



Redefining finance for agriculture: green agricultural credit for smallholders in Peru

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INNOVATE – Adoption of Agricultural Innovations through Non-Traditional Financial Services, is a three-year initiative implemented by MEDA and funded by the International Development Research Centre (IDRC). MEDA and its partners are assessing the potential of non-traditional finance to enable large scale adoption of agricultural innovations among women and men smallholder farmers in South Asia, South America and East Africa. The research and learnings will contribute to developing policy and programming recommendations.

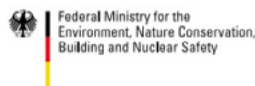


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About IKI

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About Global Canopy

Global Canopy is an innovative environmental organisation that targets the market forces destroying tropical forests. Since 2001, we have been testing new approaches to tackling deforestation, and guiding companies, investors and governments worldwide to think differently about our planet's forests.



Executive Summary

The majority of Peru's greenhouse gas emissions (GHG) comes from land use change, primarily caused by agricultural expansion into native Amazon forest. This occurs mostly in small patches and has historically been associated with smallholder agriculture. This means Peru's agricultural sector needs to change if the country is to meet its climate targets.

Smallholders in the Amazon are one of the most vulnerable groups in Peruvian society. According to the most recent poverty statistics in Peru, around half of rural populations are poor. The jobs generated in these regions are predominantly in agriculture, and rural smallholders have not benefited equally from financial inclusion efforts, which concentrate in urban areas. Without access to the finance needed to transition to sustainability, smallholders are trapped in a cycle of deforestation.

The necessary transition to sustainable agriculture is a major opportunity for Peru's finance sector – the investment required in the San Martin Department alone has been estimated at USD88 million. However, lending to both smallholders and the agricultural sector in general is risky due to lack of access to assets by producers, farm size and dispersion, and weather and pests respectively – problems which are exacerbated by the varying nature of smallholder farms. As such, whilst financial institutions lending to the sector are interested in green agricultural credit, they require support to mitigate these risks, for example through insurance and/or other financial support from the government in the early stages.

This report helps identify the gaps and opportunities to support and scale up green agriculture, smallholder agriculture and financial inclusion. It first explores the current state of lending and investment in Peru, and then looks at farmers' views on the barriers to sustainable agriculture, drawing on interviews with farmers in the Amazon State of San Martin, exploring the role of financial access within this.

It finds that farmers agree that the financial sector could be a critical enabler of the shift to sustainable agriculture if it provided credit that responded to the needs of farmers. This would mean, most importantly, longer payback periods, lower interest rates and the provision of finance for packages that include a combination of irrigation systems, pest management and agroforestry. The report then considers the responses of financial institutions (FIs), who were selected based on their level of involvement in the agricultural sector. It finds that the financial institutions interviewed were interested in using credit as a tool to incentivise sustainable agriculture, but highlighted that there were barriers which made this difficult. The sector is inherently risky with no clear functional risk transfer alternatives in Peru.

The report finds that the goals and needs of FIs and farmers must be brought into alignment to drive the transition to sustainability, and makes recommendations for how this can be achieved through FIs, governments and smallholders working together to ensure favourable terms of credit.

Introduction

The Peruvian Ministry of Environment estimates the size of the Peruvian Amazon at 68.7 million hectares. According to the Peruvian National Service for Natural Protected Areas, 17.5% of this forest is located in officially recognized protected areas¹. However, the Peruvian Amazon is shrinking: Monitoring of the Andean Amazon Project (MAAP), a project dedicated to providing near real-time deforestation monitoring in Peru, Colombia and Ecuador, calculates its original extent was 73 million hectares. More than a third of this forest loss occurred since 2001².

The Peruvian Government identifies agriculture and livestock rearing as the main direct deforestation drivers, attributing 81–93% of deforestation to these activities³. This is aligned with more recent information from the MAAP project, which calculate that 80% of forest loss events in the Peruvian Amazon happen in small scale patches of less than five hectares, and identifies small scale agriculture and livestock rearing as the most critical deforestation drivers. Other direct causes are mining and infrastructure projects⁴.

This is important because Peru as a country has committed to reduce its greenhouse gas (GHG) emissions by 30% by 2030. The government's most recent National GHG Inventory estimates that Land Use, Land Use Change and Forestry (LULUCF) represents 50.6% of Peru's GHG emissions. Nearly all (98%) of these emissions are associated with the expansion of agricultural activities into forests⁵. Agricultural production processes⁶ contribute a further 15.2% of national GHG emissions⁷.

¹ Source: List of protected areas in Peru, <http://www.sernanp.gob.pe/documents/10181/165150/LISTADO+ANP+Enero+2019.pdf/507d28d7-e7f6-4add-a1fd-2666d2e926f5> (08.01.19)

² Source: https://maaproject.org/2018/shrinking_primary/ (14.11.18)

³ Source: GGI, DIE, SERFOR, 2015. Interpretacion de la dinamica de la deforestacion en el Peru y lecciones aprendidas para reducirla. Available in <https://www.serfor.gob.pe/wp-content/uploads/2016/03/Interpretacion-de-la-dinamica-de-la-deforestacion-en-el-Peru-y-lecciones-aprendidas-para-reducirla.pdf> (09.01.19)

⁴ For more information look at MAAP project reports here: https://maaproject.org/2018/perusat_eng/ ; <https://maaproject.org/2017/maap-sintesis2/> Accessed on 14.11.18 and 21.11.18 respectively

⁵ Adding changes from forest to agricultural land and from forest to meadows. Changes from forest to human dwellings were not included.

⁶ Examples of GHG sources in this category include enteric fermentation, soils and burning of agricultural residues.

⁷ Source: <http://bvs.minsa.gob.pe/local/MINSA/3688.pdf> (21.11.18)

Achieving the Peruvian GHG emission reduction targets requires a transformation of the agricultural sector – as it has been estimated that small scale agriculture (production sizes under 3 ha) accounts for 70% of agricultural production value in Peru⁸.

The Peruvian Amazon, as many other rural areas, has higher levels of poverty and less access to critical services. Smallholders encroaching into the forests and planting crops for a living may feel they do not have access to other alternatives. For those smallholders who are causing deforestation, opportunities to switch to sustainable alternatives, such as farming models that increase productivity and limit the need to expand, are critical. However, they have little access to financial resources, and the limited credit opportunities that they do have penalise their lack of assets (i.e. secure land titles) and ability to develop business plans. This tends to make the farmers risk averse: instead of actively looking for alternatives to change their production methods, they stick to what they know because it is what they can implement with the resources they have.

Solving these issues for rural populations would contribute to many objectives: food security, poverty reduction, equality – both gender and general equality between vulnerable populations and better off sectors of society- and climate change mitigation, as well as supporting the smallholders who are themselves affected by deforestation.

Creating an environment where farmers are willing to engage in sustainable food production, can access finance in the right terms, and have the knowledge to identify and implement best practices according to their specific situation and the commodities they produce requires joint work with different key actors such as financial institutions, government and international cooperation to identify the barriers and propose a solution that can be implemented at the farm level.

This report shares the results of our research aiming to understand farmers' interests in sustainable agriculture, defined as a production system that respects forests and other critical environmental habitats and mitigates their climate change related threats. In this case, zero deforestation agriculture is a key component of what we consider sustainable. We also identified farmers' barriers and how local financial

⁸Source: Eguren, F.; Pintado, M. 2015. Contribución de la agricultura familiar al sector agropecuario en el Perú. http://biblioteca.clacso.edu.ar/Peru/cepes/20170323050819/pdf_595.pdf

institutions and other stakeholders can contribute to the solution. Does the concept of green agricultural finance make sense for the farmers as beneficiaries? Do they see finance as a major enabler in the transition to sustainability? If yes, what would they like to see as changes in the system? How does gender influence opportunities in the different regions we studied? Are those changes viable at all for the financial sector? What are the barriers financial institutions face? How can we use credit as a vehicle in the transition to a more sustainable economy?

Transitioning to sustainable agriculture: **the farmer's view**

Context

In mid-2018 the project conducted a series of interviews and focus groups with farmers in the Peruvian Department of San Martin. These farmers produced a wide range of crops. There were three focus groups with a total of 49 participants conducted in Moyobamba (North of San Martin), Lamas (Centre of San Martin) and Juanjui (South of San Martin). The objective of these three group discussions was to gather a broader perspective from farmers across the state, which has the largest accumulated deforestation in Peru.

Direct in-depth interviews were conducted with a smaller group of farmers who volunteered: 6 for each zone. An observation from the general interview is that volunteer farmers were quite happy to be part of the exercise, in which they were asked about their thoughts and perceptions and requested for this to be done more periodically because it shows that their important role in ending deforestation is recognised. Participation in both the focus groups and in the in-depth interviews was completely voluntary and the exercise was conducted as a conversation rather than a traditional structured interview.

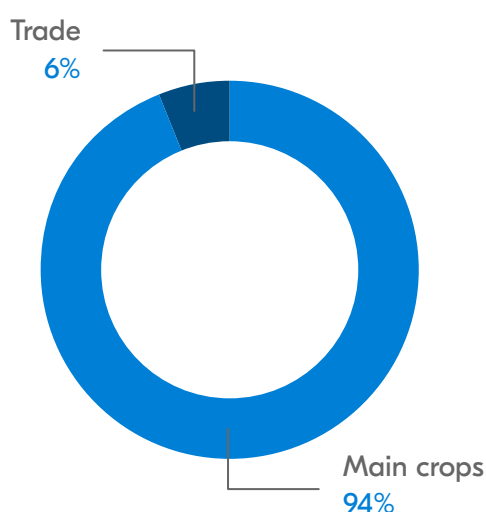
Farmer profile

Many families interviewed were near or below the poverty line, and just under half of the farmers interviewed had some level of debt. Most of those with debt owed 3,000PEN or more, which is the top end of a monthly salary for the highest-earning farmers. None of the farmers interviewed had access to permanent financial resources in the form of savings, and 94% of farms are under 5 hectares. A detailed breakdown of these statistics can be found in Annex 3.

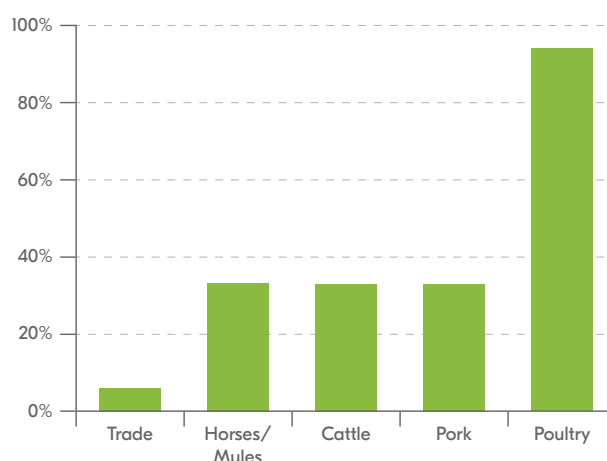
Farmers attending the interview were mostly of normal working age: between 26 and 50 years. However it is encouraging to see that one third of interviewees were under 40.

The typical agricultural family in San Martin undertake a variety of rural activities. Their main income comes from agricultural activity, understood as the management of their crops – 56% with cacao and 44% with coffee. For a small percentage of the farmers trade is their primary activity.

Main source of family income



Secondary income sources



However, they also have a varied set of activities that provide secondary income sources. The majority of the farmers interviewed raise some form of poultry that they may use both for family consumption and for local sale. They also raise cattle, and horses and mules given their use for transportation in not very well connected areas in the Peruvian Amazon. Pig rearing and trade constitute a smaller proportion of activities providing secondary income to these families.

How are products sold, and is certification involved?

44% of the farmers sell their plantation crop products to the cooperative they belong to, 39% sell to intermediaries and 17% sell to direct purchasers – which means locally based organisations collecting a certain commodity for further sale. However, there are also zone-specific contrasts: in Juanjui 100% of producers sell to intermediaries while in Lamas 100% of farmers sell to their cooperative. This said, farmers linked to a cooperative do not necessarily always sell to it – they sell to whoever pays the best price.

Out of the interviewed group, 72% have some type of certification, such as being certified as being organic. Everyone who has a certification indicated its relevance to help control the quality of their crops. Certification was also seen as helpful because they require farmers to have some sort of registry of their income and expenses, which certifiers also use to ensure adequate management of the crops. However, not all farmers are able to afford the auditing required to gain certified status. People in Juanjui, who lack certification, are receiving help from their financial cooperative to keep a registry of their income and expenses as this cooperative provides financial education.

How much do farmers know about and use financial services?

Over 50% of the interviewed farmers know all the mentioned financial services – with the exception of current accounts and mortgages that are less well known, but their interest in financial services focuses on a subset of them that are most relevant.

When presented with all the alternative products available in the Peruvian financial system, farmers have a clear preference for four of them: agricultural credit, savings products, agricultural insurance and life insurance. In many cases, such as with agricultural insurance, these products are not available.

The products they are least interested in are mortgages, current accounts and credit for furniture or electric appliances.

Insurance is another critical area of interest for the interviewed farmers. 72% of interviewed people have access to the Integrated Health Insurance (IHI). This is a health insurance focused on people without access to other healthcare, particularly poor and extremely poor people⁹. In the case of Juanjui, due to their participation in the financial cooperative, farmers also have a form of life insurance that covers their debt to the FI in case of death¹⁰. 11.1% of interviewed farmers have no form of insurance. It is important to highlight that none of them have access to agricultural insurance.

⁹ More information available here: http://www.sis.gob.pe/Portal/quienes_somos/index.html

¹⁰ It is known in Peru as Seguro de Desgravamen. More information here: <http://www.sbs.gob.pe/usuarios/informacion-de-seguros/otros-seguros/seguro-de-desgravamen>

Preferred payment terms

The payment alternative that is most useful for farmers is the balloon payment – when they are allowed to pay everything at the end of the harvest period. Farmers have access to individual and group credit options: 75% prefer individual loans while 25% prefer group credit.

Influence of gender on financial inclusion in San Martin

In Lamas and Juanjui, the participation of women in decision making and economic activities is higher than in Moyobamba. Overall, women constituted 40% of attendees in the focus groups. Of the 25% of farmers who preferred group credit, this was made up of women in Juanjui who have used this form of credit provided by their financial cooperative. This cooperative offers this financial product because rural women are part of their target population. In general in the region, women have had minimal participation in dealing with financial institutions. In this sense, cooperatives are starting to use communal credit as a women engagement strategy specifically for agriculture. Traditionally, microfinance for women in Peru has had a general focus, meaning it has not been focused on agriculture, so financial institutions are starting to use communal credit to engage women in agricultural production activities.

Why would rural women prefer communal credit?

In most of the cases, women are not responsible for the main economic activity in the household – agriculture. Men are usually the main responsible people even though women participate in the productive process. Women normally focus on other household related activities – i.e. small animal rearing, consumption products or trade related activities. These activities usually require less capital that can be easily provided under traditional microcredit – i.e. women may require amounts close to USD300 while the main crops require significantly higher amounts per hectare. This means that higher amounts must be committed to the transition to sustainable agriculture, as if the production of these main crops is not made sustainable progress will be limited. The exact amounts required vary both by main crop and productive system but can be around USD1,500/hectare.

The above conditions imply that these individually smaller credits targeted at women need scale to be profitable for the FI in the medium term – hence the use of communal credit as a tool to achieve the needed scale.

What interventions should be funded to ensure more sustainable production?

Agroforestry systems were mentioned by every farmer, and so financing this approach is a major opportunity for sustainable agriculture. Everyone interviewed has timber yielding trees in their farms together with their coffee and cacao. They are also aware of the relevance of trees for the environment but also for the benefit of their own farms: they protect them from strong winds, rain, provide shade for their crops, and help with soil quality among others. However, all of the farmers mentioned that they would like to make the trees an extra source of income. This implies that their tree plantations need to be saleable in the market. The farmers mentioned an interest in focusing on regional species.

In terms of the specific agroforestry system, women preferred fruit trees over timber yielding species due to their potential to produce food for family consumption in the shorter term. Men, on the other hand, were keener on mainly timber yielding trees, which require a longer time to produce a potentially higher cash flow. The farmers are constrained in investing in the forestry element because there is limited offer of capital that matches the long term requirements of such investment, as the trees in many cases cannot be profitably commercialised before a decade or so.

When it comes to the disadvantages of agroforestry systems, farmers mentioned lack of technical assistance and capacity building, the time it takes to recover deforested areas and in general the time timber trees take to grow, as well as the apparent lack of market for the timber they could generate, the scarcity of carbon capture projects, and the absence of specific finance for these systems. Out of these disadvantages, the most important for them is the lack of economic incentives to keep trees, there is no market and they see the need of using trees as a source of income for the family economy. In this sense, guidance about the tree species to plant in their farms and how to commercialise them would be extremely valued.

Along with showing their interest in such a financial product, farmers also mentioned the relevance of interest rates and payback periods. They need to see these terms to compare with existing alternatives, and they are the main factors in their decision making process.

Integrated Plague Management, tech irrigation and technical assistance

Another area where they would like to receive finance is Integrated Plague Management¹¹, which would improve the productivity of smallholder farms and so reduce the likelihood of deforestation. All of the farmers interviewed were interested in a product for this purpose, but highlighted the relevance of access to finance with appropriate technical assistance in the field. This is given that technical assistance is the most critical element from Integrated Pest Management. Farmers are looking for funding that also targets their knowledge and capacity needs as long as these investments are reflected in better production and access to markets.

Lastly, technology for irrigation is another aspect highlighted as being a useful investment. In this case, the highest relevance is for farmers located in Moyobamba and Lamas. Farmers in Juanjui are not interested because they have a good level of rain. However, in Moyobamba and Lamas, tech irrigation systems would allow them to better use their sometimes limited water resources. In fact, one of the farmers suggested that financing should include agroforestry systems, integrated plague management and tech irrigation in a combined way.

Summary of farmers' needs

In summary, the farmers interviewed are interested in implementing more sustainable systems but feel they lack the incentives and access to adequate finance and technical capacity to do so. By adequate finance we mean financial products that accommodate farmers' cash flows and incentivise sustainable production methods. We have discussed elsewhere that for farmers to see green agricultural credit as an incentive for transitioning to sustainability, they would need access to credit that is payable in four years, with interest rates closer to one digit and preferentially with grace periods¹². These requirements would apply to credit funding 70% of the farmer's capital requirements for an average farm of six hectares producing cacao, with similar requirements for other crops.

¹¹ Integrated Plague Management is a crop management technique that uses a combination of tools to minimize plagues. One of the main objectives is to reduce reliance on toxics to control pests and weeds. Examples include biologic control where natural enemies of the plagues are introduced in the ecosystem. Composting techniques are also part of IPM.

¹² For more details see <https://www.globalcanopy.org/sites/default/files/documents/resources/Overcoming%20the%20Valley%20of%20Death.pdf>

In general, it seems the farmers interviewed have less of a requirement in terms of the difference between working capital and investment. They are requesting an instrument that is designed with the fact in mind that the transition to more sustainable practices – whilst expected to result in higher and more reliable income in the longer term – causes a fall in income in the first few years due to higher costs from investments associated with specific changes in the production systems, such as installing irrigation facilities, implementing agroforestry systems, and other interventions¹³. Our key conclusion is that a transition to sustainable production can build on existing crops but will also require a significant element of capital investment. That investments begin to generate returns in the medium term – as such they are not fit for existing working capital lines, as detailed below.

Having built an understanding of the needs of farmers, we examined the credit currently available to them.

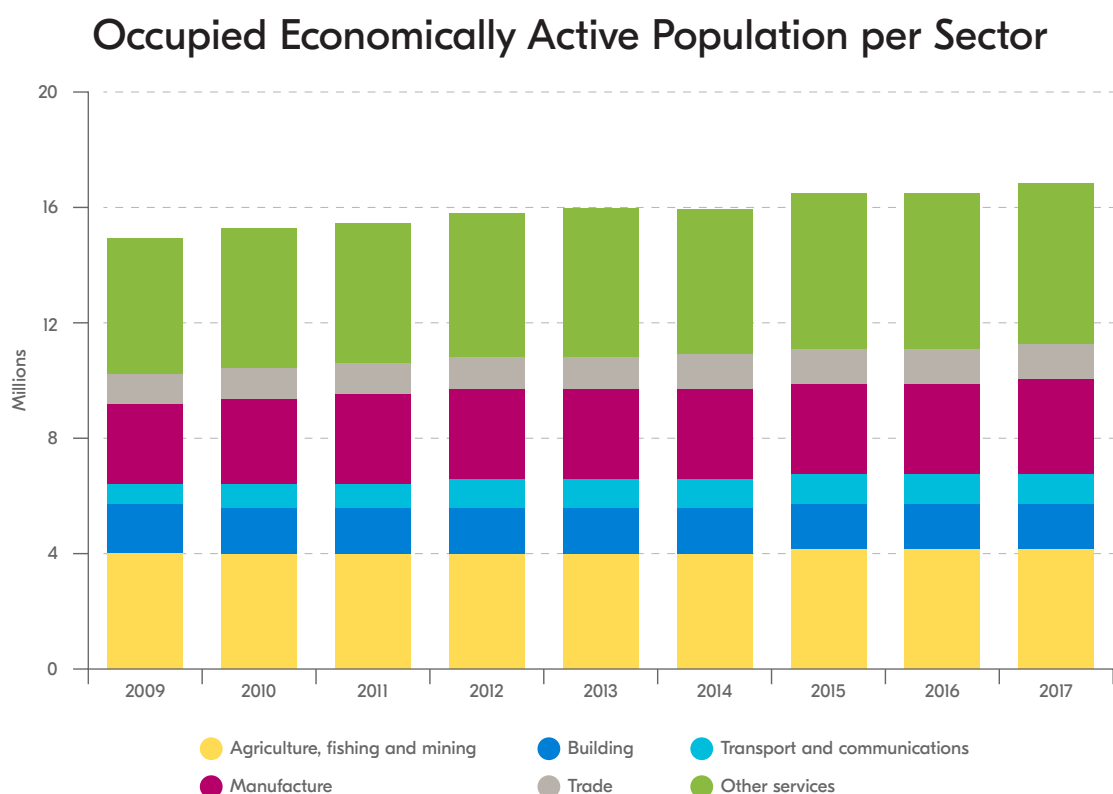
Availability of existing credit for agriculture: a broad review

How the current financial framework reduces smallholders' access to credit

Agriculture: GDP, employment and poverty

According to data from the Peruvian Central Bank, agriculture as a sector has maintained a relatively stable 5% of GDP. Between 2008 and 2017, Peruvian agricultural GDP has grown by 32% while total GDP has grown by 48%. However, in terms of employment the contribution is much more significant: as of 2017, 26% of the occupied economically active population (EAP) was working in agriculture, fisheries and mining.

¹³ For more details see <https://globalcanopy.org/publications/sustainable-palm-oil-production-peru>



Source: Central Reserve Bank of the Republic of Peru

The agriculture, fish and mining sector is more relevant as an employment generator in rural areas. While the sector only occupies 10% of urban EAP, it provides an economic activity for 76% of rural EAP.

Another aspect worth noting is the difference in poverty levels. According to the last report from the Peruvian Statistics Institute (INEI), poverty affected 21.7% of the Peruvian population in 2017. However, 44.4% of the rural population were considered poor while 15.1% of the urban population met the criteria.

Although the total amount of credit going to the Peruvian Amazon has grown 15 fold since 2001 compared to 6.5 fold growth for total credit in Peru, it still represents only 2% of the total credit in the country.

Given their proportion of credit supply in Peru, it is expected that in terms of absolute amounts, banking institutions are lending the most to agriculture – defined as agricultural companies of different sizes. As of 2017, banking companies had 86% of the national credit supply and 68% of the agricultural credit supply but the latter only represented 2.8% of their total lending portfolio.

At the other end of the spectrum, Rural Savings and Credit Institutions had only 0.5% of total credit and 1% of the total agricultural credit, the latter representing 8.5% of their loan portfolio. It is possible that the real proportion of their loans to the productive agricultural sector might be underrepresented given the official definition of agricultural credit excludes lending to smallholders who are not part of a cooperative.

Average active interest rates have historically been above 14% in Peru. Inflation rate in Peru was 2.19% for 2018. However, interest rates for smallholder and general agricultural credit are normally much higher than this. It is important to remember that consumer credit, mortgages and corporate credit represent more than half of disbursed credit and what is classified as agricultural credit seems rather focused on agricultural companies. These types of credit – particularly corporate and mortgages – can be considered significantly lower risk than credit for the more general agricultural sector, including smallholders. This means that smallholders in the agricultural sector in the Amazon, who do not qualify for these lower risk credits, are more likely to face interest rates significantly over 20%.

The agricultural sector in Peru can be divided into two groups: large scale agriculture, with production strategies taking full advantage of their scale, with a strong exporting focus; and small scale agriculture, which generally focus on internal demand, lacking economies of scale, in many instances relying on traditional production techniques and micro-commercialisation of their products.

We identified financial institutions lending to smallholders in the agricultural sector and analysed the offer of credit they have, based primarily on desk research. The research focused on 16 financial institutions with a relatively high portfolio in the agricultural sector with a focus on smallholders, which include Savings and Credit Cooperatives. The identified institutions are detailed in Annex 4.

The Main Characteristics of the Available Credit for Agriculture

Most financial institutions lending to small agricultural producers distribute their credit in two streams: working capital and investment, with the preferred option of farmers being that these are bundled into a single package. These categories currently have different characteristics such as payback period and the maximum amount a farmer can borrow.

In general, working capital loans have a maximum payback period of one year, with three of the 16 financial institutions (FIs) identified providing a maximum payback period of 18 months. Capital investment loans can be paid in a longer timeframe, with the average being 42 months. Some FIs offer a maximum payback period of five years when it comes to investments. In some instances, institutions also provide alternatives for credits that are not tied to any specific category or that are complementary. An example of this is mortgages – which usually are long term but for these purposes are not classified as investment.

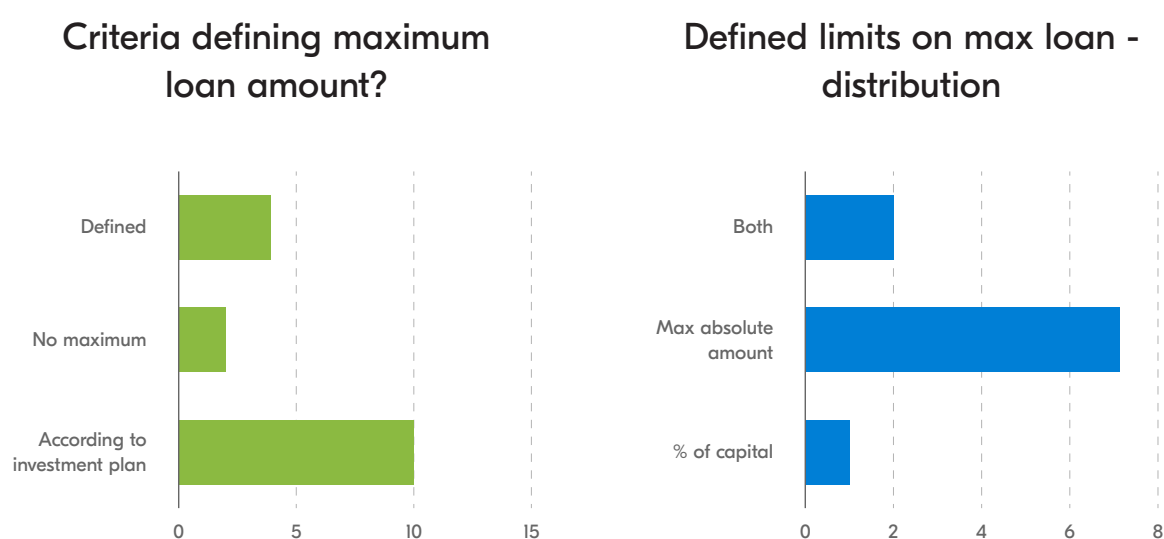


Chart: the number of FIs with criteria across a number of loan conditionalities

The majority of FIs have a borrowing cap tied to every type of credit they provide. Most of them define this cap in absolute terms (i.e. max PEN amount), a maximum percentage of the total capital requirements or a combination of both. Four FIs define the amount to lend based on a proposed investment plan and they do not mention absolute max amounts or specific max percentages. Two FIs have no specific maximum and do not mention any other limiting condition either. For FIs with a specified maximum amount to lend, these can go from PEN8,000 to PEN300,000. However, the larger the credit, the more requirements the borrower will have to meet in terms of their ability to repay the loan. Given the importance of investing in main crop products for the transition to sustainability, this is an important issue to consider in how willing farmers may be to take on larger loans, and how willing FIs may be to make them.

No financial institution currently offers a grace period of longer than 12 months, and of the FIs only one does offer one of this length. 14 of the 16 FIs require some form of guarantee, ranging from cash, to third parties, to mortgages or requiring land titles. Interest rates vary significantly, and can be as high as 99%; interest rates are set internally by FIs in Peru, and are not externally governed. A thorough breakdown of the spread of FI conditions can be found in Annex 5.

This information allowed us to identify critical gaps in making progress towards using agricultural credit as a vehicle to promote sustainable land use. As mentioned by farmers, in general, payback periods are relatively short to accommodate the requirements of transitioning to more sustainable systems and the interest rates are quite high. Although there are some FIs starting to become involved in green credit, they still lack sufficient differentiation in their terms to provide enough incentives to farmers and to mitigate their own risk.

With this information at hand plus the conversations with farmers, we organised a two tier conversation with FIs (first one-to-one interviews and then group meetings) to gather their input on farmers' concerns and the potential of implementing solutions aiming to increase the flow of capital to sustainable agricultural production. The upcoming section details our findings.

Using agricultural finance to promote sustainability: **the view of FIs**

Out of the 16 FIs analysed, we excluded two in this stage because their focus is either more urban or peri-urban or because they are looking to maintain an existing agricultural loan portfolio (part of an acquisition process) but do not see the sector as strategic for their organisational growth.

Most of the 14 FIs targeted in this section have a geographical coverage spanning two or more regions, with four of them having a national focus. Their strategic vision point includes rural development, poverty reduction, microfinance and/or fostering productive supply chains.

Out of the 14 FIs interviewed, 11 are interested in credit for sustainable agriculture with some of them starting to get involved via their lending for coffee and cacao –i.e. agroforestry. Some of them consider green agricultural credit as a strategic pillar of growth.

Gender considerations in FI Products

Four of the 14 FIs have specific gender considerations in their products. This includes a specific product targeted at women over 23 years old, more general savings and credit products for women, or they give relevance to gender across their products with a broadly equal split of customers. Three additional FIs lack specific products but highlight that gender is critical for their strategy or that they have a mandate to consider gender issues. The remaining FIs either lack gender considerations or they are not clear for the interviewee.

What are the barriers?

In the individual interviews, the main barriers raised by the FIs for them to become involved in the green agricultural credit agenda include lack of incentives particularly related to cost of capital and payback periods for green finance, with some of them mentioning the relevance of non-reimbursable funds to build capacity within the FI and for producers. From the FI angle, this capacity building would take the form of developing tools for accurately pricing green credit products; for farmers, it includes new equipment and farming techniques. Both of these are essential to make the transition to sustainable agriculture a success, as funding must be provided in a context where it can be most efficiently used.

They also brought up the need for risk mitigation instruments, such as agricultural insurance and guarantees. In addition, several highlighted the role of strategic allies –such as NGOs and similar organisations providing technical assistance directly to farmers– that can play critical roles to also help mitigate risk. Here, financial institutions expressed the importance of combining credit with the right conditions in regions which have sufficient agricultural extension capacity, to ensure farmers will be able to implement the technological improvements being financed. Ensuring this availability is critical not only to build capacity at the farmer level but also to ensure the credit is used adequately and increase the chances of success for the farms, and thus their payment capacity. This is a role best suited for technical capacity-building organisations with strong local experience and track records.

Other elements mentioned were investments to increase the capacity of farmers (customers), with identified weaknesses including low capacity to identify and propose interventions on farms and on broader financial education, as well as information about the agricultural sector in a consistent manner, such as geographical data on how crops will be affected by climate change. This will allow banks to better assess creditworthiness, mitigate risks and identify opportunities.

Group meetings

We had group meetings with eight of these institutions. The conversation highlighted a diversity of efforts these FIs have carried out to improve financial inclusion, with the recognition that many of its benefits remain concentrated in urban areas. The penetration of banking services in rural areas remains limited in terms of speed or flexibility and this has opened space for more informal actors who try to fill that void: intermediaries in the productive supply chain such as input providers and warehousing centres.

FIs also highlighted that rural areas are low demand zones (loans tend to be small) with high transaction costs and with seasonal productive cycles. These characteristics increase the perceived risk. As mentioned earlier in this report, agriculture is still the main activity in rural zones and it faces inherent risks such as weather changes, natural disasters and price volatility. In addition, farmers are perceived as a group with low payment capacity, usually with low technology, lack of access to commercialisation channels and even lack of capacity to generate accounts documentation and guarantees to receive a loan. Another element is regulatory: provisions for these credits¹⁴ might be too high and reduce interest on the FIs side.

The lack of insurance for this type of customer is also a key factor: with insurance, producers can count on resources in case of an emergency, pay their financial obligations and go back to their productive activity in a shorter period of time. Lacking insurance, FIs can only rely on reducing access to finance for those producers that they deem riskier. This effect might become more important with climate change, which exacerbates risks for the agricultural sector in an environment of inadequate insurance and risk transfer mechanisms – potentially pricing farmers, products or regions out of the financial system if alternatives are not created.

¹⁴ Banks and other FIs must set aside provisions to cover potential defaults and other liabilities. Hence, the provisioning level for FIs is related to credit risk. Credits with higher risk, by regulation, may require a higher level of provisioning – which is allocated as an expense in the banks accounts.

The role of government

FIs would like to see the government playing an active role in risk mitigation and transfer. Guarantee funds are an example of the instruments they require. FIs mentioned they needed the government to be part of the discussion and they would like the government to view the private sector as a strategic actor for agricultural development. Information is another area where FIs would like to have government support – such as reliable price data and geographical information allowing FIs to better assess risks specific to agriculture, including climate risk. International, national and regional governments can contribute further by funding elements of the agenda that are required but not fundable by the FIs as part of a loan to farmers [technical assistance, capacity building for FIs, farmers and other actors].

FIs mentioned that, with regards to technical assistance for the farmer, although this is a key element of the green agriculture puzzle, the main problem lies in the identification of high quality and effective technical assistance –that actually increases productivity in the field and enhances production conditions– more than who covers the costs. The underlying idea is that farmers would be more willing to pay for the service if they really saw results.

Conclusions and next steps: recommendations for FIs

As part of their feedback, financial institutions mentioned the following requirements to be able to produce agricultural credit products that meet the needs of farmers.

- Access to sources of capital with reduced costs and longer payback periods, such as development finance institutions: this is a requirement that is more critical if agricultural credit is to be considered an enabler of sustainable production alternatives
- Developing guarantee funds and insurance products for these farmers is critical – all FIs highlighted the relevance of risk mitigation and risk transfer instruments, particularly to enter into longer-term products, which are required for the complete transition of agriculture to sustainability.

- It is important to develop new –green– products in partnership with FIs and enhance their internal capacity to channel resources towards sustainable agriculture. This also includes the development of tools and data offerings that allow these FIs to understand their climate risks and opportunities and link them to their credit risk assessment process, a process now underway in the Peruvian government
- Senior Management of FIs need to be committed to the green finance agenda for the FIs to be able to implement the idea
- Alliances with organisations that have the ability to engage with farmers and build their capacity is key to ensure benefits of the transition to sustainable agriculture reach the farmers and mitigate risks
- It is important to provide geographical information about borrowers (i.e. polygons of the farms) to support implementation of green agricultural credit, by both tracking which crops are being grown where and to ensure deforestation is not taking place
- Government participation via regional governments and guarantee funds that are designed together with the financial institutions is key
- FIs all consider gender when developing credit products in light of the traditionally higher barriers to credit for women in the region

What is next in the pursuit of this agenda?

There is a clear appetite for green credit products in the region. From our analysis, there are a series of areas that require work and further coordination to align the variety of requirements and capacities to realise the green agricultural credit agenda in Peru. Ideally, a balloon payment product for farmers could be developed, but this is not the only option. A roadmap from this paper to a pilot study would be as follows:

- Existing opportunities should be identified to provide risk mitigation/transfer vehicles that enable financial institutions to invest in resilient agriculture and enable the transition to a green economy. This would include existing funds, government programmes which would benefit from but also facilitate risk mitigation, and bilateral programmes.

- Once these opportunities are identified, FIs, governments and other actors should evaluate how they can be put into practice, with a particular focus on aligning incentives between all the relevant stakeholders, building a structure with clear rules and access to longer term concessional capital.
- This would form the basis of a green credit line, which would be developed to fit the specific opportunity.

There is a need to identify critical capacity-building actors, for financial institutions and farmers on the ground that can support this agenda and link efforts to the deployment of this green credit. Financial institutions need capacity to include climate change risk considerations in their credit assessment process as well – this might lead to building the basic tools so that they can blend credit risk assessment with climate risk assessment for their credits in the sector.

This technical assistance will have a cost at least in the first stage of piloting and deployment, so funds need to be identified that can support these efforts directly. With these pieces at smaller scale, a pilot could then test the green credit line, followed by refinement and upscaling.

Conclusion

Business-as-usual agriculture cannot continue, and the focus must be widened beyond short-term economic measures. If environmental sustainability – ultimately the very heart of agricultural production – is not prioritised, Peru will not meet its climate targets and the risk to farmers will increase. However, positive steps are being taken and the goals of all parties can be aligned through multi-stakeholder approaches. FIs are increasingly willing to explore the green credit sector, farmers would benefit from green credit to ensure sustainable livelihoods and remove the incentive to deforest, and governments can accelerate progress on climate and development goals by bringing the private sector with them. This report showcases both the ‘pain points’ for achieving sustainable agriculture and a vision of how they can be overcome.

Annexes

Annex 1: Types of institutions providing credit in Peru

Since we use the Peruvian classification of credit providers ahead, we will describe them briefly: According to the Peruvian Financial Regulator¹ (Superintendencia de Banca, Seguros y AFPs, SBS) there are broadly five types of directly supervised organisations and one type of currently indirectly supervised organisation that can lend to the public in Peru²:

- Banking institutions (supervised by SBS): their main business is receiving public deposits or under any other contractual modality, and using that money, their own capital and the capital obtained from other funding sources to give credit under different modalities or to use these resources for operations subject of market risk.
- Financial institutions (supervised by SBS): these receive public deposits and their expertise lies in enabling the primary issuance of securities, operating with transferable securities and providing financial advice.
- Rural Savings and Credit Institutions (supervised by SBS): these institutions receive public deposits and their expertise lies in providing finance with preference for medium, small and micro enterprises operating in rural areas.
- Municipal Savings and Credit Institutions (supervised by SBS): these institutions receive public deposits and their expertise lies in funding operations with preference for small and micro enterprises.
- Small Business and Micro-enterprise Development Companies (EDPYME) (supervised by SBS): their speciality lies in financing with preference for small and micro entrepreneurs.
- Savings and Credit Cooperatives (supervised by Fenacrep): These are non-for-profit cooperative institutions, property of their members who are beneficiaries of their services³.

¹ Superintendencia de Banca, Seguros y AFP. <http://www.sbs.gob.pe/>

² Some of these organisations are allowed to lend but do not have authority to receive deposits from the public. For the purposes of this report, we will focus on the financial institutions that can lend. For more information about these definitions see Ley General del Sistema Financiero y Sistema de Seguros (Law No. 26702), available here: <http://www.sbs.gob.pe/regulacion/sistema-financiero>

³ Source: <https://www.fenacrep.org/2-18-coopac#id> (22.11.18)

A final clarification is that besides market scope and supervision, the most significant difference between these organisations lies in the operations they are allowed to carry out and when, according to Peruvian financial regulations.

Annex 2: credit disbursed by different FIs

	Total credit	Total agricultural credit	% total credit	% agri credit in total loans
Banking Institutions	237,123,670	6,661,688	86%	2.8%
Finance Institutions	10,712,300	513,679	4%	4.8%
Municipal Savings and Credit Institutions	18,972,309	949,363	7%	5.0%
Rural Savings and Credit	1,330,347	113,256	0.5%	8.5%
Edpymes	1,897,675	30,999	0.7%	1.6%
COOPAC*	9,831,000	(See notes)		
Financial system	276,736,814	9,736,457		
% of selected in financial system	98%	85%		

As of 30 Sept 2017 for all excepting Cooperatives. Source: SBS

As of 30 March 2018 for Cooperatives. Source: Fenacrep. Productive credit represents 65% of the loan portfolio.

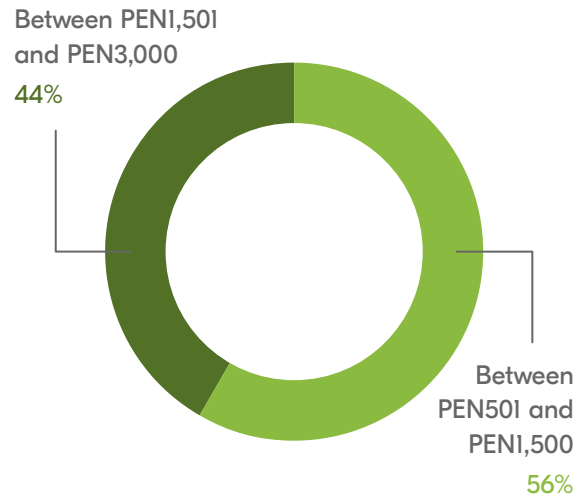
**Financial information from COOPACs is not yet reported to the SBS, so they are not part of the financial system.*

We present the information in the same table to illustrate comparability of scale to other actors in the sector.

Annex 3: breakdown of farmer information

The average home interviewed was composed by five family members, with about two adult working men per family, one working woman and two children. Over half of the interviewed people make a monthly income of PEN1,500 (around USD 442) or less. It is worth noting that according to the Peruvian Statistics Institute, the poverty line cut for a family of four in Peru is PEN1,352 per month. Our finding keeps in line with national expectations that about half of rural populations are poor with some of the interviewed potentially classifiable as extremely poor.

Average monthly income

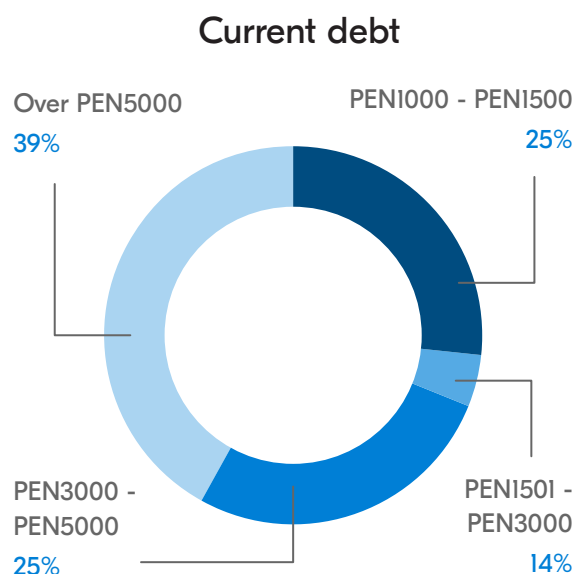


Area of land used for main crops



71% of the interviewed farmers have three hectares or less devoted to the production of their main commodity. This finding aligns with what we have identified previously in the region, where producers with coffee and cocoa as main products tend to have smaller areas for production.

44% of interviewed farmers had some level of debt. Most of them have debt of over PEN3,000 and all of the farmers with debt explained that they borrowed to invest in their farms and that these credits were short term. Most of the borrowers obtain their resources from Savings and Credit Cooperatives given the reduced interest rates and the flexibility to adjust payments to their crop cycle.



Annex 4: identified FIs

- Agrobanco (bank)⁴
- Mibanco (bank)
- Financiera Confianza (finance institution)
- Financiera Credinka (finance institution)
- Caja Municipal de Ahorro y Crédito Arequipa (Municipal Savings and Credit Institution)
- Caja Municipal de Ahorro y Crédito Piura (Municipal Savings and Credit Institution)
- Caja Municipal de Ahorro y Crédito Huancayo (Municipal Savings and Credit Institution)
- Caja Municipal de Ahorro y Crédito Maynas (Municipal Savings and Credit Institution)
- Caja Rural de Ahorro y Crédito Sipan (Rural Savings and Credit Institution)
- Caja Rural de Ahorro y Crédito Los Andes (Rural Savings and Credit Institution)
- Cooperativa de Ahorro y Crédito Abaco (Savings and Credit Cooperative)
- Cooperativa de Ahorro y Crédito Norandino (Savings and Credit Cooperative)
- Cooperativa de Ahorro y Crédito San Martín (Savings and Credit Cooperative)
- Cooperativa de Ahorro y Crédito Prisma (Savings and Credit Cooperative)
- Cooperativa de Ahorro y Crédito Tocache (Savings and Credit Cooperative)
- Cooperativa de Ahorro y Crédito Aprocredi (Savings and Credit Cooperative)

⁴ Currently being restructured

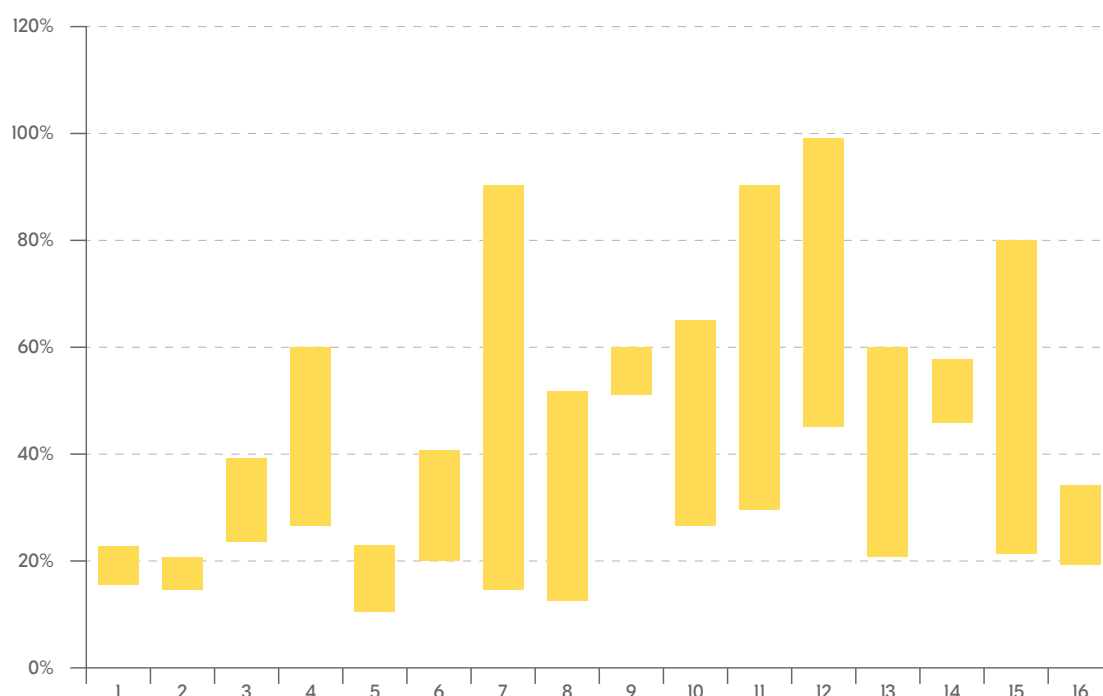
Annex 5: lending conditions

Grace period: 63% of the reviewed institutions have some sort of grace period for their short term credits, while 75% have some type of grace periods for their longer term credits. Nonetheless, the longest grace period we found is 12 months – offered by one institution. Several institutions report that their grace periods depend on crop cycle while others define a maximum grace period of six months.

Guarantee requirements: Two of the 16 reviewed FIs do not require any sort of guarantee – meaning that 14 have a guarantee requirement. The type of guarantees required or accepted vary going from cash guarantees to a third party guarantor to mortgages. The specific requirement is tied to the amount requested, with larger/ longer term credits usually requiring a mortgage. In some cases having land title is a requirement for the credit granting process – which might relate to an implicit guarantee. Some institutions waive guarantees for credits under PEN1,000.

Interest rates:

Interest Rate Spread - Min-Max by FI



For working capital, the minimum interest rate charged across the reviewed institutions was 10.5% (only one FI), but the arithmetic average of the floor interest rates charged is 25% and a median of 22% for capital investment loans; whilst the average and median for working capital loans are 26% and 22% respectively. On the other hand, the arithmetic average for the maximum interest rate charged is 56% - with a minimum of 21% and a maximum of 99%. Here it is important to note that the Peruvian financial regulator controls processes neither rates nor specific terms; the definition of credit terms is internal to financial institutions, hence the possibility of 99% interest rates.



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