

A smiling man with a mustache, wearing a blue baseball cap with "ANDSOR" in red, a tan button-down shirt over a white t-shirt, and dark trousers, stands in a vineyard. He is holding a small white piece of paper in his left hand. The background shows lush green grapevines with clusters of green grapes hanging from the branches. A wooden post is visible behind him to the left.

**GLOBAL
PARTNERSHIPS**

Idepro Case Study

Gaining deeper insight into the
clients served and outcomes
achieved in the grape value chain



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A man wearing a white baseball cap and a light-colored jacket is pointing his right arm towards a vineyard. A woman with dark hair, wearing a dark jacket, is looking at him and smiling. They are standing in a vineyard with rows of grapevines. In the background, there are mountains under a blue sky with some clouds. A white rectangular box is overlaid on the bottom left of the image, containing the text "Executive Summary" in red.

Executive Summary

Project Background

ABOUT GLOBAL PARTNERSHIPS

Global Partnerships (GP) is an impact-led investor whose mission is to expand opportunity for people living in poverty. GP invests in social enterprise partners that deliver high-impact products and services that enable people to earn a living and improve their lives. GP's portfolio is comprised of a growing number of investment initiatives that are designed to address various facets of poverty.

Impact Management

GP is dedicated to understanding the outcomes achieved through its investments. GP employs an iterative impact management practice that draws on qualitative and quantitative data from various domains to gain deeper insight into what works, why, for whom, and under what circumstances. As part of its on-going learning program, GP launched a case study initiative with a select set of partners across several of its investment initiatives. This report describes the results from the case study, conducted by Microfinance Opportunities (MFO) in partnership with GP-investee, Idepro.

ABOUT IDEPRO

Idepro is a non-profit financial institution that is aligned with GP's Rural Centered Finance with Education Initiative. The Bolivian microfinance institution (MFI) works across several value chains, offering specialized credit and technical assistance (TA) to underserved producers.

Idepro believes that providing working capital loans to small-scale producers will enable them to invest in their businesses. This will result in enterprise growth while TA can help producers eliminate other obstacles to success, such as a lack of business training.

In the grape value chain, the focus of this case study, Idepro manages two programs offering different levels of assistance. In the *Financia* program, farmers receive loans and a tailored farm improvement plan, a basic TA offering. In the *Impacta* program, clients receive loans and tailored improvement plans. They also receive on-going, in-depth TA from Idepro.

Idepro is highly committed to the measurement of results, performing internal evaluations of their work in various value chains. Idepro participated in this case study to deepen their understanding of results and inform their analysis.

GLOBAL PARTNERSHIPS BY THE NUMBERS*

19 COUNTRIES
where GP has worked

118 PARTNERS

8.9 MILLION LIVES IMPACTED
(estimated number as a result of GP's investments in partners)

\$287.2 MILLION
capital deployed

13 INVESTMENT INITIATIVES

*Cumulative as of December 31, 2017



PARTNER: Idepro





COUNTRY: Bolivia

FOUNDED: 1991

VALUE CHAINS: Brazil Nuts;
Grapes, Wine, and Singani;
Textiles, Quinoa

Research Objectives and Design

GP and Idepro sought to answer four core research questions to gain deeper insight into the clients served and outcomes achieved through Idepro's grape value chain:

-  What is the poverty profile of grape value chain clients?
-  Is the training delivered by Idepro increasing farmers' agricultural knowledge and adoption of best practices?
-  Are clients demonstrating progress toward intermediate economic outcomes, such as improvement in yields, incomes, and the accumulation of assets?
-  Are clients making progress toward longer-term economic outcomes; specifically, are they displaying signs of improved economic resilience?

For each question, GP and Idepro also sought to understand whether there were differences between the *Financia* and the *Impacta* programs.





To answer these questions, MFO surveyed 299 grape value chain clients, including 249 of 493 *Financia* clients and 50 of 51 *Impacta* clients. MFO designed the survey, in consultation with GP and Idepro, to focus on important indicators to answer these research questions—it was not an exhaustive survey of farmers' knowledge, behavior, or economic well-being. This study provides descriptive data on all surveyed clients and allows for some comparisons between the *Financia* and *Impacta* programs. MFO also included questions to examine how knowledge, behavior, and well-being have changed over time.

55% OF IDEPRO GRAPE VALUE CHAIN CLIENTS WERE SURVEYED IN THIS CASE STUDY



Results

The results of this case study, which focused on the grape value chain, suggest that:

-  Clients are likely to be living in moderate poverty, with no significant difference in poverty levels between *Financia* and *Impacta* clients.
-  Idepro's TA programs are effective in improving knowledge and changing farmer behavior, and the *Impacta* program is more effective than the *Financia* program at eliciting these changes.
-  Clients are likely improving their economic well-being but there is weak evidence at this point that one program is yielding better outcomes than the other.
-  Clients in both the *Financia* and *Impacta* programs still struggle to be resilient to economic shocks. This suggests that while economic well-being may be improving, it has not yet translated to long-term improvements in economic well-being.¹

1. While the data suggest improvement in economic well-being, the research design does not allow us to say definitively that these improvements are a result of participation in Idepro. In other words, we cannot say that farmers in either program have experienced improved economic well-being because of Idepro's credit or programming.





Table 1: Detailed Summary of Findings

RESEARCH QUESTION & SUB-TOPIC	FINANCIA (CREDIT + BASIC TA)	IMPACTA (CREDIT + ADVANCED TA)
 Poverty Profile		
Depth of Poverty Outreach	On average, 13 percent of surveyed clients lived at or below the Bolivian national poverty line. However, about 50 percent of clients lived below twice the national poverty line, suggesting that clients were living in moderate but not extreme poverty. For comparison, the World Bank estimates that 39 percent of Bolivians live below the national poverty line.	
 Agricultural Management		
Agricultural Knowledge	<i>Financia</i> clients showed good, but not great, knowledge about the effectiveness and dangers of pesticides and how to protect oneself.	<i>Impacta</i> clients showed high levels of knowledge about pesticide effectiveness, dangers, and protection methods.
Record Keeping	Thirty seven (37) percent of clients kept some records on their use of inputs, yield, and earnings.	Eighty (80) percent of clients kept some records on their use of inputs, yield, and earnings.
Processes Implemented	Clients demonstrated lower-rates of advanced process utilization compared to <i>Impacta</i> , but most of those that have adopted did so after joining Idepro.	Clients used more advanced farming processes, including soil analysis, better pesticide disposal, and recycling techniques.
 Intermediate Economic Outcomes		
Yields	On average, <i>Financia</i> and <i>Impacta</i> clients sold a greater volume of grapes in the most recent harvest than they did the year prior. However, the difference between the years was not statistically significant, and there was no difference between the two groups. ²	
Income ³	Sixty-three (63) percent of <i>Financia</i> clients reported increases in their income in the past year.	Fifty (50) percent of <i>Impacta</i> clients reported increases in their income in the past year.
Asset Accumulation	A smaller share of <i>Financia</i> clients owned agricultural assets than <i>Impacta</i> clients, but roughly the same share of <i>Financia</i> clients accumulated them since joining Idepro as compared to <i>Impacta</i> clients.	A majority of <i>Impacta</i> clients owned basic, mechanized equipment. They were more likely than <i>Financia</i> clients to own higher-value assets like tractors.
 Economic Resilience		
Income Variability	Two-thirds of surveyed clients reported that they did not think their incomes were reliable.	
Unexpected Expenses	Ninety-five (95) percent of surveyed clients reported that they worry about coming up with cash to pay unexpected expenses; however, 70 percent of clients said that it was “some-what possible” or “very possible” that they could come up with a large sum of cash in a time of need.	
	More <i>Financia</i> clients reported that they would rely on some type of loan than on savings to meet unexpected expenses—loans are a higher stress tool than savings.	<i>Impacta</i> clients reported being more likely to use savings and less likely to use loans, sell belongings, or reduce expenses to cope with unexpected expenses.
Food Security	About a quarter of clients reported a high probability of having limited or inadequate access to food in the past 12 months.	

2. This analysis used a regression model that controlled for clients' Idepro program participation, time in program, size of land owned, amount of land cultivated, education, and age. There are numerous other variables that effect agricultural production that the survey could not capture that could impact these results.

3. This difference could be due to the fact that *Impacta* clients were more likely to keep records on their production, sales, and income and thus were able to recall these figures more accurately than *Financia* clients who relied predominantly on memory and perception.

Key Insights

-  While monetary poverty lines serve as a guide, aspects of non-monetary poverty, such as food insecurity, remain important considerations as practitioners and investors think about the poverty profile of their target market.
-  This study demonstrates that technical assistance programs, such as Idepro's *Impacta* program, can increase knowledge and change behavior. However additional research is needed to better understand which aspects of the program—including content, design, and delivery—are key to delivering these desired outcomes.
-  Practitioners and investors often focus on long term outcomes such as improved economic position and resiliency. While it is important to set these objectives, we must also develop informed and practical expectations regarding the time needed to deliver such results.
-  Furthermore, this study reminds us of the importance of identifying shorter term outcomes (such as knowledge and behavior change) and then develop cost effective ways to track progress toward and correlation with longer term outcomes (such as improved economic position and resilience).





Project Background

Impact Objectives

GLOBAL PARTNERSHIPS

Global Partnerships (GP) provides working capital loans to partner enterprises to strengthen and scale the delivery of goods and services that empower low income households to earn a living and improve their lives. Within its Rural Centered Finance with Education Initiative, GP aims to improve the livelihoods of rural households living in poverty by investing in financial institutions that deliver tailored credit and education. In doing so, GP looks to achieve medium-to-long-term outcomes that are associated with improved economic well-being, resilience, and food security.



Within its Rural Centered Finance with Education Initiative, GP aims to improve the livelihoods of rural households living in poverty by investing in financial institutions that deliver tailored credit and education.



IDEPRO

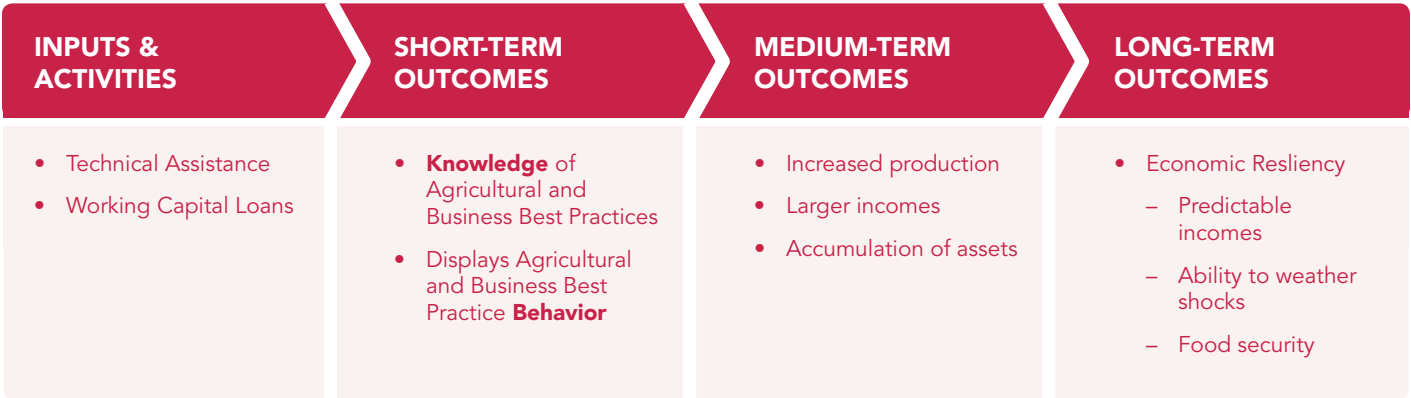
Idepro works with producers across several value chains. For those producers, access to capital to invest in their operations can be a serious limitation to short-term production and long-term investment.

Idepro aims to remove this barrier by providing working capital loans to small-scale producers. In doing so, Idepro looks to catalyze business investments that will yield increases in income over time, allowing individuals and households to improve their quality of life.



Roughly 220,000 people in Bolivia are involved in grape production. Approximately 2,200 hectares of land produce mainly wine and singani. 93% of grape production takes place in the two provinces where Idepro operates: Tarija (80%) and Chuquisaca (13%).

Theory of Change



Measuring Progress

FINANCIA VS IMPACTA PROGRAMS

In the grape value chain, Idepro offers two credit and business development products: *Financia* and *Impacta*. The *Financia* model is the most common, providing credit and a tailored improvement plan to participants as well as asking for a commitment from clients to follow appropriate agricultural practices. The *Impacta* model provides these elements and includes follow-up and hands-on technical assistance from Idepro staff to ensure clients are following the implementation plan.

OPERATING HYPOTHESES

In practice, the *Financia* and *Impacta* models have the same goals, as defined in the Theory of Change: provide credit and TA that will give producers the knowledge to enact best practices and the cash to implement their learning with the goal of higher yields and improved economic well-being. The key difference is that the *Impacta* program addresses the knowledge and behavior barriers with a more robust TA program.





Consequently, GP and Idepro’s operating hypotheses going into the study were that the *Financia* program would lead to some knowledge and behavior change, increases in production and incomes, and improved economic resiliency while the *Impacta* program would see more growth in these areas.



FINANCIA	IMPACTA
Some Knowledge and Behavior Change	Larger Changes in Knowledge and Behavior
Improved Production, Income, and Economic Well-Being	Larger Improvements in Production, Income, and Economic Well-Being

RESEARCH QUESTIONS

GP, MFO, and Idepro sought to examine their hypotheses with a survey of Idepro clients. To guide the research program, the partner organizations identified four research questions:

-  What is the poverty profile of grape value chain clients?
-  Is the training delivered by Idepro increasing farmers' agricultural knowledge and adoption of best practices?
-  Are clients demonstrating progress towards intermediate economic outcomes, such as improvement in yields, incomes, and the accumulation of assets?
-  Are clients making progress toward longer-term economic outcomes; specifically, are they displaying signs of improved economic resilience?

RESEARCH METHODS

MFO designed the survey instrument in consultation with GP and Idepro, and it included questions about clients' grape-growing activities, their knowledge and implementation of good agricultural practices, and questions on outcomes like income growth, financial tool use, and response to economic shocks. The survey questions focused on the elements most relevant to GP and Idepro. It is not an exhaustive assessment of Idepro's operations or GP's areas of interest.

Given these hypotheses, it was important to GP and Idepro to identify whether certain knowledge, behaviors, or outcomes occurred before or after the clients joined Idepro. Consequently, MFO included several questions with temporal elements (i.e. which agricultural assets do you own and which of these did you purchase after joining Idepro?). The inclusion of these questions allowed MFO to discern whether there was a differential impact on *Impacta* clients compared to *Financia* clients.

SAMPLE SELECTION

MFO implemented a research methodology that relied on a cross-sectional survey with *Financia* and *Impacta* clients. At the time of the case study, IDEPRO served 543 clients—493 *Financia* clients and 51 *Impacta* clients.

MFO endeavored to reach each client-household and interview one client. In cases where multiple clients lived in one household, MFO randomly selected one client to interview. MFO successfully interviewed 299 clients—249 *Financia* clients and 50 *Impacta* clients. Other clients were unavailable during the survey period or declined to participate.



Note: This study does not evaluate the impact on farmers of belonging to Idepro versus not belonging to Idepro nor can it definitively discern the relative impact of the two programs compared to a farmer who does not participate in either program. Instead, it provides descriptive information on both programs and allows for a comparison of results between Financia and Impacta.



Results

Poverty Profile

Research Question:

What is the poverty profile of clients served within the grape value chain?

Answer and Implications:

- Households in the *Financia* and *Impacta* program had equal poverty likelihoods.
- Idepro is reaching farmers living in moderate but not extreme poverty

A PROFILE OF GONZALO ORTEGA

Gonzalo Ortega, at the time of the survey, was 45 years old, completed primary school, and had been an Idepro client for five years. He is one of 299 Idepro clients MFO surveyed that grow grapes for wine production in the Tarija Central Valley. Arid mountains dotted with shrubs surround the valley. On the valley floor, plots of land, like Gonzalo's, look like a green patchwork that goes on for miles.

Gonzalo's farm is average-sized for this group of clients at two hectares—that is about twice the size of the grass area inside an Olympic-sized running track—and, like most of the clients here, not all of that land is devoted to grape production. While most clients cultivate grapes on 75 percent of their land, Gonzalo only does so on 50 percent of his land, opting to grow commercial and subsistence crops on the rest.

His family helps with his farming endeavors; at four people, it is an average size for this group of clients. It includes his wife, Jazmin (40 years old), who completed primary school, and his two sons—Diego (21 years old) and Julio (20 years old)—who both completed technical school.

All three of them help Gonzalo on the farm, but he still has to hire additional help during the harvest season. Gonzalo and Jazmin also reported that they had other sources of income. Gonzalo said he works part-time as a driver while Jazmin runs a small shop; neither son reported a secondary source of income. This set-up is similar to other households—with most relying on multiple sources of income.

The family lives together in a home that looks similar to most of those in the Tarija Central Valley. It has a kitchen, two additional rooms, with cement floors and a latrine. A few large household appliances accent the modest construction. Like the other farmers, Gonzalo has the luxury of a refrigerator and a television. He does not have a vehicle though, while most other farmers do.



TYPICAL CLIENT PROFILE

Monetary Poverty:

According to the Probability of Poverty Index (PPI), grape value chain clients have a 13 percent chance of living below the national poverty line (\$6.88 USD Purchasing Power Parity (PPP)/person/day) and a 50 percent chance of living below 2X the national poverty line (\$13.76 USD PPP/person/day)

Avg. Farm Size:

2 ha (75 percent under grape cultivation)

Avg. Family Size:

4 people

* This client's name has been changed to protect client privacy. The picture shown here is of a different Idepro client, but not the one profiled in this report.

According to the PPI, there is a 32 percent chance that Gonzalo and his family live at or below the Bolivian national poverty line, equivalent to \$6.88 per person per day adjusted for PPP. Gonzalo's family's likelihood of being poor is greater than Idepro clients in the survey generally—they had a 13 percent chance of being at or below the poverty line.

The World Bank estimates that 39 percent of Bolivians live at or below the national poverty line, which suggest that Gonzalo and his fellow farmers tend not to be as poor, on average, as their fellow Bolivians are. However, most households here still face moderate poverty—it is likely that more than half of the households surveyed live on less than twice the national poverty line (\$13.76 per person per day).

RESULTS

Clients are likely to be living in moderate poverty, with no significant difference in poverty levels between *Financia* and *Impacta* clients.

KEY INSIGHT:

While monetary poverty lines serve as a guide, aspects of nonmonetary poverty, such as food insecurity, remain important considerations as practitioners and investors think about the poverty profile of their target market.

The Probability of Poverty Index (PPI)

The PPI allows for a quick assessment of the likelihood a household lives at or below the poverty line when detailed income data is not available. Adjustments for purchasing power account for the fact that goods in Bolivia are cheaper than they are in the United States. The purchasing power parity factor for Bolivians is 2.92 to one U.S. dollar.



Knowledge and Behavior

Research Question:

Is the training delivered by Idepro increasing farmers' agricultural knowledge and adoption of best practices?

Answer:

- Yes, *Financia* and *Impacta* clients demonstrated good knowledge of pesticide and fertilizer best practices. Both sets of clients had better knowledge of basic practices than more advanced practices, but *Impacta* clients had better knowledge of all practices.
- Similarly, *Impacta* clients reported better knowledge and behavior than *Financia* clients on all behavior questions. For example, the data show that *Financia* clients were unlikely to keep agricultural records of any type. *Financia* clients were also unlikely to engage in advanced agricultural processes. The data show that *Impacta* clients were much more likely to keep records than *Financia* clients, and they were more likely to engage in more advanced agricultural processes
- Additionally, *Impacta* clients were more likely to have engaged in most agricultural processes after joining Idepro, especially the more advanced processes such as soil analysis.

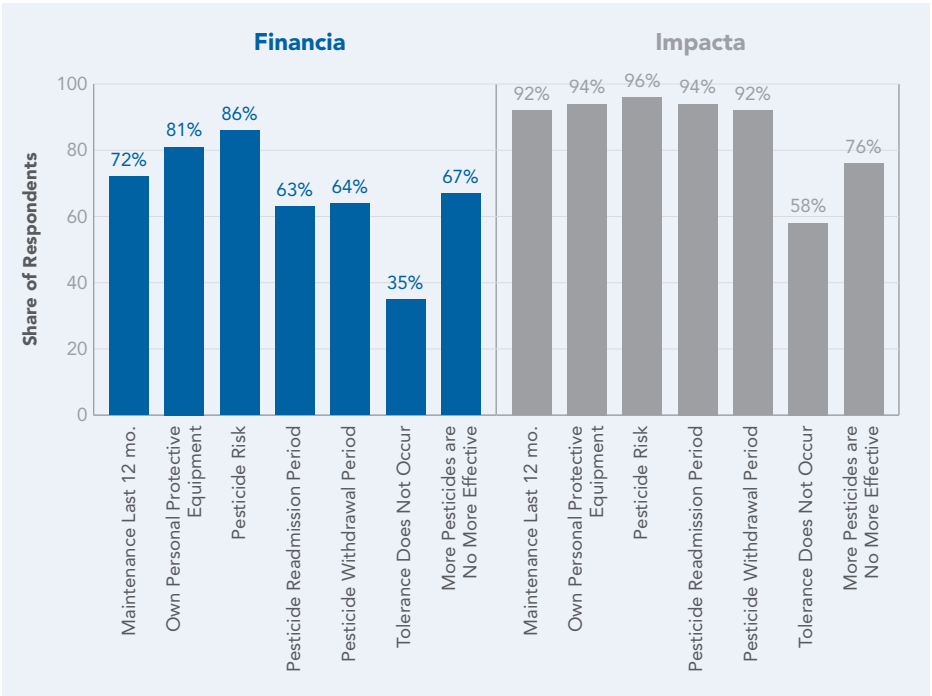
Implications:

- *Impacta's* more robust training program appears to deliver better results, which aligns with the hypothesis that the more robust TA program will lead to stronger knowledge gains.
- The data show clients have knowledge and display behaviors that Idepro's technical assistance program teaches, suggesting the program is having a positive effect on these short and medium term outcomes. Furthermore, the evidence shows that the *Impacta* program is more effective in eliciting knowledge and behavior changes than the *Financia* program.

KNOWLEDGE

Idepro offers training on a variety of important agricultural and business practices, but they emphasize teaching farmers like Gonzalo about the risks associated with pesticide and fertilizer use. MFO asked a series of questions generally related to farmers' knowledge of pesticide and fertilizer best practices. The data show that clients in both programs reported good knowledge of agricultural best practice related to pesticide use, and *Impacta* clients were much more likely to answer these questions in the positive. This is in line with the hypothesis that *Impacta* clients would demonstrate more knowledge than *Financia* clients.

Client Knowledge of Best Practices



RESULTS

Idepro’s TA programs are effective in improving knowledge and changing farmer behavior, and the *Impacta* program is more effective than the *Financia* program at eliciting these changes.

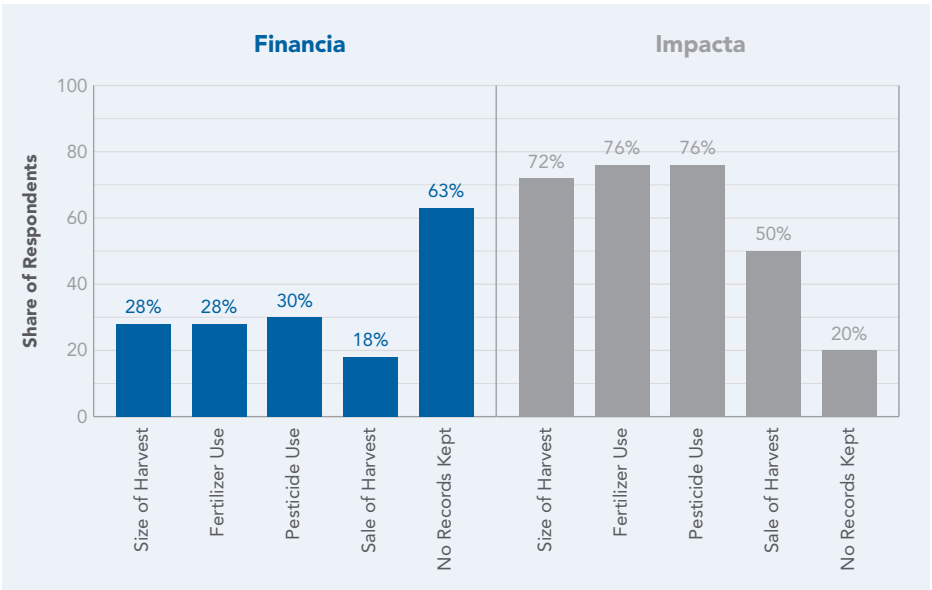


BEHAVIOR

Record Keeping

Idepro also emphasizes the importance of record keeping. Record keeping is important because it allows farmers to track their use of inputs, their production, their earnings, and their return on investment. The data show that *Impacta* clients were significantly more likely to keep records on all these topics than *Financia* clients were. Not all clients kept all records, but the proportion of *Financia* clients who reported that they kept no records was three times as high as for the *Impacta* group.

Client Record Keeping Rates



Processes Used

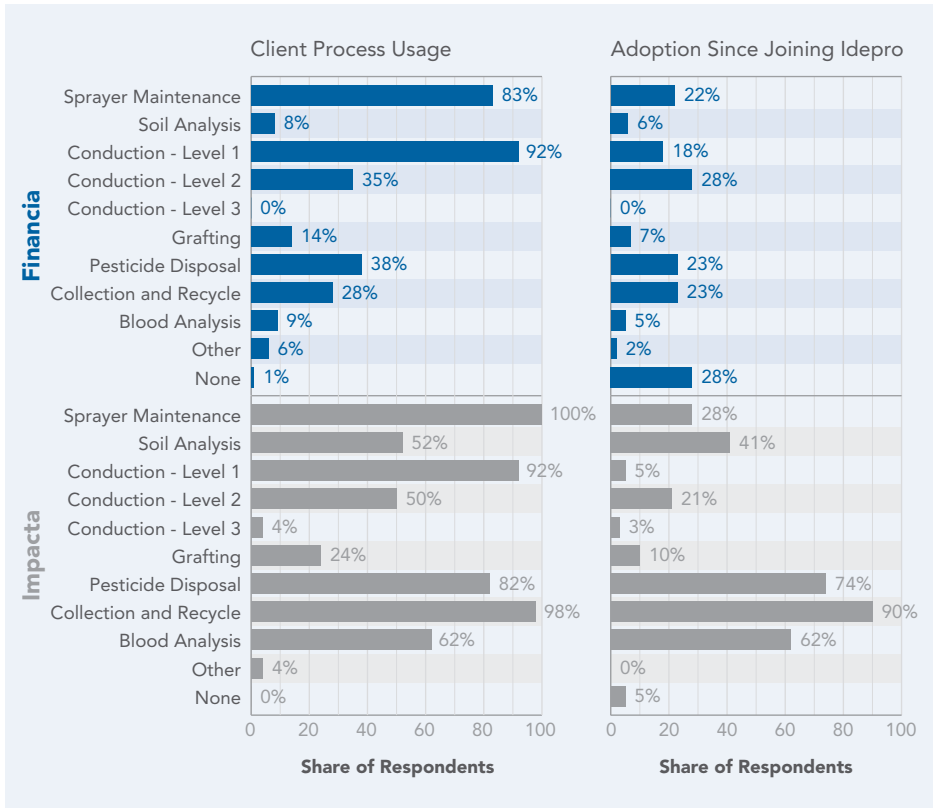
Another important component to agricultural success is following good agricultural processes. MFO asked questions about a core set of processes that Idepro believes would enable farmers to improve productivity. There are a range of processes, some basic and some advanced. Presumably, the more advanced processes are more likely to increase productivity.

In the chart below, the graph on the right shows the share of all respondents engaged in the different processes. It shows that the majority of *Financia* clients engaged in basic processes like performing maintenance on their backpack sprayers and having a basic conduction system on their farms. No more than a third of *Financia* clients used advanced agricultural processes like pesticide disposal, collection, and recycling protocols. Gonzalo, for instance, used a basic and slightly more advance conduction system (levels 1 and 2) as well as a manual backpack sprayer but nothing else. *Impacta* clients were much more likely to be engaged in processes that were more complex and advanced. At least half of these clients used advanced conduction systems, performed soil analysis, used collection and recycling protocols, properly disposed of pesticides, and performed blood analysis on themselves to gauge their pesticide exposure.

The graph below shows the share of clients that had adopted the agricultural processes listed at the time MFO interviewed them. The graph on the right shows the share of clients who reported they adopted those processes after they joined Idepro. It shows that almost all the use of advance agricultural processes on farms (conduction level 3, soil analysis, pesticide disposal, collection and recycling, and blood analysis), for both *Financia* and *Impacta*, occurred after clients joined the program, but there were significantly higher rates of adoption among the *Impacta* clients as compared to the *Financia* clients.

KEY INSIGHT:
This study demonstrates that technical assistance programs, such as Idepro’s Impacta program, can increase knowledge and change behavior.

Client Process Usage and Adoption Rates



Economic Outcomes

Research Question:

Are clients demonstrating progress towards intermediate economic outcomes, such as improvement in yields, incomes, and the accumulation of assets?

Answer:

- Yes, clients are demonstrating progress and there is no statistically significant difference in the changes experienced by participants in the two programs.
- Both *Financia* and *Impacta* clients reported increased yields in their most recent harvest, but the difference compared to the previous year was not statistically significant. There were also no statistically significant differences in yields between the two programs.
 - This finding was supported by an analysis of Idepro's administrative data. That data also showed no differences in yields from year to year or between the programs. However, there was some evidence that clients did improve their incomes between their first and second cycles with Idepro, after controlling for other factors including the year those cycles took place, but there was no evidence that there were improvements in subsequent cycles.
- Both groups of clients reported that their income increased in the last year but *Financia* clients (63 percent) were more likely to report this than *Impacta* clients (50 percent). This difference could be due to the fact that *Impacta* clients were more likely to keep records on their production, sales, and income and thus were able to recall these figures more accurately than *Financia* clients who relied predominantly on memory and perception.
- *Impacta* clients were more likely to own advanced agricultural assets, such as tractors. While more of them owned these assets, they were about as likely as *Financia* clients were to have purchased them since joining Idepro.

Implication:

This is a mixed picture of economic outcomes. There was no statistically significant growth in year-over-year harvests, although given the volatility of agriculture and the large number of variables that can influence this result, a longer period is needed to discern impact. The results show that *Impacta* clients were less likely to report increases in earnings in the past year, but a greater share of them owned agricultural assets. Additionally, of those clients that owned assets, a roughly equal share of them have purchased them since joining Idepro.

YIELDS

The size of a harvest is an important outcome. Although there may not always be increases in economic well-being following increased production because of volatility in prices, it is typically a critical component in a farmer's ability to improve his or her well-being.

While MFO interviewed 299 farmers, only 218 reported producing grapes in the two most recent harvests. Of the 81 farmers who reported that they did not produce, 42 farmers reported having crops that were too young to produce grapes. Others declined to provide the information or did not know their yield (illustrating the importance of record keeping), only produced

grapes in one of the two years because of crop age, or experienced a negative agricultural event that resulted in the loss of their harvest.

MFO asked respondents that did produce in the past two seasons how many standardized units of grapes they sold during the most recent harvest and harvest prior to that.⁴ Respondents reported that their total production between the two harvests increased, but the change between the two periods was not statistically significant. Additionally, there was no statistically significant difference between how much *Financia* and *Impacta* clients produced.

INCOME

MFO asked respondents whether they thought their income had increased or decreased during the past year. Almost two-thirds of *Financia* clients and half of *Impacta* clients reported increases. Roughly equal shares of clients in each group reported their incomes remained the same while more *Impacta* clients reported that their income declined during the past year.

In the last year, has your income:	Financia	Impacta	Total
Significantly Increased	12.1	2.0	10.4
Somewhat Increased	50.6	48.0	50.2
Same	24.1	28.0	24.8
Somewhat Declined	10.0	22.0	12.0
Significantly Declined	2.8	0.0	2.3
Don't Know/Refused	0.4	0.0	0.3
Total	100.0	100.0	100.0

AGRICULTURAL ASSETS

A potential driver of future well-being is the acquisition of productive assets. MFO, on Idepro’s advice, focused on a key set of agricultural assets—sprayers (to distribute pesticides), brush cutters, animal led plows, and tractors. Manual sprayers were the most basic while motorized sprayers and those that attach to tractors were the most advanced.

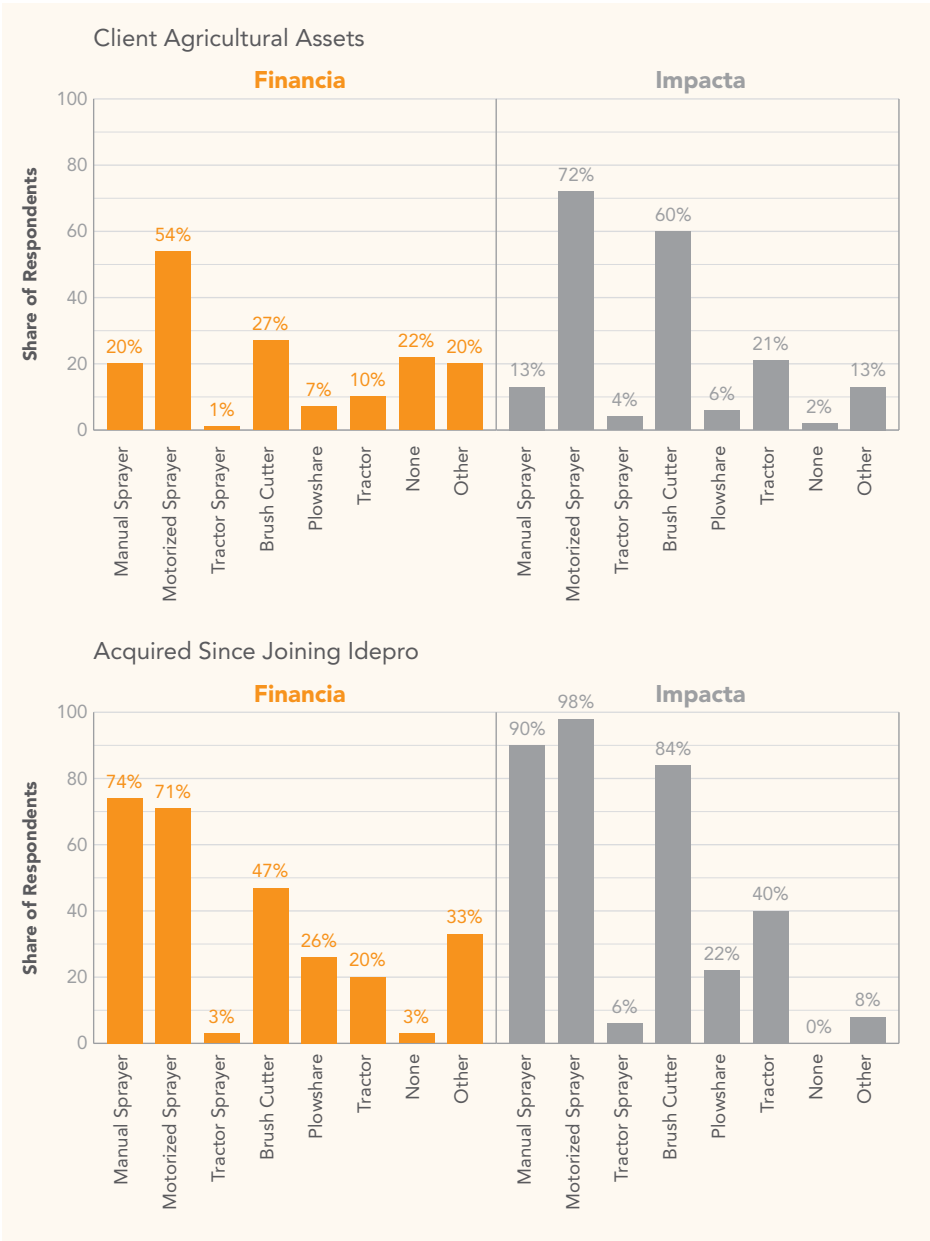
The data show that *Financia* clients had lower rates of asset ownership than *Impacta* clients, and they were more likely to own less-advanced versions of these assets (i.e. a manual sprayer versus a mechanical one or an animal driven plow versus a tractor driven one). Gonzalo, for instance, only owned two of the assets we asked about—a motorized backpack sprayer and a brush cutter.

4. Farmers sell grapes in quintal-sized bundles at the market and in standardized boxes to wineries. For this analysis, we standardized all units to quintals. One quintal is equal to 220 pounds.

RESULTS

Clients are likely improving their economic well-being but there is weak evidence at this point that one program is yielding better outcomes than the other.

Client Agricultural Assets and Acquisition Rates



KEY INSIGHT: Practitioners and investors often focus on long term outcomes such as improved economic position and resiliency. While it is important to set these objectives, we must also develop informed and practical expectations regarding the time needed to deliver such results.

While *Impacta* clients had higher levels and more advanced levels of asset ownership, it may not have been the direct result of the *Impacta* program. Of the clients that own these assets, *Financia* and *Impacta* clients were equally likely to have purchased them after becoming members of Idepro, except for brush cutters—*Impacta* clients were more likely to have purchased this asset after joining Idepro than *Financia* clients were.



Economic Resilience

Research Question:

Are clients making progress toward longer-term economic outcomes; specifically, are they displaying signs of improved economic resilience?

Answer:

- Not really. The data suggest a high-level of financial stress, which is not unusual for households living in moderate poverty.
- Two-thirds of surveyed clients reported that their incomes were not reliable.
- Ninety-five (95) percent of surveyed clients reported that they worry about coming up with cash to pay unexpected expenses; however, 70 percent of clients said that it is “somewhat possible” or “very possible” that they could come up with a large sum of cash in a time of need.
- The most common types of financial tools people would rely on in a time of need were savings, which are a low-stress financial tool, and loans, which are a high-stress tool. *Impacta* clients were much more likely to rely on savings while *Financia* clients were more likely to rely on loans.
- About a quarter of clients reported a high probability of having limited or inadequate access to food in the past 12 months.

Implications:

Collectively, these data suggest that clients still struggle to be resilient to economic shocks. This may be evidence that improving incomes have not yet translated to long-term improvements in economic well-being.

Economic resilience is about an individual's ability to respond to economic shocks, such as unanticipated major expenses or income losses. In other words, an individual is economically resilient if he or she can quickly return to or improve his or her economic well-being following an economic shock. Resilience is a difficult thing to measure directly, but there are key indicators of whether a household is resilient.

Specifically, MFO asked clients about their income variability, their ability to access cash in an emergency, and how they cope in the face of emergencies. MFO's Financial Diaries studies have shown that clients with more stable income and/or the ability to access cash through low-stress financial tools are likely to be more resilient.

In addition, MFO asked a series of questions about the clients' level of vulnerability including their household's food security. Households that struggle to purchase food are likely to be less resilient to economic shocks.

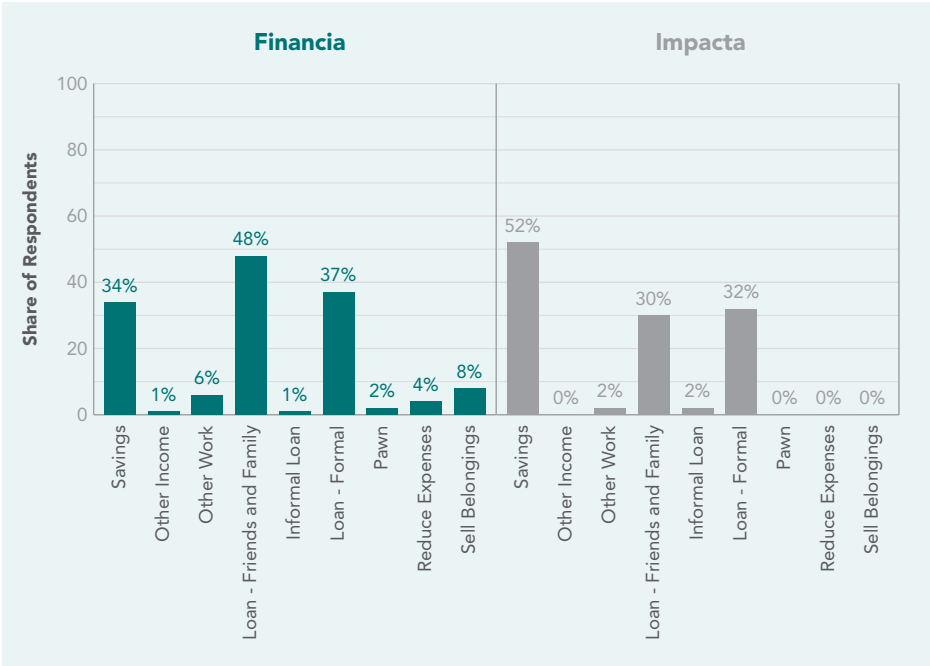
INCOME VARIABILITY AND FINANCIAL TOOLS

About two-third of clients reported that they did not think their income was reliable and there was no statistical difference between the share of *Financia* and *Impacta* clients that felt this way. All else equal, farmers who reported being wealthier, better educated, and who did not experience a negative agricultural event were more likely to feel their incomes were reliable.

The lack of reliable income may explain why 95 percent of clients reported that they worried about being able to access enough cash to pay unexpected expenses, including 81 percent who said they were very worried about this. Despite this worry, about 70 percent of clients reported that it is “some-what” or “very” possible that they could access a large sum of money in an emergency.

Despite similar proportions of farmers reporting unreliable incomes and concerns about accessing cash, *Impacta* clients were more likely to report relying on low-stress financial tools when trying to access cash to cope with an unexpected expense. More than half of *Impacta* households reported that they would utilize savings to help pay for the expense while only 34 percent of *Financia* respondents reported the same. *Financia* respondents were also more likely to report using other, more stressful financial tools to cope, including being more likely to use loans, cut back on expenses, and sell assets. No farmers reported the use of insurance, remittances, or skipping loan payments to cope with unexpected expenses.

Client Use of Financial Tools



RESULTS

Clients in both the *Financia* and *Impacta* programs still struggle to be resilient to economic shocks. This suggests that while economic well-being may be improving, it has not yet translated to long-term improvements in economic well-being.



FOOD SECURITY

Another key component of resilience and well-being is the ability to afford necessities, including food. Households that struggle to purchase food are less likely to be resilient.

One way to assess whether households have adequate access to food is through a food security survey. Various international agencies and organizations perform surveys to assess both acute and chronic limited or inadequate access to food. These surveys often use more than a dozen questions to determine whether access to food is an issue, the frequency of access is an issue, and the severity of decreased access. The results are used to rate households on their level of food insecurity.

Given limited time, MFO chose to ask the three food insecurity “screen-er” questions focused on the last 12 months. A response of “frequently” or “sometimes” to any of these questions triggers the longer survey, so respondents that answer more of these questions in the positive are more likely to have higher levels of food insecurity. Individuals who answer in this way to three questions or more on the full survey are deemed food inse- cure—they had limited or inadequate access to food at some point in the past 12 months.

KEY INSIGHT:
This study reminds us of the importance of identifying shorter term outcomes (such as knowledge and behavior change) and then develop cost effective ways to track progress toward and correlation with longer term outcomes (such as improved economic position and resilience).

Number of Food Security Questions with Responses “Frequently” or “Sometimes”	Financia	Impacta	Total
0	65%	72%	67%
1	10%	4%	9%
2	20%	22%	21%
3	4%	2%	4%
Total	100%	100%	100%

Two-thirds of all farmers reported that they never experienced limited or inadequate access to food—these farmers were food secure. However, about a quarter of clients reported that they likely had limited or inadequate access to food in the past 12 months.⁶ *Impacta* clients were less likely to be food insecure than *Financia* clients.

5. In the variant of the food security survey MFO based these questions on, an individual needed to answer in the positive to three questions to be considered food insecure. Consequently, farmers who answered in the positive to two of these screener questions are more likely to answer in the positive to one of the “Stage 2” questions.

Participating Organizations



Global Partnerships (GP) is an impact-led investor, pioneering and investing in sustainable social enterprises that deliver high-impact products and services for people living in poverty. Global Partnerships invests in microfinance institutions (MFIs), social business and cooperatives in Latin America, the Caribbean and Sub-Saharan Africa.



Idepro is a Bolivian non-profit financial institution that aims to improve productivity, income and employment to small-scale agriculture and non-agriculture entrepreneurs. They achieve this by providing financial and non-financial products and services. Idepro works with value chain-oriented credit products in five priority sectors: wine grapes, Brazil nuts, quinoa, textiles and timber.



Microfinance Opportunities is a global nonprofit organization committed to understanding the financial realities of low-income households and developing consumer-focused solutions. Their work shapes the design and delivery of financial products and services, and enhances the capacity of low-income consumers to make informed financial decisions. In collaboration with a wide range of public and private sector partners, their research and expertise help to increase consumer access to finance in the developing world.

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The Economic Cooperation and Development division is part of SECO's economic competence. In advanced developing countries, it supports socially, environmentally and climate-friendly economic growth with more and better jobs for all levels of the population. This opens up prospects, reduces poverty and removes inequalities. Switzerland benefits from development of this type through new trading partners, increased security and reduced migration pressure.

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JPMorgan Chase believes more people should have access to opportunity and the chance to move up the economic ladder, particularly in the world's cities, where the benefits of revitalization are not reaching everyone. Their global initiatives are focused on key drivers of inclusive growth to address social and economic challenges and leverage the firm's world-wide presence, talent and resources.