historical legacies, climate change and technological progress.
   2. The ‘rules of the game’: Relevant institutions, including formal laws and regulations and informal social political and cultural norms, that shape power relations and, ultimately, economic and political outcomes.

2b: Agency Diagnosis: Power, incentives and behaviour
   Key question: What combination of perceived incentives influences the behaviour that leads to this problem?

   Analysis of:
   1. The motivations (financial, political, personal, ideational, etc.) of relevant individuals and organisations that shape their behaviour in ways relevant to the problem and potential reform.
   2. The types of relationships and balance of power between those actors.
   3. Relevant analytical concepts that provide some insight into actors’ incentives and decision logics: including credible commitment problems, collective action problems, information asymmetries, principal-agent relationships, heuristics and biases, etc.

3. Prescription
   What can be done?
   Key questions:
   1. What is a plausible pathway of change?
   2. What actions can be proposed that support that pathway of change?

   Analysis of:
   1. Potential change processes; and
   2. The realism of proposed change processes given the constraints and opportunities identified in the analysis.

   Assessment of the range of potentially viable entry points, if any, for external actors seeking to facilitate this change.
   If viable entry points exist:
   1. Selection of appropriate interventions and modalities
   2. Timing, tailoring and sequencing of selected intervention

## Annex 2  Research questions

These questions were used to guide the study. They were devised through ongoing discussion between research team members and advisers.

### Overall Research Questions

#### General Questions:
- What are the political, social, economic and governance dynamics that support or constrain ambitions to improve the smallholder vegetable sector?
- What are the implications of these dynamics and of ongoing change processes for the project’s work?

#### Assumptions / Theory of Change:
- Carefully devised direct interventions can improve the sustainable welfare of smallholder vegetable producers and associated communities in the project area.
- The market for vegetables is growing. Improving market access and prices for smallholders are viable aims that will improve smallholders’ lives.
- Barriers can be identified and then addressed through appropriate interventions.

### Main Research questions

#### Structure:
- What influences political processes in the project area? (resources, ethnicity, party affiliations, military, patronage networks, civil society networks or activists)
- What are the rules of the game – how do local politics operate? (following formal rules / legal mechanism, dependent on patronage, closed or open political access?)
- Can smallholder farmers influence change individually or collectively?
- What political or social barriers restrict or facilitate market access?
- How are positive changes likely to take place – how do farmers define progress and approach change?

#### Motivations and power:
- Who are the significant actors in terms of local power and politics, and are their interest aligned with those of smallholder farmers?
- How is the current political context and role or identity of the most influential actors likely to change in future?
- Variety within smallholder farmers and communities – gender, ethnicity, affluence?

#### Market context
- How is the private sector organized – what are the influential bodies
- Why do identified constraints to the vegetable market exist? Where are they rooted in, or interact with, the public sector, in administration, organization, policies or regulations. [e.g. demand, exports]
- What factors constrain and enable farmers choices and decisions in production methods, particularly considering farmer risk /vulnerability]
Power, politics
- What are the power and trust relationships and who are the influential actors along the value chain – what are their incentives and how will these be affected by the proposed recommendations (winners and losers)?
- How empowered are farmers, individually or in groups, to access services, gain good market prices, credit, land security, etc.
- What are the role/structure/politics of private sector actors and associations at different levels, including ethnic affiliation, how do they interact with each other and the public sector at different levels?
- Who are they key public sector players, at what level or in what institution, and how significant is decentralization in a still-centralized system? Within the Self-Administered Zones, are there any hidden rules and norms or other pressures that might hinder MVMW's ability to create change?

So What
- How might the programme be affected by local political networks, structures and trends – ethnicity, conflict, political affiliation, the role of the military? Drugs?
- What opportunities are there for farmers/groups to advocate and with whom/how.
- How might these issues be different depending on income, ethnicity, gender.
Annex 3  Four Identified research topics for interviews

FOCUS AREA A Farmer Choice

Key points:

Overview: Initial research indicates fairly open markets at local level. Farmers have market information and select from a range of providers / market channels. Farmers also develop trust relationships with brokers and / or retailers / buyers that may involve several aspects: providing inputs on credit, buying crops, transport, etc.

But unpredictable output price changes, other risks, and wider vulnerability given land ownership/rights, lack of credit, limited irrigation, poor health provision etc., little collective / group action, rising costs of labour, etc., affect farmer choice. Farmers are generally acting rationally and while resistance to new techniques and lack of knowledge, as well as mixed input quality and poor information, may be factors limiting uptake of newer farming methods, other factors may be more prevalent. Many issues are relevant: farmers state that they want improved traditional seed rather than costly annual hybrid seed. See final note from Vincent for longer summary of key points.

Questions: (may not manage to answer all of them…)

For farmers:

- Basic information: Land ownership / area? Gender? Crop types, credit/ Debt? Irrigation?
- What inputs do you use and where do you buy them? What output market channels do you use?
- Why? E.g. How much Choice, any Debt / link with collector, Price / Quality, transport? (try to understand nature of this relationship, levels of trust and valued information-sharing through these channels).
- Have you changed input sources? Output market channels? If yes, then why?
- Groups – any involvement with other farmers? If yes or no, would you see any value in that? E.g. credit groups; information sharing; access better market price if work together, etc.?
- Do you link on issues related to farming with:
  - CSOs or networks
  - village or village tract committees and leaders
  - political links – local political party representatives or other channels?

For Traders, collectors, input retailers, unions / associations:

- How do you engage farmers? (i.e. marketing strategy and outreach)
- Is the relationship sustained over time? If they have a close relationship, what is important in this relationship and what additional embedded services are included (e.g. credit, trust, risk-sharing; technical information, personal connection including ethnic group)?
- What interaction do you have, if any, with farming groups or village structures?
- Do you participate in any business group or association? What activities does this include (e.g. information-sharing; training; policy discussion and advocacy)
- Are you seeing any change in government policy that affects your business? If yes, how might you (or your association) interact with government to take advantage of the opportunity or mitigate the risk?
- Do you engage with women and men differently (e.g. more/less; different engagement approach)? If so, how?
Who to meet:

- Farmers in Project areas. First, focus on Pindaya (links with Focus Area C) but also elsewhere. Can informally try to meet farmers at existing project events or by asking in fields. We will not arrange formal village meetings as it takes too much farmer time and may damage project relationships. **At least 2 farmers in each of at least 8 sites.** Try to ensure that at least 30% of interviewees are women. Aim for variety: mixture of larger and smaller farmers. Near and far from main road.
- Collectors, retailers and traders, especially at the local level. For this, a limited number only. See existing interviews and project market assessments. **Aim for minimum 8-10 different interviews in total.** This will overlap with Focus area B) and potentially C) too.
A. Farmer choices
Overview: Initial research indicates fairly open markets at local level. Farmers have market information. But unpredictable output price changes, other risks, and wider vulnerability, affect farmer choice.
- Non-technical factors affecting input types and use; choice of output market channel
- Farmer-trader / retailer interactions
- Role of groups / cooperatives and potential value;
- Constraints / vulnerabilities: land access & certification, irrigation, credit, transport etc
- Local conflicts: land, water etc.
- Differences by gender, assets, ethnicity, area

B. National governance and related interests:
Overview: investigate national policy/practice in vegetable sector, reasons / incentives / power around it. Focus on a) pesticide and fertilizer, and b) vegetable import/export. Lack of support for / control over imports and exports exacerbates price volatility and hinders the development of export markets.
- Licensing and politics of input suppliers — who, why, how?
- Dominant trends of public/private interactions?
- Exports: political, personal, institutional barriers (avoid technical detail), government responses and engagement.
- Imports, relationship with prices (and policy-making interactions).
- Impact on local costs and market prices for farmers

C. Local government, power and engagement
Overview: local government changes, bottom-up planning, and potential advocacy / access points. Available information from key interviews and existing sources covers local structures, Pa-O SAZ, etc.
- Case of Danu SAZ and Pindaya Township; how the SAZ works, how it links with state, township, and village tract authorities and implications for smallholder farmers.
- Compare with other townships in the project area.

D. Local agribusiness mini-case studies
Specific local cases relevant to project and sector investment
- Processing: problems with drying plant (+ proposed Kalaw processing zone)
- Contract farming: Pepsi and Diamond Star

Research focus areas for data gathering

Other important issues (no more fieldwork)
- 4 levels of conflict
- Shan and SAZ power post-2015 elections
- Pa-O SAZ
- Environment
- Drugs
- Gender
- Differences between areas
- Relations between traders
- Market chains
- Farmer factors: land, water, credit
- Other processing or contract farming investments
- Market information
- Exports – barriers, etc
- Future scenarios
FOCUS AREA B National governance and related inputs

Overview:
At the national level: investigate policymaking in vegetable sector, looking for examples and explain reasons / incentives / power around it. Focus on a) pesticide and fertilizer, and b) vegetable import and export markets. Lack of support for or control over imports and exports exacerbates price volatility and hinders the development of export markets. Some local level interviews may also help, linking with Focus area A) and maybe C) or D). Points:

- Licensing and politics of input suppliers – who, why, how?
- What is the dominant trend? Productive public-private partnership, or policy capture by influential agribusiness, or lack of any government interest (or something else)?
- Exports: political, personal, institutional barriers (avoid detail of trade rules or markets), government responses and engagement. By land (Thailand / China) and by sea (other).
- Imports, relationship with prices (and policy-making interactions including rent-seeking), government responses.
- How does this affect local costs and market prices for farmers?

Questions: (may not manage to answer all of them…)

- Who are the major input (meaning pesticide, fertilizer) providers? How big, how politically connected, what personal links?
- What government regulations exist surrounding imports and licensing?
- Government (DoA) promotion of farmers’ own natural fertilizers: is there an overall policy and how does it relate to national level / input companies? Also, gov’t desire to limit foreign involvement and support national or local companies?
- Problems over quality control and information / packaging: how addressed?
- Local marketing, credit provision, links with retailers and brokers: any main patterns (see Focus area A)?
- What are the views of MFVPA / traders / trade associations over input-related concerns (quality, price, other)?
- And their views of import / export issues relating to government policy or interventions?
- What business / farmer sector engagement with government is there? Roundtables, influencing, pressure, trade groups, etc.?
- Imports: any policies? What control does government actually have over them given illegal flows?
- Exports: similarly – what engagement, support?
- Border area issues? Does government control border trade? If not, who does?

Who to meet:

- Government: in Yangon: For Pesticides regarding registration, import license, Plant Protection Department in Yangon and For Fertilizer (Formulation/ production and import license, product registration , Land Use Department in Yangon.
- DAI policy: Napyitaw? Who?
- Any specialists in Yezin U. (check Aye Kyawt).
- Companies: local office in AungBan; HQ in Yangon? Myat Su can follow pesticide company links.
- Traders of pesticides and fertilizers in AungBan? Brokers providing inputs (See focus area A) too).
What Holds Vegetables Farmers Back?
Conflict, Governance and Markets Assessment
Making Vegetable Markets Work for Smallholders Program

- Market traders in Yangon who know links between prices and import/export trends.
- International advisers, other knowledgeable informants.
- State, district, township government? Explore relevant intervention?
- NGOs/CSOs

Aim for at least 8 national level interviews and 10 local level interviews. May overlap with other sectors.

FOCUS AREA C Local Government, Power and Engagement Focusing on Danu SAZ and Pindaya Township

Key points:
- local government changes, bottom-up planning, and potential advocacy/access points. Key interviews as main research method.
- Focus on Danu SAZ and Pindaya Township: how the SAZ works, how it links with state, township, and village tract authorities and implications for smallholder farmers. (this provides an accessible area case study)
- Existing sources covering local structures (e.g. TAF reports), Pa-O SAZ (e.g. interviews on 5 Feb), etc. can be used for final summary - do not need more detail now.
- Compare with other townships in the project area.

Questions:
- How does the new SAZ work and how does it link with Pindayatownship? (also union and state, district, village tract – how linked)?
- What changes have taken place since the SAZ started? Does the SAZ support or affect vegetable farmers and how? For example: land, water, inputs and markets, government investment (e.g. credit, roads, irrigation), private sector investment, extension services?
- How about other changes in townships and village tracts? Have they affected services, information and extension for farmers?
- Public-private linkages? Include development plans, processing, transport, contract farming, credit?
- Planning and budgeting: what changes, what a) influence and b) control over budgets does SAZ have? How does SAZ work with Township GAD or management committee?
- DoA, Rural Development Department – how do they link with township, SAZ, village tract?
- Bottom-up planning: Do villages/tracts/farmers engage in planning? What has changed as a result with plans or budgets?
- Groups and associations: what exists for farmers, traders, or others?
- Farmer groups/advocates/influencing: do farmers, traders, agricultural businesses, or groups including NGOs or CSOs influence policy of SAZ or township? (explore all influences).
- Politics: what parties, who controls?
- Do farmers/villagers/traders have information on township and SAZ policy?
- Other big factors in Danu SAZ: mining? Military or militia? Sources of revenue for SAZ.
- Is Pindaya different from other townships in the project area?
Who to meet:
Already done overview meetings. Now, focus on Danu/Pindaya, especially identified key informants (not general survey of all stakeholders) with enough breadth to ‘triangulate’ / check data from more than one source: Danu SAZ; Township – GAD, RDD, others recommended; informative business leaders; CSOs/NGOs; village elders; trade associations / traders; farmers.
Aim for at least 10 interviews. (some may overlap with other focus areas)

FOCUS AREA D: Local agribusiness mini-case studies.

Key points:
- This is a smaller focus area, using investigative journalist style research methods including interviews (without damaging project relationships!)
- 2 Specific local cases relevant to project and sector investment worth further investigation
  1) Processing: problems with drying plant (+ proposed Kalaw processing zone)
  2) Contract farming: Pepsi and Diamond Star
  3) Other similar examples for contrast
- Online research may be possible, as well as phone interviews, interviews in SSS and maybe Yangon.
- Need to check with Aye Kyawt first before interviewing people at the Veg processing plant. See existing report from market review, their links with farmers etc.
- May meet some other processing plants or contract farming businesses too e.g. tomato juicing.

Questions:
1. Cabbage Processing
   To meet / interview: Factory managers (check with Aye Kyawt first); local community members? Possibly local township officials. Also to investigate with local traders? Possibly Myanmar Belle Company in Yangon.
   - Who owns and runs the plant and the parent company? (see existing data from review…)
   - Why did it close? It is open again?
   - Is it related to the local community and army intervention or not?
   - If yes, what were the problems with the community? What was the role of the army?
   - What do they think of government support for processing? Electricity supply? Land? Tax?
   - How do they link with local authorities? Township especially…
   - What is the scope for further sales on export / domestic markets?

2. Pepsi / Diamond Star
   To meet: Pepsi in Yangon? Diamond Star locally / Yangon? Other traders / local businessmen / government with knowledge of what happened and is happening. Other contract farming businesses?
   - See existing web-links. There is an ongoing Pilot of ‘atlantic’ potatoes for Pepsi. Diamond Star was key implementer (for inputs, extension etc.??) But according to local sources Pepsi switched to another provider. What happened and why?
   - Diamond Star’s view?
   - Pepsi’s view?
   - Who is now implementing?
   - Potato pilot farmers’ view?
3. **Other examples**
   - If meeting other processors as part of other research focus areas, ask about how they link with township authorities, how they get permission, etc. Also try to find out who owns the company, whether they are well connected politically etc.
Annex 4 Interview methods guidance

Summary

This section provides a short summary note explaining the interview methodology. It gives an overview of important aspects of interview approaches and behavior. The interview approach is semi-structured, meaning that the interviewers have a list of questions but do not need to follow specific wording or order and have the liberty to ask other questions that are likely to generate useful information. They do not need to follow exactly the same structure for each interview.

A rapid training session will aim to build a common approach, increase awareness of the overall issues being addressed, and counter any misconceptions. Interview role-playing will give practical experience. In the first round of interviews, the presence of an experienced interviewer will enable other interviewers to learn by doing.

Preparing for Interviews / Focus Groups

- Agree on who is conducting the interview. Normally there will be two or three interviewers. One person asks questions and at least one person writes notes. You can share the tasks so work out in advance who will do what part of the interview.
- Before each interview make sure that the interviewee agrees with the process and answer any initial questions that they may have.
- Inform Mercy Corps / the project manager where you are going, when you are going, and who is going.
- Follow the planned list of interviews and focus groups. However, the list may change over time.

Conducting Interviews / Focus Groups

- Make the environment relaxed if you can. Hold the discussion wherever the interviewee feels comfortable – outside, in a café, at their home, etc. Maybe offer some snacks or a drink if appropriate.
- Then begin with some easy, open questions. Maybe begin with everyday discussion (the weather, road conditions, etc etc.) to help people relax.
- Respect local cultural norms, especially with government staff.
- Consider language. If possible interviews should be conducted in the language that the interviewee is most comfortable with. This has implications for translation.

Explain that the discussion is part of an evaluation. Make the following points:
- Explain that a team is conducting informal interviews with many people in order to support the work of Mercy Corps with their partners (at the local level, people may not know Mercy Corps).
- The work has government permission.
- The names of people interviewed will not be given in the final research report.
- The report is to help Mercy Corps and partners improve in future by designing support for small vegetable farmers that reflects the context in which they are working. So all information is welcome.
- We are impartial.
- We are interested in problems as well as successes. It is hard to learn much from good news!
- The interview will last about an hour.

- After that, maybe start with a simple question asking about the interviewer’s work or responsibilities.
- Sometimes it is not possible to interview one person as other people join them. Don’t worry too much if this happens.
- Be flexible. Obviously, interviewing a senior leader or official will be different from interviewing a group of farmers.
- You can ask the questions in any order. Try to build a conversation. If an answer is interesting then you may want to ask follow-up questions in order to find out more.
- Be happy to listen to whatever the interviewee wants to say. Sometimes they say interesting and unexpected things. At the same time, you have to try to make sure all of the questions are answered during the interview.
- If you think that a question is not appropriate then see if you can ask it in a different way. You do not need to stick to exact words but can change them depending on the context.
- Use whatever language works best.
- Think of ways to ask questions: for example, “someone told me that…….. Is it the same in this village?” Or ‘How is the situation concerning xxxx different from a few years ago? How may it change in future’
- Respect the respondent’s pace if they talk slowly and do not be afraid of pauses or silences.
- But try to keep to the topic if the interviewee is trying to talk about something different instead.
- Interviewers should not judge what respondents say. Be careful not to ask leading questions (Avoid questions like ‘Do you agree that…..’)
- If people do not answer the question, try asking it in a different way. Avoid suggesting answers.
- Listen carefully to all answers. You can ask more questions to obtain additional information if an answer is not complete.
- If a reply is not clear, it is OK to check. You can ask: ‘So are you saying that…..” or “Let me check if I understand you. Did you say that…..”

Taking notes

- Try to write all the important answers. If you have time, write other comments too as they may be useful.
- Sometimes it is possible to write quotes that seem important. They can be used in the report. If you do not have time to do this, no problem!
- If the person taking notes does not understand the answer, then try to ask for more explanation.
- You can also record interviews if that helps although you must ask the permission of the interviewee. In my experience, people are less happy to talk openly if they are being recorded.
Ending the interview

- When all topics have been discussed, ask the respondent if he/she has anything to add.
- Ask if we should interview anyone else on the topic. Sometimes this leads immediately to interesting discussions.
- Interviewers should thank the respondent for participating and explain again how the rest of the project will proceed.

Following up

- Immediately after the interview, try to write down your impressions and any things that stood out.
- Write up the notes into the template as soon as possible. Add any extra thoughts or ideas.

Further notes for focus groups

A focus group is a group discussion on a particular topic organized for research purposes. This discussion is guided, monitored and recorded by a researcher (sometimes called a moderator or facilitator). Focus groups follow a similar informal format but the process is a little different. The aim is to ask fewer questions and to let the group discuss the issue. It is better if they talk as a group than if they only talk to the interviewer. This takes some planning in advance.

- Try to arrange to sit in a circle or a similar shape so that all people can talk.
- The best size for a focus group is six to eight participants (excluding researchers), but focus groups can work successfully with as few as three and as many as fourteen participants.
- Think about the group dynamics. Often one leader will talk more than the others so it may be important to ask other people for their views.
- Sometimes it helps to divide into two groups, especially men and women, so that women get a chance to speak.
- Explain that you are interested in different views. If only one or two people are speaking, it may help to invite other people to talk too.
- If the moderator is comfortable and natural, participants will feel relaxed.

Security

- No serious concerns are expected but simple steps should be followed.
- Make sure that you manager knows where you are going every day.
- Do not travel at night. Make sure you leave enough time to return before it is dark.
- Only use recognized drivers.
- Travel and conduct interviews in a pair or more, never alone. Keep your mobile phone charged.
- Follow Mercy Corps security advice at all times.
More Information

If you are interested in more detail, start with these pages:


http://www.sswm.info/category/planning-process-tools/decision-making/decision-making-tools/gathering-ideas/focus-groups

There are further links to follow up listed on these sites. Or search online for ‘focus groups’ or ‘semi-structured interviews’ or ‘social science research methods’ and follow anything you find interesting.
# Annex 5  Sample interview template

<table>
<thead>
<tr>
<th><strong>Detail</strong></th>
<th><strong>Note</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Answer every line. If so answer is possible, explain briefly why.)</td>
<td></td>
</tr>
</tbody>
</table>

## Background information

<table>
<thead>
<tr>
<th>Interviewers’ names</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date and time</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>Number of interviewees</td>
<td></td>
</tr>
<tr>
<td>Interviewees’ names (if known)</td>
<td>No need for name if considered sensitive</td>
</tr>
<tr>
<td>position, organization, gender</td>
<td></td>
</tr>
</tbody>
</table>

## Interviewees’ status / role

<table>
<thead>
<tr>
<th>Select one or more:</th>
<th>Respondents may have more than one role. Explain if necessary.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Select one or more:</td>
<td></td>
</tr>
<tr>
<td>- Official in state or national level</td>
<td></td>
</tr>
<tr>
<td>- Official in township</td>
<td></td>
</tr>
<tr>
<td>- Local village / village tract official</td>
<td></td>
</tr>
<tr>
<td>- Private sector – trader, seller, etc.</td>
<td></td>
</tr>
<tr>
<td>- NGO / CBO</td>
<td></td>
</tr>
<tr>
<td>- INGO / donor</td>
<td></td>
</tr>
<tr>
<td>- Farmer / farmer group</td>
<td></td>
</tr>
<tr>
<td>Other (state, e.g. journalist, elder, priest)</td>
<td></td>
</tr>
</tbody>
</table>

## Main Questions  (divide into separate categories etc.)

1. **(Introduction) – Can you explain your role?**

2. **What steps might enable vegetable farmers to get a better price for their vegetable crops?**
<table>
<thead>
<tr>
<th></th>
<th>Detail</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Research has identified access to good quality and affordable pesticide and fertilizer as an issue. Do have any views on how to address this?</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>What barriers might need to be tackled in order to make these changes?</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>What barriers limit farmer access to low-interest / affordable credit and what steps could be taken to address them? Is it an important issue?</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>A question about market access and traders. What could help farmers negotiate the best price? And would some interests try to block these steps? (or ask who are the most powerful market traders)</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Recent changes mean that people have more freedom to form groups, like unions or farmer groups. Is this happening at all, and does it help farmers?</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>What government policies aim to address the vegetable farming sector? What is the priority?</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Have recent changes made a difference to how local government works and does that have an impact on vegetable farmers? For instance, township development committees, or the state parliament, or the Pa-O SAZ</td>
<td></td>
</tr>
<tr>
<td>Detail</td>
<td>Note</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>(Answer every line. If so answer is possible, explain briefly why.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Final Questions**

Any further points raised

Anyone else interviewees think that we should meet

**Further Information to add after interview**

General impression - Were the interviewees comfortable or reluctant to speak? Was the environment relaxed?

Any questions need to add or revise for future interviews?

Security issues etc.

Other points