



# On-Going Community Assessments 2015-2019 : Analysis Report

*-July 2020-*

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# 1. Introduction

For nearly a decade, Spark Microgrants has been pioneering an approach to international aid that is 100% community-driven and places decision-making power in the hands of those most affected by poverty. Villages that benefit from Spark's approach tend to be sidelined from decision-making that affects their livelihoods. Whether from a mining company's land grabs, a non-profit imposing a seed varietal or a national government forcing participation in a program. Community members of all genders, ages and ethnicities deserve their right fulfilled not just to participate, but to drive local change.

Spark's Facilitated Collective Action Process (FCAP) curates village 'town-hall' style weekly meetings, in which village members come together to drive village planning and action. Through this process, families democratically elect a leadership committee, establish a village savings account, and decide a project of their choice, and implement the project with an \$8,000 seed grant. Each community receives an additional two years of management support and facilitation from Spark and our partners to ensure sustainability of the process.

As a result of the FCAP, communities become more self-reliant and continue their own development with a new platform for accelerating civic engagement and improving livelihoods. For every one project stimulated by the FCAP, a community launches another, showing a 2x impact multiplier. Across the board, 85% of villages continue to meet regularly and 86% have projects that are sustaining. 85% of these projects are profit-generating, ranging from agricultural to transportation businesses. Spark's process isn't just local, it's inclusive; 59% of ideas come from women and 44% of leaders are democratically elected women.

This document lays out the results of analysis conducted on Spark Microgrants on-going community assessment (OCA) forms that were collected between 2015 and 2019 in communities in Rwanda and Uganda. This report recognizes that Spark was continually iterating it's approach throughout these years, both its delivery, content and evaluation of the FCAP and that this dataset was not collected within the confines of a rigorously designed study.

Despite these limitations, these findings deliver a strong account of the livelihoods impact and characteristics of the FCAP from 2015-2019. The livelihoods results importantly are consistent with prior reports on asset growth and food consumption giving us confidence that the FCAP generates results in both.

## Key Findings

### *Livelihoods:*

There is strong evidence that the FCAP improves livelihoods within communities. This is demonstrated through increased income as measured through the average monetary value of animals kept per household within FCAP members increasing by USD\$116.50 between baseline and midline (twenty-one months). When taking the \$8,000 microgrant into consideration we can see that USD\$76 is likely attributed to the village seed grant. This leaves USD\$40.50 of improved animal assets we suggest might be attributed to the FCAP process, a notable 53% increase. When disaggregated by gender we see that male headed households own more animal assets than female headed households but that ownership over the course of the FCAP improves 16% in male headed household ownership and 22% for female headed households - demonstrating a strong inclusion aspect of the FCAP process.

We also see a strong increase in consumption from baseline to endline, as measured through the number of meals eaten per day within FCAP households. The number of families eating at least 2 meals a day has increased from 45% to 89%.

## Wider Socio-Economic trends

A weakness of this report is the lack of a control group included in the methodology meaning that throughout the report it is impossible for us to directly attribute the changes we see to the FCAP. In an attempt to mitigate this weakness, albeit imperfectly, we are able to outline wider socio-economic trends going on within Rwanda and Uganda in their most recently published data. Demonstrating at a macro-level what we potentially would be seeing happening in control communities, if we had them.

Both countries report no shift, or a minor negative shift in poverty levels with their most recent publications, and demonstrate food insecurity / poverty levels that don't undercut our own data. Meaning that we are able to estimate that the deadweight<sup>1</sup> of the FCAP during this time is relatively minimal.

### *Rwanda:*

Rwanda has seen GDP per capita growing at around 7.5% annually for the last decade and has seen strong poverty reduction between 2006 and 2014, moving from 56.7% to 39.1%. However from 2014-2017 there has been minimal continued reduction in this poverty level with a 0.9% shift to 38.2%. When looking at household living conditions this slowdown of improvement holds true with an increase in living conditions slowing down significantly 2014-2017<sup>2</sup>.

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<sup>1</sup> The % of change that would have happened in communities, even if the FCAP had not been delivered.

<sup>2</sup> Rwanda Poverty Profile Report 2016/17 -

<https://www.statistics.gov.rw/publication/eicv-5-rwanda-poverty-profile-report-201617>

When looking at food security we see no significant changes in food consumption since 2009 with 20% of households in 2018 having borderline food consumption, a statistic that matches our own baseline<sup>3</sup>.

*Uganda:*

Data in Uganda is not presented in trends, with all data below given from the publish 2016 national household survey<sup>4</sup>.

We see that poverty trends in Uganda have increased between 2013 and 2017. Moving from 19.7% to 21.4% of the population. Any positive trend seen within FCAP communities is assessed within this wider poverty context. We see that 45% of households own livestock assets but unfortunately Uganda only started collecting this information in 2016 so we are unable to discern any change. Food Poverty is reported at 40% in rural areas. Which is 10% lower than our baseline of 50% respondents eating one meal per day. Food poverty is defined as the inability for households to afford, or to have access to, food that makes up a healthy diet<sup>5</sup>. Meals per day is not a full indicator of food poverty, but a good indication.

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<sup>3</sup> The Comprehensive Food Security and Vulnerability Analysis\_2018 - <http://www.statistics.gov.rw/publication/comprehensive-food-security-and-vulnerability-analysis2018>

<sup>4</sup> Uganda National Household Survey 201617 - [https://www.ubos.org/wp-content/uploads/publications/03\\_20182016\\_UNHS\\_FINAL\\_REPORT.pdf](https://www.ubos.org/wp-content/uploads/publications/03_20182016_UNHS_FINAL_REPORT.pdf)

<sup>5</sup> Sustain - <https://www.sustainweb.org/foodpoverty/whatisfoodpoverty/>

# Methodology and Respondent Characteristics

This section outlines the methodologies used in both the collection of the data to be analyzed and in how we analysed the data. The analysis was designed to answer the following research question:

*Does the FCAP improve livelihoods?*

## a) Data collection methodology

The OCA’s were collected at 7 intervals throughout the FCAP process as outlined below.

OCA #	Time of collection
1	Baseline (before 2017 this was the first village meeting hosted by Spark and after it was corrected to be pre first meeting)
2	After pathway selection (Planning, ~3 months)
3	After (using) first disbursement (Implementation, ~6 months)
4	1-month post implementation
5	8-month post implementation
6	15-month post implementation - Midline
7	24-month post implementation (Graduation) – End-line

For this analysis we utilized OCA 1 as our baseline, OCA 6 as our midline and OCA 7 as our endline. Discounting OCAs 2-5.

All OCAs were collected utilising convenience sampling, meaning that community leaders were rang before enumerators travelled to communities and asked to gather group participants together and be able to answer survey questions. While this has been shifted to a more random approach since, this does introduce two specific biases into our sample. Firstly it relies on the community leaders to self select responders. Meaning that the leader may be selecting the most engaged community members. This is known as a self-selection bias and may result in the results being more positive than a random sample would produce. It also means that our results are unable to disaggregate by direct and indirect beneficiaries, meaning all results are only applicable to those individuals who do attend FCAP meetings. This means all results do not involve the entire community but only those ~50% of community members who attend meetings. This has been shifted in more recent methodologies to a random approach that is able to disaggregate by direct and indirect beneficiaries, but it will be key to keep in mind when interpreting the below results.

## b) Data Analysis methodology

To analyse this data we created a singular dataset that included all observations from OCA 1, 6 & 7. This required significant data cleaning and linking between different questions on OCA sets. Once this was converted into one set, Stata was used to conduct tests on the significance of the changes in the dependent variables. These tests included: Analysis of variance (ANOVA) for continuous indicators; Chi-square for categorical indicators; Spearman's Rank Correlation; Binary logistic regression and; Principal component analysis.

We also constructed an animal asset ownership index, as animal ownership was disaggregated by different animal types. This index was constructed through the calculation of Cronbach's alpha for each animal type. A test that allows you to see whether there is internal validity in the question asked and whether the question asked measures the right thing. This resulted in rabbits and "others" to be discounted from the animal ownership index. The weighting of the index was allocated through running a principal component analysis. This resulted in the following weights for animal ownership being calculated.

Animal	Goats	Sheep	Cows	Pigs	Chicken
Weight	0.33	0.53	0.55	0.55	0.10

## c) Respondent Characteristics

These methodologies have resulted in the following characteristics of our analysis.

Country	# of communities assessed	Number of observations	Confidence Level
Rwanda	38	2,156	99% $\pm$ 3%
Uganda	80	2,389	99% $\pm$ 2.5%
Total	118	4,545	99% $\pm$ 1.7%

Variable	Category	# of respondents	% of respondents
Gender	Male	1,779	39%
	Female	2,766	61%
Marital status	Single	110	4%
	Married	2,066	82%
	Divorced	92	4%

	Widowed	240	10%
	Other	17	1%
Leadership status	Not a leader	1,636	65%
	Leader <sup>6</sup>	892	35%

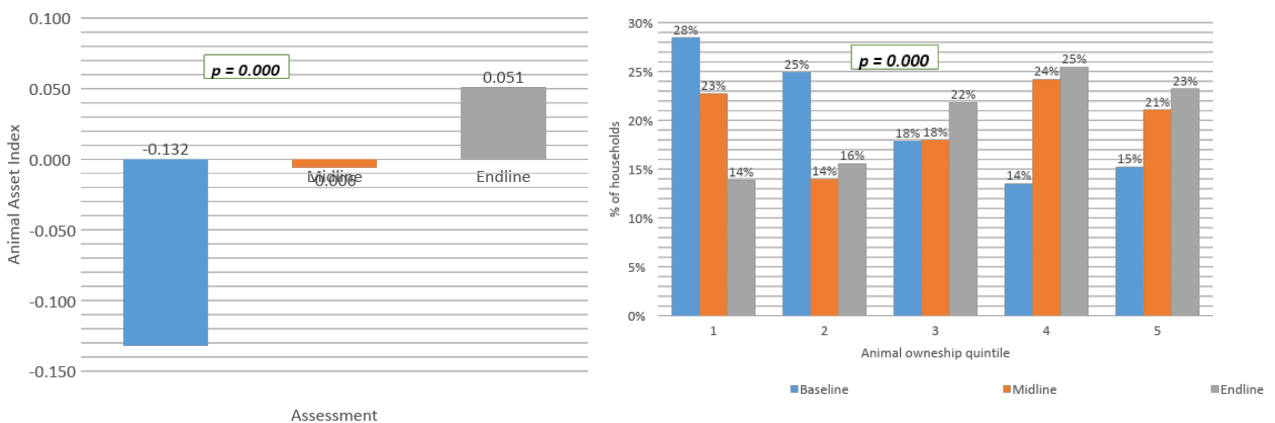
## Analysis Results

### a) Does the FCAP improve livelihoods?

Livelihoods are commonly accepted to be measured through *income and consumption*<sup>7</sup>. In this set of surveys *income* was defined as animal asset increase, and *consumption* was defined as average number of meals per day. Spark since 2019 has also included savings as an additional indicator of income, alongside expanding animal assets to household assets.

#### Income as measured through an Animal Asset Index

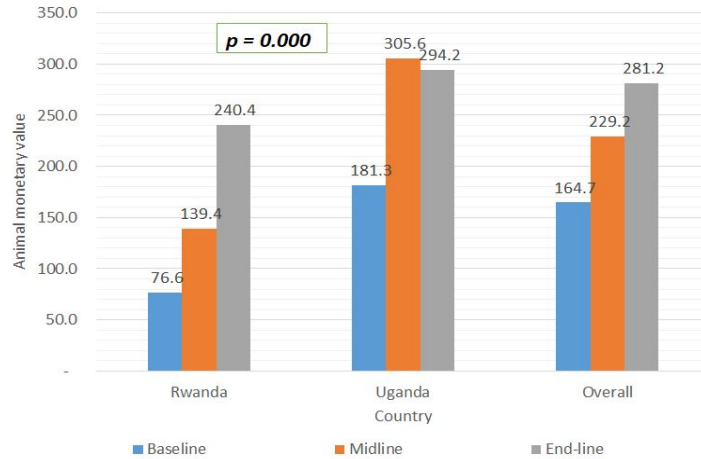
Through the construction of the animal asset index as shown in section 3c we can demonstrate a strong, statistically significant, improvement in animal ownership across our communities of 18%.



When placing this data into quintiles (20% sections of the index) we see a strong shift out of the 1st quintile, a 14% reduction, and a strong increase in the number of households in quintiles 4 and 5, 11% and 8% respectively. When transferring this increase to monetary values we see a \$116.50 increase in animal ownership per household, a 71% increase over the 30 months between baseline and endline.

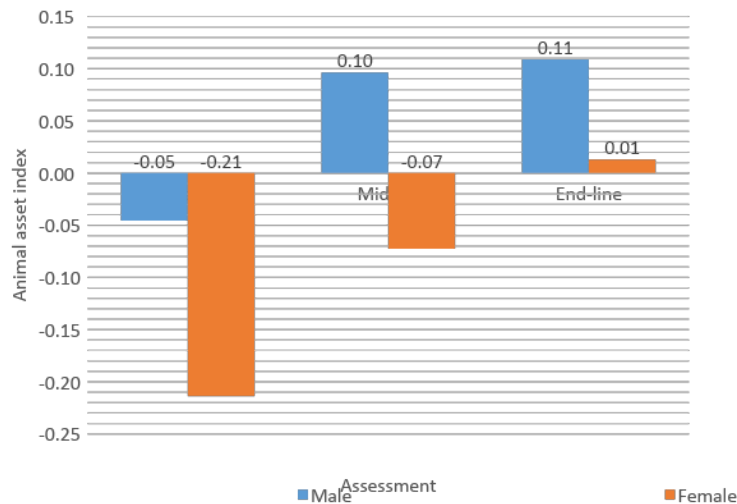
<sup>6</sup> A leader is defined as anyone within the community who holds a traditional community leadership role, or a leadership role in the FCAP group, or any other community based groups.

<sup>7</sup> WORLD BANK (2003) Measuring Living Standards : Household Consumption and Wealth Indices Introduction



When we incorporate average planning group size of 105<sup>8</sup> we can see that USD\$76 can be directly attributed to the microgrant. Leaving a USD\$40.50 improvement in these households, a 53% increase. Although due to the limitation of the methodology we are unable to control how much of this improvement would have happened in these communities anyway and can be directly attributed to the FCAP.

Disaggregating these results by gender we can see that male headed households own significantly higher numbers of animals than female headed households, yet we see a 16% improvement in male headed household ownership against a 22% increase for female headed households - demonstrating a strong inclusion aspect of the FCAP process.



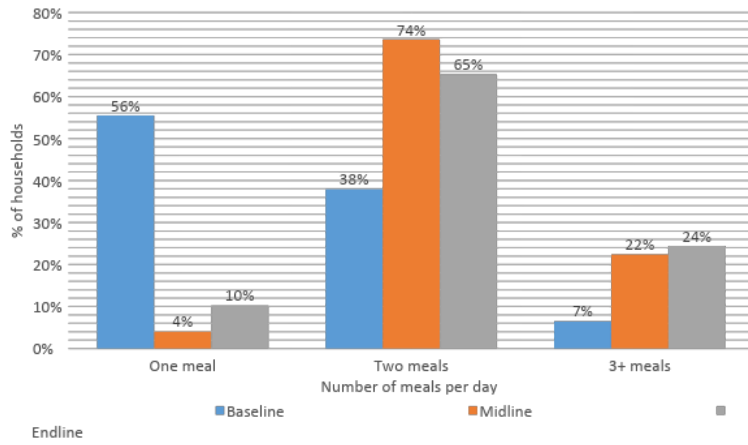
Consumption as measured through average meals eaten per day

We see a significant impact on the number of meals eaten per day by households with a 46% decrease in the numbers eating one meal a day, meaning that at least 89% of families are now consuming more than

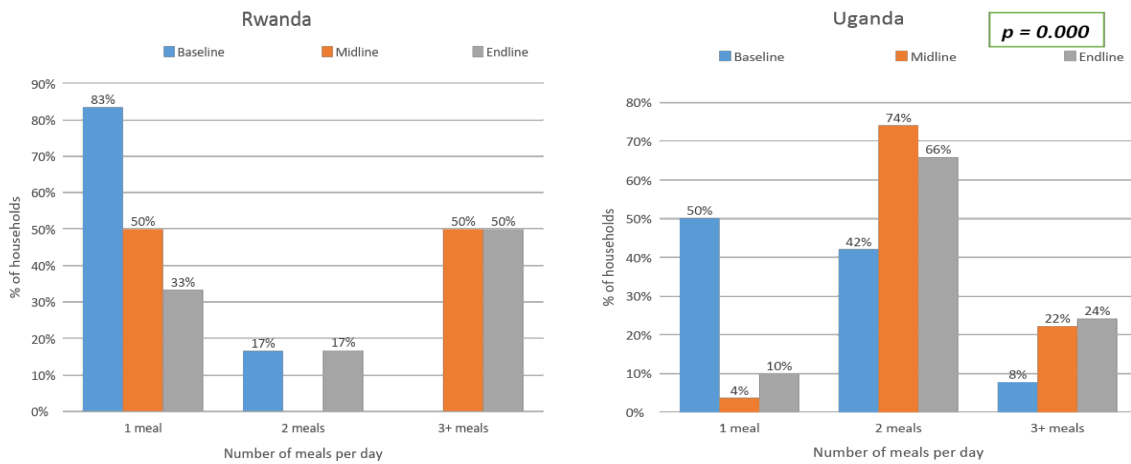
<sup>8</sup> Calculated from wider Spark data kept under the “lives touched” data sheet.



one meal per day, an increase from 45%. There was no difference in gender headed households on the number of meals eaten per day.



When disaggregated by country we see a strong change across both, with Rwanda improving the number of households eating 2 or more meals a day from 17% to 67% and Uganda from 50% to 90%.



# Recommendations

Based on the analysis above key recommendations based on this data include both process improvements and focus for future evaluations. They are as follows:

1. The OCA forms were adapted to each county, leaving the resulting data set complex and hard to compare across countries at certain points. Recommend that all collection tools are universal across countries to ensure strong data collection and ease of analysis. This has been actioned within late 2019/2020.
2. Data at a community level is now conducted through stratified random sampling rather than self selecting sampling. This has been done to remove bias; to ensure strong generalisable results across the whole community and to enable us to disaggregate impact by households that are part of the FCAP group and those that are not. This has been actioned within 2020.
3. While this report shows that once a member of the FCAP group, there is no difference in outcome based on socio-economic status, we are currently unable to quantify whether there are any barriers to entry to the group. Future data must be collected on whether there are any barriers to entry. This will require greater information gathered, as well as access to wider local government data sets. These conversations have started and Spark hopes to sign an agreement with local government partners on access to this data over the next six months.