

# AN IN-DEPTH LOOK AT THE FINANCIAL LIVES OF MAVUNO FARMERS



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# KEY TAKEAWAYS

- There is suggestive evidence of the positive impact of the length of participation on expenditures on food
- There is suggestive evidence of the positive impact of the amount borrowed in the previous season to expenditures on social events
- Treated partner's average income per week was 29854 Francs, whereas the median income was 17350 francs per week. This translates to a median annual income of \$568.36 USD per year. With an average household size of 6.4, this equates to a median \$0.24 in income per person per day, or well below the poverty line.
- Agricultural related livelihoods are the only source of income for a majority of all surveyed respondent. At any point in time, an average of 88% of respondents had no other economic activity apart from agricultural ones.
- Mavuno was not the only source of credit for partners. On average, at any point in time, 42% of surveyed respondents had an outstanding debt with another lending entity. These loans were up to \$112.44, but on average were \$17.02, while Mavuno loans were, on average, \$25.59.
- Participation in Mavuno's activities may be increasing partner's ability to engage in non-agricultural economic activities, especially women.

## SUMMARY

In 2017, as an out of cycle evaluation, Mavuno tracked a subset of 237 partner households, including incoming partners considered not yet treated, and conducted in-depth interviews with each household, where available, over a period of six months. The survey sought to understand how partners manage their income on a day to day basis. As such, the survey was designed to capture the inflows, outflows, assets, strategies, and debts of partners.

The results of the survey can be seen as a valuable tool in understanding the spending and budgeting priorities of partners. Furthermore, we can compare two important and different treatment effects using the data: 1. Program participation, for which we can consider older program members "treated" and incoming, not-yet treated partners a "control" group, and 2. Microfinance program impact, for which we can compare Mavuno's microfinance program users with nonmicrofinance users. In isolating both treatment effects, it is possible that the differences between groups are due to either the services provided by Mavuno, or inherent differences between the groups to begin with. As robustness checks, continuous variables are introduced as controls.

For program participation, some suggested evidence of program impact can be seen. Taking microfinance program data season by season, meanwhile, reveals positive impact on food expenditures and social events.

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# INTRODUCTION

Lacking the basic means necessary to meet personal needs, a common definition of poverty, is a problem that lies at the heart of poverty alleviation programs. But while a variety of responses have been institutionalized, the rigorous collection of program evidence is limited. This is even more so in areas affected by active or recent conflict, for which there is little panel data or quasi-experimental data available. As with any poverty alleviation program, the relative social return on investment for different poverty alleviation interventions should be compared, as certain interventions will ultimately be less effective than others.

Generally, Mavuno experiments with a number of ways to understand and measure our impact, the results of which are important decision-making tools. The main measure to date of this has been our annual survey, which measures variation in the multidimensional poverty index in partner communities, in samples of over 200 households each year. In addition to the annual survey, we track weekly indicators of activities including production, consumption, and sales as managed by our partner farmers.

However, this data is limited in its ability to accurately capture recall information related to the income and expenditures of partners. It may also confound program inputs with business creation, income created by Mavuno with income created outside of Mavuno activities, and not accurately capture the opportunity cost of participating in Mavuno's program.



## OBJECTIVES

Through one-on-one interviews with partners over a period of 6 months, the survey sought to:

A.) Provide a detailed picture about the individual circumstances of farmers, including

1. A reliable baseline level of income
2. A reliable baseline level of expenditures
3. A breakdown of what expenditures currently look like
4. A breakdown of sources and types of income, including debt

B.) Provide an indication of the relationship, if any, between

1. Program participation, income, and consumption choices
2. Length of program participation, income, and consumption choices
3. Microloan usage, income, and consumption choices
4. The size of microloans, income, and consumption choices

The data can also be used to provide a picture of how any of the above might fluctuate during certain months of the year. Findings, in turn, can be the grounds for changes in intervention strategies. For example, the survey data might be able to identify the size of loans that have the largest impact, or indicate a type of expenditure that is high in demand that Mavuno could support through community infrastructure improvement projects.

# METHODOLOGY

The survey was conducted by a team of researchers in 10 locations. The locations were chosen to affect a representative sample for Beni territory, as the remaining locations Mavuno works in tended to be either atypically affluent rural-urban communities (Beni and Mangina), or atypically impoverished indigenous communities (Beka). The sample size was chosen to affect a confidence interval of + or – 10, although additional respondents were added to the survey as some respondents were not available at the same meeting for each of the 6 months, resulting in an end confidence interval of 5.5, but less panel data.

Sampling at the sublocations was random. This resulted in a fairly equal spread of microfinance program participants vs. non-microfinance program participants: roughly 48% of respondents at any time were beneficiaries of Mavnuo's microlending program. Also, at any point in time, roughly 60% of respondents were female, which is comparable to the overall gender breakdown of Mavuno participants (of whom 61.5% are female).

Some additional caveats about data quality can be mentioned:

- Surveying was usually conducted during the first week of the month. However, in May, surveying was conducted in the second week of the month. A control is added for which week of the month the surveying took place.
- The final data generally does not have a normal distribution. Therefore, both mean and median figures are reported where descriptive statistics are relevant, and where the median is not 0.
- Following the convention documented by One Acre Fund (2016)<sup>1</sup>, recall periods of 1 week were used. Thus, monthly figures are reached by multiplying weekly figures by 4.25, and annual figures are reached by multiplying monthly figures by 12. This may miss out on important monthly milestones, i.e. lumpsum incomes for salaried workers. Efforts were therefore made to control especially for non-agricultural livelihoods, in addition to the week of the month the surveying occurred.
- Following the convention documented by One Acre Fund (2016)<sup>2</sup>, incoming farmers are treated as a control group only in the months prior to the harvest, and considered treated post-harvest, as they are expected to see the benefits of program participation after the sale of their first harvest.
- Farmers were asked about their entire household's income and consumption. However, recall may not have been as accurate for other members of the household as they were for member's themselves. Hence the need for a short recall period, in addition to frequent reminders in advance of each week's surveying.
- Where farmers may have reported higher expenditures than income, we cannot rule out the possibility of incentives to underreport income or overreport consumption, to either appear more needy or deserving of an intervention. In addition, it may be possible that respondents are relying on savings and loans not reported. Consumption is generally being relied on as the more accurate indicator of impact than income for this reason.

1. OAF, 2016. Income and Expenditure Report. [online] Available at: [https://www.oneacrefund.org/uploads/all-files/Income\\_and\\_Expenditure\\_Report\\_-\\_Kenya\\_2015\\_FINAL.pdf](https://www.oneacrefund.org/uploads/all-files/Income_and_Expenditure_Report_-_Kenya_2015_FINAL.pdf). Accessed 6/11/17. Nairobi, Kenya: One Acre Fund

2. Ibid

# RESULTS

Treated partner's average income for their household per week was 29828 Francs, whereas the median income was 17300 francs per week. This translates to a median annual income of \$570.44 USD per year. With an average household size of 6.4, this equates to a median \$0.24 in income per person per day, or well below the poverty line. On average, treated partners had an income of 8,726 Francs per week from Mavuno activities, or 5.5 USD, which represents 29% of their total income.

Expenditures are sometimes used in development analysis because they can provide more accurate measures of survey respondent's situations than income. However, they also show the typical partner's household members living on far below a dollar a day. Treated partner's expenditures were on average 26,385 Francs per household per week, whereas the median expenditures of partners 15,200 Francs per week per household, or \$497.95 in median expenditures per household per year. Again, with an average household size of 6.4, this means that **Mavuno partner farmers tend to live on a median expenditure of \$.21 a day per person per household**. Below, average expenditures of treated show that there was not a significant difference in mean expenditures between treated participants and non treated participants ( $t_{505} = 1.006, p > .10$ ). These figures do not include the value of home-produced consumption, which could considerably raise these values if monetized. It could also affect the difference between Mavuno partners and incoming partners, as much of the agricultural yields of Mavuno partners are used in home consumption.

Daily Cash Expenditures Per Person		
	Mavuno Partners' Household Members	Incoming (Not Yet Treated) Partners' Household Members
<b>Average</b>	\$0.37	\$0.43
<b>Median</b>	\$0.21	\$0.33

Table 1 Daily Cash Expenditures Per Person

Food was the biggest cash expenditure of all respondents, who spent an average of 10,009 francs, or \$6.31 per week on food for their families. At right, a breakdown of expenditure averages between Mavuno farmers and not-yet treated farmers show similar consumption patterns.

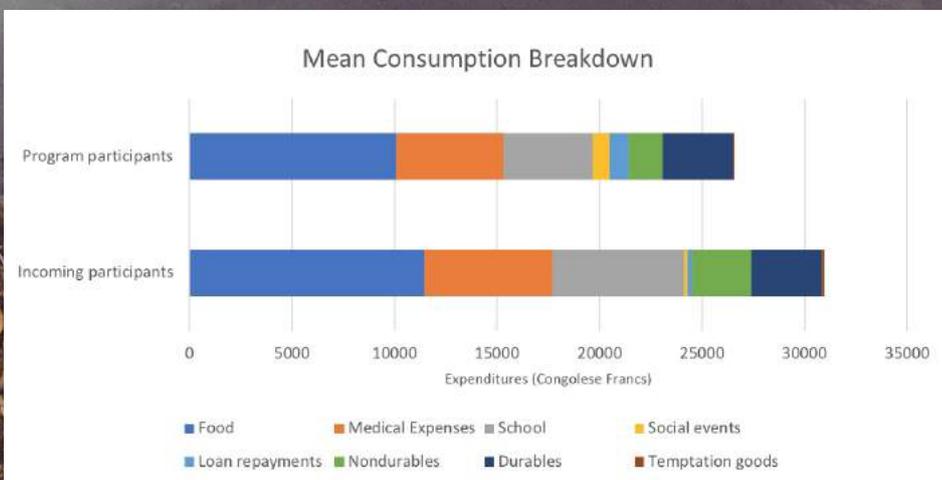


Figure 1 Mean Consumption Breakdown of Program Participants and Incoming (Not yet treated) Participants

Incoming participants actually spent, in absolute terms, more than existing participants in many areas, which could indicate a problematic selection bias in determining program impact. To control for this in the regression analysis run on the results, controls are added for gender, household size, location, month, week and reported private income.

One positive difference we can see visually from this breakdown is the higher average amount spent by program participants on social events, including contributions for community functions and extended family, which could be suggestive of increased social cohesion among participating members (However, this was not statistically significant in an independent samples T-test).

**The distribution of spending was highly unequal among program partners, with almost 50% of respondents spending less than \$10 a week.** Below, the distribution of the combined expenditures of surveyed partners shows a skewed-right distribution. This indicates the presence of some higher spending partners, who raise the average above the median.

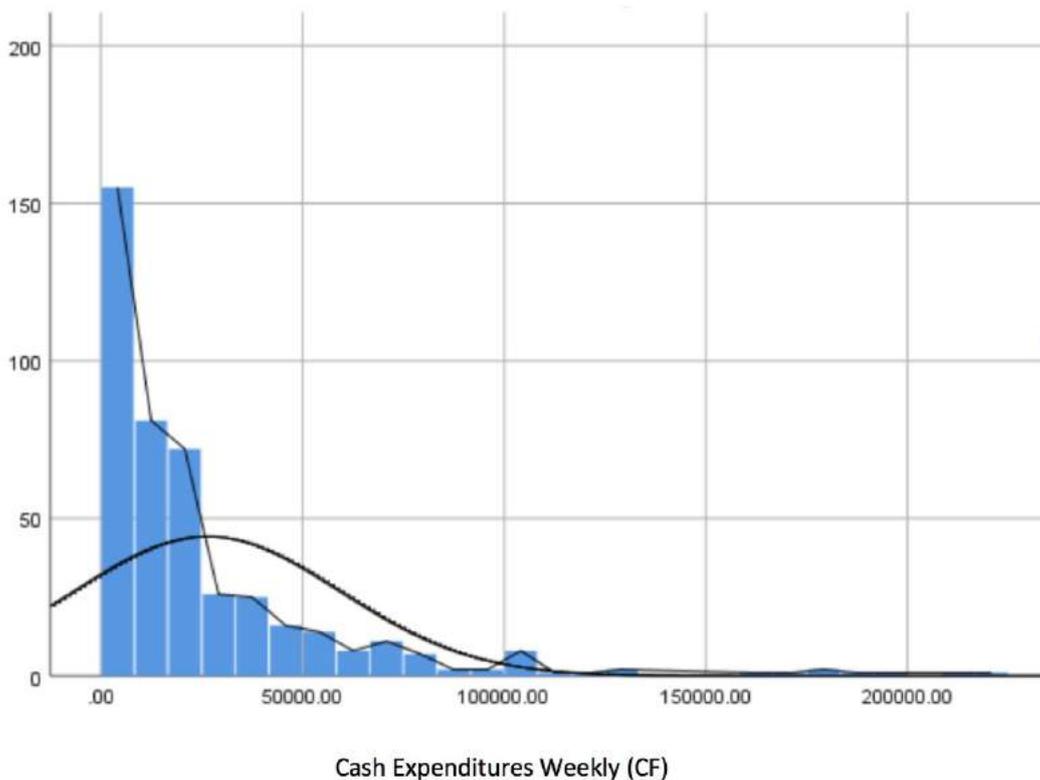


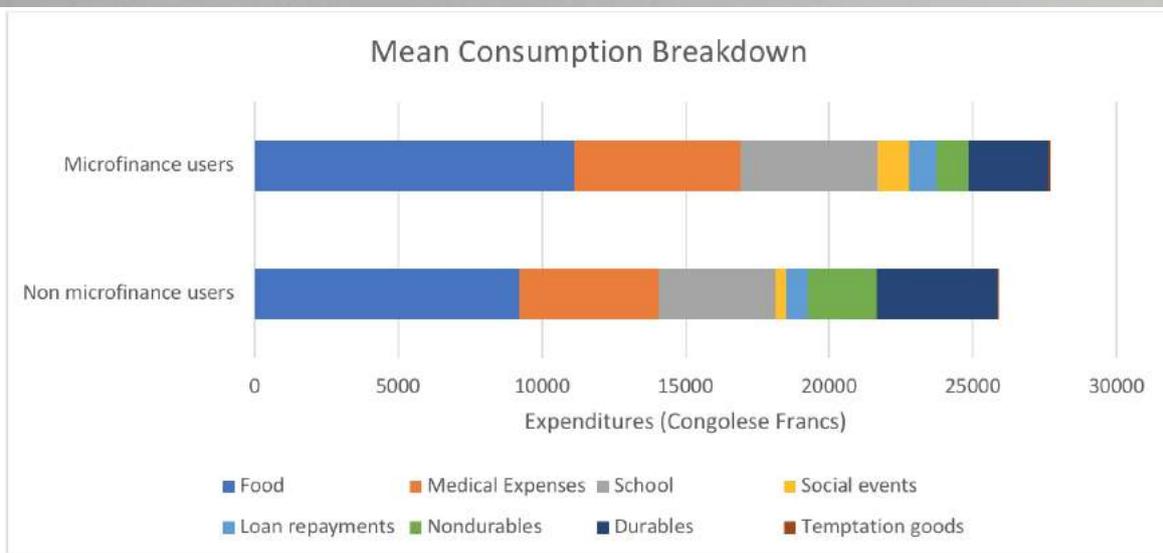
Figure 2 Distribution of Weekly Expenditures Total of Participating Households

	Percentiles						
	5	10	25	50	75	90	95
Weighted Average (CF)	2100	3195	6162.5	15200	32487	65580	97980

Figure 3 Quantiles of Weekly Expenditures Total of Participating Households

# COMPARISON BETWEEN MAVUNO'S MICROFINANCE USERS AND OTHERS

Mavuno's microfinance users also spent more than non-microfinance takers- on average, about \$1.69 more per week, yet this difference was not statistically significant between the groups ( $t_{-.634} 506, p > .1$ ). Whether this can be attributed to program impact, or is due to the cash injection created by the credit product, can be examined further in a regression that controls for which season the loan was taken. Below, a breakdown of expenditure averages between Mavuno's microfinance users and non microfinance users also show similar consumption patterns, with food again dominating cash expenditures.



**Figure 4: Mean Consumption Breakdown of Microfinance Users and Non Microfinance Users**

The distribution of Microfinance users' consumption was again skewed right, as shown at right, indicating, again outliers who increase the mean relative to the median. In other words, Mavuno has some high spending farmers, which may create the appearance of higher average wealth among the sample.



**Figure 5 Distribution of Weekly Expenditures Total of Microfinance-taking Households**

	Percentiles						
	5	10	25	50	75	90	95
Weighted Average (CF)	2270	3240	6400	16850	33750	68840	101100

**Figure 3 Quantiles of Weekly Expenditures Total of Microfinance-taking households**

Income also changes significantly throughout the year. The mean combined income of partners, shown in Figure 6, dipped considerably during May, and then rose steadily throughout September. Similar trends among microfinance users compared to all treated partners suggest that microfinance users do not experience significantly less volatile income than non-users. This is not surprising, as microfinance is more commonly used as a consumption smoothing tool- investments in businesses can be made with microloans that would have otherwise come from household consumption patterns and constitute an unacceptably large cut to current consumption patterns.

In figure 7, however, consumption patterns over time show similar patterns again among microfinance users and treated non-users, suggesting little transformative impact from Mavuno’s microloan itself. Given that consumption levels fluctuate considerably less than income, this nonetheless suggests a range of consumption smoothing being practiced among partners (among which, savings and loans may play a role).

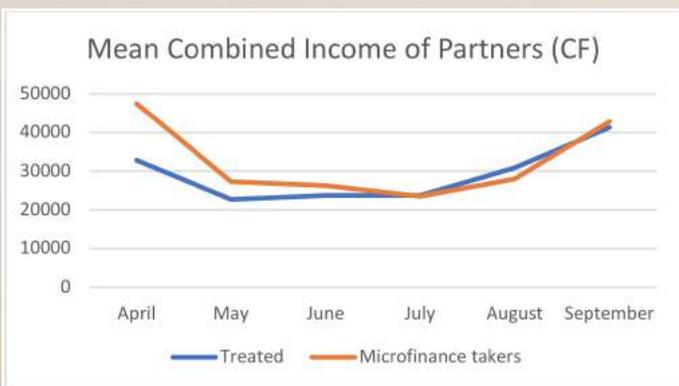


Figure 6 Trends in Income Over Time

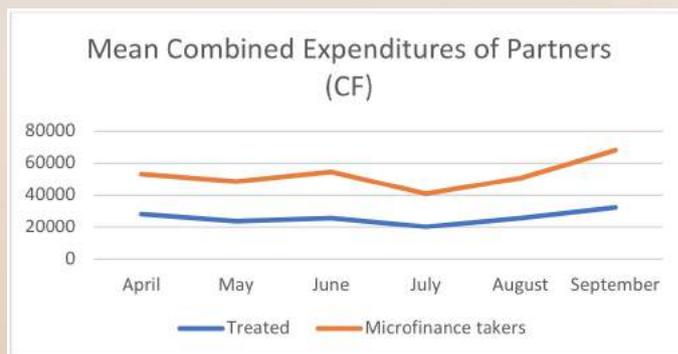


Figure 7 Trends in Expenditures Over Time

At right, the use of non-Mavuno credit does indicate typical levels of indebtedness that peak during the month of June, likely due to school fees being due, and reliance on this alternative source of income in a time period when income (as seen) is typically lower.

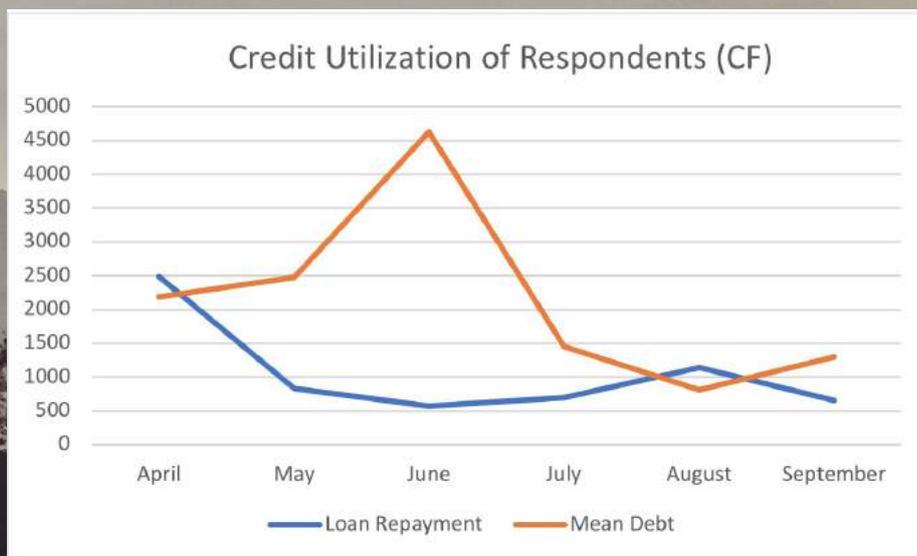


Figure 8 Non Mavuno Credit Utilization

## RESULTS (CONT'D)

Given that the averages of both treatments are not shown to be significantly different between program participants and not-yet treated participants, nor between microfinance users and non-microfinance users, we can still examine program participation by controlling for factors that may have been inherent in the samples and could help in isolating the effect of Mavuno's programming.

Below, in table 2, regressions for the effect of program participation and tenure are run on different consumption categories. Controls were added that are likely to influence consumption outcomes apart from program participation such as gender, household size, and alternative sources of income. We also control for temporal and spatial differences, including month, week, and location, as different times of the year may produce highly different results.

**Results show that, on average, for each month spent with Mavuno, partners spend approximately 876 Congolese Francs, or .54 USD, more on food per week than non-partners (p<.01).** Being a member or not was not shown to be significant in determining any consumption categories. The length of tenure was not shown to be significant in determining any consumption category apart from expenditures on food.

Consumption Effects					
	Food	Nondurable Goods	Durable Goods	Temptation Goods	Gifts and Events
<b>Program participation</b>	v188.140 (1686.548)	634.418 (880.534)	2833.078 (2270.076)	-40.075 (55.063)	493.970 (1025.615)
<b>Tenure</b>	875.877*** (121.793)	-37.965 (63.806)	2833.078 (2270.076)	-5.283 (3.977)	1.622 (74.040)
<b>Gender</b>	-2250.861** (949.738)	-1149.275** (495.405)	-1585.392 (1274.309)	-108.605*** (30.967)	-297.444 (576.803)
<b>Household size</b>	411.320* (210.172)	-16.434 (109.972)	57.142 (282.860)	-2.069 (6.862)	112.133 (127.674)
<b>Adjusted Reported Private income</b>	.122*** .019	.050*** (.010)	.162*** (.026)	-.001*** (.001)	-.021* (.012)
<b>N</b>	482	482	481	483	483
<b>Adj R<sup>2</sup></b>	.23	.14	.15	.11	.08

Additional controls added for sublocation, month, week, the square of private income, the amount borrowed from other entities, and an interaction between Mavuno income and household size

\* p<0.10, \*\* \*p<0.05, \*\*\*p<.01

Table 2 Regression of Program Participation

These results, we believe, are suggestive of Mavuno's impact on household food security. They can be interpreted with caution, however, since the survey doesn't calculate at home produced food, and because of Engel's law, that even as absolute income rises, the relative proportion household spend on food tends to drop, even if relative absolute food expenditures tend to rise (If we apply Engel's law, households should have seen more significant rises in all consumption categories, not just food, for truly transformative impact).

Table 3 shows a regression of microfinance program participation, including controls for which season a loan was taken and how much was borrowed, in addition to the previously discussed controls. The regression indicates that, controlling for aspects likely to affect one's self-selection into a microfinance program, microfinance participation was also not a significant predictor of expenditures during the week.

But while whether or not a partner or non partner borrowed in either season had no significant correlation between their expenditures in any category, the amount they borrowed in the season during which the survey was being conducted was a significant predictor of spending on gifts and social events, including charitable contributions. For every \$.01 borrowed that season, a partner was more likely on average to have contributed an additional 27 CF to social events. This may be indicating a slight likelihood of increased social cohesion among microfinance takers.

Consumption Effects					
	Food	Nondurable Goods	Durable Goods	Temptation Goods	Gifts and Events
<b>Microfinance program participation</b>	1433.128 (2337.728)	-818.529 (1170.108)	-3558.048 (2356.878)	40.796 (78.661)	876.692 (1450.083)
<b>Borrowed in 2<sup>nd</sup> season 2016</b>	-2440.628 (2204.266)	-26.940 (1101.149)	817.109 (2217.474)	-46.673 (74.025)	-546.752 (1364.625)
<b>Borrowed in 1<sup>st</sup> season 2017</b>	1265.459 (2064.820)	-615.705 (1029.691)	690.355 (2073.608)	-15.247 (69.221)	-261.144 (1276.068)
<b>Amount borrowed in 2<sup>nd</sup> season 2016</b>	102.854** (42.177)	-18.050 (1.196)	-54.590 (42.686)	-.455 (1.425)	-22.288 (26.268)
<b>Amount borrowed in 1<sup>st</sup> season 2017</b>	9.097 (24.519)	9.730 (12.340)	16.282 (24.849)	068 (.830)	25.933* (15.292)
<b>N</b>	461	462	460	462	462
<b>Adj R<sup>2</sup></b>	.229	.182	.103	.102	.097

Additional controls added for program participation and tenure, gender, household size, sublocation, month, week, the square of private income, the amount borrowed from other entities, and an interaction between Mavuno income and household size

\* p<0.10, \*\* p<0.05, \*\*\*p<.01

Table 3 Regression of Microfinance Program Participation

## RESULTS (CONT'D)

The survey findings are consistent with existing literature on the transformative power of microfinance, which has suggested that while anecdotes may be selected to show high-performing outliers, the broad impact of microfinance may be better stated as an increased number of choices than in income or expenditure increases. One study by BancoSol in Bolivia, for example, estimated that at any point in time, 25% of clients were showing impressive gains to borrowing, while 60-65% stayed the same, and 10-15% actually suffered financial losses.<sup>3</sup>

A series of 6 randomized evaluations of microfinance programs, published in 2015<sup>4</sup>, point to similar results. The editors of the journal do point out, however, that some tests do find evidence of increased business size, occupational choice, consumption choices, female decision-making powers, and improved risk management. Mavuno's farmers may be demonstrating their increasing ability to make consumption choices in their increased expenditures on food and social events. But it is also worth examining the data for impact on occupational choice, female decision-making power, and risk management (we do not have sufficient evidence from the survey to examine impact on business size).

A regression can be run with spending on health and medical emergencies, which can proxy for improved risk management. However, none of the treatments- program participation, program tenure, microfinance program participation, or loan amount- are significant in explaining variances in spending on managing medical risks (results not shown). Thus, we cannot establish that Mavuno has had any impact on risk management.

For occupational choice, we can examine the outcome of whether a Mavuno program participant is more likely to have a business- in addition to their agricultural one- which is non-agricultural in nature. For example, we know from many member stories of partners who have re-invested their Mavuno profits into small businesses, including selling motorcycle gas, managing a pesticide sprayer, or sewing children's school uniforms. Below, table 4 does indicate that participation in Mavuno's programs, in addition to the number of months of participation, are both significant ( $p < .10$ ) in explaining the likelihood to have a non-agricultural economic activity. We take this as suggestive evidence of the programming's impact on occupational choice, however results are only significant at a 90% confidence interval, and the adjusted R2 value is low.

3. Hulme, D., & Mosley, P., 1996. Finance against poverty, Vols. 1 and 2. London: Routledge
4. Banerjee, A., Karlan, D. and Zinman, J., 2015. Six randomized evaluations of microcredit: Introduction and further steps. American Economic Journal: Applied Economics, 7(1), 1-21

Non Agri. Livelihood	
<b>Program participation</b>	.100* (.055)
<b>Tenure</b>	.009** (.007)
<b>Microfinance program participation</b>	-.028 (.073)
<b>Borrowed in 2<sup>nd</sup> season 2016</b>	-.010 (.069)
<b>Borrowed in 1<sup>st</sup> season 2017</b>	.079 (.064)
<b>Amount borrowed in 2<sup>nd</sup> season 2016</b>	4.489E <sup>6</sup> (.001)
<b>Amount borrowed in 1<sup>st</sup> season 2017</b>	-.001 (.001)
<b>Gender</b>	-.041 (.031)
<b>N</b>	462
<b>Adj R<sup>2</sup></b>	.024

Additional controls added for gender, household size, reported private income, sublocation, month, week, the square of private income, the amount borrowed from other entities, and an interaction between Mavuno income and household size

\* p<0.10, \*\* \*p<0.05, \*\*\*p<.01

**Table 4 Occupational Choice**

## RESULTS (CONT'D)

And finally, to examine whether Mavuno program participation, or the use of Mavuno's microfinance products, may have affected female decision-making power, we can also isolate women who have participated in Mavuno's programming for at least 14 months (the median) for their likelihood to have a non-agricultural economic activity. Below, table 5 does also indicate that women who have been with Mavuno's program for a minimum of 14 months are significantly more likely to have a non agricultural economic activity. However, these results should be interpreted with caution, as the results are only significant at a 90% confidence interval, and the adjusted R2 value is low.

Gender and Non Agri. Livelihood	
<b>Program participation</b>	.163** (.070)
<b>Tenure</b>	.010** (.004)
<b>Microfinance program participation</b>	-.049 .075
<b>Female*Program Participation</b>	-.102 (.095)
<b>Female*Program Tenure (median)</b>	.111* (.058)
<b>Female*Microfinance Program Participation</b>	-.028 (.064)
<b>Borrowed in 2<sup>nd</sup> season 2016</b>	-.020 (.071)
<b>Borrowed in 1<sup>st</sup> season 2017</b>	.083 (.065)
<b>Amount borrowed in 2<sup>nd</sup> season 2016</b>	.000 (.001)
<b>Amount borrowed in 1<sup>st</sup> season 2017</b>	-.001 (.001)
<b>N</b>	468
<b>Adj R<sup>2</sup></b>	.026

Additional controls added for household size, reported private income, sublocation, month, and week  
\* p<0.10, \*\* \*p<0.05, \*\*\*p<.01

Table 5 Gender and Occupational Choice

# QUALITATIVE FINDINGS

Apart from providing valuable quantitative data, the financial diaries exercise provided invaluable qualitative data regarding the quality of partner's living circumstances. For example, many of the categorizations of spending use generalizable terminology for quite -revealingly- sub-optimal circumstances. General trends noticed include:

## **1.) Even if food secure, eating sub-optimal and nutritionally poor food**

Reviewing the types of expenditures on food, it quickly becomes apparent that the majority of partners subsist on nutrient-poor food such as cassava and yam products as the base of staple starches. Additional foods eaten include palm oil instead of vegetable oil, small dried or salted fish as opposed to fresh fish, and beans as a common source of protein, often eaten with plantains. Revealingly, many partners tended to purchase the inputs for one meal per day, indicating the cooking of one meal that is eaten two times. Foods such as bread, milk, tea, sugar, eggs, and other foods which are commonly eaten by higher-class families in Beni territory for breakfast, for example, were rarely if ever purchased by farmers. Spices, aromatics, and societally higher regarded proteins- such as chicken, goat, or pork- were also rarely purchased by respondents.

## **2.) Borrowing and receiving extremely small amounts of money**

Talking about informal sources of credit and loans, one should be cautious about their transformative power, as the actual amounts from local savings clubs were, as the financial diary surveys revealed, quite small. For example, one partner recorded a loan that he had received from a mutuality in the area called AVEC. The loan itself was 2,000 Congolese Francs, or about \$1.26. In addition, charitable contributions were quite small. Recorded gifts from children were also, commonly, from 1000 Congolese Francs to 2,000 Congolese Francs. This may indicate the relative inaccessibility of credit on the scale needed for business creation in the area, an area that Mavuno may be well positioned to influence, because even if partners use informal credit, the credit they are using is apparently quite small.

## **3.) Working physically demanding work for little monetary reward**

The most common form of income, more so than income earned from agricultural product sales, was daily wages for labor. This usually involved working on the fields of another farmer who required additional labour, for wages that ranged from 1000 CF to 3,500 per day, but were commonly 2,000 CF. Again, with an average of 6.4 members per household, this equates to \$.19 per person per day, or well below the poverty line. This kind of physically demanding, low reward behavior can help us understand several things: one being the relative attraction of having one's own field, to eventually reap the harvest and earn higher returns than the rates available through daily labour. Secondly, these wages can indicate a baseline against which Mavuno can also plan a work-for pay program, a credit product that targets unemployed youth, as we can better understand the average local wages for this type of work, and be positioned to offer a better paying alternative.

## QUALITATIVE FINDINGS (CONT'D)

### **4.) Temptation goods would not be considered luxury goods by many standards**

Finally, to create a consumption category for temptation goods, we considered things purchased for special occasions, including sodas and alcoholic beverages. But these purchases were so far and few between-only seen purchased by 5% of respondents, and up to a maximum of 3,500 CF, or \$2.20- that their very elevation to temptation goods indicates the hand-to-mouth lifestyle of most survey respondents. In the United States, for instance, many families would have soda on hand in their fridge as a basic food item, not to mention alcoholic beverages; and even high-class residents of Beni maintain these in their homes as well. So the relative scarcity of purchasing power among survey participants for these- not even luxury, but temptation-goods indicates the lack of slack among most households for investments in businesses or other unplanned purchases.

Although not statistically established, as we've seen, instances of creating resilience were, however anecdotally, still found. For instance, Paluku Badusi, a member of Mavuno's grassroots organization in Mangango, had had his son and daughter both admitted to a local hospital for malaria during the month of June. But Paluku was able to use some of his proceeds from selling 675 kilograms of cabbage, in addition to over 200 kilograms of eggplant that he had grown with Mavuno, to manage his bill from the local hospital, and was still able to pay 25 dollars towards his five children's school fees.

Finally, as statistically established, Mavuno programming was found to contribute to female occupational choice. As an illustrative case, a member from our grassroots organization in Bingo 11, Kavira Nzyavake, grew cabbage and eggplant with Mavuno. After one season, she began using her proceeds to buy and resell motorcycle gas, and now services motorcycle drivers passing on the Beni Mangina road along the Mangina Axis.

# CONCLUSIONS

Mavuno partners are similar to incoming partners in terms of income and consumption. Agriculture is the mainstay of the majority of households surveyed, with few engaged in non-agricultural economic activities. For most, agricultural economic activity included low paid wage labour on other farmer's fields, the resale of raw agricultural outputs, or the creation of value added goods.

For some, especially women, however, participation in Mavuno has meant an increased ability to divest and start an occupation unrelated to agriculture. For "reluctant micro-entrepreneurs"<sup>5</sup>, who may be part of the rural economy by default rather than choice, increasing occupational choices may be an important part of development that has been captured with the study.

Differences between older participants and incoming participants, microfinance users and non-microfinance users, however, were less conclusive. With a range of variables controlled for, this lack of differences in income and expenditures between groups suggests that the impact of participation in Mavuno programming may take longer than currently captured to be seen, if any, and that caution can and should be used in ascribing exponential gains in income to program participation. These exponential gains, which are captured anecdotally, occur within the outliers of the sample, and are not representative of the majority of the sampled respondents. This is largely consistent with the findings of microfinance experts, who have suggested that microfinance practitioners may do well to emphasize their services as the expansion of choice rather than in poverty alleviation.

Scattered, positive, and significant relationships were found, however, between participation in Mavuno's programming and in expenditures on food, and between participation in Mavuno's microfinance program and social events. For a program working in a context characterized by severe food insecurity, and one of the most violent conflicts recorded in the world, these potential implications of impact on food security and social cohesion are more than welcome. At the end of the day, this study has also identified key markers of purchasing power among our respondents, created a culturally appropriate modification of financial diaries, and provided an insight into the financial lives of Mavuno's farmers; and as such should be of interest not just to Mavuno, but to the variety of development organizations facing security and data collection restraints in the Kivu provinces.

5. Collier, Paul and Stefan Dercon. 2014. African Agriculture in 50 Years: Smallholders in a Rapidly Changing World? World Development. 63, pp. 92 – 101.