

OFF-FARM EMPLOYMENT AND THE TRANSFORMING RURAL NON-FARM ECONOMY AROUND YANGON

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INTRODUCTION

This research highlight presents findings from the Myanmar Aquaculture Agriculture Survey 2016 (MAAS)¹ on the characteristics of off-farm employment and the rural non-farm economy in four townships close to the city of Yangon.

Two groups of village tract were selected to facilitate comparison of the impacts of aquaculture and agriculture on the rural economy: an ‘aquaculture cluster’, located in areas with high densities of fish farms, and an ‘agriculture cluster’ located in areas nearby where cultivation of paddy and pulses was the main form of agricultural production. This research highlight focusses on the characteristics of off-farm employment in the two clusters.

Off-farm employment is defined here as all the remunerative work that individuals perform away from their own farms. In the following analysis we distinguish between four main categories of off-farm employment: casual labor, long-term salaried employment, self-employment in non-farm enterprises (e.g., petty trade, transport services, handicrafts production), and self-employment in natural resource extraction (e.g., collecting firewood, fishing).

Casual labor can be further subdivided into agricultural labor (e.g., harvesting paddy), and non-farm labor (e.g., basic construction work). Salaried employment can likewise be divided into agricultural (e.g., guarding fish ponds) and non-farm (e.g., school teaching).

In keeping with the comparative approach adopted by MAAS, this brief focusses on the characteristics of off-farm employment in agriculture and aquaculture clusters,

¹ A full synopsis of the survey can be found at: http://fsg.afre.msu.edu/fsp/burma/Research_highlight_1_Met_hodology.pdf

and on gendered differences in employment opportunities and wage rates. It also presents evidence of transformation in the rural non-farm economy in both clusters

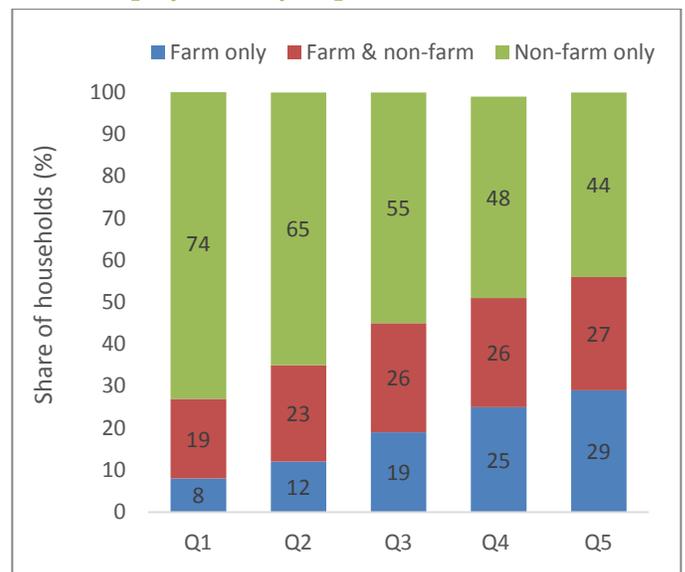
KEY FINDINGS

The Structure of Off-farm Employment

Off-farm employment plays a very important role in the livelihoods of households in all income classes, and is of particular importance for the poor. Seventy-eight percent of households in the sample engaged in off-farm employment of some kind.

For the purpose of analysis, households were ranked in order of their average expenditure per capita (a proxy for income), and divided into five equally sized groups, with the first (quintile 1) representing the poorest 20% of the population, and the last (quintile 5), the wealthiest 20%.

Figure 1. Household Participation in Farm and Off-Farm Employment, by Expenditure Quintile



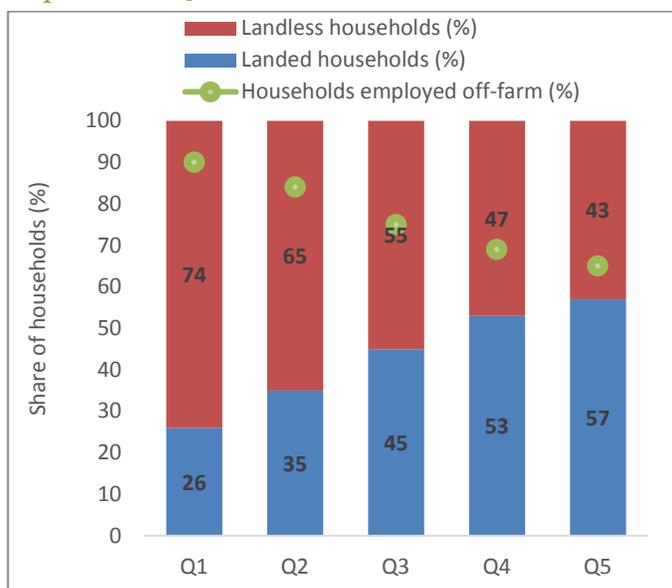
Source for all figures: Author, MAAS 2016.



Households in quintile 1 are overwhelmingly dependent on off-farm employment. Seventy-four percent of households in this group have no other source of income, and just 8% are fully employed on their own farms. Even among the wealthiest quintile, only 29% of households derive their entire incomes from own-farm employment, and 44%, depend exclusively on off-farm income sources (Figure 1).

Over half (56%) of all households in the sample possess no agricultural land, and are thus bound to work off-farm. The relationship among landownership, expenditure, and off-farm employment is illustrated in Figure 2.

Figure 2. Landownership Status and Household Participation in Off-Farm Employment, by Expenditure Quintile



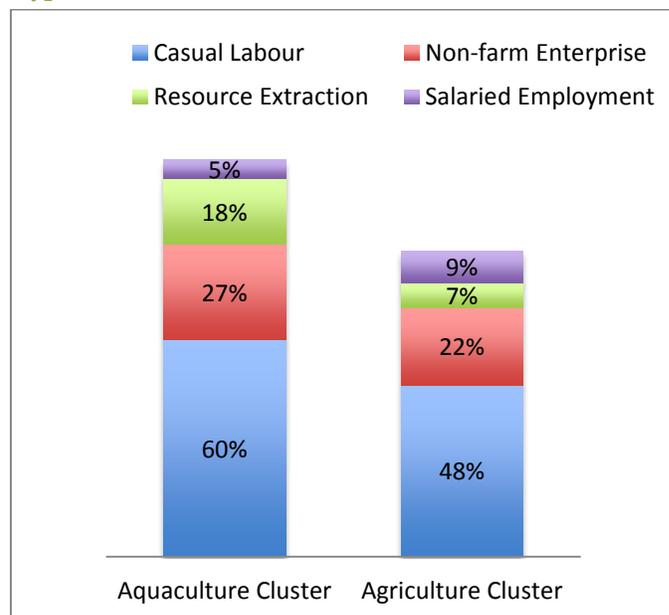
Landlessness and economic status are negatively correlated, but this relationship is not as strong as might be expected. Only 26% of households in expenditure quintile 1 own agricultural land. This share increases in each successive quintile, but even in quintile 5, only 57% of households own farmland.

Conversely, dependence on off-farm work falls as agricultural land ownership increases, but remains high. Some 90% of households in the poorest quintile of engage in off-farm work, but so do 65% of those in the wealthiest quintile.

As expected, casual labor is by far the most common form of off-farm employment in the village tracts surveyed, followed by self-employment in non-farm enterprises.

Fish farming appears to create more opportunities for enterprises in the fish value chain and to generate greater demand for hired labor on and off-farm, than crop-based agriculture. Higher shares of households in the aquaculture cluster engaged in casual labor and non-farm enterprises than in the agriculture cluster - 60% and 27% versus 48% and 22%, respectively (Figure 3).

Figure 3. Share of Households Participating in Off-Farm Employment, by Cluster and Employment Type



The rate of landlessness is higher in the aquaculture cluster than the agriculture cluster (58% versus 51% landless). This may also contribute to the likelihood of individuals in the former seeking off-farm work.

There are gendered differences in the types of off-farm employment performed by women and men. Women are more heavily represented in non-farm salaried employment than men, while men tend to engage more in non-farm casual labor and natural resource extraction activities. Casual agricultural labor accounts for a similar share of men's and women's off-farm employment (Figure 4).

Employment Duration

As expected, the average annual duration of off-farm employment varies by employment type, ranging from approximately 10-11 months per year for salaried employment and self-employment in non-farm enterprise, to 7-8 months for casual labor, and 4-5 months for natural resource extraction (Figure 5).

Figure 4. Share of Individuals Participating in Causal Labor and Salaried Employment, by Gender

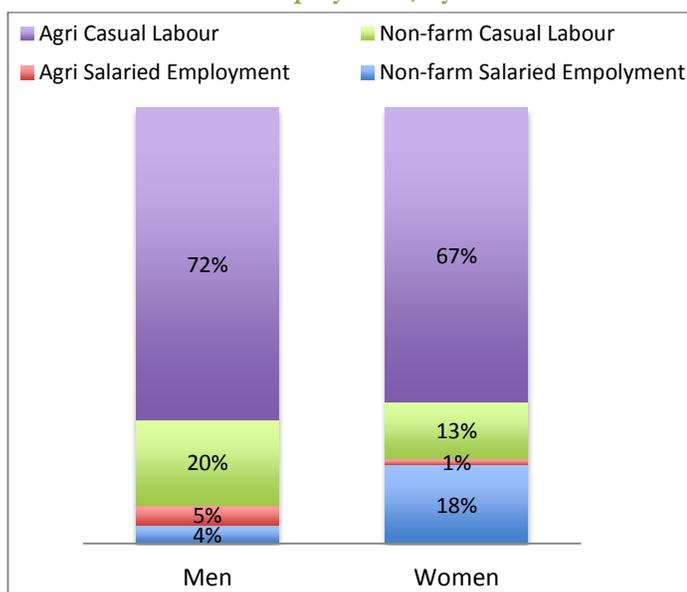
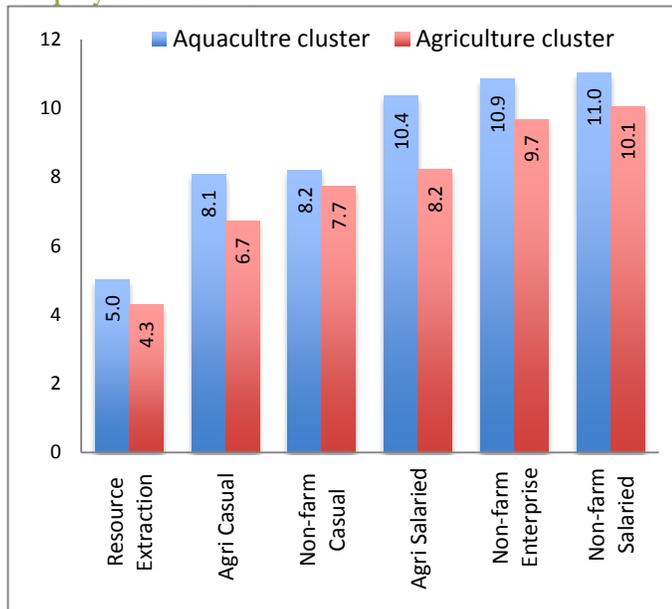


Figure 5. Mean Annual Working Months, by Type of Employment and Cluster

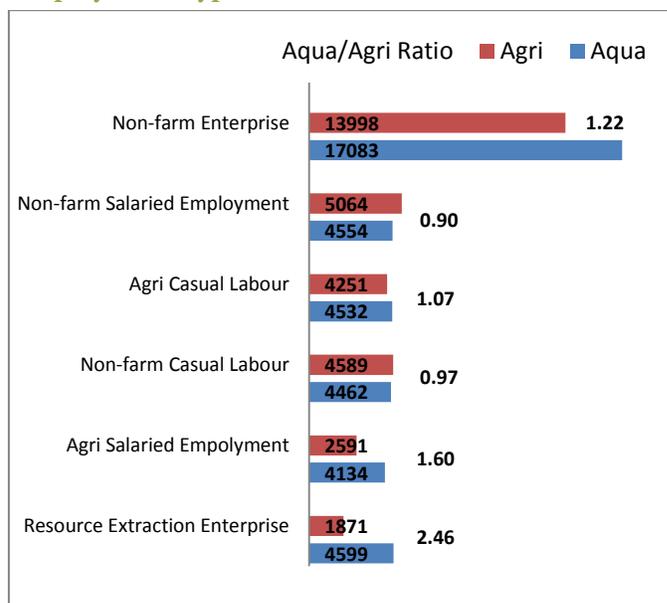


Employment opportunities linked to fish farming appear less seasonal than those in agriculture. Work in all categories of employment was available for close to one month longer in aquaculture cluster village tracts than in the agriculture cluster (Figure 5). When employment is computed in terms of average annual days worked per person, the gap between clusters narrows for casual labor, but remains substantial for non-farm enterprises, salaried work, and resource extraction.

Off-farm Incomes

Labor markets appear well integrated in the areas surveyed. Average daily incomes from causal farm and non-farm labor and non-farm salaried employment varied little between agriculture and aquaculture clusters, standing at approximately MMK4500-5000 (\$3.75-4.15) (Figure 6).

Figure 6. Average Daily Incomes (MMK), by Employment Type and Cluster



However, salaried workers in the aquaculture cluster received a daily income 60% higher than those in agriculture cluster. This likely reflects high demand for permanent workers to tend fishponds in the aquaculture cluster.

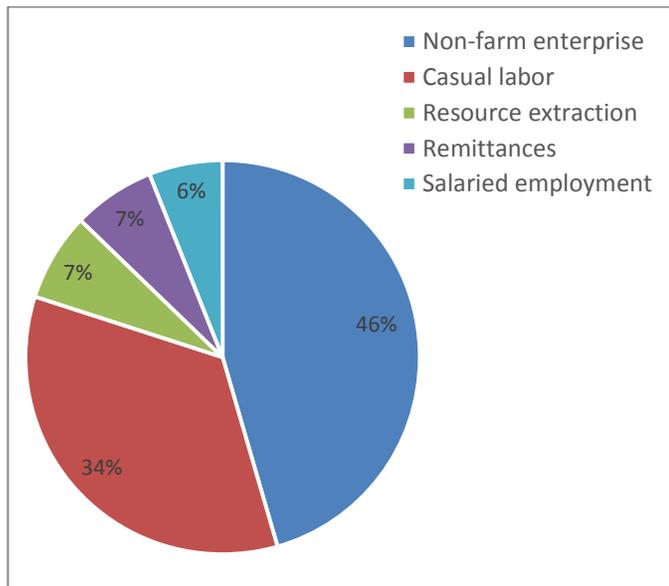
Resource extraction activities play an important role in seasonal income smoothing. Sixty percent of individuals who engaged in natural resource extraction also worked as casual agriculture labor, with most resource extraction activities taking place during the agricultural slack season.

The most important resource extraction activity in both clusters was small-scale capture fishing. Households in the aquaculture cluster received average daily incomes from resource extraction 146% higher than those in the agriculture cluster. This reflects the commercially oriented nature of fishing in the numerous rivers, canals and other water bodies found in the aquaculture cluster. In the agriculture cluster, wild fish were less abundant, and fishing was more strongly oriented toward subsistence consumption, with only catch surplus to household requirements marketed.

In both clusters, self-employment in non-farm enterprises was far better remunerated on average than any other type of off-farm employment, ranging from MMK 13,998-17,083 (\$11 - 15) per day. Mean income figures disguise a large amount of variation however. Dividing non-farm enterprises into terciles based on annual turnover reveals that businesses in tercile 1 (those with the lowest turnover) generated average daily incomes per capita of MMK 4135, while those in tercile 3 (those with the largest turnover) generated MMK 33,800 per person/day.

Remittances sent by migrants working outside the surveyed village tracts are another source of off-farm income. Figure 7 compares the shares of total off-farm income contributed by all income sources, including remittances, across both clusters.

Figure 7. Percentage Contributions to Total Off-farm Income, by Source

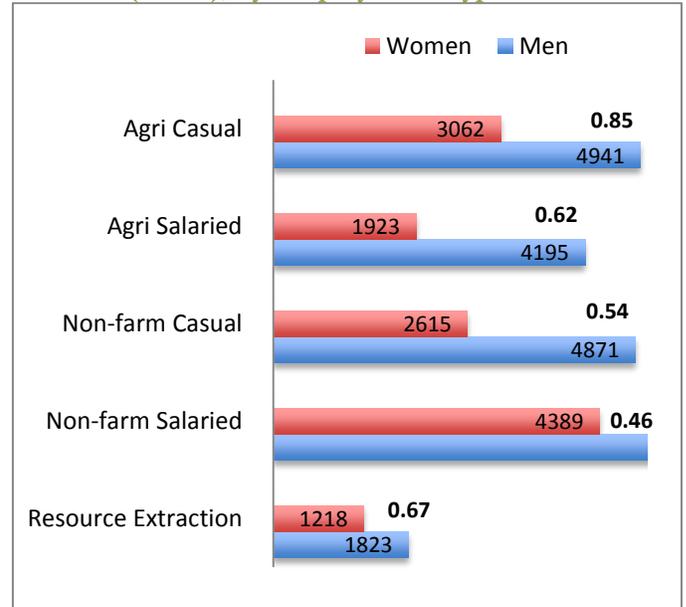


Non-farm enterprises contributed 46% of the value of all off-farm income, followed by casual labor (35%). The contribution of remittances to annual off-farm incomes was similar to that of salaried employment and natural resource extraction, at around 7%. Thus, although remittances are important for receiving households, their total value is low in comparison to that generated by the wage work and enterprise components of the rural non-farm economy.

The survey revealed a very large gendered wage gap. The ratio of women's to men's wages ranged from a little as 0.46 for salaried agricultural employment (i.e., women

earned 46% of the male wage on average), to a maximum of 0.85 for non-farm salaried employment (Figure 8).

Figure 8. Men's and Women's Average Daily Incomes (MMK), by Employment Type and Cluster



Although this gap may reflect gendered specialization in different forms of work (e.g., planting versus harvesting), and in modes of payment (e.g., piece rate versus day rate), the pervasiveness and size of the gap suggests that women's work is consistently undervalued relative to that of men.

Non-farm Enterprise Growth

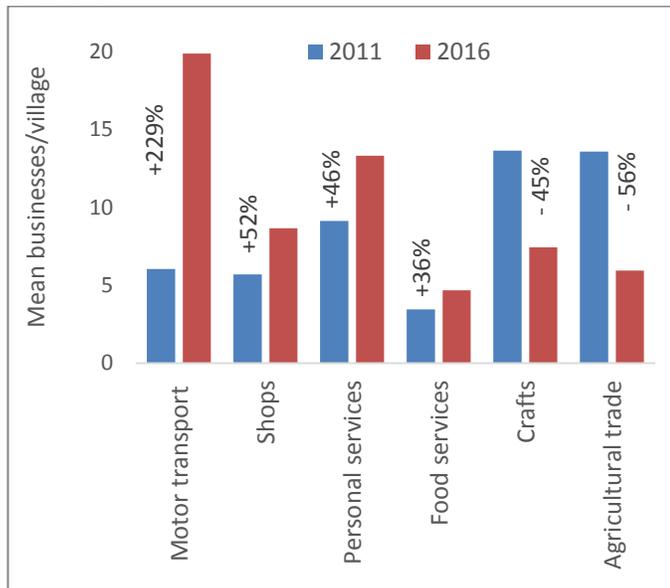
The growth and transformation of the rural non-farm economy is revealed by rapid change in numbers of non-farm enterprises in sampled villages, from 2011 to 2016 (Figure 9).

Inhabitants of the villages surveyed are increasingly mobile and well integrated into markets, and seem to be spending more of their growing incomes on discretionary purchases, contributing to the rapid increases in numbers of rural non-farm enterprises.

The most significant enterprise growth was in motorized transport services, which more than tripled over five years. Motorbike taxis are the most important of these, and were available in 75% of villages in 2016.

Improving transport services have facilitated greater human mobility. Motor vehicles edged ahead of boats between 2011 and 2016 to become the main mode of transport used to reach nearby towns and Yangon, causing average journey times to fall by 20-30%.

Figure 9. Growth in Non-farm Enterprise Numbers, 2011-2016



There was brisk growth in the number of shops in surveyed villages, most notably electronics and agricultural input stores, which grew 157% and 114% respectively. Numbers of general village stores increased 53%, and attained almost total ubiquity, being found in 96% of villages surveyed.

Significant increases in numbers of businesses providing food away from home (e.g., restaurants and tea stalls) and personal services (e.g., beauty salons and hairdressers) were also reported (up 46% and 36% respectively).

Numbers of craft-based enterprises (e.g., thatching, weaving), and some forms of agricultural trading (most notably livestock trading) declined by 45% and 56% respectively. This may be linked to improving transport services, which allow producers to market products more easily themselves, as well as to the improved availability of manufactured goods from an expanding retail sector.

The drop in the numbers labor-intensive crafts activities may also reflect the increasing opportunity costs in the face of rising real wages, which jumped by 32% between 2013 and 2016 alone in the village tracts surveyed², contributing to demand for goods and services from rural non-farm enterprises.

Provision of basic infrastructure remains poor however, suggesting substantial scope for investments to stimulate further growth in the rural non-farm economy.

For example, the average distance from surveyed communities to the nearest paved road was 3.1 miles; 68% of villages could not be accessed by car during monsoon season; and 88% of villages had no access to public electricity.

CONCLUSIONS

- 1) Off-farm employment is extremely important, even among the wealthiest households and largest landholders. It provides work of 78% of all households surveyed, and is the sole source of earnings for 56% of households.
- 2) Aquaculture appears to create additional off-farm employment opportunities compared to areas dependent on paddy and annual crop cultivation, in terms of both employment duration and numbers of jobs created.
- 3) Off-farm labor markets in the areas surveyed appear well integrated, as indicated by similar wage rates across clusters, but there is a large gender disparity in the wages paid for comparable forms of work.
- 4) Remittances are important for receiving households in the village tracts surveyed, but their contribution to off-income is small in comparison to that of non-farm enterprises and wage labor. However, the labor shortages created by migration appear to drive up rural wages, benefitting individuals employed off-farm.
- 5) Significant improvements have occurred in transport services and travel times, geographical connectivity and human mobility within the last five years, but there is still much scope for infrastructure development that would accelerate these further.
- 6) The rural non-farm economy is growing quickly and restructuring in response to these stimuli.

² See Research Highlight #2 for details:

http://fsg.afre.msu.edu/fsp/burma/Research_highlight_2.pdf

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