

INCREASING INCOMES AND ASSETS IN LIFT-SUPPORTED VILLAGES 2014-2018

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May 2019



Evaluation &
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Studies



Livelihoods and Food Security Fund



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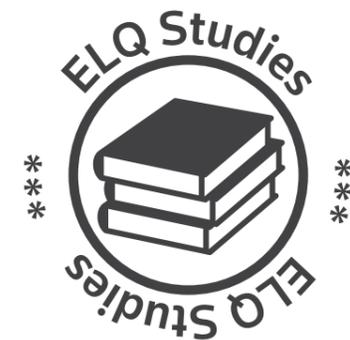
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DISCLAIMER

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PREFACE

LIFT is a multi-donor fund with the purpose of strengthening the resilience and sustainable livelihoods of poor households in Myanmar. LIFT was established in 2009 when it focused predominantly on rehabilitation work, supporting the recovery of households affected by Cyclone Nargis.

A second strategy 2012-2014 recognised the progress made towards recovery and emerging opportunities in the country and shifted towards a more development-oriented approach that prioritised increasing food security and incomes through non-farm income generating activities.

A major strategy revision was undertaken for 2014-2018. This phase was characterised by a regional approach to programming in the Delta, Dry Zone, Rakhine State and the Uplands that aimed to address major contextual variations in development across the country. The strategy was underpinned by LIFT's differentiated strategies intended to assist rural people 'step up', 'step out or 'hang in'. Recognising that progress towards food security did not specifically address significant nutritional deficits, particularly for women and children, LIFT explicitly included a stronger focus on nutrition. A new stream of work focused on migration was developed as part of the broader 'stepping out' strategy. There was also a shift towards private sector engagement through the financial inclusion and agriculture portfolios.

Under its 2014-2018 strategy, LIFT's overall purpose was to strengthen the resilience and sustainable livelihoods of poor people in Myanmar. LIFT's contributions to resilience are measured through four Purpose-Level Outcomes:

1. Increased incomes of rural households
2. Decreased vulnerability of poor rural households and communities to shocks, stresses and adverse trends
3. Improved nutrition for women and children
4. Improved policies and effective public expenditure for pro-poor rural development

These outcomes were achieved through LIFT's programmes that aimed, in combination, to deliver on the following Programme Outcomes:

1. Improved nutrition, sanitation and hygiene practices
2. Improved market access and market terms for smallholder farmers
3. Increased sustainable agricultural and farm-based production by smallholder farmers
4. Increased and safe employment in non-farm activities for smallholders and landless
5. Increased access to adequate and affordable financial services by smallholders and landless
6. Safeguarded access to, and sustainable use of, natural resources for smallholders and landless
7. Strengthened local capacity to support and promote food and livelihoods security
8. Generation of policy relevant evidence regarding pro-poor development

Gender and inclusion are integral parts to all interventions and LIFT seeks to promote positive impacts for women and gender equality.

At the end of 2018, LIFT had reached more than 11.6 million people, or roughly 33 per cent of Myanmar's rural population, and has been active in 247 of the country's townships.

As LIFT strives to be a collective and influential voice for innovation and learning, greater emphasis was placed on the generation of evidence and knowledge that can inform development policy and practice in Myanmar. When implementation of the 2014-2018 strategy began, LIFT developed a monitoring and evaluation for accountability and learning framework that, amongst other things, sets out the key evaluation and learning questions that LIFT seeks to address. These questions cover key aspects of LIFT's performance: relevance, effectiveness, sustainability, value for money, policy influence, and gender. They are intended to assess LIFT's performance and serve as tools to organise and synthesise LIFT's learning in relation to each of the key evaluation criteria.

In order to respond to the second ELQ: ***To what extent has LIFT contributed to strengthening the resilience of poor people in Myanmar and helped them to hang in, step up or step out?***, LIFT commissioned a series of three in-depth outcome studies, focusing on LIFT's contribution to each of the first three Purpose-Level Outcomes: income and assets, vulnerability and nutrition. These studies draw primarily on the LIFT Household Survey data from 2015 and 2017, complemented with qualitative data gathered from individuals in target communities and from LIFT implementing partners. The report that follows is one of the studies in this series.



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EXECUTIVE SUMMARY

Study purpose and approach

The study is one of three in-depth outcome studies commissioned to address LIFT's Evaluation and Learning Question (ELQ) 2: "To what extent has LIFT contributed to strengthening the resilience of poor people in Myanmar and helped them to hang in, step up and step out?"

The study takes a theory-based approach through which it explores the linkages laid out in LIFT's Theory of Change (TOC) related to income and assets to answer the following three research questions:

- What changes have there been to the levels, distribution, sources of and drivers of income, asset ownership, and poverty levels among households in villages supported by LIFT starting in 2015?
- What is the link between participation in LIFT-supported activities and changes to household income and assets, and what are the pathways through which these changes appear to occur?
- How do changes differ between households that received development assistance and households that did not, and to what extent are these changes likely to be attributable to the participation in development activities?

The study uses mixed methods: It is primarily an analysis of quantitative data using a panel of 2,249 households surveyed as part of LIFT's Household Survey in 2015 and again in 2017. It also integrates findings from a large qualitative study undertaken for the purpose of the studies related to ELQ2. The empirical strategy uses fixed effects regression analysis and a matched differences-in-differences approach.

Overall findings

The study found substantial positive changes to average household incomes over the two-year period from 2015 to 2017 with mean annual incomes increasing by 24 per cent in real terms. Substantial increases were seen in consumption expenditure and ownership of household assets, in particular durable household goods.

Average household debt increased by 32 per cent whilst the debt-income ratio – debt as a proportion of household income – saw a smaller increase of three percentage points over the two-year period.

Although average incomes, consumption and asset ownership improved, the data also revealed a certain degree of volatility with some households becoming wealthier and others becoming poorer or falling into poverty. The poorest households received fewer benefits overall and saw a large increase in borrowing from moneylenders. Qualitative findings indicated that many of the poorest felt stuck in perpetual debt.

Households that received assistance were more likely to be better off to begin with, and were substantially more likely to improve their situation over the two year period than were households that did not receive assistance. As such, a challenge remains in reaching the part of the population who remain simultaneously vulnerable and unsupported.

Development assistance and targeting

Three-quarters of respondents received some kind of support in 2017, which included training or advice, material support or group membership, on any topic.

Financial inclusion was the most common form of support received by half of respondents. Agricultural support (including crop agriculture, livestock, aquaculture and fishery) was the second most common support type, received by 24 per cent of respondents. This was followed by WASH support (22 per cent), community-based organisation's support (22 per cent) and nutrition (16 per cent). As part of agricultural support, 18 per cent of households reported receiving assistance on crop agriculture, which is of importance for the analysis of linkages between LIFT support and Programme Outcome 1: Increased sustainable agriculture and farm-based production by smallholder farmers. Just 6 per cent reported having received any non-agricultural support in the last two years, which is of importance to Programme Outcome 3: Increased and safe employment in non-farm activities for the smallholders and landless.

The majority of households that received support in 2017 had also received some kind of assistance at the time of the 2015 survey, prior to when most of LIFT's partners began implementation. The wealthiest households were most likely to receive support in both years with 71 per cent of the wealthiest doing so compared to 48 per cent of the poorest.

Overall, development assistance was somewhat skewed towards the wealthy, but there are signs that is becoming more pro-poor under LIFT. Respondents who were in the poorest quintile in 2015 were noticeably more likely to receive no support in either time period, but were also more likely to begin receiving support for the first time in 2017, suggesting that LIFT's implementing partners have been successful in targeting a share of the poorest households that were previously unsupported.

Female-headed households were more likely to have never received any support than were male-headed households with 11 per cent of male-headed households and 19 per cent of female-headed households receiving no support in either year. Female-headed households were, on the whole, less likely to have received support than male-headed households in both 2015 and 2017. However, female- and male-headed households were

equally likely to start receiving support, indicating that LIFT's partners appear to be at least partially successful in targeting female-headed households.

Increased incomes of rural households

Households in LIFT-supported villages increased mean annual incomes from MMK 1.9 million (USD 1,400) in 2015 to MMK 2.4 million (USD 1,770) in 2017, equivalent to a 24 per cent increase in real terms.

The study finds a positive and significant effect of being among the group of households that receive support. Using reported income data, mean incomes increased by 19 per cent for households not receiving support compared to 29 per cent for households that did receive support.¹ The difference in change over time for the two groups was highly statistically significant.

Using a perception-based question on income change, 20 per cent of those with assistance and 12 per cent of those without, said their incomes had increased over the past 12 months. A numeric measure based on comparison of reported income for each year found that income increases were more common: 53 per cent of households that received assistance in 2017, and 45 per cent of those that did not, had increased their incomes since 2015.

For improved analysis taking into account factors such as pre-existing wealth, education and other factors which may affect incomes, regression analysis using a Fixed Effects model was applied. The results show a large positive and statistically significant effect on income from receiving assistance in 2017. Receiving assistance increases incomes by an average of 18 per cent or more than MMK 400,000 (USD 295) annually. Being in higher wealth quintiles also has a positive effect. The results are robust across different specifications of the model.

As a further step to reducing unobservable selection bias the study also carries out a matched difference-in-differences estimation. This approach uses propensity score matching to match treatment and comparison households on baseline characteristics and estimates the average treatment effect on the treated (ATT). Different specifications of the model all reveal a clear positive effect of development assistance on income, similarly to the Fixed Effects results reported above.

Consumption expenditure and poverty

Mean consumption expenditure increased substantially over time for all categories of households. The increase for households receiving any kind of support in 2017 was close to 24 per cent whereas it increased just 2.5 per cent for households that received no support.

¹ Note that due to the nature of the income range variable, incomes over MMK 7,500,000 are all recorded as MMK 7,500,000, which causes mean and median income to be lower than the actual median and mean. Thus, specific values and percentages should be regarded as approximate only.

Poverty, using the World Bank's local poverty line, appeared to decrease and the decrease was driven almost entirely by households that received assistance. Using the same poverty line measure, households were twice as likely to step out of poverty than to fall into it: 25 per cent of households became non-poor over the two-year period whereas 14 per cent became poor.

Asset ownership and relative wealth

Overall, ownership of durable assets increased significantly in the two-year period when measured using responses to questions on ownership of specific assets in each of the two survey years. Ownership of several assets increased between 10 and 20 per cent over the two years with the largest increase seen in mobile phone ownership, which increased from 60 – 79 per cent over the two years, making it the most commonly owned asset overall.

Contrary to the numeric measure, when asked about perceived changes to assets in the last year, the majority of households in 2017 said it had remained the same. The proportion of households reporting an increase in assets owned dropped from 28 per cent in 2015 to under 15 per cent in 2017.

Using wealth quintiles to explore relative wealth change, the study found that households that received support in 2017 were more likely to increase, and less likely to decrease, relative wealth than were households that did not receive assistance. Overall, female-headed households were more likely to become poorer in relative terms and less likely to become wealthier than were male-headed households

Sustainable agriculture and farm-based production

The likelihood of trialling or adopting new agricultural practices was low with just 9 per cent of crop growers reporting doing so in the two years prior to the 2017 survey. Even so, those who received agricultural support were substantially more likely to trial and adopt new agricultural techniques or practices. Whereas 8 per cent of crop growing households that received no support either trialled or adopted new practices in the two years, 15 per cent of those that received support did so.

Whereas the proportion of households trialling or adopting new methods was small, there was clear evidence of a positive relationship between trialling or adopting new crop agriculture methods, and positive changes to agricultural crop yields, crop profits and income. Overall, households that had received agricultural support in the last two years were more likely to report increased yields, crop profits, agricultural returns, or overall incomes in the last year.

Consistent with an overall increase in crop yields and profits, the proportion of households reporting any constraints to agricultural production decreased between 2015 and 2017 as did the mean number of constraints each household experienced.

Improved market access and market terms for smallholder farmers

Households that received development assistance in 2017 were more likely to adopt new marketing practices in both 2015 and 2017 than were households that received no such assistance. In 2017, 20 per cent of households that received assistance said they had adopted new marketing practices in the last year, compared to 12 per cent of households that did not receive assistance. Amongst households that received assistance, the proportion adopting new marketing practices remained practically constant at roughly one-fifth of households in the two-year period. Even so, the study found a strong positive relationship between adoption of new marketing practices and increased income. Households that adopted new marketing practices increased incomes by, on average, 34 per cent more than households that did not adopt such practices over the two-year period.

Increased and safe employment in non-farm activities for smallholders and landless

Slightly over half of households reported having some non-agricultural income in 2017. Nevertheless, just 6 per cent of households received any non-agricultural support in the same time period.

Amongst households with non-agricultural incomes there was a substantial drop in the proportion reporting perceived non-agricultural income increases. The proportion doing so nearly halved from 42 per cent in 2015 to 22 per cent in 2017. Despite the overall decrease, the study found a positive relationship between receiving non-agricultural support and increasing non-agricultural incomes. Households that received non-agricultural assistance in 2017 were more likely to report an increase in 2017 than were those that did not receive support. Exploring the net effect of households reporting increased and decreased incomes, the study finds a net positive effect of 17 per cent for households receiving assistance with a net decrease of 14 per cent amongst households that received no non-agricultural support, and a net increase of 3 per cent for households with support.

Increased access to adequate and affordable financial services by smallholders and landless

Overall, 77 per cent of households in 2015 and 80 per cent in 2017 reported taking some kind of loan from any source – including from formal sources, moneylenders and family – in the past 12 months. Moneylender, government and microfinance institutions were the three most common sources of lending with 28, 27 and 27, percent of households respectively reported taking such loans in 2017.

There was a positive relationship between receiving financial inclusion as development assistance and increased incomes of beneficiaries. Households receiving a combination of financial and non-financial assistance achieved higher incomes than households with other types, or combinations, of support.

Households in the poorest wealth quintile grew 10 per cent more likely to take a loan over the two-year period. These loans were mainly obtained from moneylenders, although there appeared to be a small increase in microfinance and loans from voluntary savings and loan associations (VSLA). Qualitative information revealed that debt was a central topic of concern for many poor people. The availability of low-cost microfinance simultaneously provided large benefits for some, whilst others found themselves trapped in a cycle of debt.

Shocks

More than half of households reported having experienced at least one shock, or an unexpected event, which affected livelihoods to some degree. One-quarter of households said they had experienced such an event which affected livelihoods severely.

The most common shocks were illness or injury of a household member, crop failure, and death of major livestock. Losing a major source of income and experiencing illness or injury of a household member were the events which were most likely to severely affect livelihoods. Borrowing money, selling assets or spending savings were some of the most common response mechanisms.

Experiencing shocks increased the likelihood of reporting a perceived income decrease and decreased the likelihood of reporting an increase, but less so for households that also received development assistance. Using numeric measures of income change, shocks did not appear to independently impact household incomes.

Conclusions and recommendations

Conclusions related to the research questions and recommendations are detailed in Section 4 of this report. In summary, the recommendations are:

- Consider expansion of agricultural and non-agricultural activities within LIFT villages
- Ensure relevance and appropriate targeting of LIFT activities
- Implement interventions synergistically so that financial support are combined for maximal impact
- Explore and understand potential negative effects of increased access to finance and promote interventions to support financial literacy and financial management skills
- Develop/expand programmes specifically aimed at strengthening social safety nets for the most marginalised and vulnerable groups
- Identify barriers to participation of excluded households and develop interventions that address their specific constraints

INTRODUCTION

1. INTRODUCTION

1.1 STUDY BACKGROUND AND PURPOSE

1.2 LIFT, INCOME AND THE THEORY OF CHANGE



1. INTRODUCTION

1.1 Study background and purpose

The study is one of three in-depth outcome studies commissioned to address LIFT's Evaluation and Learning Question (ELQ) 2 developed as part of the LIFT 2014-2018 strategy: "To what extent has LIFT contributed to strengthening the resilience of poor people in Myanmar and helped them to hang in, step up and step out?"

Alongside the two other outcomes studies on vulnerability and nutrition, the income and assets study feeds into a synthesis study specifically addressing ELQ2.

1.2 LIFT, income and the Theory of Change²

Supporting the income generation of rural households has been one of LIFT's central objectives since it was established in 2009. LIFT was originally designed to support the eradication of extreme poverty and hunger in Myanmar following Cyclone Nargis in the Delta. The LIFT strategy (2014-2018) sought to help transform the rural economy by promoting inclusive growth and providing new knowledge, technologies, and access to finance and markets with more opportunities for agribusiness with the private sector. In doing so, it sought to strengthen the resilience and sustainable livelihoods of the rural poor population in Myanmar, helping the rural population to 'step up' in commercial value chains, to 'step out' of marginalised farming and into more profitable non-farm support jobs, and to 'hang in', using agriculture as a safety net to reduce stunting and gain better nutrition and skills that will enable these groups to later step up or step out.³

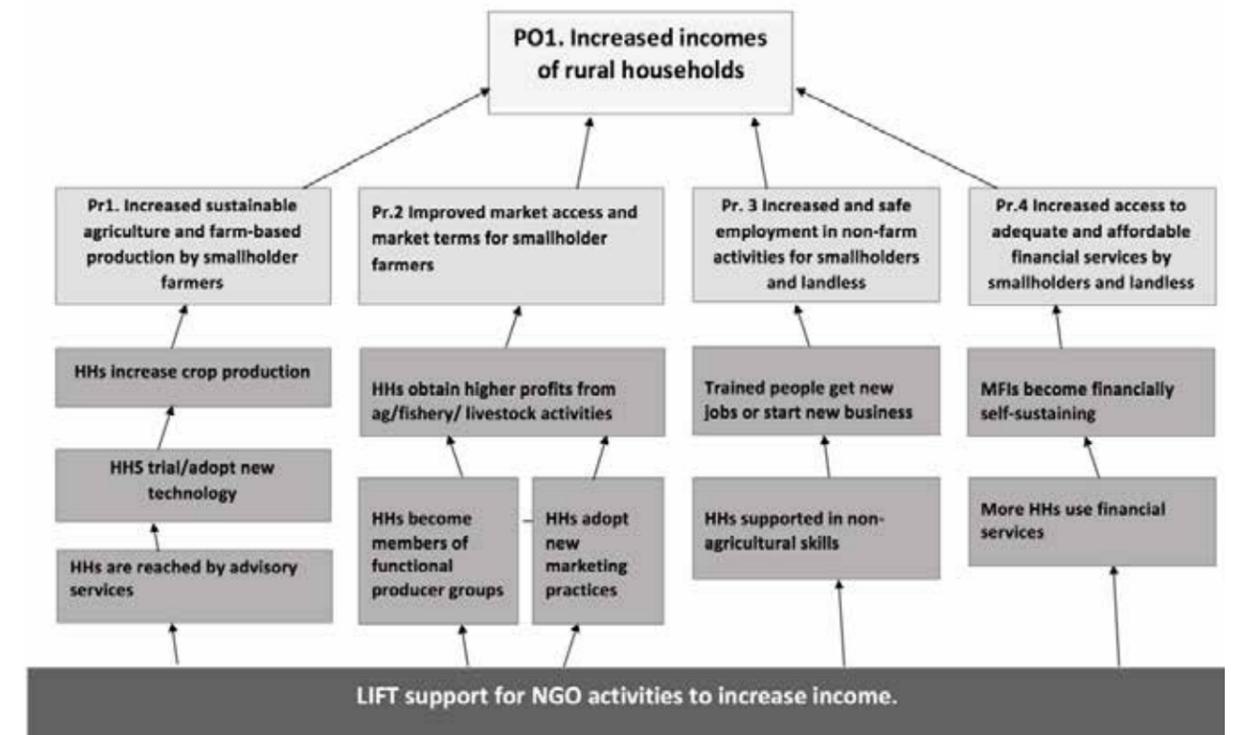
Increased incomes of rural households was one of four Purpose-Level Outcomes in LIFT's 2014-2018 strategy as shown in Box 1.

The 2015-2018 logframe includes eight Programme-Level Outcomes each with a number of reach and outcome indicators. Whilst several Programme-Level Outcomes are likely to affect incomes, four of these are directly linked to income. For the purpose of this study a Theory of Change (TOC) diagram was created to illustrate the causal pathways through which LIFT support is expected to directly influence incomes. This ToC was used to guide the analysis using the approach and methodology described in section two⁴. LIFT's full TOC can be found in Annex C.

Box 1. Key outcomes for LIFT 2014-2018

- Increased incomes of rural households
- Decreased vulnerability of poor rural households and communities to shocks, stresses, and adverse trends
- Improved nutrition for women and children
- Improved policies and effective public expenditure for pro-poor rural development

Fig. 1 LIFT'S Theory of Change for improving incomes and assets



The 2014-2018 LIFT strategy includes interventions at the village, system and policy levels, and nationwide programmes on financial inclusion, migration, gender and civil society strengthening. As such, projects or programmes to support increased incomes come in many shapes.

One example of a relatively 'traditional' approach to income generation is described in Box 2 and examples of more innovative approaches are described in Box 3.

² This section borrows from and includes reproduction of some paragraphs from the 2017 LIFT Household Survey Report which was written by this author in collaboration with LIFT staff.

³ LIFT Strategy 2014-2018

⁴ The TOC diagram was first developed for and presented in the Income and Assets baseline study (2018). It was developed using the 2014-2018 strategy logframe.

Box 2. Income generation project: Traditional approach

The Delta RISE project implemented by Welthungerhilfe (WHH) and GRET is an example of a classic income generation project.

Targeting more than 7,000 households in 146 villages in the Delta, the project has two income generation objectives:

- 1) It aims to help households increase diversify and increase income of smallholder farmers from agricultural activities including paddy/ horticulture/livestock/aquaculture. It aims to do so through a range of activities including: (a) building organisational capacity of producer organisations to deliver services along the value chain; (b) increasing access to extension services and increasing farmer capacity to lead such service; (c) building seed grower networks to increase access to quality local seeds, and (d) facilitating access to credit and financial management skills.

This in turn is expected to increase farm productivity and address the needs of smallholders with commercial potential and strengthen their role in the rice value chain, thus helping farmers to “step-up” from subsistence farming.

- 2) The project aims to diversify and increase incomes of landless and vulnerable households through non-farm economic activity, which is expected to help them to ‘step-up’ from subsistence farming or ‘step out’ of agriculture. It works to do so mainly by building capacity and know-how to professionally run a small business and as above, facilitate improved access to finance and strengthen capacity in financial management.

Box 3. Income generation project: Innovative approaches

Plan Bee: Introduction and Expansion of Modern Beekeeping and Honey Production in Shan State implemented by TAG International Development targets 19 villages of southern Shan State where it works to increase the incomes of rural households through promotion of responsible and organic production of honey.

The project provides training on modern beekeeping methods to rural communities to (a) facilitate women and vulnerable community members to develop microenterprises for bee by-products and encourage beekeeping as a part-time seasonal activity through collective or individual ownership, and b) encourage the commercialisation of beekeeping, increase hive productivity and honey quality amongst commercial beekeepers and ultimately support villagers to ‘step out’ and become commercial beekeepers: invest in hives, follow migration and adopt beekeeping as main livelihood source.

The project also supports the establishment of a sustainable vocational training programme for beekeeping in southern Shan and facilitated the creation of a support structure (the Apiculture Resources and Business Center) to provide networking, market information and supply of equipment. In the latest project phase, the objective is to turn this structure into the ‘Plan Bee Social Enterprise’: a financially sustainable producer-owned and self-managed social enterprise.

The **Myanmar Agro-Input and Farm Services Project (MAFS)**, implemented by the International Fertilizer Development Center (IFDC), aims to “strengthen a network of providers of agricultural inputs and services to enable commercial agricultural production, with the ultimate aim of improving smallholder farmer incomes”.

Operating in six townships in the Dry Zone, the project (a) trains a network of private sector input and service providers on product knowledge, service offerings and marketing of these products and services to farmers; and establishes linkages between the service providers and financial services, (b) trains officials from the Department of Agriculture (DOA) on conservation agriculture and public-private coordination of extension services, and (c) works with farmers to enhance productivity and profitability through improved crop management products and practices.

These activities in turn are expected to lead to enhanced business, technical and financial capacity of the private sector, a strengthened private-sector asset base, and better linkages between service providers and farmers. These changes are then expected to improve service provision for farmers and ultimately to simultaneously increase income for service providers and increase productivity and income of smallholder farmers.

STUDY DESIGN AND METHODOLOGY

2. STUDY DESIGN AND METHODOLOGY

2.1 RESEARCH QUESTIONS

2.2 APPROACH AND METHODOLOGY

2.3 SURVEY SAMPLE



2. STUDY DESIGN AND METHODOLOGY

2.1 Research questions

The study seeks to answer the following three research questions.⁵ The questions are interlinked and the answers are expected to overlap:

What changes have there been to the levels, distribution, sources of, and drivers of, income, asset ownership, and poverty levels among households in villages supported by LIFT starting in 2015?

What is the link between participation in LIFT-supported activities and changes to household income and assets, and what are the pathways through which these changes appear to occur?

How do changes differ between households that received development assistance, and households that did not; and to what extent are these changes likely to be attributable to the participation in development activities?

2.2 Approach and Methodology⁶

The study takes a Theory Based approach through which it explores the linkages laid out in the LIFT Theory of Change (TOC) related to income and assets, shown in Fig. 1. It looks separately at each of the causal pathways from activities to outputs and outcomes; and explores each individual step within the pathways to help shed light on what actually happens on the ground (how many, who and how) at each step of the TOC. The Income and Assets baseline study conducted in 2016-17 explored characteristics of the population at baseline. This study focuses on the change that has occurred to the population surveyed in both 2015 and 2017, and to what extent the change can be linked to LIFT support.

The study uses mixed methods. It is primarily an analysis of quantitative data using LIFT's Household Survey data as described below. It integrates a variety of findings from a large qualitative study undertaken to support the work related to ELQ2.

The quantitative analysis employs a range of econometric tools including summary statistics and a variety of multivariate regression analysis techniques described in section 2.2.1. Qualitative methodology is described in section 2.2.2.

⁵ A fourth research question was originally posed, but was found to not be feasible following discussions with the LIFT team and researchers on related studies: Using criteria identified as part of related work on ELQ2 (vulnerability and resilience), can we identify households that have "hung in", "stepped out", and "stepped up" over the period between 2015-2017, and if so, what are the characteristics of these households and the support they receive?
⁶ Parts of this section borrows from and includes reproduction of some paragraphs from the 2017 LIFT Household Survey Report which was written by this author in collaboration with LIFT staff.

2.2.1 Empirical strategy: Measuring programme effect

Robust analysis of programme effect ideally requires a study design which is specifically planned to measure the causal effect of predefined outcomes. This can be done when carrying out a well-specified project with pre-determined outcomes, in which case project implementers work with evaluators to develop the evaluation that will measure programme effect.

In general, this type of design requires a methodologically sound, and clearly identified, control or comparison group, which either receives a different version of assistance than does the treatment group, or no assistance at all. Ideally the assistance, or different versions of assistance, will be randomly assigned within a given target population with those who receive the assistance of interest constituting a so-called treatment group, and those who receive different or no assistance constituting a control group.⁷ This type of impact evaluation is typically referred to as a randomised controlled trial (RCT), or experimental evaluation. Where random assignment is not feasible, comparison groups may be identified using statistical matching, which is referred to as non-experimental or quasi-experimental impact evaluation. In both cases treatment and comparison groups should (at least) be surveyed at baseline, prior to project implementation, and at project completion.

The LIFT Household Survey was not conducted in the specific context mentioned above, however data were collected in 50 comparison villages for a total of 800 households to allow for some degree of counterfactual analysis. These households however, were ultimately excluded from the analysis due to the spread of LIFT activities into a large share of the original comparison villages.

Therefore, in the sample used for the purpose of this study, treatment and comparison households are located within the same villages. Receiving any kind of assistance in the 12 months prior to the 2017 survey is used as main 'treatment' variable when seeking to estimate programme effect, and households not in this category are defined as 'comparison households' regardless of whether they reported having received support at the time of the baseline survey. For robustness checks and for distinguishing the effects of different types of support the following categories of treatment are also examined in some instances: (1) financial support only, (2) non-financial support only, (3) financial and other support jointly.

Because treatment and comparison households are located within the same villages, we would expect that they have all have had the opportunity to join LIFT-supported activities. There can be many reasons for not joining such activities, such as lack of time, interest, ability, information, and restrictions on access related to, for example, gender, village or household power structures, health, or geography. For the purpose of measuring programme effect we are interested in knowing whether there are any kind of systematic, non-random, differences between the two groups, also referred to as selection bias. If such bias is present it is likely to affect our impact estimates. The following empirical strategies seek to limit selection bias as much as possible given the available data:

⁷ Note that the term control group is used when there is random assignment to both treatment and observation whereas comparison group is used for with non-random assignment to treatment.

- (1) Fixed Effects estimation is used to examine within household changes over time. The approach eliminates time-constant unobservable selection bias, though validity may be compromised in the event that results are affected by time-variant factors which are unobserved or not controlled for.

Treatment effect is identified as follows:

$$y_{it} = x_{it}\beta + c_i + u_{it} \quad (1)$$

- (2) Matched differences-in-differences is used as a robustness check, which allows for the inclusion of time-invariant control variables. Treatment effect is identified as follows:

$$y_{it} = \alpha + \beta_1 year_i + \beta_2 Treat_i + \beta_3 year_i * Treat_i + \gamma x_{it} + u_{it} \quad (2)$$

2.2.2 Qualitative approach

The qualitative study used a 'Narrative Analysis' approach to record community members' stories of change in vulnerability and resilience, and to explore ways in which communities have responded to internal and external pressures

The study collected over 150 such narrative interviews in 12 communities selected from LIFT's programme areas. The study communities were selected to represent the three main geographical areas of Myanmar, as well as to include a range of different programme activities. The selection included a mixture of communities that were sampled at baseline in 2016, and four new villages, in Yesagyo and Pindaya, to enable the inclusion of a wide range of development activities as well as specific follow up of anomalies identified in the quantitative analysis. This included two villages in Yesagyo to allow for narratives concerning implementation of the maternal and child cash transfer (MCCT) activities, and two villages in Pindaya, to look for narratives to explain the quantitative finding of increased vulnerability in that area. The sample also includes at least one large (more than 200 households) village and at least one small (fewer than 100 households) village in each geographical area. The selected communities are shown in Annex B.

2.3 Survey sample

LIFT Household Survey data were collected in 2011, 2013, 2015 and 2017. In addition, tracker surveys were undertaken on a smaller scale in 2012, 2014, 2016 and 2018. In 2015, the questionnaire was adjusted to better reflect LIFT's new strategy and logframe, and the sample was expanded to include 199 new villages in LIFT's new programme areas, which were to serve as the baseline for examining developments in LIFT villages between 2015 and 2017. The follow-up survey in 2017 was designed as a panel survey, which meant that the same households would be interviewed in 2015 and

2017. Due to a number of unforeseen events⁸ however, the sample was substantially reduced between the two survey rounds resulting in a panel sample of 2,249 households available for this study. As shown in Table 1 the final sample was not equally divided between LIFT regions, which means results are not examined or reported by region.

Table 1. Total sample of households by region – original vs final

	Original baseline	Panel
Delta	822	666
Dryzone	810	790
Uplands	763	517
Rakhine	920	276
Total	3,315	2,249

2.4 Measuring income, assets and consumption expenditure

Measuring wealth and income using survey data in a developing country such as Myanmar is a challenge and there is no universally agreed upon best approach for doing so. Most established surveys of living standards such as the World Bank Living Standard Measurement Surveys do include both a measure of asset ownership and a measure of consumption expenditure, although the length and detail of the latter vary extensively between surveys.

The LIFT household dataset allows us to use several different measures of income and wealth:

- Perceived income change:** Respondents report whether their income increased, stayed the same, or decreased over the past 12 months. This is an easily captured measurement, but measurement error may stem from its subjective nature. It is helpful for indicating direction of change, but not the degree of change. These data were collected in both 2015 and 2017.
- Reported income.** Households report their estimated total household income from all sources over the past 12 months. This measure is helpful for analysing income across population groups and for use as a continuous measure in regression analysis. These data were only collected in 2017 however, and can therefore not be used for analysing change over time.
- Reported income range:** Households report a range for their estimated total household income from all sources over the past 12 months. This measure is helpful for understanding approximate income, but does not allow for detailed differentiation between households. These data were collected in 2015 and 2017 allowing us to compare change over time, although less exactly than the reported income described in (b). For the purposes of this study, income ranges were therefore converted

⁸ See LIFT Household Survey Report 2017 for further discussion of the change in sample.

into a continuous measure by assigning each household an income corresponding to the middle of their reported income range. Whereas this results in less evenly dispersed data, comparing the distribution of income for 2017 using the two measures show that they are highly alike except for the former measure having a long tail of few households with very high incomes.⁹ The data were adjusted for inflation for this purpose.

- (d) **'Measured' income change:** The adjusted income range variable (c) was reorganised into an ordinal variable indicating whether incomes decreased, stayed the same, or increased over time. This was simply done by comparing the inflation adjusted incomes in 2015 and 2017 and recording the direction of change if any. To account for statistical margin of error, households with a change of +/- 20 percent were recorded as experiencing no change.
- (e) **Consumption expenditure:** Detailed data on food and non-food consumption and expenditure was collected, allowing us to obtain a measure of average daily household consumption expenditure to be used as a proxy for income. This measure however, is only available for a subset of 707 households that completed the expenditure survey. This is a complete measure that can help detailed differentiation between households, but may be prone to measurement error as it depends on respondents correctly recalling detailed information on consumption of a large variety of goods.
- (f) **Asset ownership:** Data were collected on ownership of durable assets, agricultural assets, livestock and household materials. These data are used to generate an asset/wealth index and a 'wealth score' for each household based on the number and quality of assets owned.¹⁰ That in turn is used for dividing respondents into wealth quintiles and hence for analysing other variables by wealth. It is not, however, necessarily helpful for detecting short term income fluctuation. An asset index was composed in 2017 to correlate as much as possible with both incomes and consumption expenditure.¹¹ The wealth quintiles used in the study to illustrate wealth status of respondents are constructed from that index.

Whilst none of these measurements constitute a flawless measure of income or wealth, the availability of comprehensive asset ownership data along with different measures of income and consumption should allow for a substantive analysis of changes in socio-economic well-being over time. Strengths and weaknesses of each measure should be kept in mind when interpreting findings.

9. Because the reorganized income range measure (c) does not capture households with very high incomes, the mean income using this measure appears noticeably lower than for the measure in (b) particularly for the wealthiest households. Even so the measure is useful for the purpose of comparing change over time.

10. A separate methodological note on this was developed in preparation for the income and assets study and is available from LIFT upon request.

11. LIFT Working Note on Asset Index, July 2018.

2.5 Survey tools and components

The household survey comprised of several components, and included a number of survey tools:

- A village questionnaire
- A household general questionnaire
- A household nutrition and anthropometry questionnaire
- A household expenditure survey
- Focus group discussions

Each of these are described below. The full survey tools are available from LIFT's website (<https://www.lift-fund.org/lift-2017-householdsurvey>), as well as upon request.

In addition, a large separate qualitative survey was carried out as described in section 2.2.2.

Box 4. Village profile topics

- Access and proximity to services
- Infrastructure and facilities
- Presence and activity of NGOs and CBOs
- Sources of credit
- Sources of water availability
- Village resource management
- Maternal and child cash transfers
- Market linkages

2.5.1 Village profiles

Key information on village characteristics was collected through a village survey, administered by survey team leaders as key informant interviews with representatives from village authorities and leaders. Data was collected on key topics related to village infrastructure, population and activities as listed in Box 4.

2.5.2 Household questionnaire

The household survey questionnaire used in 2017 was based on the questionnaire used in previous survey rounds with some modifications. The original questionnaire was designed and developed by LIFT and the research firm, Myanmar Survey Research (MSR), in 2015 with support from the Food and Agriculture Organization of the United Nations (FAO). The questionnaire incorporates standard Food and Nutrition Technical Assistance (FANTA) food security questions used globally by international aid agencies.

The household questionnaire was edited for use with LIFT's tracking survey in 2016, and again for use with the 2017 household survey to ensure

Box 5. Household questionnaire topics

- Demographic information
- Participation in development assistance activities
- Household income
- Farming practices
- Food security
- Financial services
- Ownership of livestock, agricultural equipment, and other household assets
- Water and sanitation
- Shocks and stresses

correct capture of LIFT indicators, and other key socio-economic information. Care was taken to keep wording identical to the wording used in 2015 to allow for direct comparison. However, in some instances editing was done to ensure the quality and correctness of information collected, and as such was prioritised over being able to compare directly with 2015.

2.5.3 Expenditure survey

The consumption expenditure survey was developed for previous survey rounds and was based on the World Bank Living Standards Measurement Study survey,¹² adapted to the Myanmar context. The survey collected detailed information on food consumption and expenditure, non-food expenditure,¹³ housing and value of household assets, all of which were used for calculating daily per capita food and non-food consumption expenditure, measures used for comparing living standards across households and regions, and for identifying households above and below the poverty line.

For a full description of how the LIFT household surveys were conducted, see the LIFT household survey 2015 and 2017 reports available on LIFT's website.

¹². <http://surveys.worldbank.org/lsms>

¹³. Daily consumption expenditure is the average daily value of all goods consumed in the household whether home produced, purchased or received as gifts.

FINDINGS

3. FINDINGS

3.1 LIFT SUPPORT

3.2 PROGRAMME OUTCOME 1: INCREASED INCOMES OF RURAL HOUSEHOLDS

3.3 POVERTY LEVELS AND CONSUMPTION EXPENDITURE

3.4 ASSET OWNERSHIP AND RELATIVE WEALTH

3.6. PROGRAMME OUTCOME 2: IMPROVED MARKET ACCESS AND MARKET TERMS FOR SMALLHOLDER FARMERS.

3.7. PROGRAMME OUTCOME 3: INCREASED AND SAFE EMPLOYMENT IN NON-FARM ACTIVITIES FOR SMALLHOLDERS AND LANDLESS

3.8. PROGRAMME OUTCOME 4: INCREASED ACCESS TO ADEQUATE AND AFFORDABLE FINANCIAL SERVICES BY SMALLHOLDERS AND LANDLESS

3.9 SHOCKS

3

3. FINDINGS

3.1 LIFT support

3.1.1 Types of support

LIFT support is expected to lead to increased incomes following a number of impact pathways as illustrated in Fig. 1. Each of these pathways are explored below.

The household survey data capture three broad types of support:

- (a) Training or advice
- (b) Material support or inputs
- (c) Group membership

Material support or inputs refer to support such as e.g.

- (g) Seeds, fertiliser, pesticides or equipment for agriculture, livestock, fishery and other on-farm activities
- (h) Loan provision under microfinance schemes
- (i) 'Other' including cash for work, maternal cash transfers, sanitation facilities, etc.

As discussed in section 2.2.1, for purposes of detecting the effect of receiving development assistance the three categories of support are analysed jointly, with 'treatment' defined as households receiving any kind of development assistance the 12 months prior to the 2017 survey. The alternative categorisations of financial assistance only, non-financial assistance only and financial and non-financial assistance combined are explored as well.

Following the TOC for income and assets, development assistance is explored under the categories: Agricultural support, non-agricultural support, and financial inclusion.

Agricultural support is defined as any support related to:

- Crop agriculture
- Livestock
- Aquaculture
- Fishery

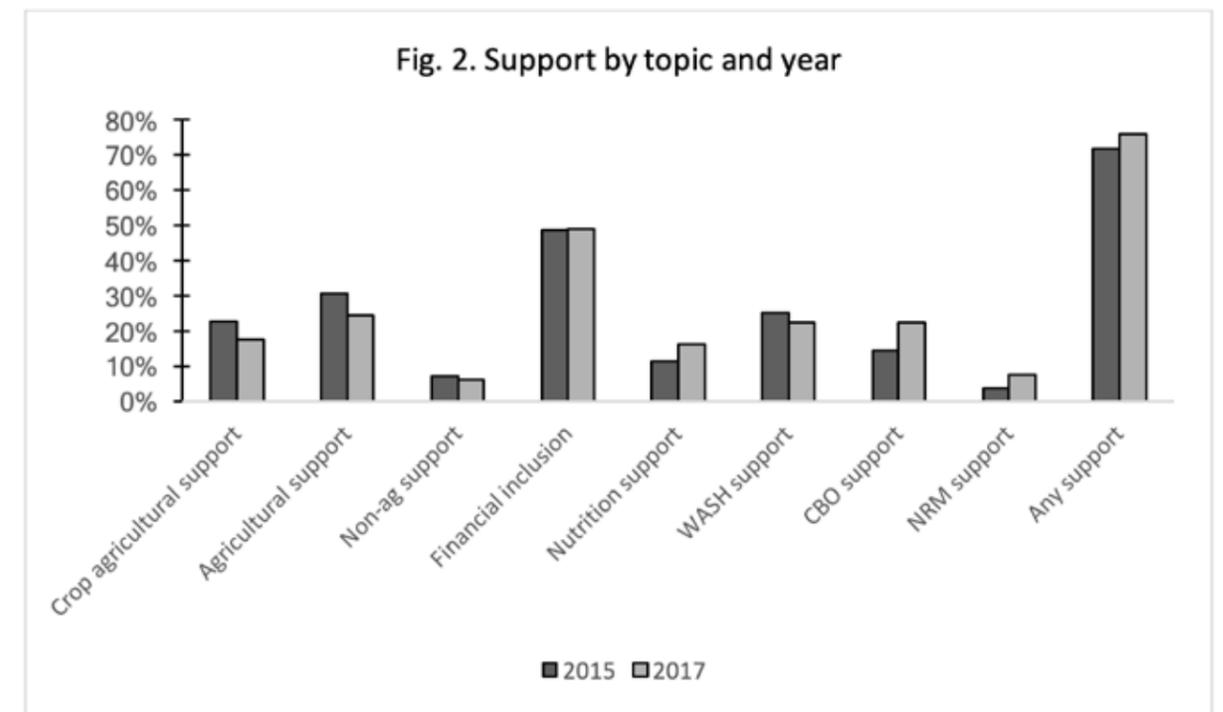
Non-agricultural support is defined as related to:

- Vocational skills - carpentry, tailoring/sewing, mechanics/repairs,
- Small business development (e.g. business planning, bookkeeping, management, marketing, enterprise development, etc.).
- Life skills and safe migration
- Financial literacy training

The data allow us to broadly examine whether respondents received assistance in any of the following topics:

- Crop agriculture
- Livestock
- Aquaculture
- Fishery
- Non-agricultural support
- Financial inclusion
- Nutrition (including Maternal and Child Cash Transfers)
- Water, Sanitation and Hygiene (WASH)
- Community Based Organisations (CBOs)
- Natural Resource Management (NRM)

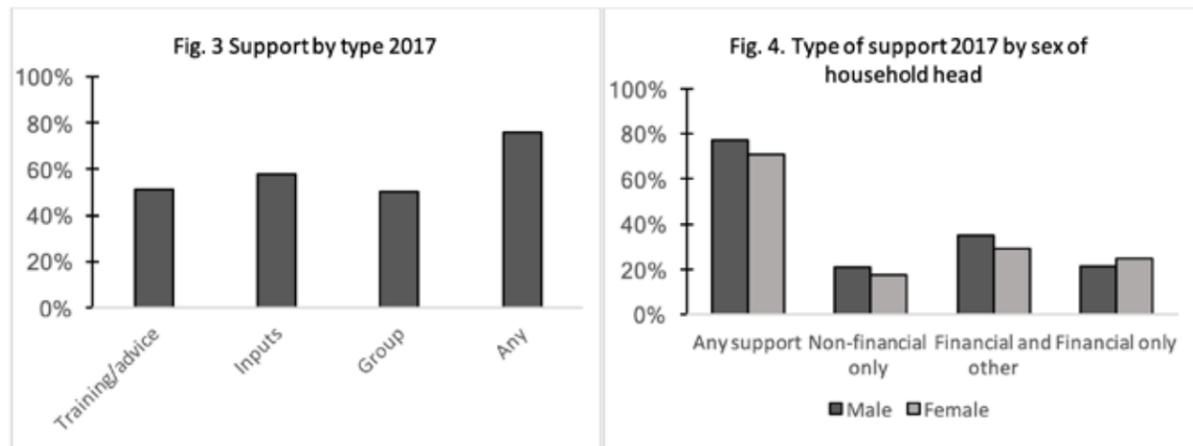
Three-quarters of respondents received some kind of support in the 12 months preceding the 2017 survey, which includes any kind of support - training or advice, material support or group membership, in any of the topics described above.



Financial inclusion was the most common form of support received by half of respondents. Farm support was the second most common support type with 24 per cent of respondents reporting any such support, followed by WASH support, CBO support and nutrition. Just 18 per cent of households reported receiving any agricultural crop support, which is of importance for the analysis of linkages between LIFT support and Programme Output 1: Increased sustainable agriculture and farm-based production by smallholder farmers. Even fewer, just 6 per cent, reported having received any non-agricultural support in the last two years, which is of importance to Programme Output 2: Increased and safe employment in non-farm activities for the smallholders and landless.

Although data on support were collected in 2015 this was done for the five years preceding the survey as opposed to 2017 where the question was

asked for the past year. As such, numbers on assistance are not directly comparable over time. Nevertheless, as shown in Fig. 2, we see that the proportion of households saying they had received support in the past year in 2017 was higher than the proportion that said they had received such support in the last five years in 2015, which certainly indicates that there has been an increase in assistance since LIFT-supported activities began. Notably, a greater proportion of households received assistance related to nutrition, CBOs, and NRM in the year preceding the 2017 survey than the proportion doing so in the five years preceding the 2015 survey, indicating a particular increase in support within those areas following the introduction of LIFT programmes.

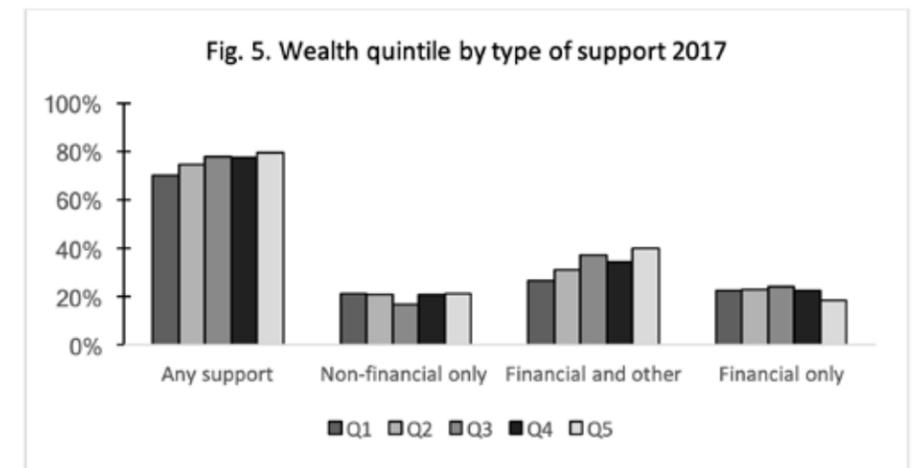


In 2017, material support, or inputs, which includes microfinance lending, was the most common support type received by 68 per cent of respondents. Group membership and training or advice were also common. Half of respondents in 2017 reported participating in either type of support (Fig 3).

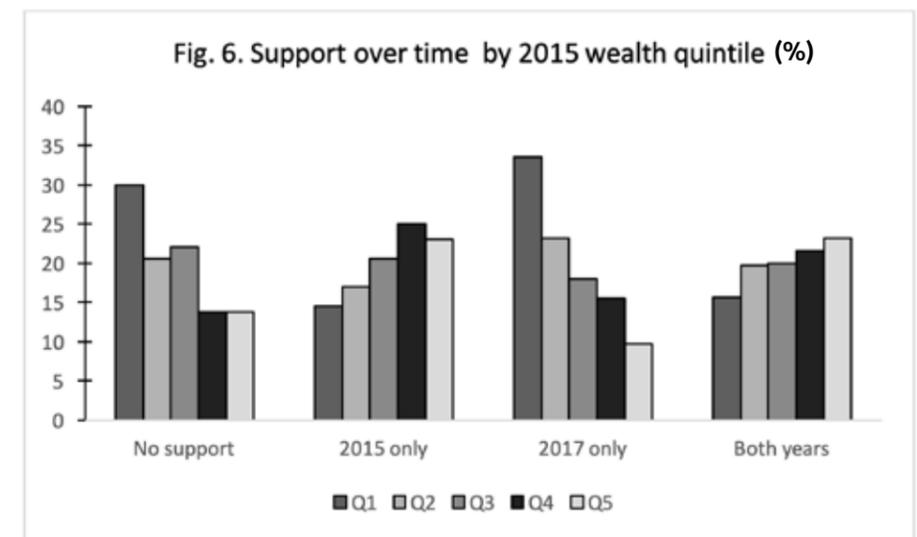
Just over one-third of respondents received both financial and non-financial support whereas 22 per cent received financial support only, and 20 per cent non-financial support only (Fig. 4).

3.1.2 Identifying the lucky ones: Who receive assistance in LIFT supported villages?

Looking more closely at who received support, we find that overall, access to development assistance increased with wealth. Almost 80 per cent of the wealthiest respondents received some kind of support in 2017 compared to 70 per cent of respondents in the poorest quintile as shown in Fig. 5. The wealthiest group was also most likely to receive financial and other assistance combined, whereas non-financial support only was close to equally distributed across wealth quintiles. The likelihood of receiving financial support only was similarly equally distributed across wealth groups except for the wealthiest, which were slightly less likely to take loans unaccompanied by other support.

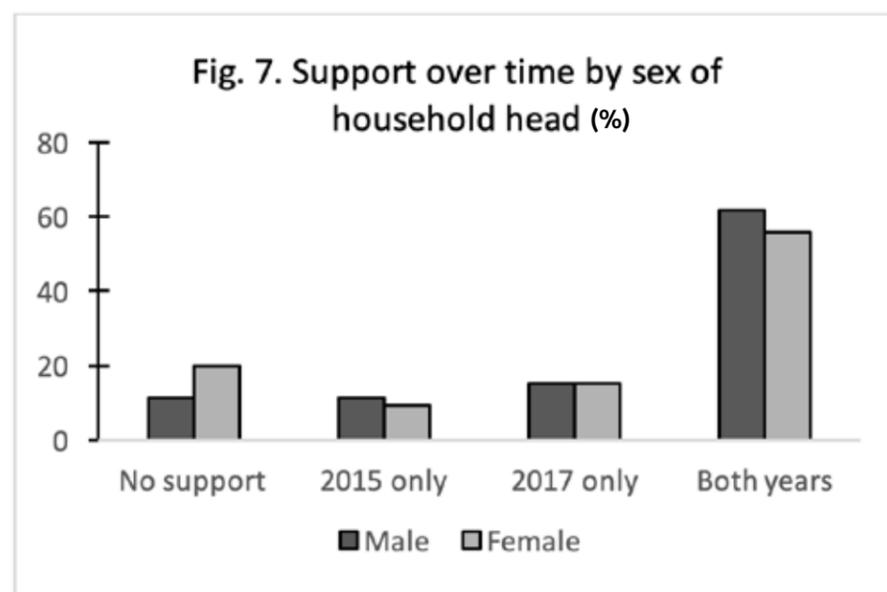


The majority of respondents in LIFT supported villages received development assistance in the five years prior to the survey in 2015 as well as in the 12 months prior to the survey in 2017. Whereas the majority of assistance reported in the 2015 baseline was not LIFT supported, the majority of the support in 2017 was. While that means that the majority of households received support in both time periods, some stopped receiving support and others began receiving support in the two-year period.¹⁴ Fig. 6 shows the change in support accessed by wealth quintile. Respondents in the poorest quintile were noticeably more likely to receive no support in either year, but were also more likely to begin receiving support for the first time in 2017, suggesting that LIFT providers were successful in targeting a share of the poorest households that were previously unsupported. Conversely the share of households that stopped receiving support was largest amongst the wealthiest. Even so however, respondents in the wealthiest quintile were still more likely to receive support in both time periods than were those in the poorest quintile, with 71 per cent of the wealthiest doing so compared to 48 per cent of the poorest.



¹⁴ Because the 2017 questionnaire captures only assistance in the 12 months preceding the survey, it is possible that some respondents (a) received no support in 2015 and 2017 but did receive support in 2016 and (b) received support in 2015 and 2017 but did not do so in 2016.

Female-headed households were more likely to never receive any support than were male households with 11 per cent of male-headed households and 19 per cent of female-headed households receiving no support in either year. They were similarly less likely to receive support in both years than were male-headed households. They were, however, equally likely as male-headed households to start receiving support in 2017 – again indicating that LIFT support appears to be at least partially successful in targeting female-headed households.



3.1.3 Identifying selection bias: Baseline differences

Looking more closely at the baseline characteristics of the two groups, we find substantial differences on a number of indicators. Annex A provides an overview of baseline characteristics for the two groups and shows that there are statistically significant differences in 12 of 23 indicators. We explore key determinants of receiving support using a probit participation regression (Table 2) and find that the baseline probability of being in the group that received LIFT support in 2017 is affected particularly by education, with formal education increasing the chances of support. The number of children under five and land size also positively affects the likelihood of belonging to this group. Having electricity in either household or village decreases chances of support, whereas having electricity in both household and village increases chances of support, which appears to indicate a favourable combination of wealth and infrastructure. Perhaps not surprisingly, a larger number of NGOs per household in the village also strongly increases the chances of support. Finally, in support of the findings above, we see that having received any support in the five years prior to the baseline survey is a very strong determinant of also receiving support in 2017 even if the majority of this support was unrelated to LIFT.

If we look at the determinants of having already received support in the five years prior to the baseline survey, the pattern is much the same although this shows chances being smaller for female-headed households. We also see that chances increase steadily with wealth with the wealthiest being

the most likely to have received any support in the five years prior to the baseline survey (although it is not possible to determine whether this is a precondition or an outcome of receiving support in the last five years or both).

Table 2. Baseline probability of being in treatment group

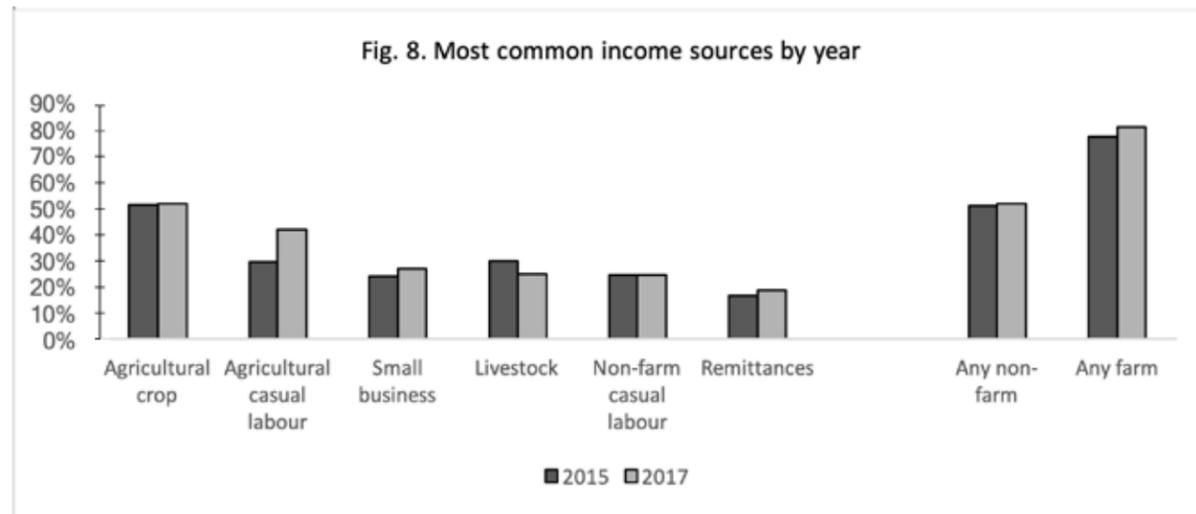
	Treatment 2017 Probit	Any support last five years Probit
Female HH head	0.057 (0.078)	-0.274 (0.084)***
Age HH head	0.022 (0.014)	0.040 (0.013)***
Age squared	-0.000 (0.000)*	-0.000 (0.000)***
Education HH head	0.167 (0.069)**	0.085 (0.078)
Buddhist	-0.296 (0.140)**	-0.296 (0.219)
# of children under 5	0.081 (0.048)*	0.122 (0.048)**
Wealth quintile 2	-0.016 (0.108)	0.272 (0.099)***
Wealth quintile 3	-0.127 (0.133)	0.338 (0.115)***
Wealth quintile 4	-0.095 (0.143)	0.450 (0.128)***
Wealth quintile 5	-0.227 (0.159)	0.522 (0.132)***
Crop	0.404 (0.274)	0.227 (0.255)
Constraints	-0.267 (0.269)	0.218 (0.248)
Land size	0.013 (0.007)*	0.012 (0.009)
Electricity in HH	-0.343 (0.206)*	-1.518 (0.580)***
Electricity in village	-0.466 (0.173)***	-0.541 (0.251)**
Electricity in HH+village	0.454 (0.220)**	1.557 (0.588)***
Road access	0.032 (0.138)	0.021 (0.150)
# of NGOs per HH	5.082 (2.489)**	7.367 (3.321)**
Dryzone	0.060 (0.175)	0.062 (0.151)
Uplands	-0.388 (0.175)**	-0.369 (0.202)*
Rakhine	0.416 (0.143)***	-0.369 (0.234)
Any support prior to baseline	0.864 (0.074)***	
Constant	0.146 (0.395)	-0.122 (0.454)
Wald Chi2	267.93	150.45
Prob>chi2	0.00	0.00
Pseudo R2	0.13	0.10
N	2,188	2,188

Standard Errors in brackets.
Stars indicate statistical significance.
*10% **5% ***1%

3.2 Programme Outcome 1: Increased incomes of rural households

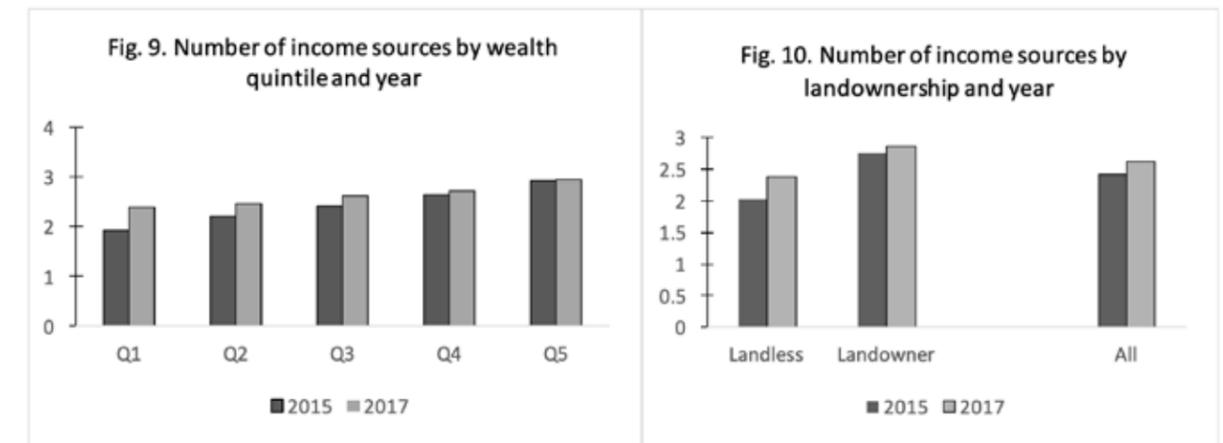
3.2.1 Income sources

Households in LIFT-supported villages often have several sources of income. On average, households in 2017 reported having 2.6 income sources (Fig.9, 10). The most common income source was agricultural crops, reported as a source by half of respondents in both 2015 and 2017 as shown in Fig. 8. In 2017, this was followed by income from agricultural casual labour – which contributed to the income of 29 per cent of households in 2015, and increased to 42 per cent in 2017. The third most common income source was small business income, which increased from 24 to 27 per cent of households over the two-year period, a small but statistically significant change. Livestock income, however, decreased over time, dropping from 29 per cent in 2015 to 25 per cent in 2017.¹⁵ Other common income sources were non-agricultural casual labour mentioned by 24 per cent of households in 2017, and remittances, which contributed to the income of 18 per cent of households in 2017.



Overall, the mean number of income sources per household increased over the two-year period with the main increase stemming from more households taking on agricultural casual labour. Whereas the richest quintile on average had the most income sources – just under three in both years, the mean number of income sources increased most for the poorest for whom it rose from 1.9 sources in 2015 to 2.4 sources in 2017. This also corresponds well with the increase in agricultural casual labour, which is most prevalent amongst poorer households.

¹⁵ Changes in casual labour, livestock and small business income are significant at 1 per cent, 5 per cent and 1 per cent respectively.



Qualitative findings suggest the increase in income sources is caused partly by a decreased ability to make a living exclusively from traditional agriculture. This in turn was reportedly caused mainly by changes in weather, but also by fluctuations in market prices, and wider changes to the socio-economic context of rural areas:

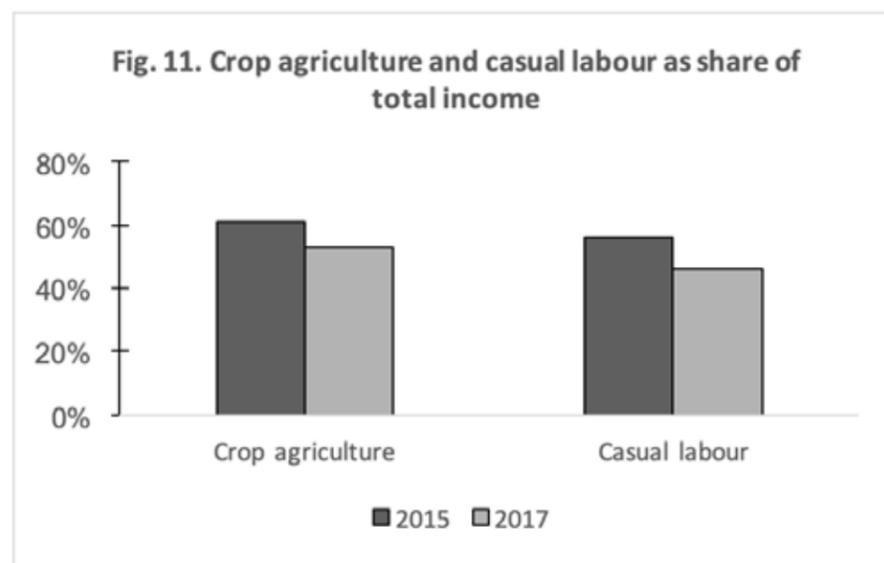
“To be honest, it [farming] isn’t really viable. For our household, we have to have many different ways to get income. We do chickens, we do pig rearing, we do paddy. My daughter works in a factory in Yangon. My husband drives a small boat.”:

44 year old female, Pyapon

“Back then, if I did the paddy, it would be enough, the others didn’t need to work. Now, we all have to work, even then it’s not enough.”:

62 year old male, Pyapon

“I don’t have land, so I work on other people’s land [daily wages work]. Previously when the farmers were OK, we’d do the daily work. But then when the farmers’ situation was not so good, we didn’t get to work. So I and my sisters went to Yangon to work in the factory. But we didn’t get good income there, and then we had to come back because of bad health. We came back to our village to recover. We bought two sewing machines to do basic sewing and we’d get the work orders in Yangon. We worked in Yangon at first, but it was hard to find a place, so we came back to the village, and we do the orders here and send back to Yangon.”: **34 year old female headed household**



These reports are backed up by quantitative data which show that the mean proportion of income stemming from crop agriculture decreased over the two-year period, as did the share of income from casual labour (Fig. 11).

3.2.2 Income levels

The average household income in the year preceding the 2017 survey was just under MMK 3 million (USD 2,200), with the median income MMK 1.8 million (USD 1,330) (Table 3).

Table 3. Mean income 2017

	Mean	Std. Err.	[95% Conf. Interval]	Median	n
All	2,988,387	145,997	2,699,985 - 3,276,788	1,800,000	2,249

Mean income in Table 3 is based on respondents' best estimate of exact income, which was reported in 2017. When comparing change over time, however, adjusted income range data is used, which lowers the absolute means, but allows for comparison, as discussed in section 2.4. Using this measure, we see that mean incomes increased by 24 per cent between the two years after adjusting for inflation (Table 4).

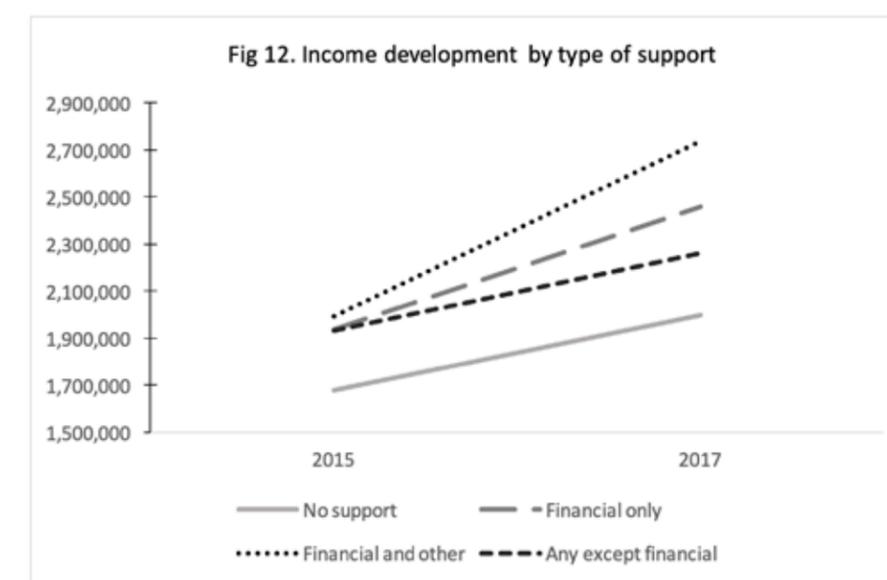
Table 4 shows a clear difference in income change over time for households receiving support compared to households with no support. Mean incomes increased by 19 per cent for households not receiving support compared to 29 per cent of households that received some kind of support. The difference in change over time for the two groups was substantial in real terms and highly statistically significant.

Table 4. Mean income change by type of support

	2015	2017	Difference	Difference %	Difference in difference	T-stat and significance level	n /year
No support	1,677,900	1,997,967	320,067	19%			541
Financial only	1,936,522	2,456,402	519,881	27%	199,814	3.15***	492
Financial and other	1,992,428	2,737,156	744,728	37%	424,661	5.17***	763
Any except financial	1,930,030	2,261,258	331,229	17%	11,162	1.65	453
Any support	1,959,775	2,530,064	570,289	29%	250,222	4.72***	1708
Everyone	1,937,199	2,403,069	465,870	24%			2249
Everyone USD ¹⁶	1,422	1,764	342				

Table 4 also shows that the largest change over time was found amongst households receiving a combination of financial and non-financial support with the smallest change found amongst households receiving non-financial support only.

To further illustrate the developments presented in Table 4, Fig. 12 shows the trajectories of mean income development for each of the 'treatment' categories. As shown, all groups that received support in 2017 have higher baseline incomes than households that received no support. In addition, they all start out at very similar levels of income but go on quite different trajectories from there.



¹⁶. Based on official exchange rate from the Central Bank of Myanmar 29-12-2017: <https://forex.cbm.gov.mm/index.php/fixrate>

3.2.3 Econometric analysis

Fixed effects estimation

Although all of the above clearly indicates that receiving support increases income over time, it does not establish a causal relationship nor does it take into account – or control for – factors such as pre-existing wealth, education and more, which may affect the results.

Table 5 shows the results of panel data regression analysis using a Fixed Effects model. The treatment variable “Assistance 2017” is defined in model 1 as households that received any kind of development assistance in the 12 months prior to the survey in 2017 with baseline assistance set to 0. All other households are identified as comparison households regardless of whether they received assistance in 2015, resulting in 1,708 treatment households and 541 comparison households. Model 2 similarly uses any assistance in 2017 as the treatment variable but compares against receiving support in the five years prior to 2015.

Both models use the log of the adjusted income bracket variable as the outcome variable. They include as controls: year, age of household head, age squared to account for nonlinear effects of age, whether household head has any formal education, number of children under five, wealth quintile, whether household grows crops, whether households experienced any shock in the year prior to the 2017 survey, whether household has electricity, whether the village has electricity, whether there is electricity in both household and village, and whether the village has road access. The Fixed Effects model can only include variables that vary over time and estimation of variables with little internal variation are likely to be imprecise. Because no data were collected on shocks in 2015, the shock variable is created so that it appears that no households experienced shocks in 2015. In doing so, the variable does not account for the fact that some households experienced shocks at baseline, which is likely to affect their income trajectory over the study period. The variable should therefore be interpreted with some caution.

The results show a large positive and statistically significant effect on income from receiving assistance in 2017. Receiving assistance increases incomes by an average of 18 per cent, or more than MMK 400,000 (**USD 295**) annually. Being in higher wealth quintiles also has large and increasing positive effects. Growing crops and electricity in the village both show a positive direction of influence but are not statistically significant. Shocks appear to have no independent effect on income, but this should be interpreted lightly given the nature of the variables as described above. Finally, road access shows a negative effect on mean income, which may be reflecting the fact that the majority of households were already in villages that only become connected to a road between 2015 and 2017

Model 2, which looks only at the effect on households that changed their status of support so that they either received support for the first time in 2017 or only received support in 2015, also shows a large positive effect, although substantially smaller than for model 1, at 7.8 per cent.

Table 5. Income change - fixed effects estimation

	Model 1 Treatment group Log income	Model 2 Any support Log income
Year	0.045 (0.045)	0.174 (0.029)***
Assistance 2017	0.179 (0.046)***	0.073 (0.038)*
Age HH head	0.010 (0.009)	0.009 (0.009)
Age squared	-0.000 (0.000)	-0.000 (0.000)
Education HH head	0.068 (0.050)	0.065 (0.050)
# of children under 5	0.022 (0.029)	0.023 (0.029)
Wealth quintile 2	0.173 (0.055)***	0.174 (0.056)***
Wealth quintile 3	0.350 (0.069)***	0.359 (0.069)***
Wealth quintile 4	0.570 (0.077)***	0.574 (0.077)***
Wealth quintile 5	0.745 (0.086)***	0.748 (0.086)***
Crop	0.079 (0.052)	0.077 (0.052)
Shock	-0.010 (0.039)	0.001 (0.039)
Grid electricity	-0.120 (0.064)*	-0.127 (0.063)**
Road access	-0.123 (0.060)**	-0.124 (0.061)**
Constant	13.661 (0.231)***	13.631 (0.232)***
sigma_u	0.58	0.58
sigma_e	0.63	0.63
rho	0.46	0.46
N	4,390	4,390

Standard Errors in brackets.
Stars indicate statistical significance.
*10% **5% ***1%

Matched difference in differences

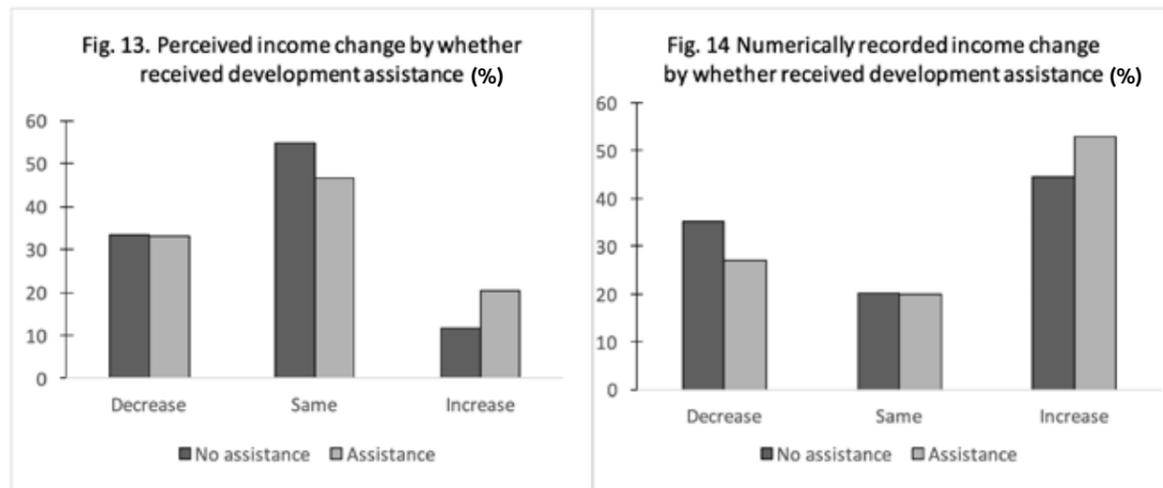
As a further step to reduce unobservable selection bias (which may affect the results), a matched difference-in-differences estimation is also carried out. This approach uses propensity score matching to match treatment and comparison households on baseline characteristics (models 1) as well as on differences in 2017 and 2015 values for control variables (model 2) and estimates the average treatment effect on the treated (ATT). Both models show a strongly significant effect with receiving any support increasing incomes by 15 and 12 per cent respectively.

Table 6. Income increase. Matched difference in differences estimates

	Log income Model1	Log income Model2
ATT	0.166 (0.054)***	0.123 (0.053)**
N	2,187	2,160

Standard Errors in brackets.
Stars indicate statistical significance.
*10% **5% ***1%

While income range data allow us to measure change in income over time, survey participants both years were also asked to assess whether their income in the last year had increased, stayed the same or decreased compared to the previous year. Whereas the numeric variable shows that 53 per cent of households that received assistance in 2017, and 45 per cent of those that did not, had increased their incomes since 2015, only 20 per cent of those with assistance and 12 per cent of those without, said their incomes had increased.¹⁷ Similarly, using either measure, households receiving support were less likely to experience negative income change (Figs 13 and 14).¹⁸



17. Technically the measured change compares income in 2015 to income in 2017 whereas the question on perceived change asks the respondent to compare income in 2017 to income in 2016. However, the same question posed to 1065 households that were also surveyed in 2016 as part of LIFT's tracking survey, do not indicate that the difference in the two measures is caused by a particularly lucrative year in 2016: 24 percent said income had increased, 39 percent that it had stayed the same and 37 percent that it had decreased since 2015.

18. The difference in change over time for households with and without assistance was statistically significant at five percent for perception question and at one percent for measured change.

3.3 Poverty levels and consumption expenditure

Consumption expenditure is used as a proxy measure for income and is used for identifying households living below the poverty line. The household survey collected detailed data on consumption expenditure for a subset of households as described in section 2.

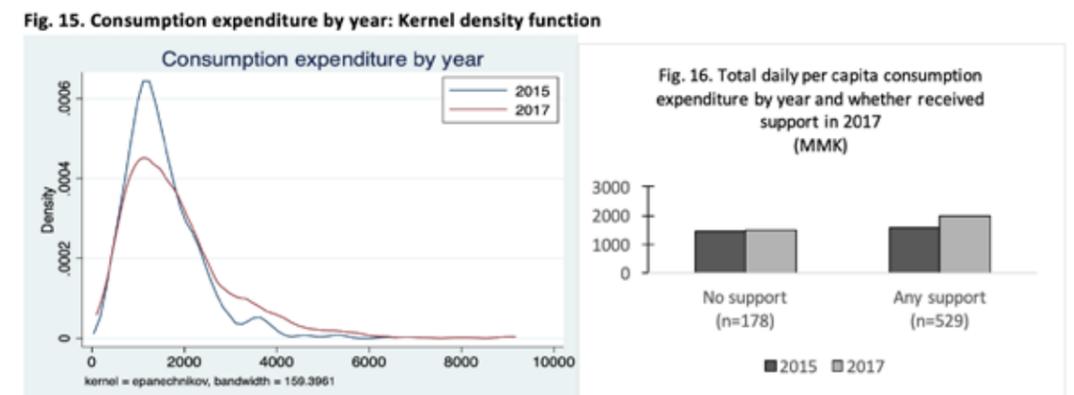
Overall, per capita daily consumption increased from MMK 1,524 (USD 1.12) in 2015 to MMK 1839 (USD 1.35) in 2017 in real terms, corresponding to a 21 per cent increase over the two-year period.¹⁹ Food consumption made 68 per cent of total consumption expenditure in 2015 and 64 per cent in 2017 as shown in Table 9. Generally, such a high share of food consumption is characteristic of households with low disposable incomes. Thus, although levels of consumption expenditure increased at a rate roughly corresponding to the approximate income increase²⁰, the high share of food expenditure indicates a continued high level of food security vulnerability.²¹

Table 7. Food share of total consumption expenditure

	Male	Female	All
2015	67%	69%	68%
2017	%63	%68	%64
Change	%4-	%2-	%4-***

*** Significant at $p < 0.01$.

Figure 15 shows density distribution of consumption expenditure by year. The improvement over time is visible as the distribution for 2017 is lower and wider, with a lower density of households with a daily per capita consumption between MMK 1000-2000, and a higher density between MMK 3000-6000 illustrating a clear positive improvement with fewer households having extremely low levels of consumption.



*Y-axis is density, x-axis per capita consumption expenditure in MMK

19. 2015 values are adjusted for inflation and reported in 2017 MMK.

20. This refers to the increase shown in Table 4 using the adjusted income range measure which groups the highest income households into a category of MMK 7.5 million annually, thus probably underestimating the true mean.

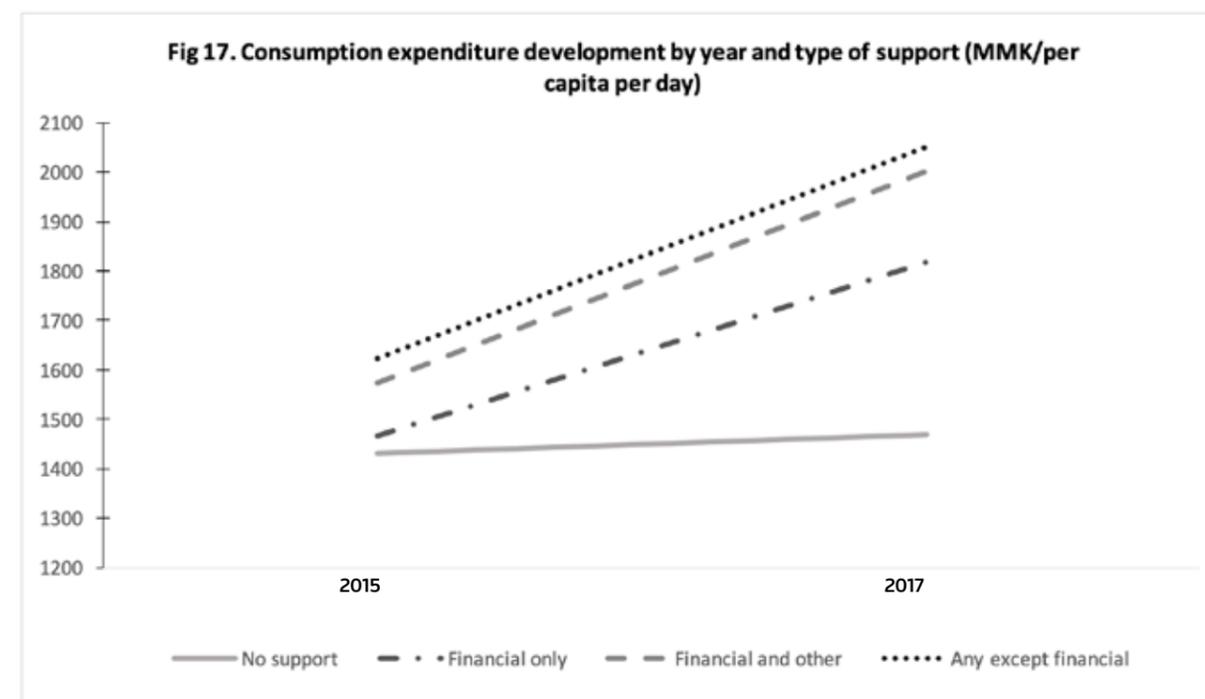
21. This follows what is referred to in economics as "Engel's Law" on the relationship between income and food expenditure.

Table 8. Daily per capita consumption expenditure development by type of support

	2015	2017	Difference	Difference	Difference in difference	T-stat and significance level	n /year
No support	1432	1469	37	3%			178
Financial only	1468	1819	351	24%	314	2.47**	147
Financial and other	1573	2002	430	27%	393	3.46***	250
Any except financial	1622	2052	430	26%	393	2.88**	575
Any support	1556	1964	408	26%	371	3.73***	529
Everyone	1524	1839	314	21%			
Everyone USD	1.12	1.35	0.23				

Looking at development for households that received support in 2017 and those that did not, we find the increase in consumption expenditure to be almost exclusively driven by increases amongst households that received support as shown in Fig. 16. Although disaggregated results should be interpreted with some caution due to limited sample sizes, Fig. 17 and Table 8 further highlights the different levels and consumption expenditure development for households receiving no support in 2017, and those receiving different combinations of support.

We see that not only did households receiving no support have lower levels of consumption expenditure at baseline than other households, they also developed at an almost flat rate whereas households in all other categories of support developed at much steeper trajectories. Unlike for income, where the change over time varied by 10 per cent between households receiving different combinations of support, consumption expenditure increased by almost the same rate regardless of what combination of support households received. There are different potential explanations for this difference. First, it is possible that the increase in consumption seen amongst households that received assistance is not driven by the assistance but by other household characteristics. Secondly, it may be that 'non-financial assistance only' affects consumption more than income, possibly through the inclusion of maternal cash transfers, and possibly by affecting crop agriculture, fishery and livestock produced and used to increase food consumption but not income.



Looking specifically at poverty we find that 13 per cent of households participating in the expenditure survey lived below the international extreme poverty line of USD 1.90 in 2015.²² In 2017, the proportion was roughly the same, decreasing less than one percentage point. In addition to the international poverty line, a local poverty line was constructed by the Government of Myanmar (GoUM) and the World Bank, published in 2017. This poverty line corresponded to a per capita consumption expenditure of MMK 1,360 (USD 1) in December 2015 and MMK 1,514 (USD 1.12) in December 2017, almost twice as much as the international poverty line.²³

Using the latter poverty line, 59 per cent of respondents were poor in 2015, and 48 per cent were so in 2017. It should be noted that these numbers are extremely high in comparison with the 2015 rural poverty rate estimated by GoUM and the World Bank using the same local poverty line and may reflect differences in the calculation of consumption expenditure. It may also reflect differences in geographical locations with LIFT specifically targeting many low-income areas. The take-away therefore should not be the absolute size of the proportion living in poverty at this line, but the fact that there was a substantial decrease in poverty when defined at a higher level of consumption.

²². The poverty line at USD 1.90 corresponded to MMK 720 in 2015 and MMK 779 in 2017 using 2011 PPP and adjusting for inflation.

²³. All values based on 2011 PPP and adjusted for inflation.

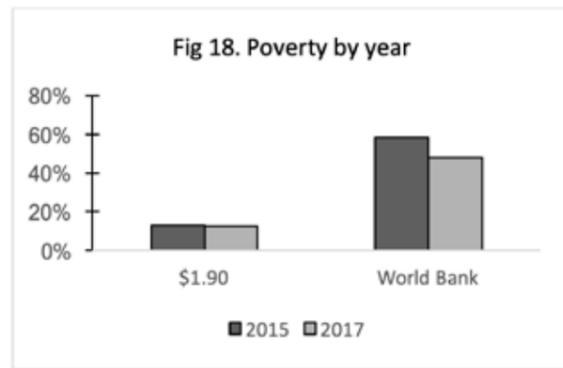
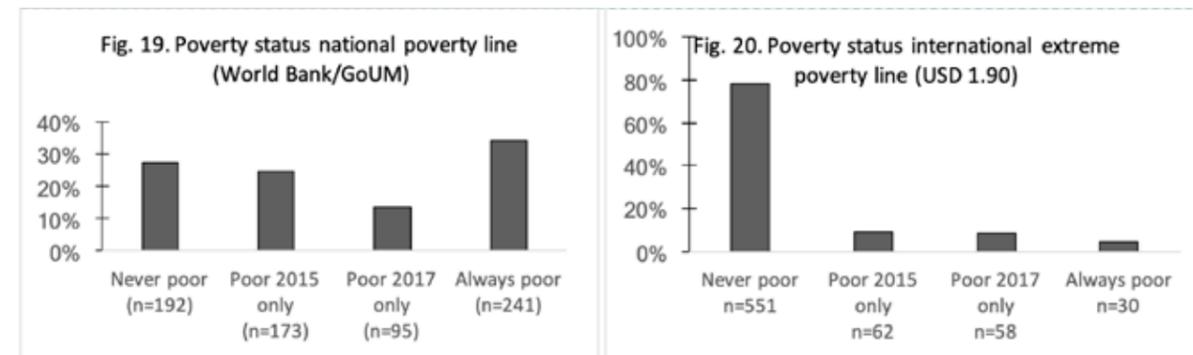


Table 9. Poverty change over time, significance tests.

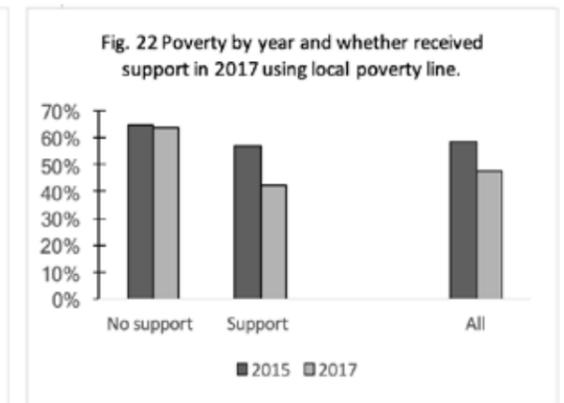
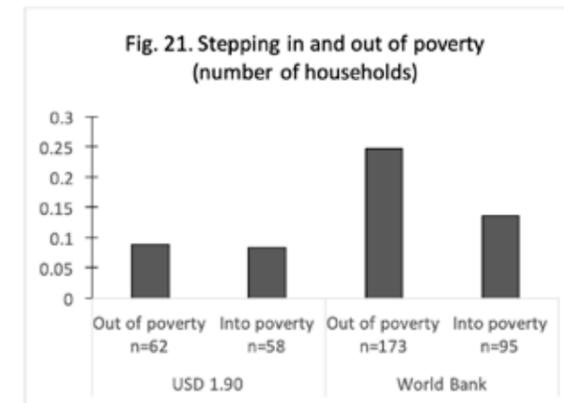
	Mean	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]
All	2,988,387	145,997	2,699,985	3,276,788	1,800,000	2,249
All	All	All	All	All	All	All

Exploring the dynamics of poverty using the locally defined line, we see that 27 per cent of the sample were ‘never poor’ in the two-year period, 25 per cent were ‘poor’ in 2015 but no longer so in 2017, 14 per cent were ‘only poor’ in 2017, and 34 per cent were ‘always poor’ (Fig. 19). Stated differently, 25 per cent stepped out of poverty, and 14 per cent fell into poverty between 2015 and 2017 as shown in Fig 21.



When using the international extreme poverty line, 79 per cent of respondents were ‘never poor’, 9 per cent were ‘poor’ in 2015 only, 8 per cent in 2017 only and just 4 per cent were ‘always poor’ as shown in Fig. 20. Stated differently when using the international poverty line, 9 per cent stepped out of poverty, and 8 per cent fell into poverty over the two-year period (Fig. 21).

As noted before, the sample sizes are small and as such these results should not be seen as necessarily representative for the population at large.



Looking at the change in poverty by whether households received development assistance in 2017 we find that the proportion of poor amongst households with no assistance remained effectively unchanged over the two-year period, whereas poverty decreased by 14 percentage points amongst households that did receive support in the 12 months prior to the 2017 survey (Fig. 22). Table 12 shows a significance test for the difference in change between the two groups over time revealing a statistical significance at the 5 per cent level.

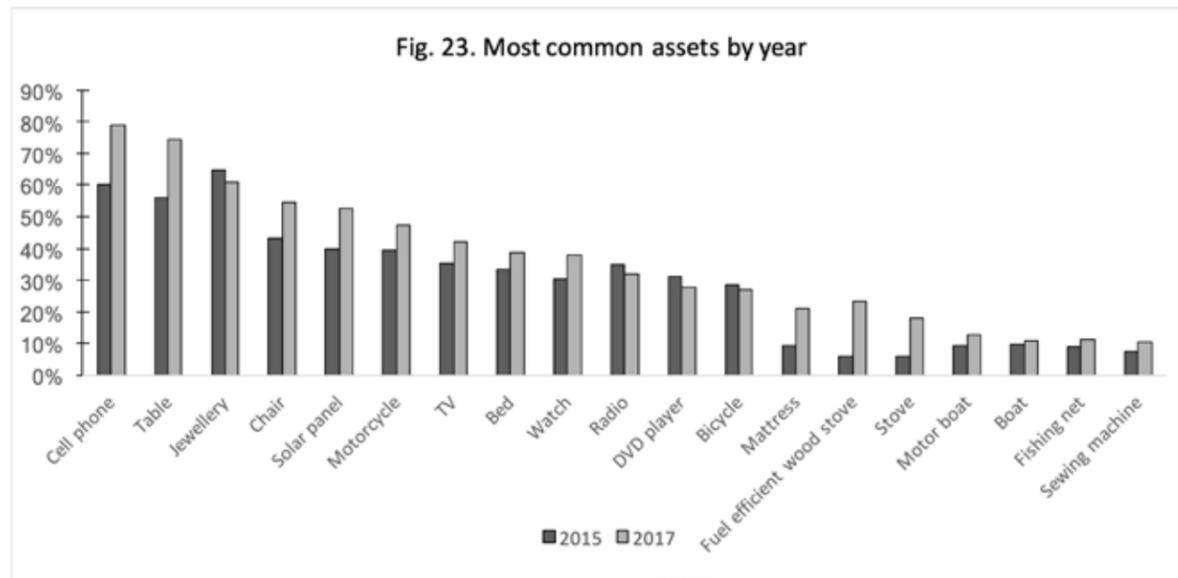
Table 10. Significance test for difference in differences. Probability that change ≠ 0.

Mean	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]
-1	-0.1337387	0.0540012	-2.48	0.014	-0.240412 -0.0270654

3.4 Asset ownership and relative wealth

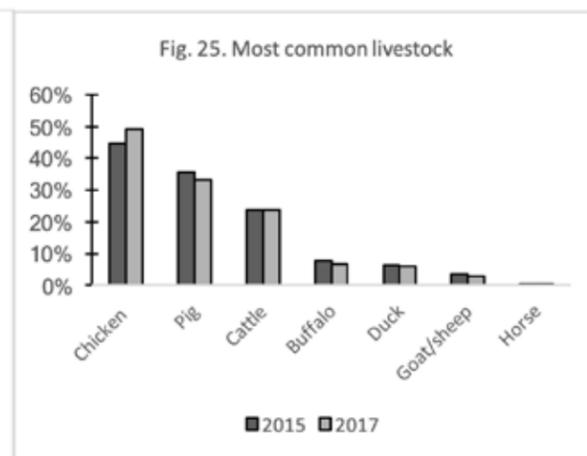
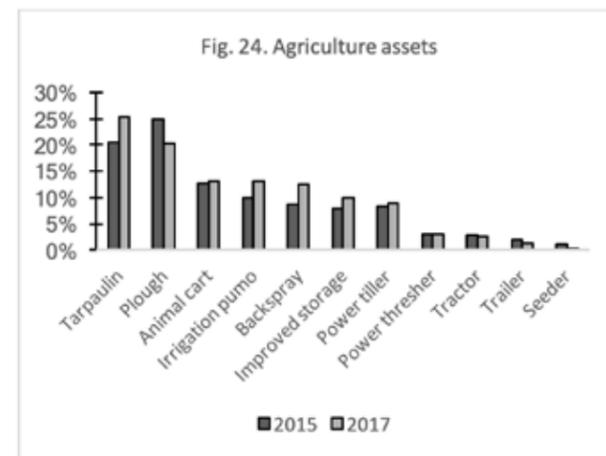
The household survey collects a wide range of data on asset ownership, including durable assets, agricultural assets, livestock ownership, landownership and housing.

Overall, ownership of durable assets increased significantly in the two-year period. Ownership of several assets increased between 10 and 20 per cent over the two years as shown in Fig. 23. This was the case for assets such as a cell phone, which was owned by 60 per cent of households in 2015 and by 79 per cent in 2017, making it the most commonly owned asset in 2017. The second most common asset was a table followed by jewellery, chair, and a solar panel, all of which were owned by more than half of the population in 2017. Fig. 23 shows all durable assets that were owned by more than 10 per cent of the population in 2017.



Focus group discussions supported the quantitative findings with participants describing an increase in asset ownership and highlighting specifically mobile phones, solar panels, motorbikes, livestock and house materials. Mobile phones were said to have become more affordable and therefore more youths, casual labourers and households were able to purchase phones by saving. Motorbike ownership had increased in some villages, mostly in the Delta and Dry Zone, with respondents stating this was due to road improvements as well as availability of loans and installment plans. In the Dry Zone, solar panels were said to have increased primarily due to government providing panels and batteries, whereas elsewhere it was said to increase when community members realised that solar panels were more cost-efficient than buying candles daily.

“We got solar panels and batteries ... The minister gave them to us ... We had to use candles in the past but now it is pretty bright in the village and on the streets. As soon as it gets a little dark, we switch them on.” : Poor female in the Dry Zone.



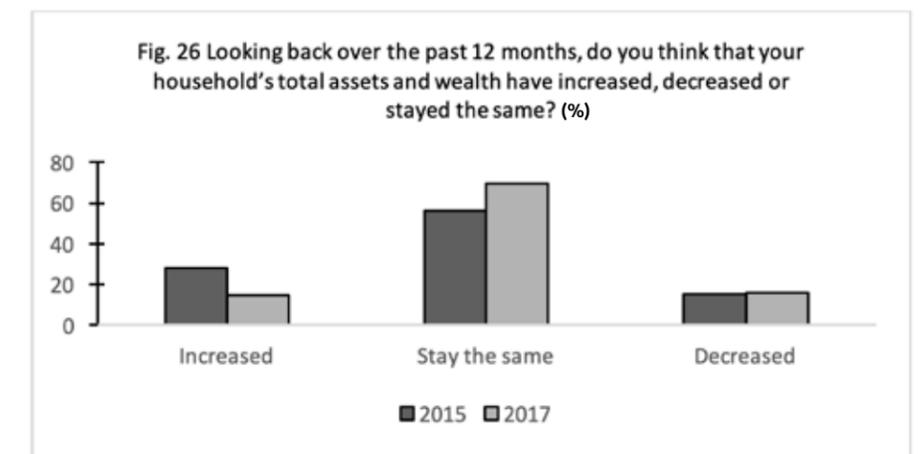
Ownership of agricultural assets remained somewhat more stable with the main changes consisting of a five percentage point increase in tarpaulin ownership, and a five percentage point decrease in ownership of a plough, which was owned by 20 per cent of households in 2015 but just 15 per cent in 2017 (Fig. 24).

Livestock ownership remained practically constant, with a minor increase in households that owned chickens and a few percentage point decrease in ownership of pigs as shown in Fig. 25.

In focus group discussions, villagers reported seeing an increase in machinery for farmers which, in turn, meant buffalos and cattle were needed less and therefore sold.

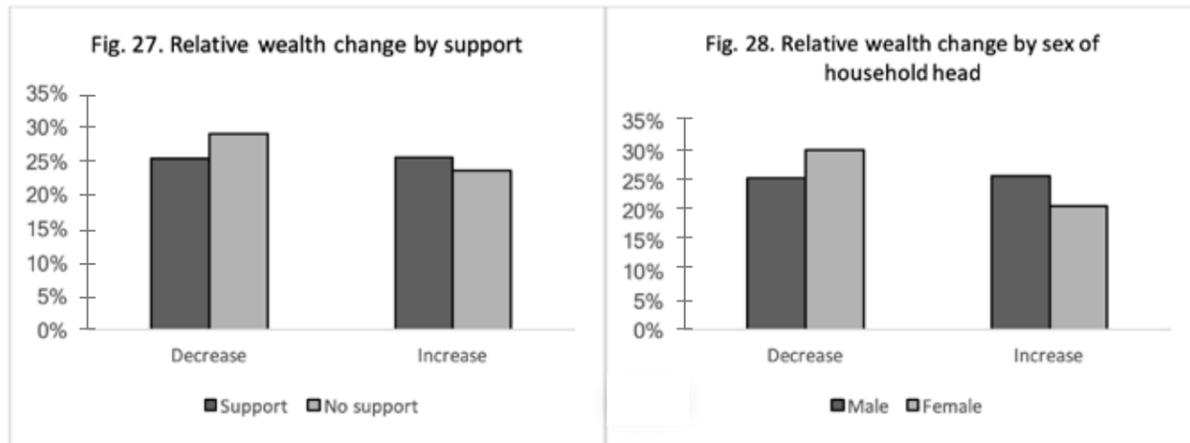
“I think there is some change in agriculture and in industry. Now we have to use machines, we own more and more machines.” : Non-farmer in the Delta.

Households also said development organisations had provided livestock such as chickens and pigs thus increasing ownership, which in turn had further increased through breeding.



Exploring respondents’ perception of change in asset ownership in Fig. 26, we see that the majority of households in 2017 said it had remained the same with the proportion saying it had increased almost the same as the proportion reporting a decrease. We also note however, that the proportion of households reporting an increase in assets owned fell from 28 per cent in 2015 to under 15 per cent in 2017, which appears contrary to the quantitative measure of asset ownership which, as discussed above, shows an increase in most assets over the two-year period.

Using wealth quintiles as shown in previous sections is helpful for understanding relative wealth. Exploring relative wealth change by whether households received assistance, we find that households that received support in 2017 were less likely to experience relative wealth decrease, and more likely to experience an increase, than were households that did receive assistance as shown in Fig. 27.



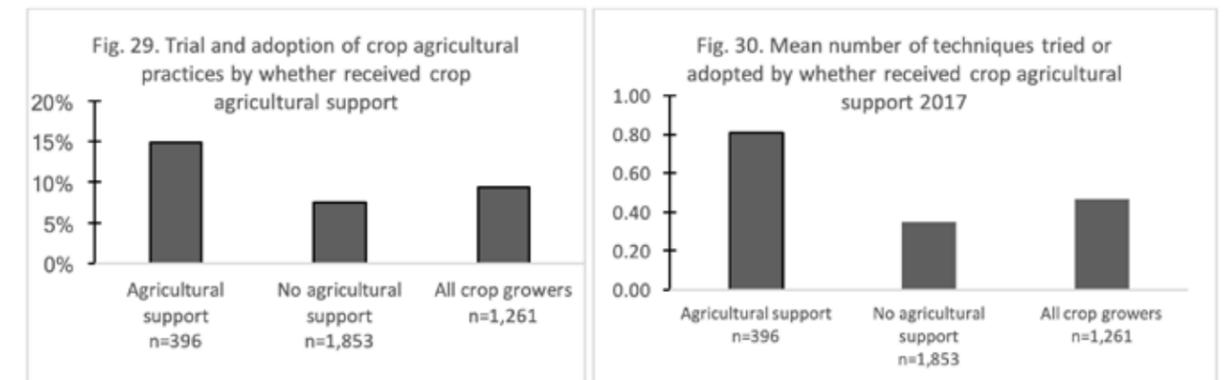
Using the same approach Fig. 28 shows that female-headed households were more likely to become poorer in relative terms and less likely to become wealthier than were male-headed households. Whereas 25 per cent of male-headed households saw a decrease in relative wealth this was true for 30 per cent of female-headed households. Conversely, 26 per cent of male-headed households saw an increase compared to 21 per cent of female-headed households.

3.5 Programme Outcome 1: Increased sustainable agriculture and farm-based production by smallholder farmers

To test the assumed linkage between receiving advisory services and ultimate income gains, we explore the steps in the Theory of Change related to Programme Outcome 1: Increased sustainable agriculture and farm-based production by smallholder farmers. As discussed in section 3.1, 24 per cent of households said they had received any kind of agricultural support in the last two years whilst 18 per cent of households reported having received crop agriculture support. Keeping these parameters in mind we examine the first step of the TOC, which explores to what extent households receiving advisory support in the last two years also report trialling or adopting new practices.

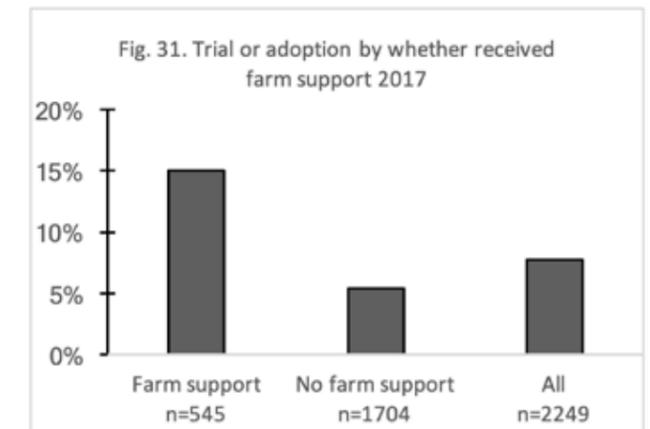
3.5.1 Trial and adoption

Overall, the likelihood of trialling or adopting new agricultural practices was low with just 9 per cent of crop growers reporting doing so in the two years prior to the 2017 survey. Even so, those who received crop agriculture-related support were substantially more likely to trial and adopt new agricultural techniques or practices. Whereas 8 per cent of crop growing households that received no support either trialled or adopted new practices in the two years, 15 per cent of those who received support did so (Fig. 29). Similarly as shown in Fig. 30, the number of new practices trialled or adopted was higher for those receiving agricultural support.



The numbers are similar for agricultural practices more broadly – including agriculture, fishery, aquaculture and livestock. Here just 5 per cent of households that received no support trialled or adopted new practices compared to 15 per cent of those that did receive support as shown in Fig 31.

In sum, while receiving support does appear to affect trials and adoption positively, the proportion doing so is low.



Qualitative findings suggest that this may be related to a number of factors. Firstly, study participants frequently expressed a demand for knowledge and skills:

- *“We need technology, more knowledge on agriculture.”: 54 year old village head, Fallam*
- *“We need more technical knowledge to do animal husbandry.”: 27 year old female, Yesagyo*
- *“We need more knowledge on animal husbandry to know how to treat the diseases.”: 44 year old female, Pyapon*

“We need to have experts from Yezin University come and show us agricultural techniques. For example, if we want to plant corn. But the corn doesn’t grow. Is it because of the soil? The water? We don’t know. We need to be able to test the soil, is it saline, is it acidic?”: 45 year old loan officer, Monywa

At the same time, many farmers expressed a high degree of risk-adversity, particularly due to the increased monetisation of agriculture:

“There hasn’t been much improvement, but I will keep trying. But I don’t dare to expand. The cost is too much, you have to buy everything, seed, fertilizers. It is too risky.”: 64 year old male, Pindaya

“I don’t dare to try planting anything new. I’ll just do what I can. You need big investment to plant, I mean I would need 500,000 Kyats.”: 66 year old male, Pindaya

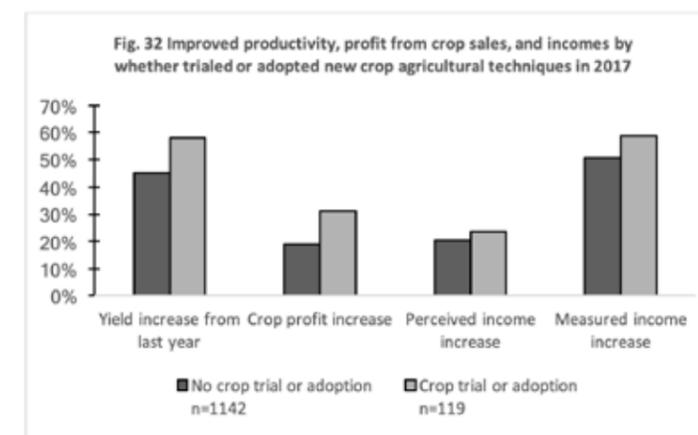
In some instances where households had received support this was not deemed appropriate, partly also due to the financing involved:

“[NGO] came and did some agricultural training. But it wasn’t suitable, you would need so much investment, much more than our normal way. So I didn’t try.” : 45 year old woman, Pindaya

Others who did trial or adopt new approaches or techniques, obtained their know-how from farmers in their own or other villages, and sometimes through the private sector with pesticide companies providing visits and instructions on pesticide use.

3.5.2 Trial, adoption and outcomes

Looking now at the next step in the theory of change, households that had received crop agricultural support in the last two years were more likely to report increased crop profits in the last year as shown in Fig 32. Fifty-eight per cent of households that trialled or adopted, reported increased yields since last year²⁴, compared to 45 per cent of those who did not trial or adopt. Crop profits as well as perceived and measured income increase was similarly higher amongst households that trialled or adopted (Fig. 32).



The full picture however, is slightly more complex. Whereas Fig. 32 show only households reporting increases, a sizeable proportion also reported decreased yield, profit and income. Taking those into account however, we continue to see an overall positive relationship between trial/adoption and outcomes.

Table 11 provides the full overview of positive, negative and net changes. The difference in net change reported for each outcome is the net effect of trialing and adopting.²⁵ As shown this is 12 per cent for yield, 5 per cent for crop profit, and 16 per cent for measured income. As discussed in section 3.2.4, there is a sizeable difference between perceived and measured income change, which is evident here as a net effect of negative 5 per cent for perceived income. However, given the clear positive effect for other outcomes, it is reasonable to conclude that household that trial and adopt overall do better than households that do not.

Table 11. Changes to crop yield, profit and income by whether trialed/adopted new techniques.

	Yield increase from last year	Yield decrease from last year	Net change	Crop profit increase	Crop profit decrease	Net change	Perceived income increase	Perceived income decrease	Net change	Measured income increase	Measured income decrease	Net change	n
No crop trial or adoption	45%	47%	-1%	19%	24%	-5%	20%	30%	-9%	51%	30%	21%	1142
Crop trial or adoption	58%	48%	10%	31%	31%	0%	24%	38%	-14%	59%	22%	37%	119
Difference	13%	1%	12%	12%	7%	5%	3%	8%	-5%	8%	-8%	16%	

²⁴. Increased/decreased yield since last year is measured as households reporting increased/decreased yields for any of the main crops in each season. As such, it is possible for the same household to experience both increased and decreased yields.

²⁵. This does not take into account other factors which may affect outcomes, and as such should not necessarily be interpreted as a causal effect.

The situation is similar when looking at changes to incomes and profits from all types of agricultural sales by whether households trialed or adopted any new practices in crop agriculture, livestock, aquaculture or fishery (Fig. 33). We see that there is a large difference in perceived profit increases with 18 per cent of non-trialing households and 34 per cent of those that did trial or adopt reporting profit increases in the last year, compared to the year before. Both perceived and measured income increases were also higher amongst those who trialed or adopted.

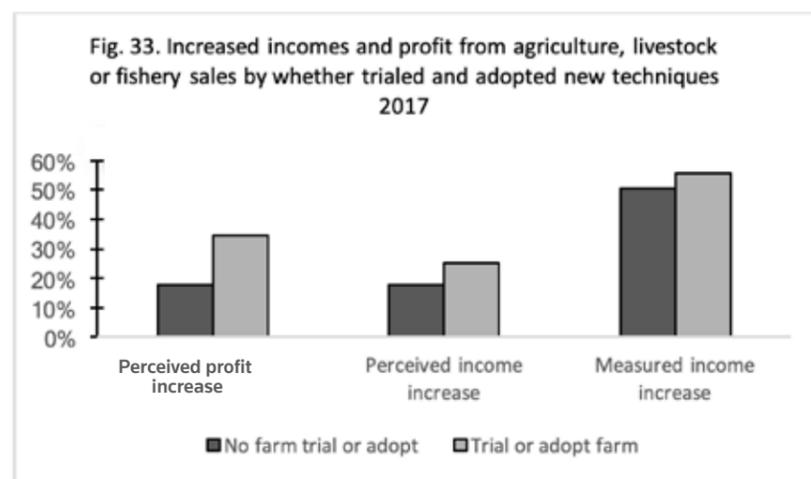
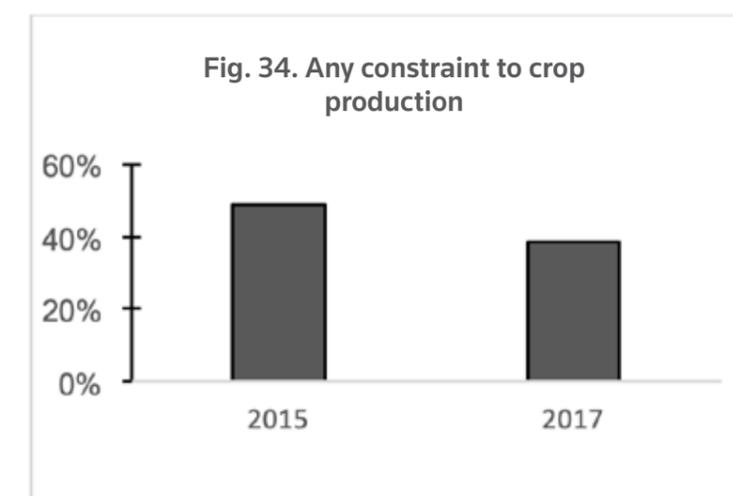


Fig. 33 shows only reported increases. As for crop agriculture, however, when including households that report decreases, we find a positive relationship between trialling/adopting and key outcomes: We find a net positive effect of 10 per cent for returns from agriculture, 5 per cent for perceived income and 12 per cent for measured income change. Table 12 provides the full overview of reported changes.

Table 12. Changes to agricultural returns and income by whether trialed/adopted new techniques.

	Increased returns from agriculture	Decreased returns from agriculture	Net change	Perceived income increase	Perceived income decrease	Net change	Measured income increase	Measured income decrease	Net change
No agricultural trial or adoption	18%	25%	-7%	18%	33%	-15%	51%	29%	21%
Agricultural trial or adoption	34%	32%	3%	25%	35%	-10%	56%	22%	33%
Difference	17%	7%	10%	8%	2%	5%	5%	-7%	12%

Consistent with the overall positive trends in yield and crop profits, we find that the proportion of households reporting any constraints to agricultural production decreased by ten percentage points between 2015 and 2017 (Fig. 34). The mean number of constraints each household experienced similarly decreased. Overall however, the proportion of crop growing households that experienced at least one constraint remains high at 39 per cent. The study explored, but did not find significant net differences, in the number of constraints experienced amongst households that trialed or adopted, compared to those that did not.



In conclusion, the study finds positive overall changes to agricultural outcomes alongside a decrease in constraints to crop production. There is also evidence of a positive relationship between trialling or adopting new agricultural methods and experiencing positive changes in yields, profits and income. However, only a small proportion of households trial or adopt at all, which is true as well for households that receive agricultural assistance. In qualitative interviews farmers report a strong desire for new knowledge and technical assistance, but many are weary to try to approaches due to high cost which, for vulnerable groups may result in severe debt in the case of crop failure.

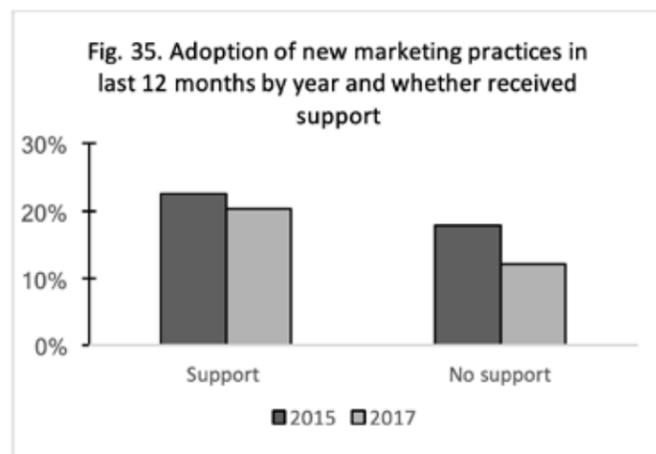
3.6. Programme Outcome 2: Improved market access and market terms for smallholder farmers.

This section explores the linkage between LIFT’s Programme Outcome 2: Improved market access and market terms for smallholder farmers and income gains. Following the TOC (Fig. 1) in section 1.2, LIFT assistance is expected to lead to increased membership of functional producer groups, and to increased adoption of new marketing practices. This in turn is expected to lead to higher profits from agricultural activities.

The LIFT Household Survey 2017 (discussed in section 2.5) found that almost no households reported being members of producer groups in 2017. This section therefore focusses on marketing. We see that those who received development assistance in the 12 months prior to the 2017 survey were more likely to adopt new marketing practices in both 2015 and 2017

than were households that received no such assistance (Fig. 35).

The share of households adopting new practices decreased from 18 to 12 per cent for households who received no support as shown in Fig. 35, whilst it decreased only slightly, and not statistically significantly, from 22.7 to 20.3 per cent for households that received support.



Although the overall share of households that adopted new practices decreased in the two-year period, the study finds a positive relationship between adopting such practices and increasing incomes.

Amongst the 545 households that reported receiving any agricultural-related assistance in the 2017 survey, those that adopted new marketing practices were substantially more likely to increase incomes than those that did not as shown in Table 13a. The table also shows, however, that households that did not adopt new marketing practices had lower baseline incomes than households that did adopt new practices. That indicates that the observed differences in income change between the two groups may be at least partially due to other factors than the actual marketing practices.

Table 13a. Income change by whether adopted new marketing.

	No new marketing	New marketing	Difference
2015	1,968,742	2,436,239	467,497
2017	2,398,519	3,787,500	1,388,981
Change	429,776	1,351,261	921,485
Change in %	22%	55%	34%

Table 13b. Significance test: Probability that difference in differences is ≠ 0

Mean	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
-1	921484.6	220970.6	4.17	0	484501.9	1358467

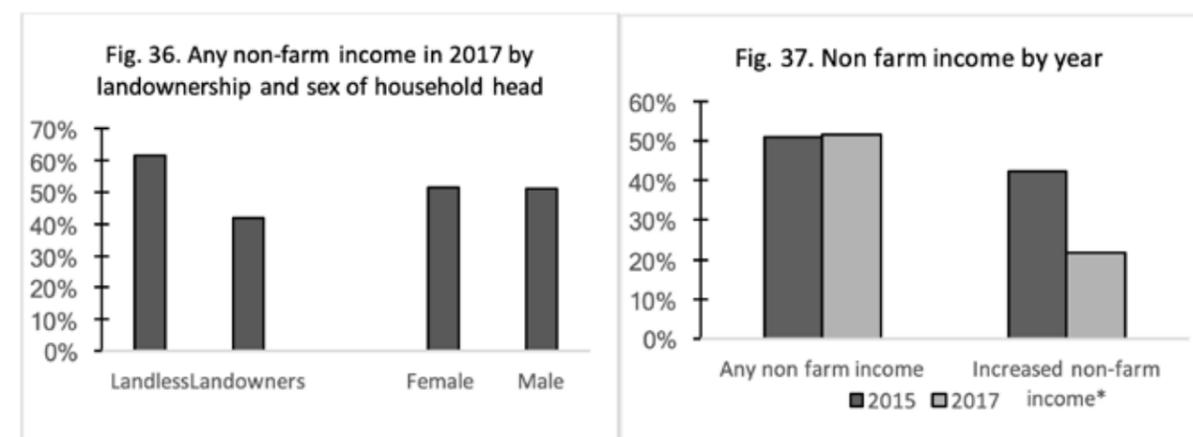
Overall, compared to households that do not receive assistance, those that do are more likely to adopt new marketing practices. Amongst households receiving assistance, the proportion adopting new marketing practices, however, remained practically unchanged, indicating that LIFT support on the topic has most likely been either limited in scope, or not successful at increasing adoption rates. In addition, whilst not drawing conclusions on causality, there is a strong positive relationship between adoption of new marketing practices and increased income as such supporting the linkages in the TOC shown in Fig. 1.

3.7. Programme Outcome 3: Increased and safe employment in non-farm activities for smallholders and landless

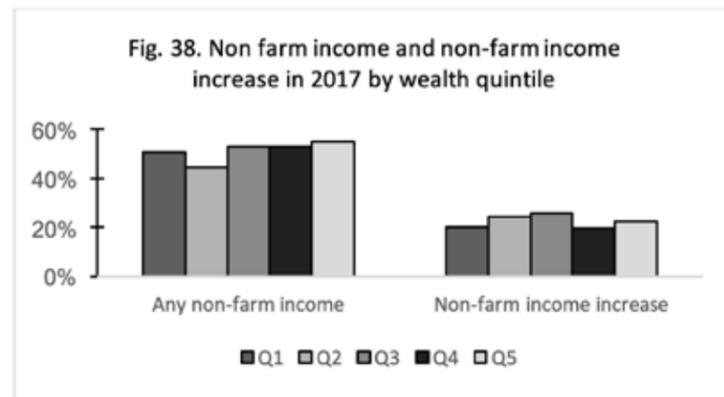
Under LIFT Programme Outcome 3, support for non-agricultural skills is expected to lead to more households finding new jobs or starting new businesses as shown in Fig. 1 in section 1.2.

3.7.1 Non-farm support

Looking first at the likelihood of having any non-farm income, we find that just over half of households reported having any non-farm income in 2017, remaining practically constant since 2015 (Fig. 36). Male- and female-headed households were equally likely to earn income from non-farm sources, and landless were more likely to do so than landowners, with 62 per cent of landless and 41 per cent of landowners having any such income in 2017, as shown in Fig. 36.



We also see that the percentage of households with non-farm income only varies little by wealth quintile: the wealthiest are slightly more likely than other quintiles to have any non-farm income, with households in the second quintile least likely to do so, as shown in Fig. 38

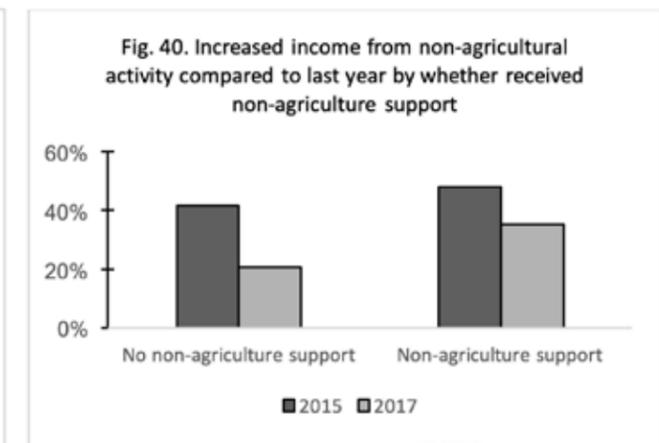
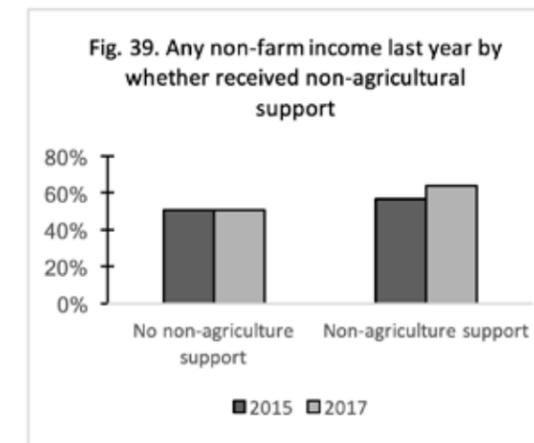


Qualitative interviews found that non-farm work was generally seen as an unreliable income source vulnerable to global economic trends:

- “Well, you get money when you get money, and when you don’t it’s hard. It’s not regular, it is very unreliable.”: 25 year old woman, Yesagyo*
- “I do some sewing work at home. If I don’t have enough food, I go and borrow some food from others. I try and get work anywhere.”: 25 year old woman, Myepon*
- “The work isn’t regular. Now, there isn’t much day work in this village. There’s factory work, some textile work [over there] but not much in the village now.”: 65 year old village elder, Monywa*
- “There are more ways now to find other income, there’s blanket making and pillows. But it is not certain, it depends on the global situation. If the global situation is tight, it is tight here too. It depends on the demand from the owners.”: 36 year old male village committee member, Monywa*

As shown in section 3.1, just 6 per cent of households received non-farm assistance in 2017. Those that did, however, were slightly more likely to report having non-farm income than in 2015.

Sixty-three percent of these households said they had some non-farm income in 2017 up from 56 per cent in 2015 (Fig. 39). Meanwhile, the proportion of households with non-farm incomes remained constant at 50 per cent amongst those that did not receive assistance.



3.7.2 Non-farm income gains

Looking now at increases to non-farm income amongst those who reported non-farm activities as an income source we find a substantial drop in households reporting increased incomes as shown in Fig. 40. In fact, the proportion doing so nearly halved from 42 per cent in 2015 to 22 per cent in 2017. While there was no clear difference across wealth groups (Fig. 38), households that received non-farm assistance in 2017 were more likely to report an increase in 2017 than were those that did not receive support (Fig. 40).

Although the proportion reporting increased incomes dropped for both groups, it dropped less for those that received support. In addition, taking those with decreased incomes into account, we find a net positive effect of 17 per cent: a net decrease of 14 per cent amongst households receiving no non-agricultural support, and a net increase of 3 per cent for households with support as shown in Table 14.

Table 14. Non-farm income change since last year ²⁶

	Decrease	Increase	Net
No non-agriculture support	26%	12%	-14%
Non-agriculture support	22%	25%	3%
Difference	-4%	13%	17%

²⁶ Whereas Figs 39-40 show proportion of households that reported any non-farm income, the difference in difference estimates uses proportion of all as the panel sample size otherwise decreases substantially, lowering accuracy of the estimates.

Summing up, although more than half of households earn income from at least one non-agricultural source, the proportion receiving support to develop non-agricultural skills is very small. Qualitative reports reveal that most households regard such income as an unstable and often ad-hoc source of income. Despite the small proportion receiving non-agricultural assistance, we do find a clear positive relationship between receiving such support and gains to non-agricultural income.

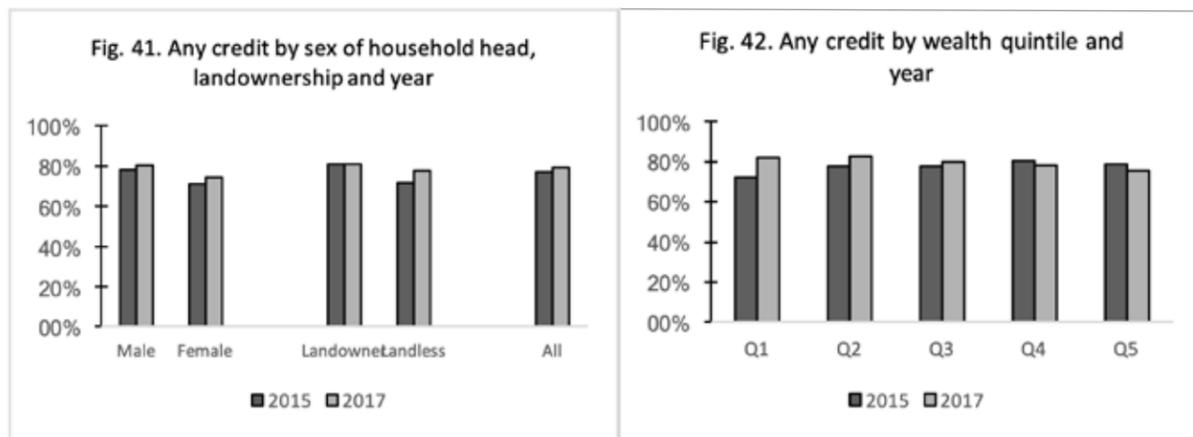
3.8. Programme Outcome 4. Increased access to adequate and affordable financial services by smallholders and landless

Programme Outcome 4 envisions that increased access to adequate and affordable financial services by smallholders and landless will help increase incomes. As shown in section 3.1 financial inclusion was the most common form of development assistance received by half of respondents in LIFT-supported villages. This section examines credit, credit sources and the size of debt.

3.8.1 Who takes credit?

Overall, 77 per cent of households in 2015 and 80 per cent in 2017 reported taking some kind of loan from any source – including from formal sources, money lenders and family – in the past 12 months as shown in Fig. 41.

Male-headed households were more likely than female-headed households to report taking a loan – 81 per cent of male-headed, and 75 per cent of female-headed households did so in 2017. Landowners were only slightly more likely than landless to take a loan; but whereas the proportion taking a loan remained constant amongst landowners, it increased by six percentage points amongst landless households over the two-year period.

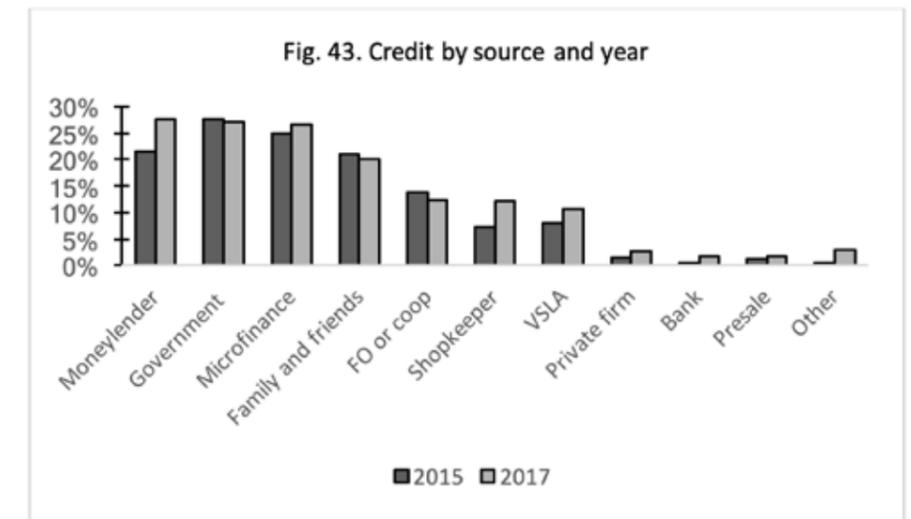


Although the likelihood of taking any credit changed little overall, it increased by 10 percentage points for households in the poorest quintile. It also increased slightly for households in the second quintile whereas it appeared to decrease by a few percentage points for the wealthiest²⁷ (Fig. 42).

²⁷. Due to a small sample size and a large margin of error we cannot conclude with certainty that there was an increase.

3.8.2 Credit sources

Households take loans from a variety of sources and often have multiple loans. On average, households in LIFT-supported villages had taken loans from 1.5 sources in 2017 up from 1.3 sources in 2015.²⁸ The reported sources of credit are shown in Fig. 43 with moneylender, government and microfinance institutions filling the top three with 28, 27 and 27 per cent of households respectively reporting taking such loans in 2017. Looking at change over time, most notably we see a six percentage point increase in the likelihood of having taken a loan from a moneylender. The likelihood of taking credit from shopkeepers increased from 7 to 12 per cent, while households became just a few percentage points more likely to report having taken a loan from a village savings and loans association (VSLA) and a microfinance provider.



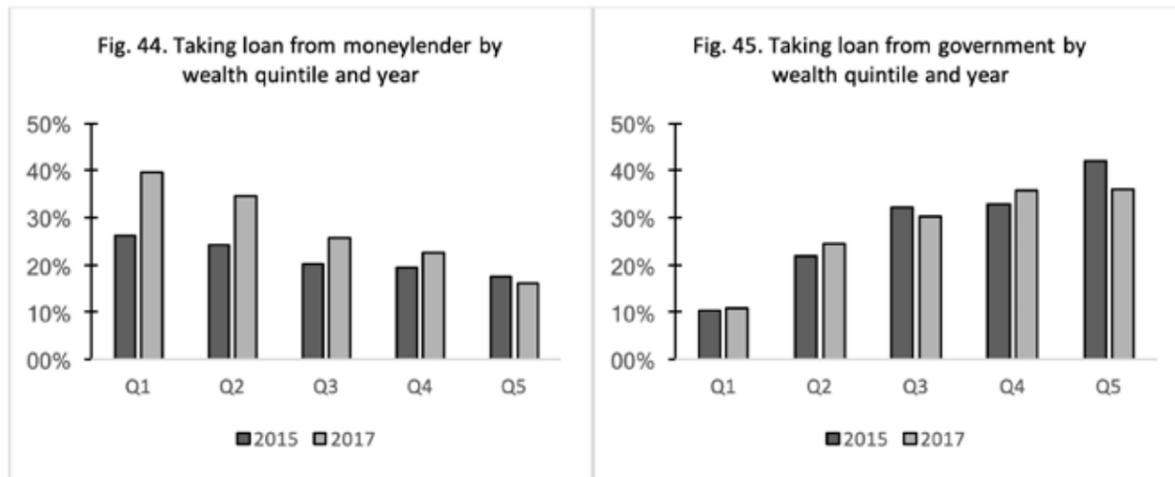
The qualitative study found a noticeable expansion of access to finance and number of credit sources available in the study areas: Some reported seven or eight different sources of microfinance, besides more traditional agricultural and bank loans, and non-formal sources:

- “We have eight microfinance organisations in our village.”: **30 year old woman, Yesagyo**
- “We have Than le Than, PACT, Red Cross, savings and loans groups, IRC and agriculture groups. PACT we have to give the interest twice a month. The saving and loans group is better, you can save as much as you want and then take out at the end of the year.”: **24 year old woman, Myepon**
- “Our village has become more urbanised now, we have many more credit sources”: **60 year old female headed household, Monywa**

Examining loan taking by wealth quintile for the three most common credit sources in Fig. 44 however, we see that the increase in households borrowing from a moneylender was driven primarily by an increase in

²⁸. This is an overall average including those who had taken no loan at all.

households in the poorest quintile. Whereas 26 per cent of the poorest quintile did so in 2015, this was true for 40 per cent in 2017, making the poorest quintile the largest group of clients for moneylenders. Borrowing from moneylenders also increased for all other wealth quintiles except for the wealthiest. However, both the proportion and the increase over time was largest for the poorest group.



Qualitative findings point to two possible causes for the increase in such lending amongst the poorest. One potential positive cause may be decreased interest rates amongst moneylenders stemming from the increased competition from microfinance organisations:

“In the past 2-3 years, we had some flooding, so some damage. We borrowed from outside, with 5% interest. We borrowed from PACT, we borrowed from MSY. We borrowed from the savings and loans group. But then when it came to pay back the loans from the organisation, we had to borrow from outside. Then, when we have to pay back the outside, we borrow from the organisations. Before we only had loans at 8%. Now the organisations came, they had lower interest. So the outside groups reduced their interest [to 5%]. Sometimes, if you know the person [lender] well, they would give you at 2%. Year on year, we borrow and repay. It’s OK, year on year.”: 24 year old woman, Yesagyo

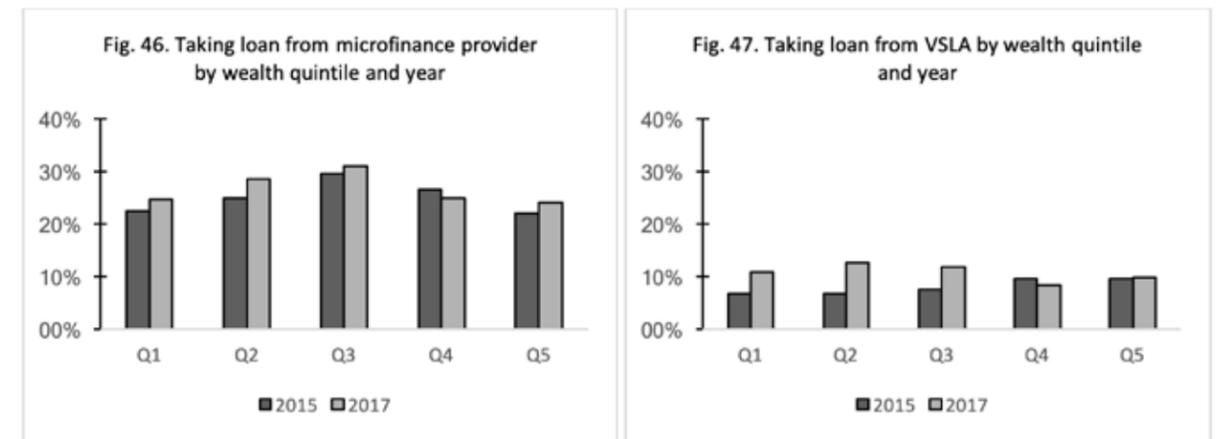
More commonly however, respondents reported that easier access to such loans increased debt, which some were subsequently unable to repay, or repay on time according to the payment schedule set by the provider, in turn leading to increased borrowing from higher interest sources.

“Then we get health problems, that costs money. We can borrow from these organisations, the interest rate is low, that’s good. But we have to find work to be able to repay [the loan]. That’s when we end up on high interest from low interest”: 45 year old woman, Monywa

“Back then, we didn’t have much debt. Now, it’s more, and it gets worse. You borrow at 1%, you can’t pay back, so you borrow at 5%. Then you can’t pay back so its 10%. You started at 1%, now its 10%. It’s a cycle.”: 52 year old male, Pindaya

Wealthier households were substantially more likely to take loans from government than were poorer households with the prevalence of these loans increasing steadily by wealth quintile. Just 11 per cent of the poorest were taking such loans in 2017 compared with 36 per cent of the wealthiest as shown in Fig. 45.

Borrowing from microfinance providers on the other hand, was distributed more equally across wealth groups with those in the middle of the wealth distribution most likely to take a loan from a microfinance provider as shown in Fig. 46. The increase in microfinance lending was derived mainly from a small increase in such borrowing amongst the poorest and second quintiles. There also was a small increase amongst the wealthiest.



Village Savings and Loan Associations (VSLAs) were not a common source of credit, but did increase over the two-year period, mainly amongst households in the poorest, second and third quintiles as shown in Fig. 47.

Generally, but not universally, the effect of greater availability of lower cost finance was seen as positive, mainly by reducing the reliance on higher-interest loans from village moneylenders and increasing access to finance for more marginalised households.

“Now it is easier for poorer people to get loans, that has helped them. Previously they couldn’t get loans. Before, they’d have to borrow from relatives, and people didn’t really trust them. So they’d ask for 100,000, but only get 50,000.”: 40 year old male, Monywa

“I’m able to get through with borrowing from savings and loan group and PACT Myanmar.” : 60 year old, female-headed household, Myepon

A number of respondents in the narrative interviews specifically highlighted the benefits of VSLAs:

“The savings and loans [group] is much better than outside loans [or moneylenders]. After saving for a month, you can borrow. Because of this, we don’t have to borrow so much from outside lenders.”: 35 year old female, Myepon

“Tat Lan came and showed us to do savings, and to organise ourselves. So we have done that. So initially as a group we save the money, then when we get a certain amount, then we take it in turns to borrow from that. Interest is about 5%. Then after a year or so, we share out the interest to the group members.”: 24 year old woman, Myepon

However, as discussed in section 3.1 on development assistance there is also a proportion of the population that does not receive assistance including microfinance, and these households are more likely to be female-headed and belong to the poorer wealth group. This was supported through qualitative discussions:

“I used to be in a savings and loans group before, but because I am so poor and don’t have regular income, I can’t save anymore, so I can’t stay in the group.”: (40 year old female, Myepon)

“There are savings and loans groups in the village, I have heard about them. You borrow 10,000 Kyat, you put in 1,000 Kyat. But I don’t dare to join. I don’t understand it. They don’t let me join. You have to make a group of five, and they didn’t let me join. I went to look, but the group was already full, so I couldn’t join. So I have to do my own way.”: 35 year old woman, Monywa

3.8.3 Household debt

Households reported on the total amount of debt currently incurred by the household as well as the size of all loans taken over the last 12 months.²⁹ Combined with income data, we find that on average household debt constituted one-third of household income in 2015, and slightly more, 37 per cent, in 2017 as shown in Table 15. We also see that on average the total size of loans taken during the space of one year was higher than current debt indicating that households tend to borrow and pay back at least part of their loans on a short-term basis.

Table 15. Loan and debt by year.

	Loan amount	Loan as proportion of income	Debt amount	Debt as proportion of income
2015	506,997	37.6%	442,088	33.4%
2017	618,531	36.5%	582,615	36.8%
Change	111,533	-1.2%*	140,527	3.4%*

*Percentage points.

Looking at debt as a proportion of income by whether households became poorer or wealthier as measured using the asset index in Table 16, we see that households that moved to a lower wealth quintile between 2015 and 2017 on average increased debt-income ratio by 15 per cent. In comparison, those who remained in the same wealth quintile did not change the debt-income ratio and those who moved to a higher quintile decreased debt as part of their income.

Table 16. Debt as proportion of income by direction of wealth change.

	2015	2017	Diff	Debt as proportion of income
Decreased wealth	34%	49%	15%	33.4%
Same wealth	32%	32%	0%	36.8%
Increased wealth	37%	34%	-4%	3.4%*

Although increased access to low-cost finance was generally viewed as positive, as discussed in section 3.8.2, qualitative findings revealed that debt was a prominent concern for the majority of groups interviewed with many households reporting debt and the inability to become debt-free as an obstacle to improving the household situation.

²⁹ Similar to the income measure used for comparing change over time, debt was reported in ranges, which in turn were adjusted to a continuous variable by taking the midpoint of each debt bracket and adjusting for inflation since 2015. This measure by necessity lowers the real mean, as all debt reported in the category “above MMK 2 million” were assigned a value of 2,05 million. Nevertheless it allows for comparison across years and for constructing an approximate indicator of debt as a proportion of income.

"I try hard to repay, I want to repay. But this is our life of poverty. If I can't pay back my debt, I'll have to ask forgiveness from the creditor.": **27 year old woman, Yesagyo**

"I borrowed money [from the organisation] to breed ducks, for duck eggs. When the weather is hotter, they don't lay eggs. And then, when the price of eggs drops, I lose a lot. Then it's hard to repay the loan [to the organisation] so I have to borrow from outside, at high interest, to payback. In the past 2 years, I have got worse, physically and emotionally. I got depressed because of so much stress. It's not that I don't have enough to eat. I have food. But I'm just worried all the time about not being able to pay back [the loan].": **40 year old woman, Pyapon**

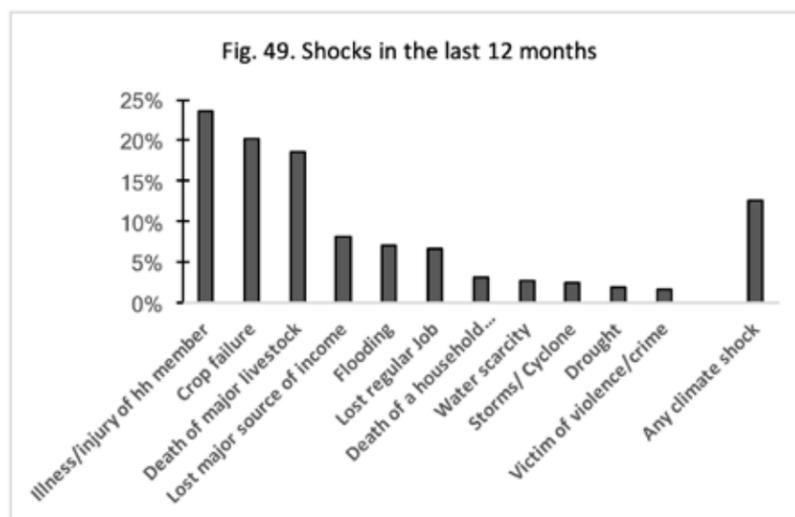
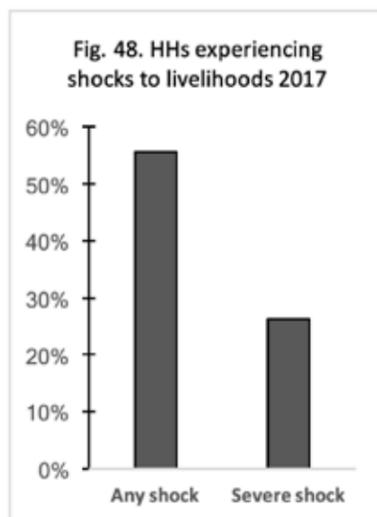
In sum, the findings paint a mixed picture with increased availability of microfinance bringing positive benefits in terms of better access to finance for the poorest and ability to increase asset ownership, but also show that many remain caught in stressful cycles of debt with borrowing from high-interest sources increasing more than microfinance borrowing over the two-year study period. As discussed in section 3.2.2, the study also finds a clear positive relationship between financial inclusion assistance and increased incomes.

3.9 Shocks

3.9.1 Shocks as a common occurrence

In 2017, data were collected on shocks – unexpected events that affected livelihoods to any extent. Data were similarly collected on severity of the shock and on response mechanisms.

More than half of households – 56 per cent – reported having experienced at least one such event, and 26 per cent said they had experienced an event that affected livelihoods severely as shown in Fig.48.



The most common shock was illness or injury of a household member, which occurred to 23 per cent of households, followed by crop failure reported by 20 per cent and death of major livestock which happened to 18 per cent of households. Eight per cent of households lost a major source of income, and just under 7 per cent relatedly said someone in the household lost a regular job. Seven percent also said they were affected by flooding and 13 per cent of households reported experiencing any climate related shock in the last 12 months including flood, water scarcity, drought, storm or cyclone (Fig. 49). Reports of weather and crop related shocks were prominent in the qualitative narratives:

"The climate has changed a lot, and water is much scarcer now. Before, the irrigation channels were good, but now they're all dry and broken.": **36 year old male village committee member, Monywa**

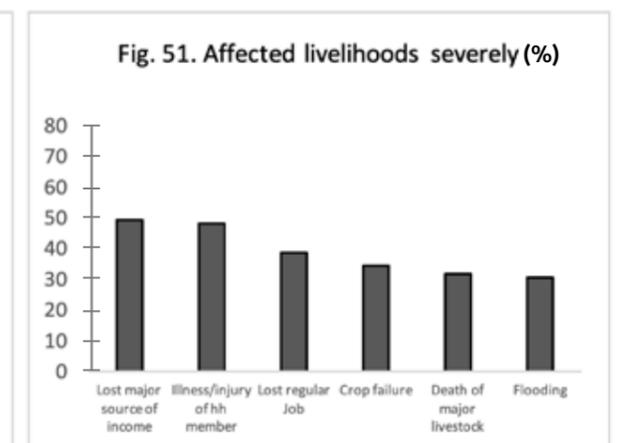
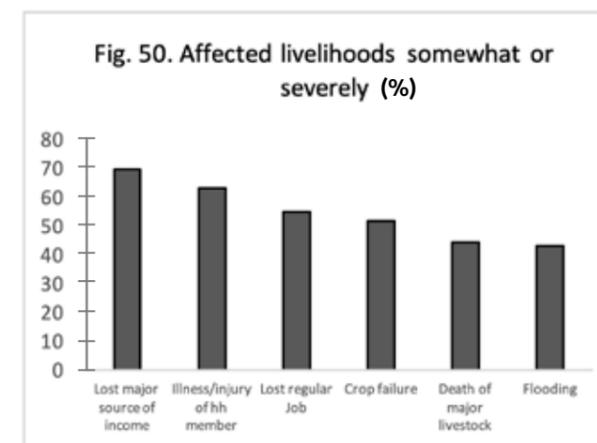
"Although there was no [big] storm this year, there was heavy rain and flooding, that made our work difficult.": **33 year old male, Village Development Committee chairman, Myepon**

"We plant. Then it floods. Doesn't grow. We lose money. We take a loan. We can't pay. That's our cycle.": **64 year old male village head, Pyapon**

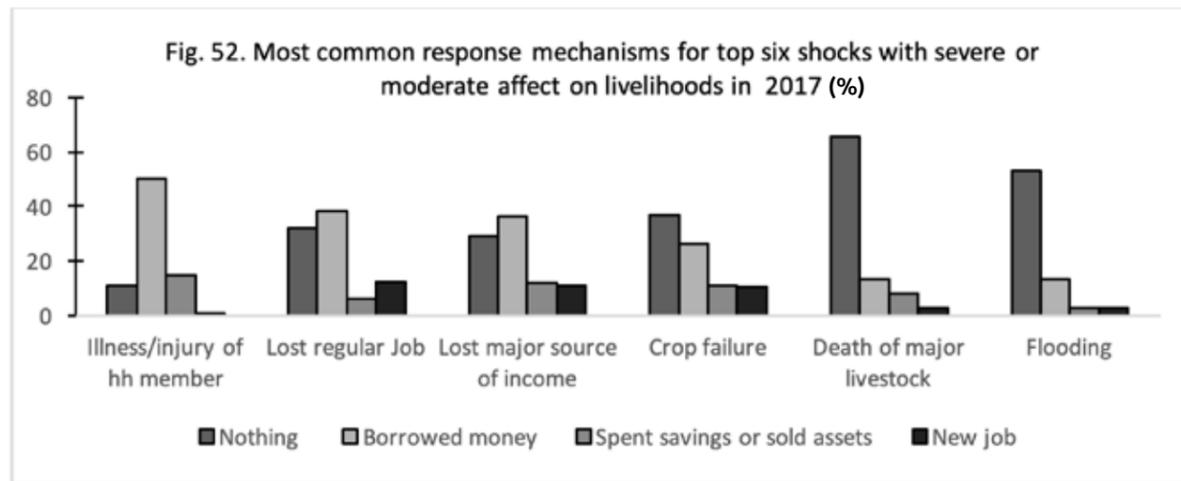
"Because of crop damage, the rice price went up. We have to buy rice, and we had to take loans to buy rice to eat. So now we have a lot more debt.": **27 year old woman, Myepon**

"Because the dykes burst, we had to go and repair it ourselves, and so we couldn't go and find work. We rely on daily income, and so when we don't have work, we can't eat.": **25 year old woman, Myepon**

"This snail problem, it is a big problem. It affected 90 per cent of the paddy. We did all kinds of things, we tried to clear by hand. We drained the water and replaced it. We have used pesticides. We have to try and find out about it.": **71 year old male, Pyapon**



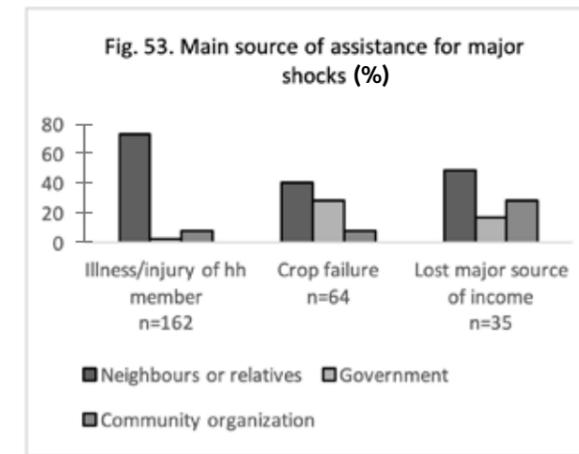
Ordering shocks by how severely they affected livelihoods in Figs. 50 and 51, we find that losing a major source of income and experiencing illness or injury of a household member were the events most likely to severely affect livelihoods. Just under half of households that experienced loss of a key income source said they were severely affected, whilst 70 per cent were either severely or moderate affected. The same was true for 48 per cent of those hit by illness or injury, with 63 per cent in that case reporting either severe or moderate effect. Roughly one-third of households experiencing crop failure, livestock death or flooding were severely affected by the event.



The most common response mechanisms were similar across shocks: doing nothing, borrowing money, spending savings or selling assets, or getting a new job. Fig. 52 shows the most common responses to shocks that were reported to have affected livelihoods either moderately or severely. Borrowing money was a key coping mechanism for illness, job or income loss, and crop failure whereas the majority of households that experienced severe or moderate effects of crop failure, and particularly livestock death or flooding, did nothing in response. Qualitative narratives illustrate how some households experience several shocks within a short time-span, and combine response mechanisms to tackle them.

"I had two people die last year, my wife and brother. That was hard, that left a lot of debt. It made me think, I could die anytime, so I don't want to leave such debts for my children. I'm working hard now to clear them so I don't leave them such a problem. I can't pay off all at once, but I reduce the amount I borrow each time." **64 year old male, Pindaya**

"Last year, my daughter got a snake bite. My son got a motorcycle accident this year ... [then] flooding damaged the crops, the dykes broke. So I lost a lot. I had to borrow from Proximity, from others. I borrow from others to pay that back. That's the cycle. All of us [household members] have to work to get enough." **43 year old woman, Monywa**



Given a limited number of households experiencing each type of shock to a moderate or severe degree, and following a response mechanism involving assistance from others, only a small absolute number of households reported any source of assistance. Amongst those that did, we see that although borrowing money was reported as a key response mechanism, the major source of assistance for most shocks were neighbours or relatives, followed by government and community organisations as shown in Fig. 53.

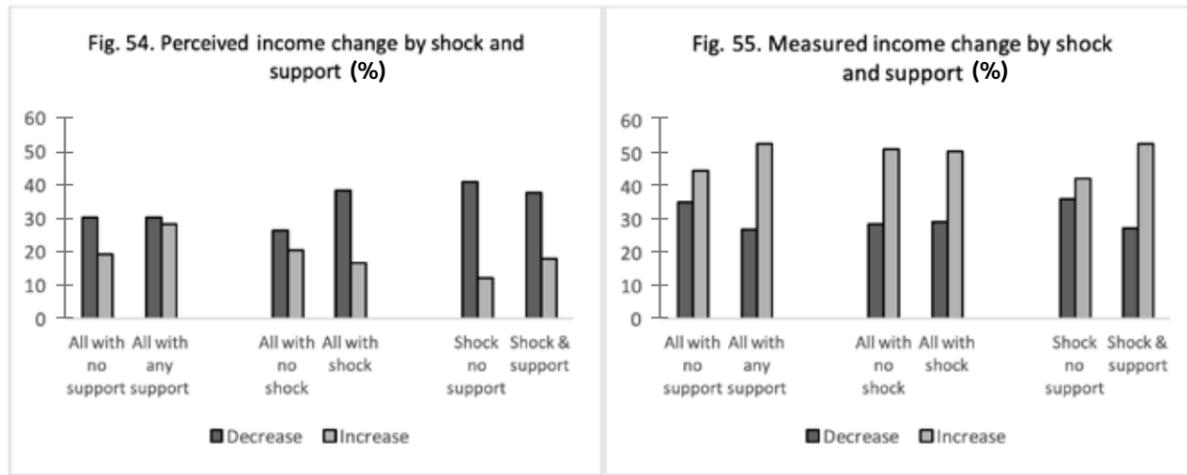
3.9.2 Shocks and income

For the purpose of understanding what affects household income and asset ownership, and for examining the effect of LIFT support on incomes, especially in the face of adversity, we look closer at the relationship between shocks and income change.

Figures 54 and 55 show perceived and measured income change, respectively, by whether people experienced shocks and whether they received support.

Using the perception-based measure of income change, we find that households that experienced shocks were less likely to report an increase in income and more likely to report a decrease compared with households that did not experience shocks, as shown in the middle bars of Fig. 54. Amongst households that experienced shocks, those that received no development assistance (whether related to the shock or not) were similarly less likely to see income increases and more likely to experience income decreases than households that experienced shocks and received assistance as shown on the right-hand side of Fig. 54. We also note that the gap between households reporting an increase and those reporting a decrease in income was substantially larger for households that experienced shocks and got no support, than for (a) all households that received no support and (b) all households that experienced shocks.

In sum, experiencing shocks increased the likelihood of reporting a perceived income decrease and decreased the likelihood of reporting an increase, but less so for households that also received development assistance.



Looking at the same factors for measured income change in Fig. 55 however, we see no difference between households experiencing shocks and those that did not. For both groups, half of households saw incomes increase and just under 30 per cent saw a decrease. Amongst households that experienced shocks and received no development assistance, the gap was substantially narrower with income decreases recorded for 36 per cent and income increases reported for 42 per cent. These numbers however, are only slightly different from the overall average for households that received no support. Similarly, amongst households that experienced shocks and did receive support, income decrease was recorded for 27 per cent and income increases for 53 per cent, which is also close to identical to the numbers found for all households that received support. This indicates that, when using this measure, shocks did not appear to have a significant effect on incomes of households that received support.

In sum, shocks are common and affect the living standards of a quarter of households severely. Overall, the findings do not show any clear effect of shocks on income but do at least indicate that receiving support may dampen the negative effects of shocks on incomes.

CONCLUSION

4. CONCLUSION AND RECOMMENDATIONS



4. CONCLUSION AND RECOMMENDATIONS

4.1 Overview

The study found substantial changes to incomes and assets amongst the rural population within LIFT-supported villages between 2015 and 2017. Whilst most of the overall developments were positive, there was also evidence of volatility with households moving up and down the wealth ladder and a high share of food in total expenditure (which is generally an indication of food insecurity) that decreased by only a small amount over the two-year period. Also, qualitative interviews show a more complex and less positive picture of change than do the purely quantitative analysis. Finally, it appears that although positive change is happening for the three-quarters of respondents that receive any kind of assistance, a smaller part of the population remains unreached and vulnerable. A challenge exists in seeking to improve the situation for this vulnerable group.

4.2 Findings on research questions

Q1: What changes have there been to the levels, distribution, sources of and drivers of income, asset ownership, and poverty levels among households in villages supported by LIFT starting in 2015?

The study found substantial changes to average household incomes over the two-year period from 2015 to 2017 with mean incomes increasing by 24 per cent in real terms. Consumption expenditure similarly increased as did ownership of household assets, in particular durable household goods.

Average household debt also saw a substantial increase of 32 per cent whilst the debt-income ratio – debt as a proportion of household income – saw a smaller increase by three percentage points over the two-year period.

Although average incomes, consumption and asset ownership improved, the data also revealed a certain degree of volatility with some households becoming wealthier and others becoming poorer or falling into poverty. The poorest households saw a large increase in borrowing from moneylenders, and qualitative findings indicated that many of the poorest felt stuck in perpetual debt.

Q2: What is the link between participation in LIFT-supported activities and changes to household income and assets, and what are the pathways through which these changes appear to occur?

Using a theory-based approach rooted in LIFT's Theory of Change as it relates to Purpose-Level Outcome 1: Increased incomes for rural households, the study explored four potential impact pathways from LIFT

assistance to increased incomes. Overall, there was evidence to support the existence of the expected pathways of change:

- (1) **Programme Outcome 1:** Agricultural assistance leading to increased sustainable agriculture and farm-based production by smallholder farmers.

Whereas just under one-quarter of respondents had received agriculture related assistance in 2017, the study found that just 15 per cent of those who received support trialled or adopted new agricultural practices or methods. Although this is a relatively small proportion of households, it is substantially more than the proportion of all crop growing households for whom just 9 per cent trialled or adopted new techniques, which illustrates a positive relationship between agricultural assistance and trialling new practices. Even so, qualitative interviews found a strong desire for new knowledge and technical assistance indicating that there is a continued demand for know-how in LIFT-supported villages. Qualitative findings also highlighted some barriers, preventing households from trialling new approaches. In particular, many farmers were weary to trial new approaches due to high financing costs which, particularly for vulnerable groups may result in severe debt in the case of crop failure.

Whereas the proportion of households trialling or adopting new methods was small, there was clear evidence of a positive relationship between trialling or adopting new crop agriculture methods, and positive changes to agricultural crop yields, crop profits and income. The same was found for households trialling or adopting agricultural techniques more broadly, including livestock, fishery and aquaculture. Although the data do not allow for drawing conclusions on the extent to which these changes can be attributed to LIFT's agricultural assistance, the findings appear to support the expected pathways of change leading from LIFT assistance to increased incomes as it relates to agricultural assistance, increased sustainable agriculture, and incomes.

- (2) **Programme Outcome 2:** Support for improved market access and market terms for smallholder farmers.

Overall, households that receive development assistance are more likely to adopt new marketing practices than households that do not receive such assistance. In 2017, 20 per cent of households that received assistance said they had adopted new marketing practices in the last year, compared to just 12 per cent of households that did not receive assistance. Amongst households receiving assistance, however, the proportion adopting new marketing practices remained practically unchanged over the two-year period. This most likely indicates that LIFT support on the topic between 2015 and 2017, has either been limited in scope, or not successful at increasing adoption rates.

The study also found a strong positive relationship between adoption of new marketing practices and increased income, supporting the presence of the causal linkages illustrated in the income-related TOC shown in Section 1.2

(3) Programme Outcome 3: Non-farm support leading to increased and safe employment in non-farm activities for smallholders and landless.

Although more than half of households earn income from at least one non-agricultural source, just 6 per cent of households received any non-agricultural support in 2017. That in turn, limits the effect such support is likely to have on mean incomes. In addition, the overall proportion of households that reported a perceived increase in income from non-agricultural sources nearly halved from 42 per cent in 2015 to 22 per cent in 2017.

Despite this overall decrease, the study finds a positive relationship between receiving non-agricultural assistance and gains to non-agricultural income. First, although the proportion reporting increased incomes dropped for both households with and without assistance, it dropped less for those that received support. Secondly, looking at perceived income decreases as well as increases, the study finds a net positive effect of 17 per cent with a net decrease of 14 per cent amongst households receiving no non-agricultural support, and a net increase of 3 per cent for households with support.

(4) Programme Outcome 4: Support for microfinance institutions leading to increased access to adequate and affordable financial services by smallholders and landless.

This pathway is laid out in very little detail in the LIFT logframe and TOC, except as a linkage between increased access to affordable finance leading to increased incomes. The study does find evidence to support that link, with results consistently showing that households that received financial assistance either alone, or especially in conjunction with non-financial assistance, substantially increased mean incomes as well as consumption expenditure.

Qualitative findings however, show a more mixed picture with increased availability of microfinance bringing positive benefits in terms of better access to finance for the poorest and ability to increase asset ownership, but also show that many remain caught in stressful cycles of debt with borrowing from high-interest sources increasing more than microfinance borrowing over the two-year study period.

Q3: How do changes differ between households that received development assistance, and households that did not, and to what extent are these changes likely to be attributable to the participation in development activities?

There were large differences in incomes and assets between households that received support and those that did not. The study found that households that received development assistance were wealthier and better educated in the first place, and that households that received support in the five years prior to the baseline were substantially more likely to also receive support in 2017.

In addition, households that received assistance increased incomes and consumption expenditure substantially more than households receiving no assistance. Assistance also appeared to dampen the negative effects of shocks on incomes and debt.

4.3 Recommendations

Recommendation 1: Consider expansion of agricultural and non-agricultural activities within LIFT villages.

A relatively modest proportion of households in LIFT villages benefited from development support. Whereas 56 per cent of households grew crops, less than one-third of these received any crop-related assistance. At the same time, the qualitative study found a continued demand for agricultural know-how and new technology.

Whereas more than half of households had non-farm income, just 6 per cent received support for non-agricultural skills development. At the same time, qualitative findings show that households perceive non-agricultural income to be an ad-hoc and volatile source of income, indicating that there may be potential gains from skills development.

In sum, there appears to be scope for improving outcomes through expansion of agricultural and especially non-agricultural activities within LIFT villages.

Recommendation 2: Ensure relevance and appropriate targeting of LIFT activities.

Although close to a quarter of respondents said they received some kind of agricultural support, and despite qualitative findings of a continued demand for agricultural know-how and new technology, just 15 per cent trialled or adopted new agricultural practices. As such there appears to be a gap between demand and supply of advisory services, as well as indications of low take-up amongst those who do receive support. Qualitative findings indicate that the latter may partially be caused by barriers in terms of cost and that risk adversity may prevent households from acting on advisory support.

It is likely that efficacy of support can improve through a review of the relevance of the support provided in the local context, alongside an effort to identify barriers that may prevent households from implementing new training or advice.

Recommendation 3: Implement interventions synergistically so that financial and non-financial support are combined for maximal impact.

The greatest income gains are seen amongst households receiving a combination of financial and non-financial support. Identifying households that are likely to benefit from combinations of support, and ensuring that interventions are implemented synergistically where appropriate can enhance the overall impact of LIFT support.

Recommendation 4: Explore and understand potential negative effects of increased access to finance and promote interventions to support financial literacy and financial management skills.

The study found evidence of both positive and negative effects of the recent increase in access to finance with access to low-cost microfinance acting as a catalyst for income gains for some, whilst others remain caught in a negative debt-cycle. As such there appears to be need for a better overview of potential pitfalls for specific target groups and for concurrent initiatives to prevent negative effects of borrowing. This may include programmes to increase financial literacy and financial management skills, also for individuals who and households that are excluded from participation in microfinance groups or VSLAs.

Recommendation 5: Develop/expand programmes specifically aimed at strengthening social safety nets for the most marginalised and vulnerable groups.

Despite overall substantial gains to incomes, consumption expenditure and asset ownership, the study finds a high degree of volatility with some households falling into poverty and others coming out. There is also evidence of frequent occurrence of shocks that affect livelihoods negatively and severely; of lingering food insecurity as indicated by a high share of food expenditure in total expenditure; and findings of problematic debt amongst the poorer households. Programmes specifically developed to strengthen social safety nets amongst the most vulnerable such as savings programmes, micro-insurance schemes, cash-transfer programmes and related initiatives are likely to prevent the worst off households from falling into destitution.

Recommendation 6: Identify barriers to participation of excluded households and develop interventions that address their specific constraints.

One-quarter of the population in LIFT villages receive no development assistance of any kind. Whilst that may be a modest share, the study clearly find the non-supported population to be amongst the most vulnerable households at baseline with no or very limited overall improvement in their situation over time. While progress has been made on reaching female-headed households and poorer households, these groups continue to remain under-represented. They are also the most likely to experience decreases in income and assets and to be badly affected by shocks and stresses. Ensuring that interventions reach them could have a transformative effect on their livelihoods and resilience.

ANNEX

ANNEX

ANNEX A: BASELINE BALANCE

ANNEX B: QUALITATIVE SAMPLE

ANNEX C: LIFT THEORY OF CHANGE

ANNEX A: BASELINE BALANCE

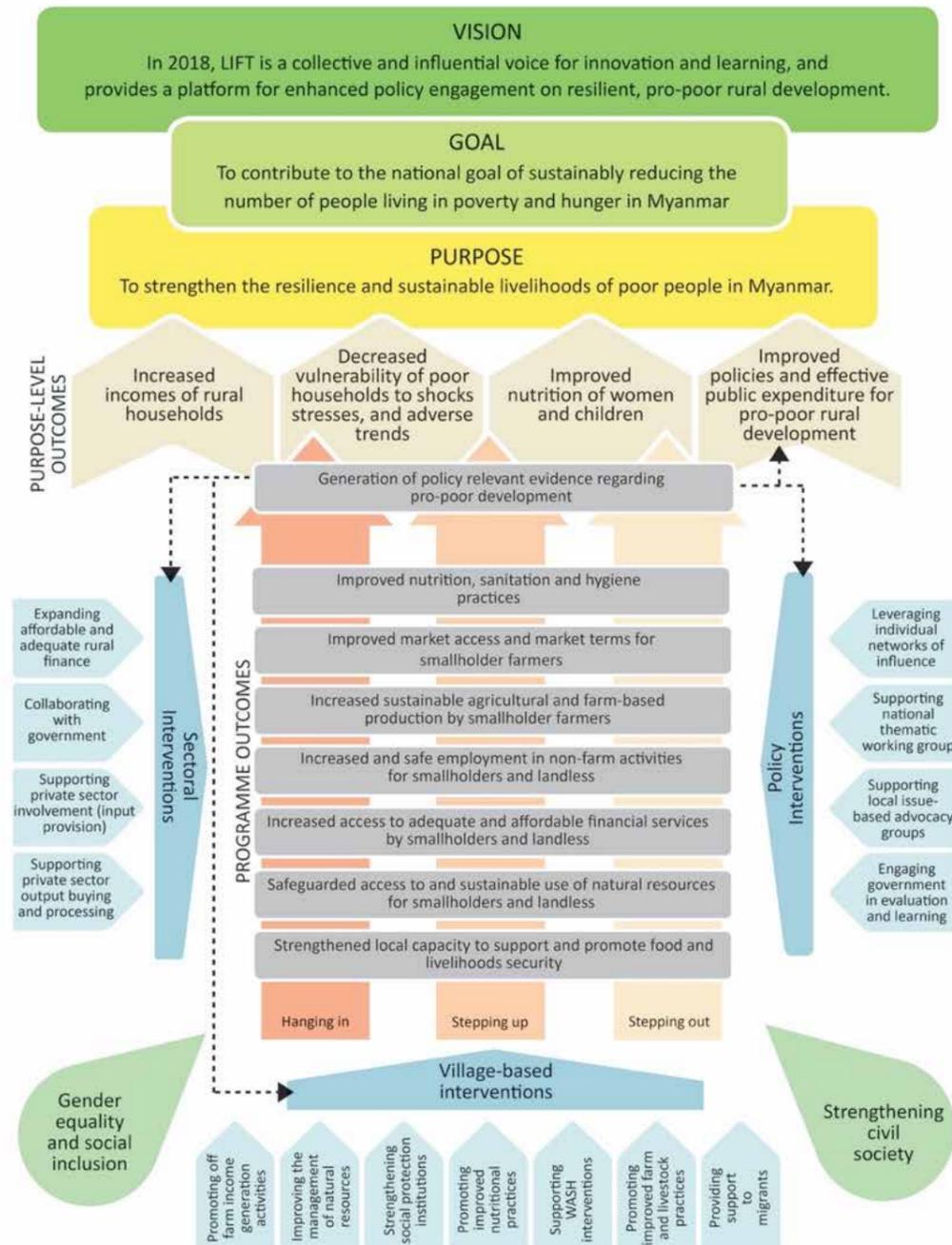
	Comparison	Treatment	Diff	Std. Err.	t	P>t	[95% Conf.	Interval]	
Female head	0.20	0.16	-0.04	0.02	-1.86	0.07	-0.08	0.00	*
Age	47.41	45.51	-1.89	0.92	-2.05	0.04	-3.71	-0.07	**
Formal education	0.62	0.69	0.08	0.03	3.05	0.00	0.03	0.13	***
Buddhist	0.86	0.84	-0.02	0.03	-0.83	0.41	-0.07	0.03	
# of children under 5	0.37	0.44	0.07	0.03	2.26	0.03	0.01	0.13	**
Crop grower	0.43	0.54	0.10	0.03	3.26	0.00	0.04	0.17	***
Constraints	0.41	0.51	0.10	0.03	3.03	0.00	0.03	0.16	**
Landsize	2.66	3.88	1.22	0.34	3.60	0.00	0.55	1.89	***
Electricity in hh	0.30	0.28	-0.02	0.03	-0.55	0.59	-0.08	0.05	
Electricity in village	0.96	0.89	-0.08	0.02	-3.34	0.00	-0.12	-0.03	***
Road access to village	0.73	0.69	-0.04	0.04	-1.09	0.28	-0.11	0.03	
NGO/per hh	0.01	0.02	0.00	0.00	2.31	0.02	0.00	0.01	**
Delta	0.30	0.30	0.00	0.04	-0.07	0.95	-0.07	0.07	
Dry zone	0.35	0.35	0.00	0.04	0.05	0.96	-0.08	0.08	
Uplands	0.29	0.21	-0.08	0.04	-2.12	0.04	-0.15	-0.01	**
Rakhine	0.06	0.14	0.08	0.02	3.36	0.00	0.03	0.12	***
Income	1866719	1959775	93056	85769	1.08	0.28	-76372	262483	
Any support past 5 years	0.46	0.80	0.33	0.03	12.23	0.00	0.28	0.39	***
Q1	0.20	0.18	-0.03	0.02	-1.12	0.26	-0.08	0.02	
Q2	0.19	0.20	0.01	0.02	0.51	0.61	-0.03	0.05	
Q3	0.21	0.20	-0.01	0.02	-0.54	0.59	-0.06	0.03	
Q4	0.20	0.21	0.01	0.02	0.77	0.44	-0.02	0.05	
Q5	0.20	0.22	0.01	0.02	0.60	0.55	-0.03	0.06	

ANNEX B: QUALITATIVE SAMPLE

Programme Area	State/Region	Township	Village	Notes	Programme activities (based on LIFT database)
Delta	Ayeyarwaddy	Pyapon	The Main Kong,	Riverine, large community, follow-up	Microfinance & off-farm
	Ayeyarwaddy	Pyapon	The Ein Kyaung Su	Riverine, small community, new	Microfinance & off-farm
Rakhine	Rakhine	Myebon	The Chaung	Coastal, large, follow-up	Agriculture training & inputs, CBO formation, WASH, FI, Health & nutrition training, MCCT
	Rakhine	Myebon	Pa Soe Pyauk	Coastal, small, follow-up	Agriculture training & inputs, CBO formation, WASH, FI, Health & nutrition training, MCCT
Uplands	Shan	Pindaya	Myin Mu	Hilly large, new,	Microfinance, migration/off farm
	Shan	Pindaya	Yae Chan Sin	Hilly small, new	Microfinance, migration/off farm
	Chin	Falam	Laizo	Hilly small	Agriculture training, MCCT, nutrition training
	Chin	Falam	Long Haw	Hilly large	Agriculture training, MCCT, nutrition training
Dry Zone	Magwe	Yesagyo	Kyet Su Kyin	Lowland, riverine, small, new	Microfinance, MCCT, nutrition training
	Magwe	Yesagyo	Htan Se Pin	Lowland, riverine, large, new	Microfinance, MCCT
	Sagaing	Monywa	Monywee, Kyar Paing	Lowland small, follow-up	Microfinance
	Sagaing	Monywa		Lowland, large, follow-up	Microfinance

ANNEX C: LIFT THEORY OF CHANGE 2014-2018

Livelihoods and Food Security Fund Theory of Change





Livelihoods and Food Security Fund



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