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The U.S. Government's Global Hunger & Food Security Initiative

Food Security Policy Project Research Highlights
Myanmar

December 2017 #10

RURAL OFF-FARM INCOMES IN MYANMAR'S DRY ZONE

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INTRODUCTION

This research highlight presents findings on key features of rural off-farm work and incomes in Myanmar's Dry Zone. It is based on analysis of data collected by the Rural Economy and Agriculture in Dry Zone (READZ) survey in 2017. READZ surveyed 1578 households in four townships: Budalin Township (Sagaing Region), Magway and Pwintbyu Townships (Magway Region), and Myittha Township (Mandalay Region).

For this study, we define off-farm income as income originating from any work or activity that individuals perform away from their own household's farm – thus it includes agricultural work for pay. We divide sources of off-farm income into two categories: "employment" and "self-employment". Employment refers to any activity earning a wage or salary, and includes both temporary casual labor ("wage work") and steady longer-term employment ("salaried work"). In contrast, "self-employment" refers to any off-farm activity that remunerates the individual in the form of profits from sales of goods or services. This includes all types of non-farm enterprise (including trade, retail, crafts, and services) as well as self-directed resource extraction activities (fishing, wood collection, etc.).

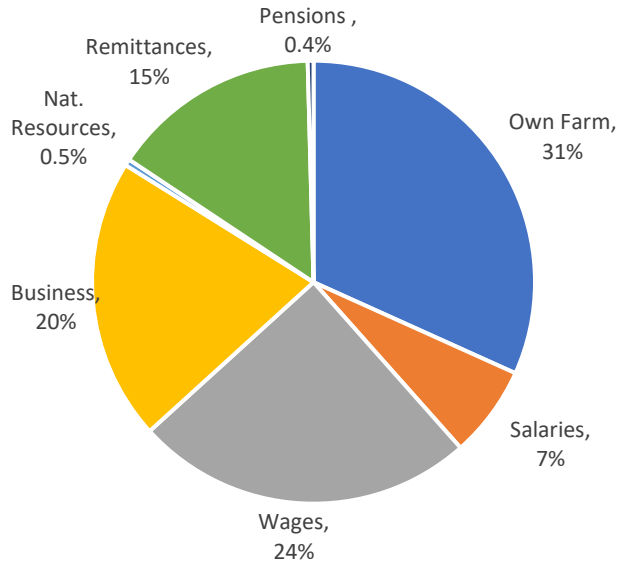
Our results highlight the diversity of the off-farm economy in the Dry Zone and the growing reliance on off-farm income sources among rural households. We present our results in three parts. First we provide an overview of off-farm incomes in the Dry Zone. Second, we analyze the details of rural employment in greater detail. Third, we analyze patterns in self-employment.

I. OVERVIEW: IMPORTANCE OF OFF-FARM INCOME

Off-farm activities constitute a significant source of income

The Dry Zone is predominantly a farm-based economy, but significant shares of inhabitants make a living by working off-farm. Only 31% of total income generated in the Dry Zone economy comes directly from farming (Figure 1). Wages from casual work generate a quarter of all incomes (24%), and salaries a further 7%, highlighting the importance of off-farm employment. A fifth of all income is generated by self-employment in off-farm enterprises (20%).

Figure 1: Share of total income, by activity type



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Remittances account for 15% of all income generated in the Dry Zone rural economy, highlighting the important role played by migrants in supporting household members they leave behind. Although remittances are a form of off-farm income, they are not generated within the rural economy of the survey area. Migrants and remittances are therefore excluded from measures of employment and self-employment in the remainder of this brief.

Natural resource extraction activities generate only 0.5% of all incomes, but are often practiced on a non-commercial basis, and may still make important contributions to livelihoods, particularly for households at the lower end of the income distribution.

Agriculture remains central

Agriculture remains at the center of rural economic activity. Although off-farm businesses and employment generate a large share of income in the rural economy, these activities are often agriculture-related.

Figure 2: Primary and secondary occupation of working age adults

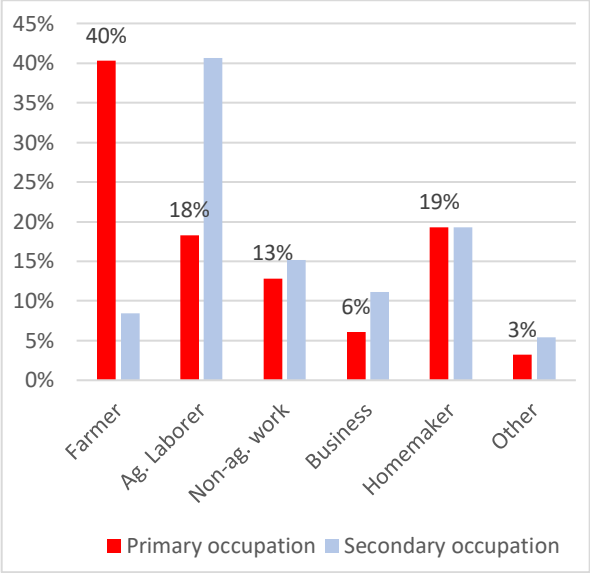


Figure 2 shows that 58% of all working-age individuals (men and women) consider either farming or agricultural labor to be their primary occupation. Furthermore, agricultural labor is by far the most commonly reported secondary occupation. In contrast, employment unrelated to agriculture accounts for only 13% of primary occupations, and 15% of secondary occupations, and self-employment in non-farm enterprises barely accounts for 10% employment in either category.

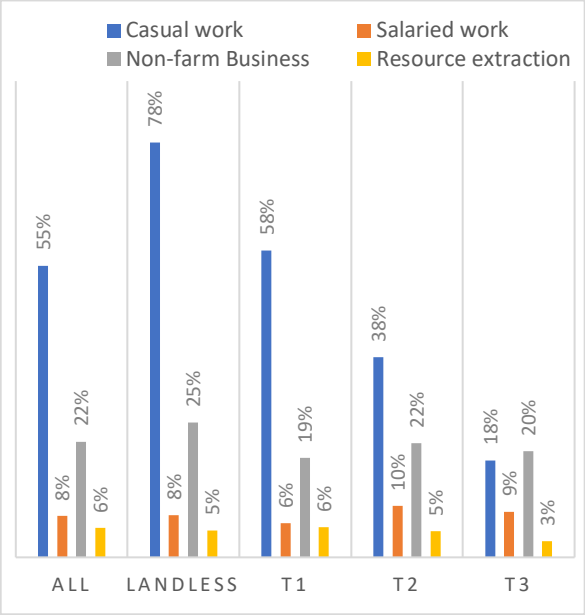
Most households engage in work off-farm

A high proportion of rural households engage in off-farm income generating activities. More than half (55%) engage in casual work, and nearly a quarter (22%) run a business. Salaried work is relatively rare: only 8% of households have a member with steady employment. Only 6% of households engage in resource extraction activities (Figure 3).

Propensity to work off-farm varies with size of landholding. Households with limited land are most dependent on informal, off-farm income sources. The share of households engaging in casual labor decreases sharply as landholding size increases: landless households are by far the most likely to engage in casual work (78%). This rate drops to 58% among the third of households with the smallest landholdings (T1), 38% in the second landholding tercile (T2), and 18% in the largest landholding tercile (T3). Interestingly, landless households are most likely to run a business (25%).

Other differences are less pronounced. Wealthier households (T2 and T3) are slightly more likely to have steady employment than landless and T1 households. Conversely, households in the top landholding tercile are the least likely to engage in resource extraction (3%).

Figure 3: Shares of households participating in off-farm employment vs. self-employment, by landholding group[1]



[1] Note: Percentages represent households with at least one member who engaged in each off-farm activity within the past 12 months. T1, T2 and T3 refer to landholding terciles (T1 smallest land areas, T3 largest).

II. EMPLOYMENT: LONG-TERM SALARIED WORK AND CASUAL WAGE WORK

Most employment opportunities are casual

The Dry Zone has a thriving labor market, with 60% percent of households having at least one member participating in casual or long term off-farm employment. However, as shown in (Figure 3), the vast majority engage in casual work, rather than salaried work which generates steadier incomes. This is most pronounced among households with little or no land.

Casual work is mostly agriculture-related and seasonal

Casual labor is dominated by work on other farms, underlining the continued dominance of agriculture in the Dry Zone economy. Figure 4 shows that 82% of all casual labor is farm labor. All other categories of off-farm work total only 18% of casual labor, the most important being working in non-farm enterprises (mostly shops), followed by work as carpenters and stevedores.

Government employs over half of salaried workers

Figure 5 shows that 53% of salaried employment is government work (including 26% as teachers). Only 16% of long-term workers are employed in non-farm small and medium enterprises (SMEs), and 9% in factories.

Figure 4: Distribution of off-farm casual labor

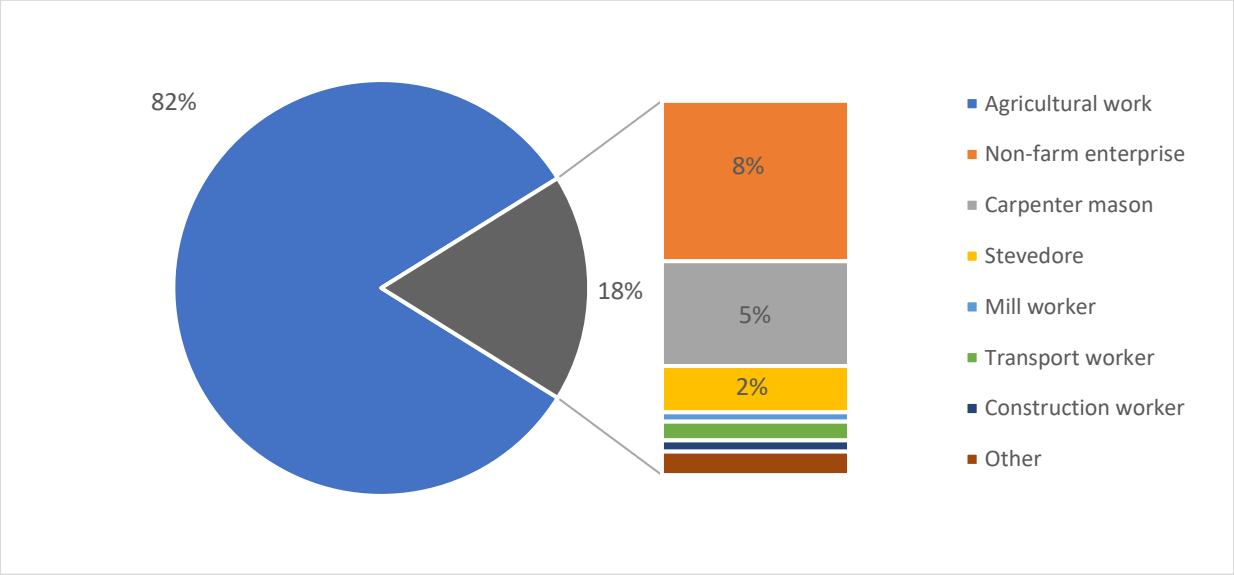
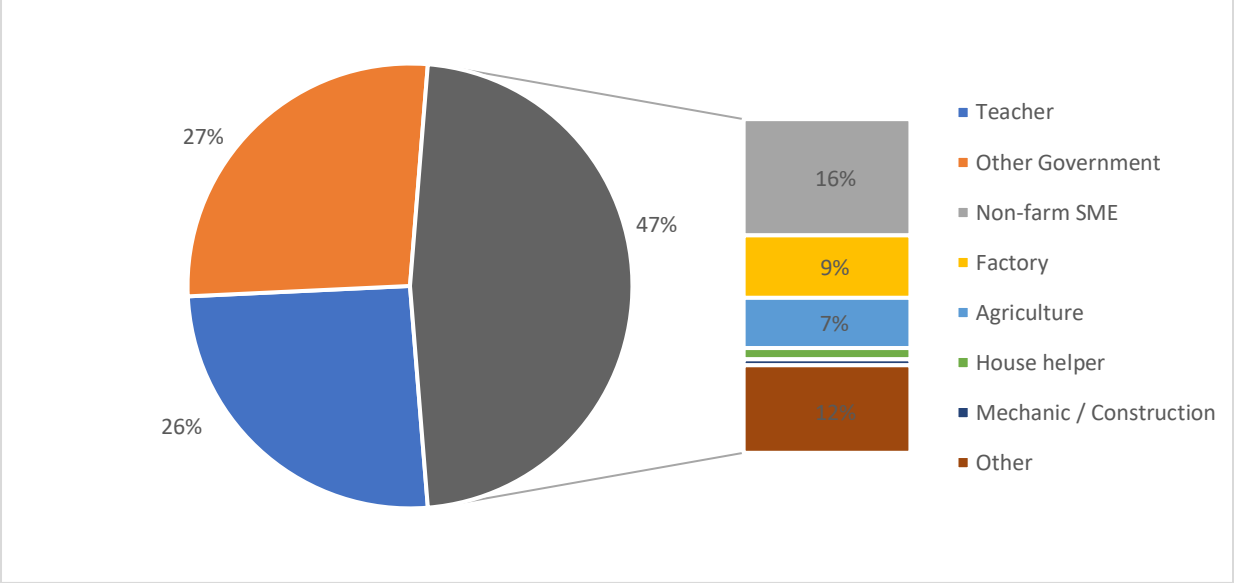


Figure 5: Distribution of off-farm salaried labor

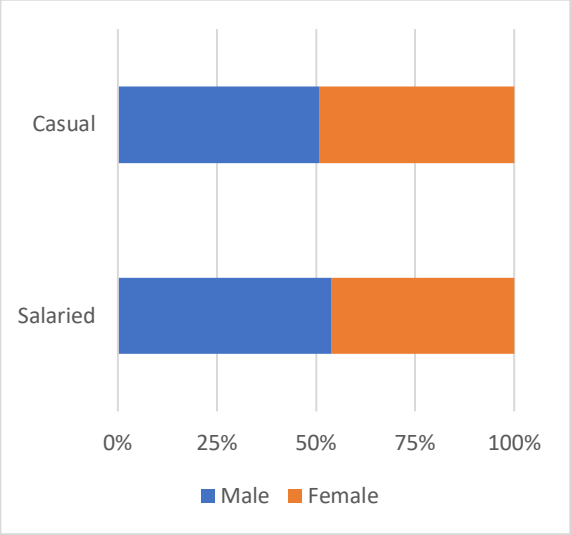


The farm sector generates very little salaried employment: only 7% of salaried workers work in agriculture. This partly reflects the fact that farm activities in the Dry Zone are mostly focused on seasonal fields crops which seldom warrant the hiring of permanent workers (as opposed to tree crops or livestock farming). Low levels of permanent agricultural work may also reflect relatively small average farm sizes.

Women and men work off-farm in similar numbers, but men earn higher wages

The gender distribution of employment in both salaried and casual labor is relatively equal, with numbers of jobs split almost evenly between men and women (Figure 6). However, they are not necessarily employed in the same activities. For instance, construction workers in the sample were exclusively male, while factory workers tended to be female (75%). Among salaried government workers, women largely dominate in the teaching profession (82%), but other roles are occupied mostly by men (69%).

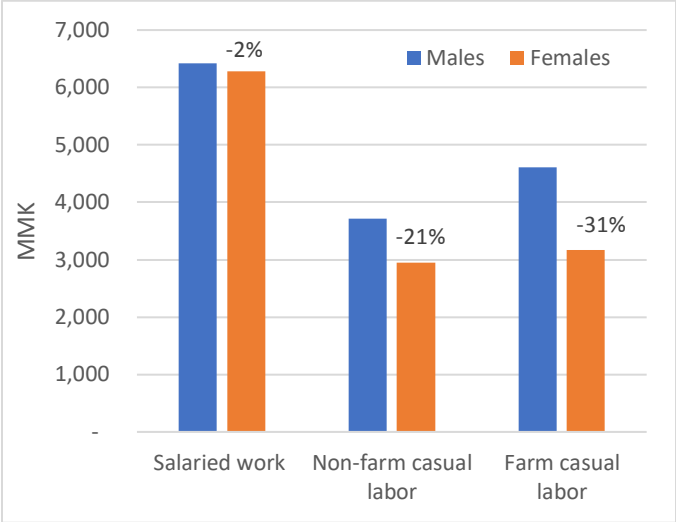
Figure 6: Share of casual and salaried workers, by gender



Although gender representation is roughly equal, incomes are not: women earn lower wages than men on average. The difference is only slight in salaried work, where the average daily wage for women is about 2% lower than for men, who earn MMK 6,400 ($4.75). The gender wage gap is much more pronounced in casual employment. Women's wages for casual non-farm work are 21% lower than those of men on average, while casual agricultural labor pays women 31% less per day of work on average (Figure 7). This wage gap may reflect differences in the type and/or intensity of tasks performed by men and women, but may also indicate that women's work is undervalued relative to men's.

These figures suggest that there is somewhat less gender disparity in wages for non-farm work than for on-farm work. This implies that growth in rural non-farm employment relative to agriculture might lead to greater gender equality, at least in terms of earnings.

Figure 7: Average daily wages of men and women workers[2]



III. SELF-EMPLOYMENT: NON-FARM BUSINESS & RESOURCE EXTRACTION

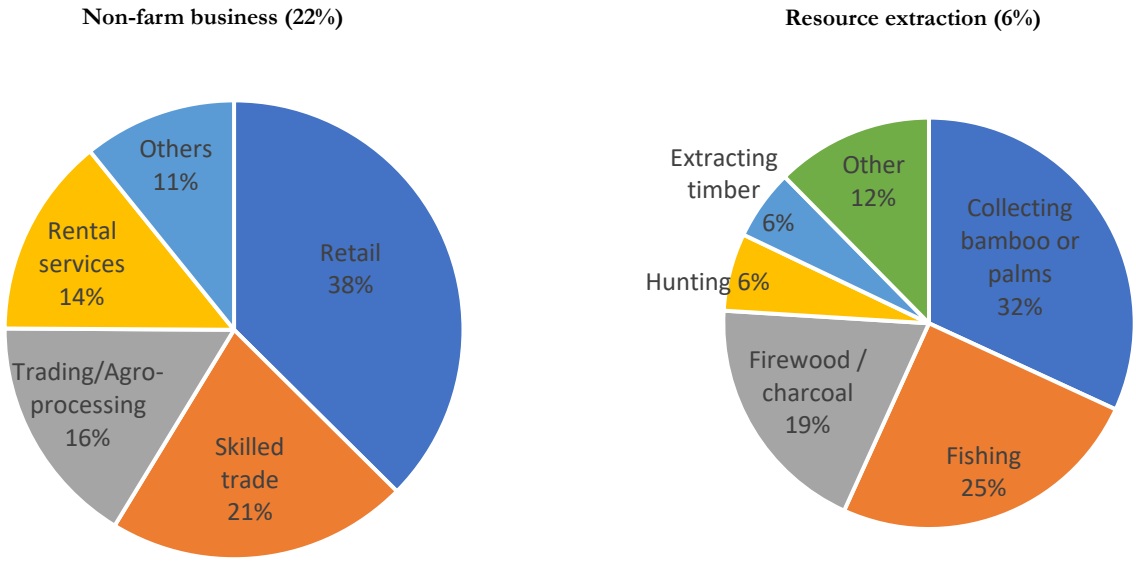
Participation is high, activities are diverse

As noted above, nearly a quarter of households engage in some form of off-farm self-employment.

The most common types of non-farm business are retail, followed by skilled trades, and trading and processing of agricultural goods. Figure 8 shows that 38% of all non-farm enterprises are retail businesses. Rental services businesses (renting out machinery for agriculture or transportation) account for 14% of the total, and are testament to an ongoing process of rapid rural mechanization.

[2] Note: For salaried workers, daily wage equivalents were estimated from monthly salaries, assuming 22 workdays per month.

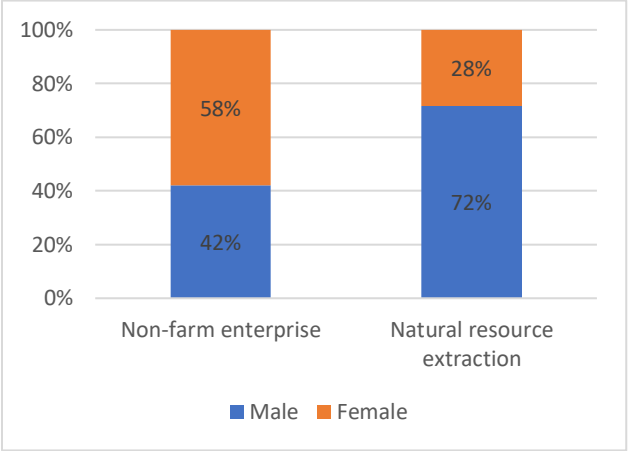
Figure 8: Categories of non-farm business and resource extraction activities



Resource extraction is dominated by the collection of bamboo and palms, which are commonly used as building materials. The next largest category is fishing, followed by firewood collection/charcoal making. The low share of households engaging in resource extraction activities likely reflects the limited natural resource base in the Dry Zone (e.g. few forests or wetlands). Nevertheless, there evidently remains a persistent demand for building materials, fuel and food sourced from the natural surroundings, particularly among poorer segments of the population

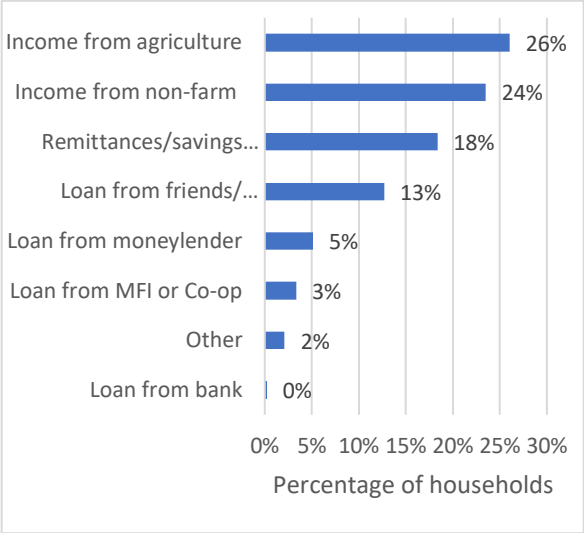
Both genders engage in self-employment.
Figure 9 shows that overall, 58% of non-farm enterprises are run by women, while 72% of resource extraction activities are performed by men. Certain self-employment activities tend to be gender-specific. Of those running a retail business, 77% are women. Skilled trades also tend to be gender specific (seamstresses tend to be women, carpenters tend to be men), but overall there are more women running that type of enterprise (60%). Hunting, fishing, cutting bamboo, on the other hand, are all strongly male-dominated.

Figure 9: Share of men and women participating in self-employment



Limited formal sources of business startup capital
One key point from these results is that non-farm incomes (considering both local non-farm activities and remittances together) are the number one source of investment capital in non-farm enterprises. Farm income and credit (all sources) occupy equal second place. Among credit sources, informal providers are much more common than formal (Figure 10). These results highlight the thinness of the rural credit market, potentially hampering growth, but also underline the importance of both agriculture and non-farm income sources in the development of the rural non-farm economy.

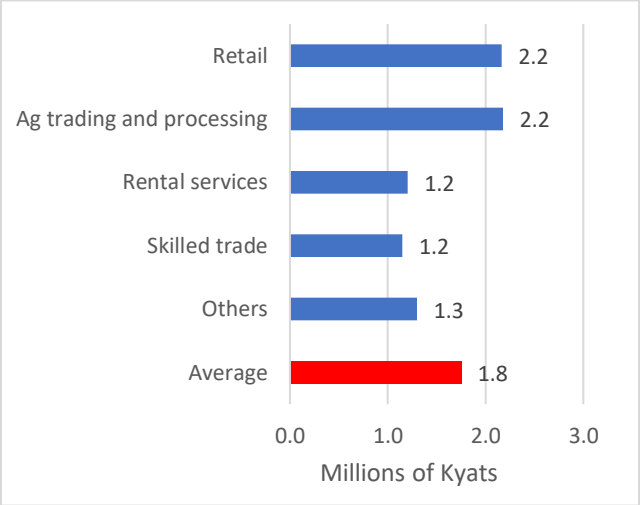
Figure 10: Main source of capital used for starting business



Business activities make an important contribution to household incomes.
Self-employment generates supplemental incomes for many households, who often engage in these activities on a seasonal basis. People who engage in resource extraction activities do so on average for 103 days in a year. Business-owners spend more time in their self-employed activity (222 days on average), mostly retailers who tend to operate year-round, whereas rental services and agro-processing are more seasonal.

Resource extraction activities generate only modest incomes in the Dry Zone. Over a third (38%) of the households engaging in natural resource extraction activities are not generating any cash, and use their extracted products in the household. This constitutes in-kind income, as resource extraction substitutes for expenditures on the market. Among the 62% selling their products, average yearly earnings range from just MMK 30,000 ($22) for firewood collection to just over MMK 0.5 million ($370) for hunting. Translated into daily wages, a day of work extracting natural resources generates an income of around MMK 500 ($0.37), which is well under the typical wage in agricultural work (MMK 3500; $2.60). This suggests that resource extraction is primarily a fallback option for supplementing income in low-earning months.

Figure 11: Average yearly net profits in non-farm businesses, by type



In contrast, self-employed ventures can represent a significant source of income. Figure 11 shows that yearly profits in non-farm enterprises average MMK 1.8 million ($1300). For comparison, the average household profit from paddy cultivation is MMK 169,000 ($125) per acre per season, or MMK 700,000 ($520) for an average farm of 4.1 acres.

Non-farm enterprises are growing rapidly
The majority of enterprises operating today were established during the past ten years (60%). The number of enterprises being established during that period increased year on year from just 3 businesses in 2006 to 38 in 2016 (Figure 12).[3]

[3] This only includes businesses still in operation at the time of the survey. Unfortunately, no data is available for businesses that stopped operating, regardless of their date of establishment.

Figure 12: Number of currently-operating enterprises established in each year, 2006–2016

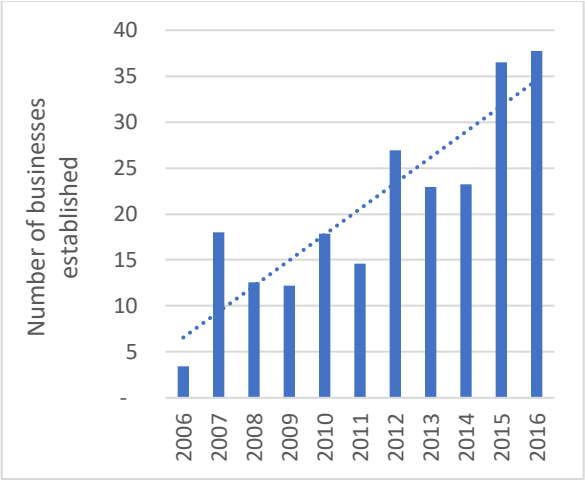
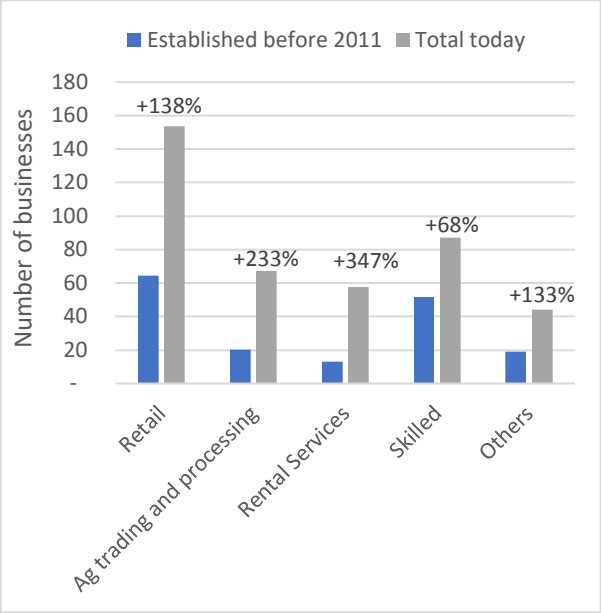


Figure 13: Number of currently operating businesses, by year established



The striking growth in enterprise numbers is driven primarily by businesses that meet local demand for goods and services. Figure 13 shows that in the five years between 2011 and 2016, the number of retail stores more than doubled, agricultural trading and processing businesses trebled, and rental services providers more than quadrupled.

The rapid growth in numbers of enterprises that meet local consumer demand (retail businesses) is indicative of increases in consumer spending power. The growth of agricultural processing and machine rental businesses is indicative of technological change in agriculture and downstream activities, as machinery is substituted for increasingly scare (or expensive) labor. Both of these observations suggest that rural transformation is now well underway in the Dry Zone.

At the same time, most of these businesses are self-operated micro-enterprises. The vast majority (81%) reported no spending on labor whatsoever, which echoes results from the employment section. Although business development is an encouraging sign of rural growth, the rural non-farm economy is not yet a major provider of jobs, other than to business proprietors themselves.

CONCLUSIONS

Our study offers the following important findings relating to off-farm incomes in the Dry Zone:

1. **Off-farm activities are a major source of income.** Only 31% of Dry Zone income is generated directly from farming; off-farm self-employment is equally as important. Non-farm enterprises account for 20% of income, and remittances 15%.

2. **Agriculture is central to rural employment.** Fifty-eight percent of working-age individuals consider farming or agricultural labor to be their primary occupation, and agricultural labor is by far the most important secondary occupation.

3. **Women and men work off-farm in similar numbers, but men earn higher wages.** The gender wage gap is most pronounced in casual employment. There is less gender disparity in wages for non-farm work than for on-farm work. 58% of non-farm enterprises are run by women.

4. **Non-farm enterprises are growing rapidly.** Since 2011, the numbers of retail stores more than doubled, agricultural trading and processing trebled, and rental services providers more than quadrupled. Non-farm income is the most important source of startup capital for these businesses.

5. **Most of businesses are self-operated micro-enterprises.** The vast majority hire no labor. The rural non-farm economy is not yet a major provider of jobs, other than to business proprietors themselves.

ABOUT THE AUTHORS

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FSP and this brief are made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the study authors, who are affiliated with Michigan State University, the Center for Economic and Social Development, and the International Food Policy Research Institute, and do not necessarily reflect the views of USAID or the United States Government. The brief was also supported with financial assistance from the Livelihoods and Food Security Trust Fund (LIFT), supported by Australia, Denmark, the European Union, France, Ireland, Italy, Luxembourg, the Netherlands, New Zealand, Sweden, Switzerland, the United Kingdom, the United States of America, and the Mitsubishi Corporation. We thank these donors for their kind contributions to improving the livelihoods and food security of rural people in Myanmar. We also thank Patricia Johannes for her editing and formatting assistance. The views expressed herein should in no way be taken to reflect the official opinion of any of the LIFT donors.

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Published by the Department of Agricultural, Food, and Resource Economics, Michigan State University, Justin S. Morrill Hall of Agriculture, 446 West Circle Dr., Room 202, East Lansing, Michigan 48824