UNIVERSITY OF PORTSMOUTH

Lendwithcare Impact Assessment

Fundación de Apoyo Comunitario y Social del Ecuador (FACES)

Baseline Report

April 2020

Acknowledgements

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Contents

List of Tables, Figures and Boxes

Tables

Figures

Boxes

Executive Summary

Photo by FACES

This is the first report of the evaluation of the microcredit programme developed by the Fundación de Apoyo Comunitario y Social del Ecuador (FACES). This evaluation is part of a wider impact assessment project led by Lendwithcare (LWC), in which similar evaluations were carried out in Pakistan and Zimbabwe between 2015 and 2019. The University of Portsmouth is the academic partner in the project.

LWC is a microfinance crowdfunding platform created in 2010 by the British development NGO CARE International UK. Its ultimate goal is improving the economic well-being of low-income and marginalised communities in developing countries. In order to achieve this objective, the organisation partners with local microfinance institutions (MFIs) with explicit social missions to whom provides interest-free loans through a lending website.

The Foundation for Community and Social Support of Ecuador (known for its Spanish Acronym FACES) is one of the largest microfinance institutions (NGOs) in Ecuador, created in 1991, with the mission of contributing to fight poverty and unemployment in Ecuador by supporting microentrepreneurs with financial and technical resources, so they can improve their entrepreneurial potential and achieve high levels of personal development and empowerment. Since it was established, FACES has considered itself primarily as a social development organization committing 15% of its profits each year to social development projects.

The MFI currently has 18 branches. It began working in the south of the country where it has 14 branches located in the provinces of Loja, Zamora Chinchipe and El Oro, and recently expanded its offer in the north of the country, with the opening of 4 branches in the rural parishes of the Pichincha *canton*. The main financial product provided by FACES is an individual microcredit loan, which is the object of this evaluation.

The main aim of the impact assessment is to study the social impact of the microcredit model implemented by FACES, by investigating the changes observed in the businesses and lives of new clients of the MFI over time. The impact assessment is, therefore, associated with a longitudinal study, which includes the

implementation of a household survey to clients and non-clients of the programme. This report presents the results of the baseline survey conducted in September 2019. In preparation for this first round of the longitudinal survey, a pilot survey and three exploratory focus groups with existing clients were conducted in June 2019.

The core evaluation team is composed of the University of Portsmouth researcher, who prepared this report; a member of LWC in charge of monitoring the local MFI; and a member from FACES with responsibilities in the management of the institution's social performance. In the implementation of the survey, a team of 5 independent enumerators, selected from students and graduates from the Universidad Técnica Particular de Loja, and a coordinator with previous experience in similar surveys were recruited. The interviews were conducted at the houses or businesses of the participants in the study, using the survey software 'Kobotoolbox' which allows for offline data collection.

Sampling was based on three criteria. Firstly, there was a branch selection according to the contributions in terms of entrepreneurs' profiles to the crowdfunding platform in 2018, with six branches being included in the study: Cariamanga, Catamayo, Loja Centro, Loja Norte, Loja Pitas and Malacatos. Secondly, the clients invited to participate were new clients from these branches during the year 2019, with the third criterion being that all of them should be invited, so to not introduce further selection bias in the study (simple random sampling at the branch level). In addition, entrepreneurs with similar businesses and located in the same neighbourhoods of the clients, but that had not applied for a loan at FACES, were also invited to the project, in order to form a comparison group.

The baseline survey sample included 367 clients and 247 non-clients. The data collected allowed us to characterise FACES new clients, identify different segments of clients and compare their characteristics with the group of non-clients; throughout the report, and whenever possible and relevant, a comparison is also established with the information on FACES clients included in its annual report 2018.

The table below highlights the main characteristics of the clients in comparison with the non-clients:

367 Clients	247 Non-Clients
▪ 58% Female Clients ▪ 25% Rural Clients ▪ Average Age: 37 years ▪ 49% Married (or *Unión Libre*); 37% Single ▪ 81% completed, at least, secondary education. 20% with only primary education. ▪ 50% are home-owners; 28% live in rented houses	▪ 66% Female Non-Clients ▪ 17% Rural Non-Clients ▪ Average Age: 42 years ▪ 62% Married (or *Unión Libre*); 21% Single ▪ 78% completed, at least, secondary education. 21% with only primary education. ▪ 59% are home-owners; 25% live in rented houses
▪ Type of activity: 39% Trade; 30% Services; 26% Agriculture; 5% Production ▪ Average business time: 4.8 years ▪ 46% Formal Businesses ▪ 75% work alone; 8% with paid employees.	▪ Type of Activity: 65% Trade; 22% Services; 8% Agriculture; 4% Production ▪ Average business time: 6.5 years ▪ 71% Formal Businesses ▪ 73% work alone; 15% with paid employees.
▪ Average microcredit loan size: $1,946 ▪ 26% were repaying additional loans from other MFIs/cooperatives or commercial banks.	▪ 41% were repaying at least one loan at a financial institution

▪ 65% declared saving in the previous 12 months (23% in a monthly basis) ▪ 14% had private insurance policies ▪ 14% had received remittances from abroad (only 4% regularly)	▪ 49% declared saving in the previous 12 months (16% in a monthly basis) ▪ 21% had private insurance policies ▪ 12% had received remittances from abroad.

The findings of the survey suggest three main segmentation criteria among the clients: location in areas classified as rural or urban, formality of the businesses and gender, with statistically significant differences between sub-groups being found for a large number of indicators especially between rural and urban clients. These differences were identified using descriptive statistics and were tested and corroborated through the application of non-parametric statistical tests.

Finally, the report makes some suggestions regarding the implementation of the next stages of the study, including the timeline for the second round of the household survey (March - April 2021).

Sumario Ejecutivo

Este es el primer reporte de la evaluación del programa de microcrédito desarrollado por la Fundación de Apoyo Comunitario y Social del Ecuador (FACES). Esta evaluación es parte de un proyecto más amplio conducido por Lendwithcare (LWC), en el que se llevaron a cabo evaluaciones similares en Pakistán y Zimbabue entre el 2015 y 2019. La Universidad de Portsmouth (Reino Unido) es el consultor académico del proyecto.

LWC es una plataforma de *crowdfunding* de microfinanzas creada en el 2010 por la ONG de desarrollo británica *CARE International UK*. Su objetivo final es mejorar el bienestar económico de comunidades vulnerables y de bajos ingresos en los países en desarrollo. Para lograr este objetivo, la organización se asocia con instituciones microfinancieras locales (IMF) que tengan una misión social, proporcionándoles créditos sin interés, y, que son manejados a través de un portal web.

La Fundación de Apoyo Social y Comunitario de Ecuador (FACES) es una Organización sin fines de lucro (ONG), y, una de las de las mayores instituciones de microfinanzas en el Ecuador. Se crea en 1991, su misión es: "*Contribuir a combatir la pobreza y desempleo en la economía del país, apoyando a los microempresarios con recursos económicos y técnicos, para que mejoren su potencial empresarial y alcancen niveles de crecimiento personal y empoderamiento"*. Desde su creación, FACES siempre se ha considerado como una organización con enfoque social, que cada año compromete el 15% de sus ganancias a la ejecución de proyectos sociales.

FACES tiene actualmente 18 sucursales. Inició su trabajo en el sur del país, donde cuenta con 14 agencias ubicadas en las provincias de Loja, Zamora Chinchipe y El Oro, y, recientemente amplió su oferta en el norte del país, con la apertura de 4 agencias en las parroquias rurales de la provincia de Pichincha. El principal producto financiero que ofrece FACES es un microcrédito individual para "mujeres y hombres microempresarias/os que mantengan una actividad productiva por cuenta propia", el cual es objeto de la presente evaluación.

El objetivo principal de la presente evaluación es estudiar el impacto social del modelo de microcrédito implementado por FACES, investigando los cambios observados en los negocios y las condiciones de vida de los clientes a lo largo del tiempo. Por consiguiente, la evaluación de impacto está asociada a un estudio longitudinal, que incluye la implementación de una encuesta de hogares a clientes y no clientes del programa. En el presente reporte se presentan los resultados de la encuesta base realizada en septiembre de 2019. La preparación para esta primera ronda de la encuesta longitudinal se realizó en junio de 2019 con una encuesta piloto y tres grupos focales exploratorios con clientes.

El equipo de evaluación está formado por el investigador de la Universidad de Portsmouth, que preparó el presente reporte; un miembro de LWC encargado del monitoreo de la IMF local; y un miembro de FACES con responsabilidades en la gestión del desempeño social de la institución. Para la implementación de la encuesta, se contrató a un equipo de 5 encuestadores independientes, seleccionados entre estudiantes y graduados de la Universidad Técnica Particular de Loja, y a una coordinadora con experiencia previa en

encuestas similares. Las entrevistas se realizaron en las casas o negocios de los participantes en el estudio, para lo cual se utilizó el software de encuestas "Kobotoolbox" mismo que permite la recopilación de datos sin necesidad de estar en línea.

El muestreo se basó en tres criterios, en primer lugar, hubo una selección de agencias en base al peso de cada una en el número de historias de clientes subidas a la plataforma de crowdfunding durante el 2018. Seis sucursales fueron elegidas para participar en el estudio: Cariamanga, Catamayo, Loja Centro, Loja Norte, Loja Pitas y Malacatos. En segundo lugar, los clientes seleccionados fueron clientes nuevos en cada una de las agencias durante el año 2019. Finalmente, el tercer criterio fue que todos los clientes nuevos deberían ser invitados, de modo que se minimice el sesgo de selección en el estudio (muestreo aleatorio simple a nivel de las agencias). Adicionalmente, a fin de formar un grupo de control, fueron invitados a participar en el proyecto microempresarios con negocios similares, ubicados en los mismos barrios de los clientes, pero que no hayan solicitado un préstamo en FACES,

La muestra de la encuesta está conformada por 367 clientes y 247 no clientes. Los datos recolectados permitieron caracterizar a los clientes nuevos de FACES, identificar varios segmentos de clientes y comparar sus características con el grupo de control. A lo largo del reporte, cuando sea posible y pertinente, se establece una comparación con la información sobre los clientes tomada de la Memoria Anual de FACES - 2018.

La siguiente tabla presenta las características principales de los clientes nuevos de FACES en comparación con los no clientes:

367 Clientes	247 No clientes
▪ 58% mujeres ▪ 25% rurales ▪ Promedio edad: 37 años ▪ 49% Casado o Unión Libre; 37% Soltero ▪ 81% completaron al menos la educación secundaria. 20% con educación primaria. ▪ 50% propietarios de vivienda; 28% en vivienda arrendada	▪ 66% mujeres ▪ 17% rurales ▪ Promedio edad: 42 años ▪ 62% Casado o Unión Libre; 21% Soltero ▪ 78% completaron al menos la educación secundaria. 21% con educación primaria. ▪ 59% propietarios de vivienda; 25% en vivienda arrendada
▪ Tipo de actividad: 39% Comercio; 30% Servicios; 26% Agricultura; 5% Producción ▪ Tiempo promedio del negocio: 4,8 años ▪ 46% negocios formales ▪ 75% trabaja solo; 8% con empleados remunerados.	▪ Tipo de actividad: 65% Comercio; 22% Servicios; 8% Agricultura; 4% Producción ▪ Tiempo promedio del negocio: 6,5 años ▪ 71% negocios formales ▪ 73% trabaja solo; 15% con empleados remunerados.
▪ Monto promedio de microcrédito: $1,946 ▪ 26% estaban pagando préstamos en otras IMF/cooperativas o bancos comerciales. ▪ 65% declaró haber ahorrado en los últimos 12 meses, (23% ahorrarán mensualmente) ▪ 14% tenía contratado seguros privados ▪ 14% había recibido remesas del extranjero (pero sólo 4% con regularidad)	▪ 41% estaba pagando al menos un préstamo en una institución financiera. ▪ 49% declaró haber ahorrado en los últimos 12 meses (16% ahorrarán mensualmente) ▪ 21% tenía contratado seguros privados ▪ 12% había recibido remesas del extranjero.

De los resultados de las encuestas sugieren tres criterios principales de segmentación de los clientes: ubicación en áreas clasificadas como rurales o urbanas, formalidad de las empresas y género, encontrándose diferencias estadísticamente significativas entre los subgrupos para un gran número de indicadores, especialmente entre los clientes rurales y urbanos. Estas diferencias se identificaron utilizando estadísticas descriptivas y se probaron mediante la aplicación de pruebas estadísticas no paramétricas.

Finalmente, en el reporte se hacen sugerencias con respecto a la implementación de las próximas fases del estudio, incluida el calendario para la segunda ronda de la encuesta de hogares (marzo - abril de 2021).

1. Introduction

This is the first report of the Lendwithcare (LWC) impact assessment project in Ecuador. It presents the preliminary results of the evaluation started in June 2019. LWC is a microfinance crowdfunding platform, an initiative of the international non-governmental organisation (INGO) CARE International UK. The main objective of this research is to evaluate the social impact of the microcredit programme developed by Fundación de Apoyo Comunitario y Social del Ecuador (FACES), LWC's local partner in Ecuador. The University of Portsmouth is the academic partner in the project, which has been implemented also in Pakistan and Zimbabwe between 2015 and 2019.

FACES is one of the largest NGOs dedicated to microfinance in Ecuador and has been providing formal financial and non-financial services to low-income populations, mainly in the South of Ecuador, since 1991. The MFI has 18 branches, including 5 branches opened more recently in the rural parishes of the capital Quito (province Pichincha). The main financial products offered at these branches are individual business loans, which are the focus of the impact assessment project.

The evaluation started with the implementation of a pilot survey and three focus groups with existing clients of the institution in June 2019. These were the basis to prepare the baseline survey conducted during the month of September. The sample in the baseline survey included 367 FACES new clients from six branches (Loja Pitas, Loja Centro, Loja Norte, Malacatos, Cariamanga and Catamayo); in addition, 247 non-clients with similar profiles from the same neighbourhoods of the clients were also interviewed.

The next section of the report briefly introduces the main concepts and issues related to impact evaluation in the microfinance sector, while section 3 provides information on the microfinance institution and its microcredit programme. These initial sections help contextualise the LWC assessment project and the choices made in terms of evaluation design and methodologies employed in the project, which are described in section 4. Section 5 presents the main results of the baseline household survey and section 6 concludes, making some recommendations regarding the next stages of the project.

2. Microfinance and Impact Evaluation: a brief introduction

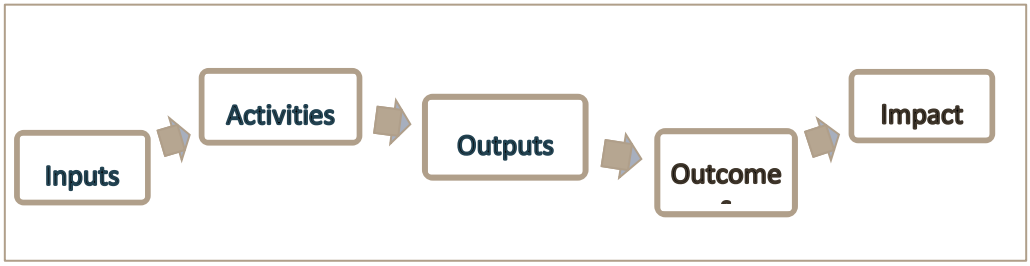
Evaluation of impact and social performance assessment have become increasingly important in the microfinance and financial inclusion sector, similarly to other areas of development and social policies. In the past two decades, the number of projects, initiatives and training related to these subjects has multiplied and has been accompanied by an intense debate, both at academic and practitioner level, on the most adequate methodologies to evaluate the short- and long-term outcomes of the programmes being implemented. In this section of the report, we present a brief overview of these questions in order to contextualise the LWC project and the methodological choices made within the project.

Firstly, it is important to clarify some of the concepts and how they are used in the report. Microfinance is, thus, the provision of financial products and services to low income populations otherwise excluded from access to formal finance (Center for Financial Inclusion, 2015). The scope of the products and services provided has evolved from the initial programmes based on microcredit (business loans) to the current offer encompassing savings, insurance, remittances, digital payments, mobile money and an array of other related financial and non-financial services (e.g. business development services, financial literacy, health services, education, etc.). This enlargement of the scope of activities has been matched by a process of diversification of the institutions providing these products and services, which include the (pioneer) NGOs, non-banking financial providers, cooperatives, commercial banks and mobile operators (Ledgerwood & Gibson, 2013). Diversification has also extended to the funding sources of the programmes. The Lendwithcare model based on solidarity crowdfunding represents one of the innovative funding sources of microfinance institutions (further details on the organisation and its model are provided in section 4.1).

The impact assessment project is an initiative of Lendwithcare to respond to the needs of different stakeholders involved in the crowdfunding platform. Primarily, these are their lenders, donors and supporters (including CARE International UK), who need evidence to make decisions on who/what to support among alternative social projects. In addition, the local partner institutions have a double motivation to evaluate their programmes. The first is related to external accountability, i.e. ascertaining that beyond theoretical and anecdotal evidence, programmes provide empirical evidence of serving the intended publics and achieving the proclaimed social goals of the institutions (Gertler et al., 2016). The second motivation is internal and linked to a learning and improvement approach at the programme and the institution levels (Patton, 2008), including developing internal capacity in evaluation and social performance assessment.

A common way of presenting the evaluation chain of a microcredit programme can be seen in Figure 1. The process starts with gathering the monetary and non-monetary resources necessary to develop the programme activities (credit process and loan use), which are expected to prompt changes in the lives of the participants in the programme.

Figure 1 – Evaluation chain



Source: Adapted from Rogers (2014)

The outputs are the immediate result of these activities and translate into the outreach of the programmes [Is the institution reaching the intended publics?], while outcomes correspond to the changes, or effects, on individuals or the environment that follow from the delivery of specific products or services (Rogers, 2014).

Impact is commonly defined as the long-term results of the programmes (Rogers, 2014), although from an academic perspective this is an incomplete take as evaluating impact requires not only identifying the outcomes but also attributing these outcomes (in some degree) to the participation in the programme (Gertler et al., 2016). In the context of this report, in line with the objectives and conditions of the LWC project, we have focused on the evaluation of the two final steps of the chain, identifying changes in short- and medium/long-term outcomes at the level of the microcredit clients and their households.

There are different types of methodologies to evaluate impact – quantitative methodologies, qualitative methodologies and mixed methods; all presenting advantages and limitations. The choice of methodology should be mainly dependent on the objectives of the evaluation and the research questions being addressed, but in practice it is often conditioned by the resources available. Traditionally, impact evaluations have been predominantly based on quantitative methodologies as several systematic reviews conducted in the sector have shown (e.g. Duvendack et al., 2011), but more relevance has been given in recent years to qualitative studies (Copestake et al, 2019; Peters et al., 2016), and above all, there is a growing call for the adoption of mixed methods (Balkhenhol, 2012).[1]

Quantitative and qualitative methodologies provide answers to different but complementary questions – quantitative analysis responds to 'what and how much has changed?' whereas qualitative methodologies address 'how and why the changes happened?' As many of the evaluations in the sector are conducted for accountability purposes, being in many cases initiated and funded by external partners, it is understandable the preference given to quantitative methodologies.

Among the quantitative methodologies, randomised control trials (RCTs) are a powerful methodology in terms of impact attribution, but one that is not suitable for evaluations in all contexts and which requires

[1] Additional references on impact studies in microfinance include a number of systematic reviews (e.g. Duvendack & Mader, 2019; Odell, 2015; Van Rooyen et al, 2012) and academic reflections on the topic (e.g. Adams & Vogel, 2013); as well as technical guides on evaluation (Gertler et al, 2016; Khandker et al., 2010) and on poverty assessment (Henry et al, 2003).

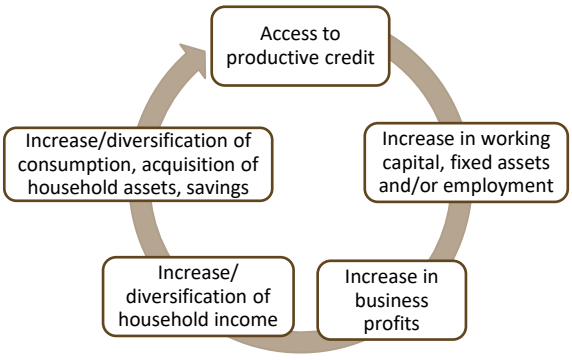
high resources (monetary and non-monetary) to be properly implemented (Odell, 2015). Empirical evidence from applications of the methodology to assess impact at household level of existing (and consolidated) microcredit programmes (e.g. in Morocco and Bosnia-Herzegovina) have shown the limitations associated with the field implementation of this type of evaluation.[2] A widely implemented alternative are longitudinal studies using quasi-experimental designs, including differences-in-differences (DiD), regression discontinuity, propensity score matching, and instrumental variables (Khandker et al., 2010). This has been the option in the LWC project, namely a DiD design.

Microcredit programmes are expected to generate outcomes at different levels, thus, from a theoretical perspective, links can be established between access to and use of productive credit and a wide range of socio-economic and well-being indicators (Duvendack et al., 2011). This diversity, which is also associated with the above mentioned multiplicity of institutions and their (social) missions, contributes to a large number of variables and indicators being used in different studies. There are, however, categories of indicators that are common to many evaluations:

- Business outcomes: revenues; business assets; employment created; net business income.
- Income, expenditure and assets: personal and household total income; salaries, subsidies and other sources of income; total expenditure, expenditure on food, education, health and luxury items; household assets variation.
- Financial practices: borrowings; savings; insurance and remittances.
- Social outcomes: schooling; access to health; food security and quality; women's economic empowerment.

In a simplified way, the rationale behind this outcomes expectation is associated with the designated virtuous cycle of credit as illustrated in Figure 2.

Fig. 2 – Virtuous cycle of microcredit



Source: Adapted from Hulme and Mosley (1996)

[2] The methodology is more appropriate to test new products or innovations in processes or products. See Banerjee et al. (2015) for examples of RCTs on microfinance impact.

Productive loans, when they are effectively applied in the business, enable an increase in working capital, fixed capital or human resources, which are expected to generate higher business profits and, subsequently, an increase of the household income. These additional funds translate into growth and diversification of consumption, acquisition of household assets and/or increasing savings, granting the client and her/his household a better economic situation and also a better bargaining position when accessing other financial products.

There are a number of assumptions associated with this virtuous cycle of credit and, in practice, there might be diverse reasons preventing it from functioning as described in the figure above. External shocks such as health emergencies, political instability or natural disasters can generate unexpected and, in some cases, negative outcomes. These negative outcomes are usually associated with a decrease of the client's capacity to repay the microcredit loan and can lead to loan delinquency. In general, these situations are expected to occur in small numbers, but it is worthwhile calling attention to the results of several studies in different countries showing that non-repayment of the loans is only one of the symptoms of problems for the client (Gonzalez, 2008; Morvant-Roux et al., 2015). Clients often keep repaying the loan but making sacrifices such as cutting consumption or selling assets to maintain their creditworthiness with the institution. As a result, avoiding or dealing with these situations, imply that the institutions know well their clients and monitor changes at the household level over time.

In this sense, together with more formal accountability-oriented evaluations, it is important to build capacity within the institutions in evaluation and social performance assessment. This will allow them to gather timely data on the programmes and their outcomes that can be used by decision-makers in the daily management of the institutions and ensure they continue working towards their (social) goals.

3. FACES microcredit programme

3.1. The institution and the context

FACES is a pioneer not for profit non-governmental organisation established in 1991 in the city of Loja, with the mission of contributing to fight poverty and unemployment in Ecuador by supporting micro-entrepreneurs with financial and technical resources, so they can improve their entrepreneurial potential and achieve high levels of personal development and empowerment.[3] The MFI has 18 branches, which are mainly located in the southern provinces of Loja (8 branches), Zamora-Chinchipe (3 branches) and El Oro (2 branches). More recently, the MFI expanded its services to the northern Sierra Region with 5 branches in the province of Pichincha (rural parishes of the capital Quito).

By 2019, the portfolio of products offered by the institution included four types of productive credit:

- Individual credit: business loans to self-employed male and female entrepreneurs to support the development of their income generating businesses. The loan conditions vary depending on the amount requested and the type of activity (for example, the repayment schedule for agriculture loans takes into account the production loan cycles). This is the main product in FACES portfolio.
- Group credit: business loans to members of self-composed group of entrepreneurs working in similar markets. The members of the groups are responsible for the loans of each other (joint liability). This product is not available in all branches and targets particularly poor producers in rural areas.
- Credit for associations of producers: loans to support associations of entrepreneurs working in the same activity.
- '*Crediesperanza*': business loans to micro-entrepreneurs with disabilities or living in a household with members with disabilities.

In addition, the institution offers a private health insurance policy to existing clients of their credit lines. It also provides workshops of financial, technical, social and health education. The training sessions are held in all branches, with a general invitation being made to clients and non-clients living in the area of the branch.

FACES is one of the few institutions in Ecuador maintaining the legal status of NGO, in a (micro)finance landscape that is dominated by cooperatives and a number of (microfinance) banks. In recent years, there was a significant effort of the Government of Ecuador to regulate the finance and microfinance sectors, particularly concerning cooperatives. Nonetheless, the regulation changes from the 2000's have affected also the NGOs operating in the sector.

Among these changes are the introduction of interest rate caps in 2008 and the segmentation of the market according to the loan amount in 2015: loans below or equal to $1,000 are designated as 'minorista', while

[3] Translation of the mission statement of the institution retrieved from FACES website (https://faces.org.ec/quienes-somos/).

loans between $1,000 and $10,000, and loans above $10,000 are within the segments of 'acumulación simple' and 'acumulación ampliada', respectively. The regulation does not establish a maximum amount for microcredit (Rosero & Viteri, 2018).[4]

The Ecuadorian microfinance market is one of the most developed markets in the world concerning conventional microcredit programmes, reflecting the professionalism of the different agents involved in the sector (such as the national network, *Red Financiera Rural*) and the level of maturity of many of the active MFIs providing microcredit, including FACES. However, similarly to most Latin American countries, it is some steps behind in the process of digitalisation of the services when compared with many African and Asian countries. This situation is illustrated in the latest results from the World Bank survey on financial inclusion (Global FINDEX). The data from the 2017 survey suggest that Ecuadorians rely mainly on financial institutions (including MFIs) to access formal financial services, such as savings accounts.[5] Table 1 presents some of the indicators included in the survey for Ecuador and the upper middle income countries.

Table 1 – Ecuador Financial Inclusion Data

	2017	**2017**	**2014**	**2011**
	UMIC (1)		ECU (1)	
Adults with an account, total	73.1%	51.2%	46.2%	36.7%
Adults with an account at a financial institution, total	72.8%	50.9%	46.2%	36.7%
Adults with an account at a financial institution, female	69.0%	42.2%	40.8%	33.2%
Adults with an account at a financial institution, rural	72.6%	47.4%	44.6%	36.3%
Adults with an account at a financial inst., poorest 40%	62.1%	33.4%	31.0%	22.8%
Adults borrowing from a financial institution, total	9.9%	11.8%	13.4%	10.6%
Adults borrowing from a financial institution, female	8.5%	8.2%	14.2%	9.9%
Adults borrowing from a financial institution, rural	9.9%	11.0%	15.1%	8.8%
Adults borrowing from a financial inst., poorest 40%	8.2%	9.2%	11.3%	7.9%
Saved any money in the past year, total	46.4%	33.9%	32.1%	n.a.
Saved any money in the past year, female	41.5%	26.4%	30.8%	n.a.
Saved any money in the past year, rural	44.7%	26.5%	30.6%	n.a.
Saved any money in the past year, poorest 40%	32.2%	20.1%	25.4%	n.a.

Notes: n.a. – not available; (1) ECU: Ecuador; UMIC: Upper Middle-Income Countries.
Source: The World Bank (Global FINDEX Survey)

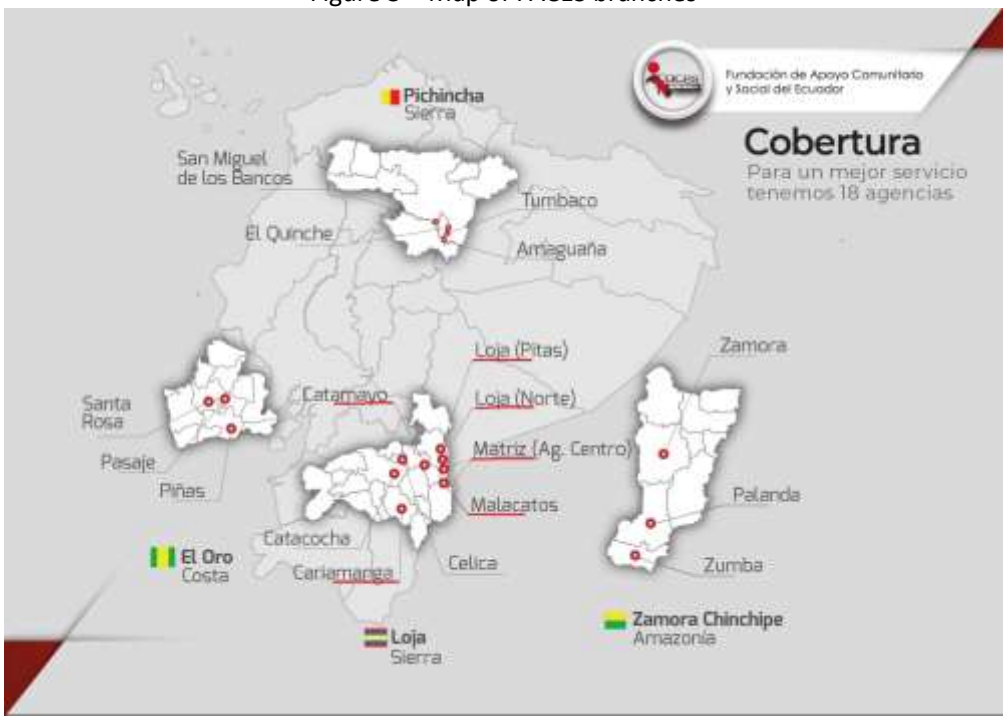
[4] The interest rate cap is dependent on the microcredit segment. By June 2018, the maximum effective annual rates allowed were 25.5% for credits 'acumulación ampliada', 27.5% for credits 'acumulación simple' and 30.5% for credits 'minorista' (Rosero & Viteri, 2018).

[5] The statistics in the Global FINDEX survey related to mobile accounts are very modest in Ecuador. In 2017, only 2% of the respondents had a mobile account (0.2% if considering the sub-group of the poorest 40% in terms of income). These numbers are lower than the average for these indicators in the upper middle income countries (3.2% and 2.9%, respectively), and they are substantially lower when comparing with a country such as Kenya where 72.9% of the population reported having a mobile account (59.4% in the case of the 40% poorest segment).

The table suggests that while the country profile is behind other countries with similar economic development level for the indicators on savings and accounts, Ecuador performs relatively better in regard to access to formal credit, which is certainly not disconnected from the evolution of the microfinance sector in the country. It also indicates that despite a general improvement of the country's financial inclusion statistics over time, a gender and income gaps persist in respect to access to formal financial services.

As the impact evaluation will focus on the branches located in the province of Loja, it is worthwhile to provide some reference information about the region. Loja is a province in the *Sierra* (Mountains) region, and in the South of the country, next to the border with Peru. Figure 3 displays the map of Ecuador identifying the location of the 18 branches of the institution (those participating in the evaluation are underlined in red).

Figure 3 – Map of FACES branches



Map provided by FACES

The province of Loja had an estimated population of 516,231 inhabitants in 2019, 36% of whom were living in rural areas. Data from the *Instituto Nacional de Estadística y Censos* shows that by the time of the last population Census (2010), the province population was of 448,966, with 90% identifying themselves as 'mestizos' (mixed race). 38% of the active population was working as self-employed. Data on consumption poverty for 2014 indicates a poverty level in the province of 31.3%, which is higher than the national average (25.8%), but still represents a significant improvement from 47.2% in 2006.

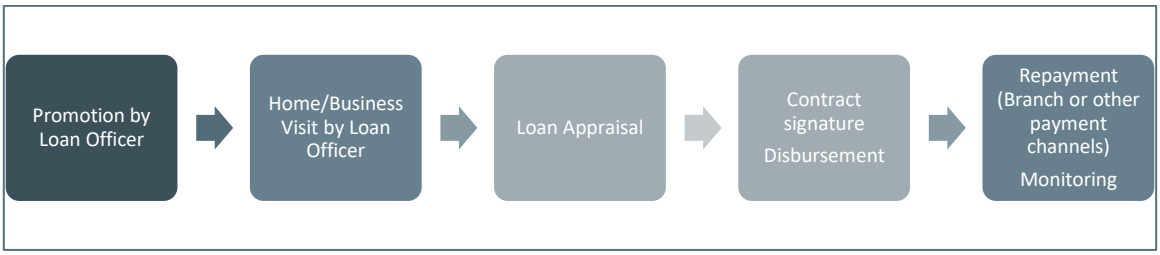
3.2. Microcredit Programme

Individual credit is the main financial product offered by FACES. As previously mentioned, this is a business loan to self-employed who manage a generating income business. Clients can renew their loans if they have 75% of the previous loan repaid (85% in the case of new clients).

The first information collected in the loan application process refers to the candidate's business experience (minimum of 6 months required), and a summary of income and expenses of the business and household to allow for both a financial and social analysis of the applications. At this stage, the loan officer consults the credit bureau as well as the judicial system ("paginas judiciales") to check the formal indebtedness level of the applicant, and if there are any legal processes in which he is involved (himself or as a guarantor for others). The candidates cannot have more than 3 other active credit responsibilities registered in the credit bureau.[6] Guarantees are provided generally in the form of personal guarantors.

Figure 4 outlines the different stages of the process. The application process takes, on average, 2 days.

Figure 4 – FACES Individual Credit Process



Looking to some of the activity indicators in the period 2016-2018, included in Table 2 below, it can be seen that the institution is gradually growing. Between 2016 and 2018, the number of clients has increased by 28%, while the growth of the gross loan portfolio was even more expressive (+65%). This later result translated into an increase of the loan average amount over the period. The portfolio at risk at 30 days increased in 2018, but still remains at values considered reasonable in the context of the Ecuadorian sector.

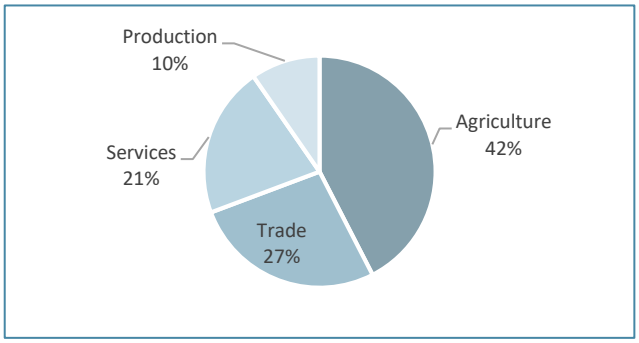
Table 2 – FACES Indicators 2016-2018

	No. Active Borrowers	Gross Loan Portfolio (USD)	Average Loan Size (USD)	PAR 30 days	No. Branches
Dec. 2016	14,175	26,198,241	2,113	2.2%	13
Dec. 2017	16,598	35,743,481	2,577	1.8%	14
Dec. 2018	18,115	43,165,204	2,706	3.5%	17

Source: *Memoria* (Annual Report) FACES 2018

[6] The tolerated level of indebtedness is significantly higher than the ones practiced by LWC partners in Pakistan (no other credit) and Zimbabwe (one additional active credit), illustrating different cultural contexts and different perceptions regarding credit and debt.

Figure 5 – FACES Loan Portfolio by Activity (Dec. 2018)



In the end of December 2018, agriculture-related activities were predominant in the portfolio; in these were included cattle raising (28%), farming (14%) and fishing (1%). These figures are in line with a stronger participation of rural clients in FACES microcredit programme (62%). 55% of the clients were female.

Source: *Memoria* FACES 2018

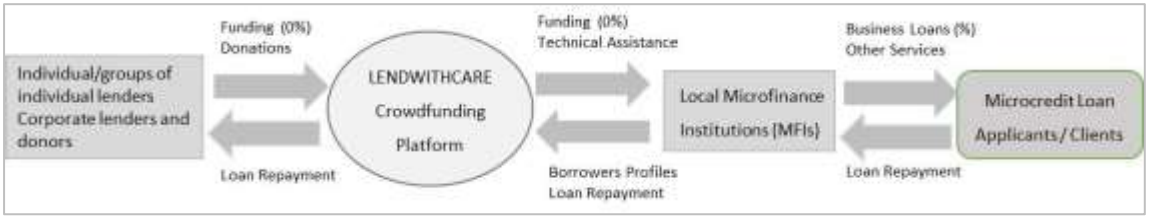
4. Lendwithcare Impact Assessment Project

4.1. Aims and context

Lendwithcare is a crowdfunding platform created in 2010, by initiative of CARE International UK, a British development NGO. By June 30, 2019 the platform worked in 11 countries and had lent $24m in support of more than 120,000 low-income entrepreneurs. It had around 50,000 lenders mostly based in the UK.[7]

"LWC ultimately aims to improve the economic well-being of low-income and marginalised communities in developing countries. To achieve this main goal, the organisation interacts with a number of stakeholders, including selected MFIs with explicit social missions to whom LWC provides free-interest loans through a functioning website (www.lendwithcare.org) as well as training and other support to improve organisational capacity." LWC crowdfunding model is depicted in Figure 6.

Figure 6 – LWC Crowdfunding Model



Source: Afonso (2018)

The model is based on solidarity since lenders do not receive a monetary compensation for their money, neither does LWC charge interest to the local MFIs. The operational costs of the platform are covered through donations. The local MFIs, however, charge the loan applicants interest according to their microcredit programme conditions in order to cover their own operational and delinquency costs. This issue is considered

[7] Information provided by Lendwithcare.

by LWC during the selection process of the MFIs, with one of the criteria considered being the reasonability of the interest rates charged by the institution in the context of the local microfinance market.

The statement of goals presented above was taken from an internal document describing LWC's theory of change. The first sentence states the main goal of the institution and it is the basis for the impact assessment project. As put by Hulme and Mosley (1996, p.86): the "ultimate test of any institution is (…) whether it manages to do something useful?" For LWC managers, the impact assessment project allows them to test if the lives of the clients supported by the programmes funded have indeed improved after accessing the microcredit loan, and in the process gather evidence on the programmes' outcomes to be accountable to the lenders and donors of the platform. Equally relevant for the project implemented is the last line of the statement, namely the reference to the provision of training and other support aiming to improve the internal organisation of the partner MFIs. Having identified evaluation and social performance assessment as an area lacking in many of the partners, the active participation of the institutions in the implementation of the evaluations became also a priority. The local evaluation teams were involved in all stages of the process, apart from the analysis of the data and reporting, which were conducted independently by the University of Portsmouth team.

The impact assessment project started in the end of 2014 when the first contacts were established between the partners. The first MFI participating in the project was Akhuwat Islamic Microfinance in Pakistan, with the project being extended to Thrive Microfinance in Zimbabwe in 2016 and to FACES in Ecuador in 2019.

In the implementation of the impact assessment in Ecuador, the core evaluation team included one element from the LWC team which is responsible for the selection and monitoring of the crowdfunding platform field partners; one element from FACES, and the University of Portsmouth evaluator/researcher.

4.2. Evaluation design and methodology

The evaluation aims to study the social impact of the microcredit model implemented by FACES. Therefore, the broad research question can be stated as follows:

> *What changes can be observed in the businesses and lives of FACES clients after they have received and applied the microcredit loan?*

The answer to this question implies the implementation of a longitudinal study over a period of time. This report refers to the first stage in the process – the preparation and implementation of the baseline survey. In this sense, the results presented will not immediately allow for replying to the broad question above, but will give insights to a number of 'introductory questions':

- Who are FACES new clients? What are their personal characteristics?
- Which businesses do they manage?
- What are their financial practices prior to applying for the microcredit loan at FACES?
- How do they compare with similar entrepreneurs who are not FACES clients?

This characterisation of the clients and their businesses is presented in the following sections of the document, and it builds on the analysis of the data collected through the baseline survey and the three preparatory focus groups implemented in June.

Sampling of the participants in the household survey followed three criteria. The first was related to the geographical location of the clients and derived from the branch selection, which was based on the number of loans supported by LWC in the branches. Cariamanga, Catamayo, Malacatos, Loja Centro, Loja Norte and Loja Pitas, all located in the province of Loja, were those contributing the most to the crowdfunding platform during 2018. The three branches within the city of Loja were analysed jointly.

The second criterion was being a new client during the year of 2019. The objective was to interview clients who had successfully applied for a loan at the MFI for the first time. The third criterion was of non-exclusion, applying simple random sampling at the level of the branches. This implies that a list of all new clients for each selected branch is available and all of them ought to be invited to participate in the survey until the target number of clients is attained.[8] However, for logistic/cost reasons, some clients located further away from the branches were excluded, with the institution reporting that these exclusions did not comprise clients with agriculture-related activities. These clients are expected to be poorer and their potential exclusion would have introduced selection bias.

Regarding the sample size, the objective established was a total sample between 600 and 700, as much as possible balanced between clients and non-clients. From previous experiences and the perception of the local team, the recruitment and participation of the non-clients was anticipated as challenging. Different strategies were discussed during the meetings in June, with the prevailing approach relying on the interviewers to identify and contact non-clients in the same neighbourhoods where they were conducting the interviews with clients. Comparison tests conducted after the first week of implementation of the baseline survey indicated that there were no statistically significant differences between the two groups for the majority of the indicators analysed at that moment. In the end, a total of 247 validated interviews with non-clients were analysed. Table 3 summarises the sample composition by location.

Table 3 - Survey Respondents (No.)

	Cariamanga	Catamayo	Loja	Malacatos	Total
Clients	63	80	168	56	367
Non-clients	49	64	100	34	247
Total	112 (18%)	144(23%)	268 (44%)	90 (15%)	614 (100%)

[8] The last criteria was introduced to avoid further selection bias. Applying for a microcredit loan implies a voluntary action from the candidates who self-select for the programme. Because it is reasonable to expect that those who decide to apply may have some different personal characteristics compared with others who did not apply, e.g. they are more proactive or less risk averse, this selection bias associated with the programme should be taken into account in the evaluation design, particularly if one of the evaluation aims is to attribute the observed changes to the participation in the programme.

Data was collected at the houses or businesses of the clients and non-clients in order to guarantee that the interviewees were comfortable to answer the questions and minimise response bias. The survey software 'Kobotoolbox' was used in data collection.[9] This is an open access software developed by the Harvard Humanitarian Initiative, which allows for data collection offline and later upload of the information. Once it is uploaded the information is ready to be analysed, making it possible to detect and correct some errors related with data entry by the interviewers.

The interviews were conducted by independent enumerators who were coordinated in the field by a former staff member of FACES, who had experience in the implementation of household surveys. The coordinator and a team of 5 interviewers were trained by the evaluation team (including the University of Portsmouth researcher and members from LWC and FACES), with the enumerators being selected among students and graduates from the Universidad Técnica Particular de Loja.

The survey questionnaire was designed by the University of Portsmouth researcher. The selection of the outcomes and respective indicators has taken into account existing theoretical and empirical research on the impact of microcredit programmes; the characteristics of the programme and local environment; and the results of the pilot survey and exploratory focus groups. The proposed questions were discussed with the local evaluation team member who made comments and suggestions to better relate the questions to the local context and their own perception of outcomes of interest for the MFI.

The questionnaire was designed in Spanish, but the language was reviewed and local expressions were introduced where justified. Complementing the purposely built questionnaire, the Poverty Probability Index (PPI) was used as a poverty assessment tool (see box 1).

[9] Further information on the survey software available at https://www.kobotoolbox.org/

Box 1 – PPI and Ecuador

The Poverty Probability Index (PPI) is a "poverty assessment tool for organisations and businesses with a mission to serve the poor". PPI (formerly known as Progress Out of Poverty Index) was commissioned in 2005 by the Grameen Foundation with the support of CGAP and the Ford Foundation, being developed by a team led by Mark Schreiner. In 2016, the Grameen Foundation has formed with IPA (Innovations for Poverty Action) the PPI Alliance, a "collective governance and funding structure" with IPA assuming the coordination of the tool. The following year the designation of the tool was changed to the Poverty Probability Index, maintaining the acronym PPI (https://www.povertyindex.org/).

The PPI is a set of 10 questions relating to household characteristics and asset ownership, which are selected specifically for each country (see section 5.2 for the questions included in the PPI Ecuador). The answers to the 10 questions are scored to compute the likelihood of a household living below a selected poverty line. The materials provided for each national PPI include look-up tables for the national poverty line and other internationally recognised poverty lines (e.g. the $5/day 2005PPP). The total scores range between 0 and 100, and the look-up tables provide the probability of the household being considered poor for each score.

The PPI for Ecuador was updated in 2015 using 2013-14 data from the Living Standards Survey conducted by Ecuador's *Instituto Nacional de Estadística y Censos* (Schreiner, 2015). This update is important as it is recognised by the developers of the tool that there is a reduction of accuracy in the identification of poverty levels over time (Boucher, 2014). IPA has reviewed the PPIs considered outdated and has withdrawn these from the tool's website. By December 2019, there were 47 updated country PPIs, including Ecuador.

In the PPI for Ecuador, one of the questions is particularly relevant – 'Does the household has a car (for its exclusive use), air conditioner, video camera, or exercise machine?' A positive answer implies that the household scores automatically the maximum (100), independently of the answers to the other questions, and it is considered non-poor.

It is worthwhile to note that PPI measures income poverty, being insufficient *per se* to capture other dimensions of poverty and vulnerability. In addition, as this is the first period in which PPI data was collected for the new clients and non-clients, it gives a static image of the household poverty level. Depending on the moment of the data collection, the PPI score may identify a vulnerable household, which interchangeably moves above and below the defined poverty line, as non-poor. Therefore, PPI data should be analysed jointly with other information on the households, gaining more relevance over time as it allows for a dynamic analysis of the changes observed at household level.

5. Findings

5.1. Insights from the focus groups

Three focus groups were led by the University of Portsmouth researcher in June 2019. The 2-hours sessions took place in Catamayo, Loja Pitas and Malacatos, in independent locations near the branches, without the presence of any element from the MFI. The selection of the clients invited to participate was made by the branch managers, considering the criteria given by the researcher. The objective was to have three groups with 5 to 8 participants: one of only female clients; one predominantly composed by clients located in rural areas and dedicating to agriculture-related activities, and a third with a mixed composition in terms of gender and activity. 22 clients participated in the sessions (6 in Catamayo, 9 in Malacatos and 7 in Loja Pitas). Although not intentionally, the three groups were composed almost exclusively by female clients (only one male client participated).

From the discussions maintained in the three sessions, here are some notes that will be referred to in the discussion of the findings for the client sample:

- There were clear generational differences, especially in one of the groups. The more experienced clients aiming to maintain their small and informal businesses in order to provide for their families; whereas the younger clients talked about growing their activities, which were in many cases formal businesses.
- There was some over-representation of clients dedicated to poultry, particularly in one of the groups. This fact allowed, however, to understand that this same activity could be perceived in different ways by the entrepreneurs – some of the businesses were formal and the entrepreneurs referred to growth objectives, while for others this was an “easy” and temporary occupation in order to obtain additional income.
- Family support in diverse forms (endorsing or actively participating in the business, guaranteeing other sources of household income, etc.) came out as an important factor in the success of the businesses.
- All clients who had participated in training sessions provided by FACES valued the opportunity. The time to participate was not considered a problem since in most cases the clients had the chance to have someone replacing them for a short period of time in the business. Good customer service (‘atención al cliente’) was referred by several clients as a topic of interest in terms of training. For those who have attended trainings, the sessions in topics of psychology were highly referenced.
- Most participants became FACES clients by someone’s reference (usually relatives).
- The cost of the loans was the common reference in the groups when asked about changes in the microcredit programme. This cost was being compared with other financial providers, including other MFIs, cooperatives and commercial banks, being admitted by some of these clients that most probably they would not have met the requirements of these providers identified as cheaper.

5.2. FACES new clients in 2019

The baseline survey was conducted during the month of September 2019. It allowed for the characterisation of the clients at the beginning of their participation in the microcredit programme, the comparison between clients and non-clients, and the identification of differences between segments of clients. The questionnaire included data on:

- Client and household characterization (gender, age, educational level, marital status, household composition);
- Business data (main and complementary activities, time, working hours, previous funding sources, revenues evolution, employment);
- Loan purpose and reasons to choose FACES (loan conditions were collected from FACES database);
- Financial Practices (other loans, savings, insurance and remittances);
- Personal and Household Income and Household Expenses (amount and composition);
- Personal Assets (house property, investment in house improvements and fixed assets);
- Health Problems and Shocks.

The PPI questionnaire developed for Ecuador includes questions related to: household size, household assets (number of activated cellular phones, car for exclusive personal use, iron, kitchen appliances and number of televisions) and housing conditions (material of the floor, bath/shower, bathroom location, and number of light bulbs in the house).

5.2.1. Demographics

Table 4 displays the client sample distribution in terms of location and gender.

Table 4 – Client Sample Location/Gender Distribution

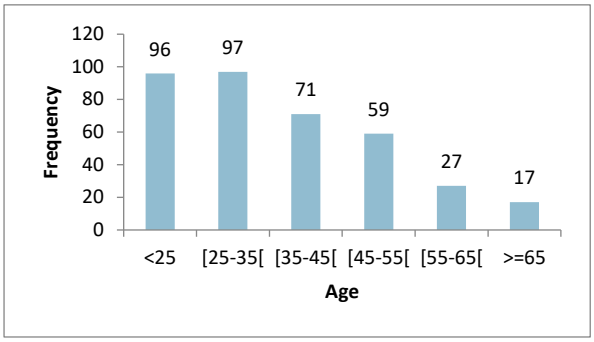
Clients/Branches	Cariamanga	Catamayo	Loja	Malacatos	Total
Female (No.)	34	44	104	31	213 (58%)
Male (No.)	29	36	64	25	154 (42%)
Rural (No.)	26	16	3	47	92 (25%)
Urban (No.)	37	64	165	9	275 (75%)

At baseline, sample clients were predominately **female** (58%) and **urban** (75%), results that are mostly influenced by the branches in the city of Loja where there are comparatively more female clients (62%) and almost all clients are considered urban (98%). Malacatos is the only branch where clients are **mainly rural** (84%). Cariamanga is the most distant branch from the province capital, and has also a significant number of clients classified as living in rural areas (41%).

Comparing with the information for the institution in December 2018 presented in section 3, it can be seen that the percentage of female clients in the evaluation sample is similar as there were 55% reported in the annual report. However, the weight of rural clients is very different (25% vs 62% for the institution as a

whole), which results at least partially from the larger number of interviewees from the predominantly urban branches of Loja and Catamayo (67% of the client sample).

Figure 7 – Client Sample Age Structure

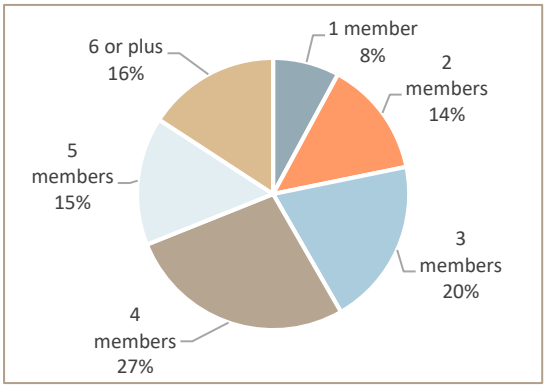


Clients were, on average, **37 years**, with age varying greatly between 18 and 85 years old. Figure 6 shows the distribution of the sample in terms of age, being interesting to note that around a quarter of the sample is composed by **young entrepreneurs** with less than 25 years.

The majority of the clients are married/de facto union (49%) or single (37%), with a smaller number of divorcees/separated (10%) and widows (4%). The strong presence of single clients can be explained by the age structure presented above.

The majority of the clients have completed at least secondary education (81%), including 22% who have progressed to technical/vocational courses or university. Still, a relevant percentage of them have concluded only primary school (20%).

Figure 8 – Client Sample Household Size



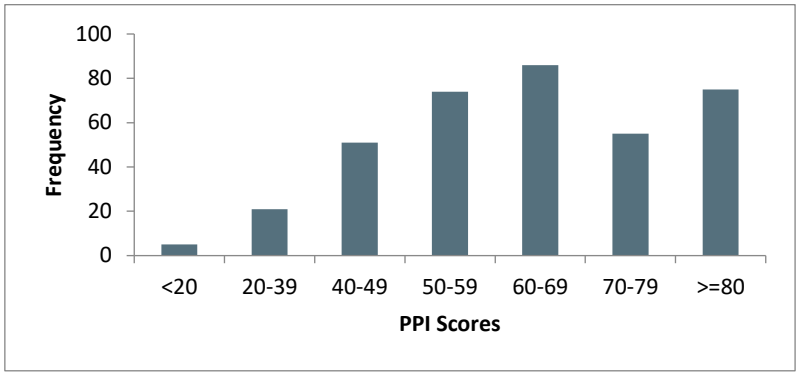
58% of the households have 4 or more members. Approximately half of the clients are **home-owners** (49.6%), while 28.3% live in rented houses and 16.6% share house with family members.

Demographic data of sample clients is, in general, similar to the Census 2010 results at province level. The main difference lies on the percentage of home-owners and renters – 64% and 21% respectively.

5.2.2. PPI and Income Indicators

PPI scores were calculated for each household. Figure 9 shows that PPI scores for the new clients varied between 8 and 100, with a sample average score of 65.

Figure 9 – Client Sample PPI Scores Distribution



Consulting the PPI look-up tables, and using the estimated poverty probabilities for the individual households, the average poverty rate for the sample can be calculated. Thus, using the national poverty line and the international $5/day poverty line, the average poverty rate of the sample is 11.8% and 27.6%, respectively.[10]

Focusing on the group of households with scores below 40, the probability of each of these individual households being identified as poor is higher than 50% using the national poverty line and 75% for the $5/day international poverty line. Looking at the 26 clients in these circumstances, it is worthwhile noting that the majority of the businesses are in agriculture or livestock breeding and associated with medium-long term production cycles. Among them, there is a significant number of new businesses (12 are 1 year or less) and informal activities (18). Although this group makes up a small percentage of the clients in the sample, the identification of their characteristics is useful considering that the institution portfolio by December 2018 was composed by 42% of loans to agriculture-related businesses and 62% of the clients lived in rural areas. It will be, therefore, important to give attention to the evolution of this sub-group in the following round of the survey.

FACES collects PPI data for all its clients once a year. In an internal report using data from 17,867 clients (including the sample clients), the reported poverty average rate for the province of Loja was 14.5% by the end of 2019. This is slightly higher than the client sample average, but it includes all branches in the province, including those in more remote and poorer 'cantons'.

Table 5 summarises the results obtained for the average PPI scores as well as for the average monthly personal income, household income and household expenses.

[10] PPI questionnaire and the look-up tables for Ecuador can be consulted at https://www.povertyindex.org/

Table 5 – Average Client PPI and Income Indicators 2019

	PPI Indicators		Income and Expenditure Indicators		
	PPI Average Score	Average Poverty Rate[1]	Monthly Personal Income (USD)	Monthly Household Income (USD)	Monthly Household Expenses (USD)
Total Sample	65.3	11.8%	701.50	912.90	453.50
Female	63.6	13.2%	528.80	794.30	418.20
Male	67.6	9.9%	929.80	1,069.80	503.10
Cariamanga	57.0	24%	492.80	639.80	434.40
Catamayo	64.4	10%	534.20	792.70	510.60
Loja	69.4	8.5%	938.20	1,161.50	442.20
Malacatos	63.4	10.4%	501.30	686.10	425.20
Rural	56.4	21.2%	601.80	739.70	404.20
Urban	68.2	8.7%	735.50	972.00	469.70
Formal	68.2	7.9%	1,094.40	1,318.30	542.10
Informal	62.2	15.1%	438.70	624.70	403.90

(1) Calculation based on the PPI scores using the national poverty line.
Number of observations for the income indicators are lower as some of the respondents did not share this information or information was incomplete. Month of reference: August 2019.

The table above signals the differences between segments of clients, which are consistent across the five indicators. Other highlights include:

- The relative weight of the personal income of the clients in the total household income, indicating the relevance of businesses supported by the microcredit programme in terms of income generation at the household level.
- The gender gap, suggesting a more vulnerable economic situation of female clients compared with male clients. The poverty average rate for the female clients in the sample (13.2%) is higher than for male clients (9.9%), which is contrary to the results reported by FACES for all clients in 2019 (female clients – 12%, male clients -13%). It will be, therefore, important to analyse the evolution of the poverty indicators in the second round of the survey to understand the reasons for this difference.
- Differences between households located in rural and urban areas, particularly for the PPI scores, with the gap being stronger in the sample than in FACES report for all clients (rural – 15.4%, urban – 9.4%).
- Differences between clients managing formal and informal businesses, especially for the income and expenses indicators.
- Differences at branch level: clients from Cariamanga are more likely to be economically vulnerable compared with those located in Loja. The average poverty rates for the sample in these two areas are similar to those reported by FACES for all clients (Cariamanga – 24.6%; Loja Norte – 8.9%; Loja Centro – 7.6%; Loja Las Pitas – 6.6%). There are, however, differences between the figures for sample

clients and all clients in Malacatos and Catamayo, with the poverty average rates being lower for the sample clients compared with all clients (12.6% in Malacatos and 17.9% in Catamayo).

In order to corroborate these differences, non-parametric tests on the equality of means were conducted. The results of the tests can be consulted in Annex I. They confirm, in general, the described differences between sub-groups in regard to the PPI scores and Monthly Personal Income. The exception is the difference between urban and rural clients for the monthly personal income, which is not statistically significant.[11]

The results are more nuanced for the indicators at the household level. In the case of the monthly household income, the tests confirmed the differences between the sub-groups of formal and informal businesses, but not for the gender and rural sub-groups. For the monthly household expenses, differences were corroborated for the comparisons rural/urban and formal/informal, but again not for the gender based comparison.

5.2.3. Business characterisation

The participants in the survey are clients who have applied to FACES since January 2019. By September, 23 of the clients reported having closed the business for which they have applied for the loan, identifying personal factors (illness) and job opportunities as main reasons to the business closure. These clients were both male (12) and female (11), but while 10 of the male clients are now employees in different activities (transport, industry and agriculture), 8 of the female clients are domestic workers.

For the 94% of the clients who declared running an active business, the **average business ownership time** was 4.8 years. However, there was a large variation in respect to **management experience** as this indicator varied between less than 6 months to 40 years. 112 cases (33%) were new businesses with 1 year or less, which is comprehensible considering the age structure of the client sample.

By the time of the application to FACES loan, for the majority of the clients, **businesses revenues** were either stable (57%) or growing (38%). Before the application, 55% of the respondents have funded the business through their **own funds**; 35% had used some form of **credi**t (other MFI or cooperative – 17.1%, commercial bank – 11.4%, and informal lenders – 6.5%); and 15% had resorted to the financial support of **family and friends.** These options were not exclusive, with 20% of the clients previously combining different sources of funds to develop their businesses.

46% of the entrepreneurs managed a formal business (with a RUC or RISE attributed).12 The level of formality was higher in Loja, where 60% of the businesses were formal, compared with Cariamanga and Catamayo (23% in both cases).

[11] Differences regarding PPI scores are statistically significant at a level of confidence of 95% for the comparisons rural/urban, formal/informal and for the branches of Cariamanga and Loja; while the gender gap is statistically significant at a level of confidence of 90%. For the personal income indicator, statistically significant differences at a confidence level of 99% were identified between female and male clients, and clients with formal and informal businesses.

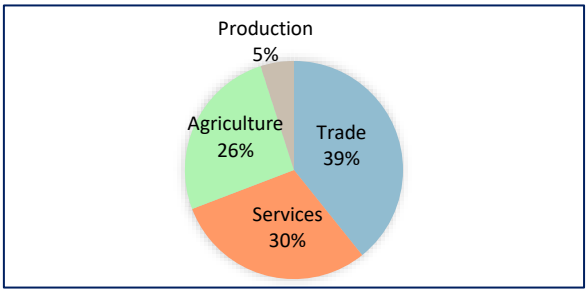
[12] RUC – Registro Único de Contribuyentes; RISE – Régimen Impositivo Simplificado

Looking at the characterisation of the businesses, it is important to take into consideration the local context. Ecuador is an upper-middle income country in Latin America, so the level of formalisation of the businesses is higher compared with businesses supported by Lendwithcare local partners in other countries. As the significant percentage of new FACES clients that have used credit before to fund their business suggests, access to credit is essential for large parts of the population. In many Latin American countries, debt is a part of life (Morvant-Roux et al., 2015). Businesses need continuous access to capital to fund growth, particularly 'young' businesses managed by self-employed without personal collateral to pledge.

75% of the entrepreneurs **work alone**. Only 28 clients (8%) reported having **paid employees**, with the double of this number indicating they had the support of **non-paid employees** in their businesses. Most of the businesses generating paid employment (22) were located in urban areas, mostly in Loja and Catamayo. Non-paid employees were equally reported in urban and rural areas.

The type of activities is displayed in Figure 10. Trade, services and agriculture are well represented in the sample, with agriculture including farming and livestock activities. 25% of the clients reported complementing the main business with permanent (48 cases) or occasional (38) **complementary activities**. These included part-time jobs or other businesses in services or agriculture.

Figure 10 – Client Sample Type of Activities



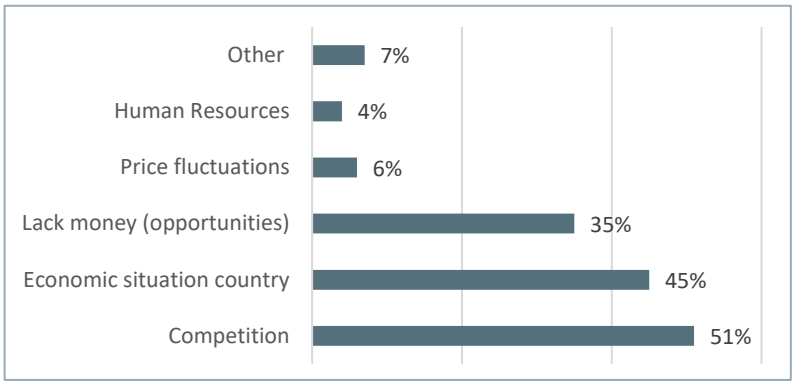
Unsurprisingly, the type of businesses differ between branches. In Malacatos, where the main local productions are coffee, sugar cane, tobacco, cassava and tomato, agriculture related activities were dominant (62% of the active businesses). Trade and services represented 19% each (corresponding to 9 businesses), with no production activities reported among the interviewed clients. This is also the branch where more clients have reported not having an active business (8 cases or 14% of the respondents). Agriculture activities were also the main activity declared in Cariamanga (54%), followed by trade (26%), services (16%) and production (4%).

In contrast, in Loja and Catamayo, the main activities were trade (48% and 42% of the active clients, respectively) and services (38% and 30%). Agriculture and production activities were relatively more important in Catamayo compared with Loja (20% and 8% of the active businesses vs 8% and 6%, respectively). The three city branches in Loja had the lowest percentage of closed businesses (3%).

The two main **obstacles to business growth** identified by the clients were external factors as shown in Figure 11: competition and the economic situation of the country, followed by the lack of money to take advantage

of business opportunities. The category 'Other' in the figure includes personal issues (3.2%), lack of knowledge about the business (2%) and legal requirements (1.7%).

Figure 11 – Perceptions on Business Constraints



5.2.4. Financial practices

The loans obtained by the new clients varied between $300 and $15,000, representing a total of $714,300. Considering the number of loans, the majority were classified as 'acumulación simple' (56% of the loans were between $1,000 and $10,000) or 'minorista' (43% were below or equal to $1,000).

These percentages change if the value of the loans is considered with the credit 'acumulación simple' corresponding to 77% of the sample loan portfolio, which is not very far from the comparative statistic for FACES gross loan portfolio composition in December 2018 (81%). The main difference in this respect is that credit 'minorista' still represents 17% of the loan amount disbursed to the sample clients, whereas it was only 4% of the gross loan portfolio of the institution. Only 1% of the loans (in number) or 6% of the total amount disbursed was associated with loans above $10,000 (acumulación ampliada).

Table 6 shows that there were significant differences between branches in terms of average loan amount, with higher loan amounts being associated with urban areas. The average loan size for the sample is inferior to the average loan size reported in the annual report 2018 ($2,706) due to the greater relevance of credit 'minorista' in the sample.

Table 6 – Average Loan Amount by Branch

	Cariamanga	Catamayo	Loja	Malacatos	Total
Average Loan Amount (USD)	$1,609.52	$1,782.50	$2,366.07	$1,300.00	$1,946,32

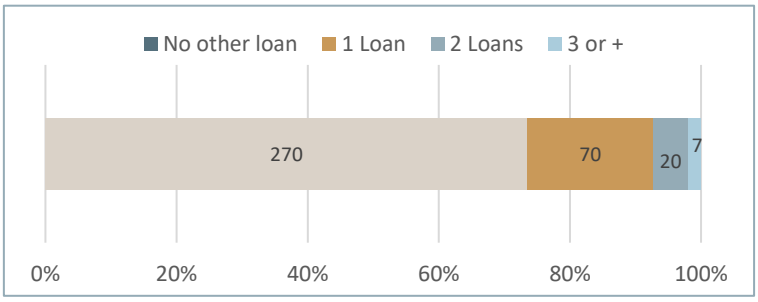
The average duration of the loans is 15 months. Repayment schedules are mainly monthly-based (90%), although there are some cases where installments are due weekly, bi-monthly, quarterly or biannually, with larger repayment periods being usually associated with medium-long term agriculture productions. Clients

have applied for the loan to invest in **working capital** (62%), **grow and diversify the business** (35%), make home improvements (4%) or other uses (4%).[13]

The **simple and quick process** was the first reason pointed out by 59% of the clients for choosing to apply to FACES, with a further 5% presenting this as the second reason. 41% mentioned recommendation from others as first or second reason to apply to the MFI, with the third most referred to reason being lower collateral requirements (26%). Only a small number of clients (15) refer to a comparatively lower cost of the loan. These results align with the information collected during the focus groups where several participants have identified the cost of loans in FACES as relatively more expensive, although some of them recognising that they most probably would be denied access to a loan in other financial providers.

At the time of the interview, 97 clients (26%) were repaying **additional loans**, including 7 who declared repaying 3 or more loans besides the microcredit loan obtained from FACES (figure 12).

Figure 12 – Clients Repaying Additional Loans

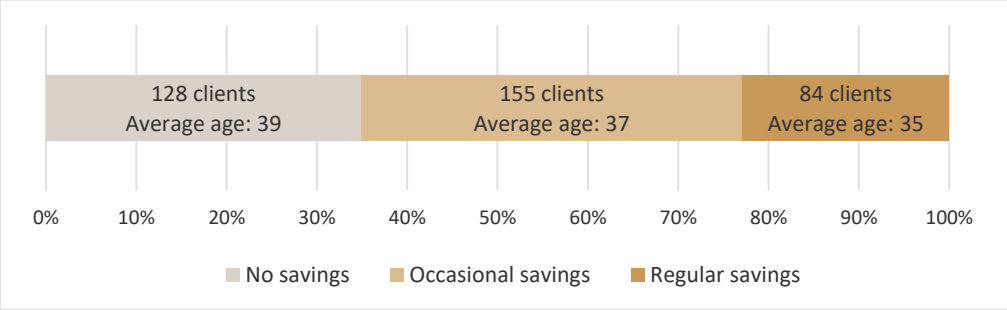


These additional loans were mainly obtained from other MFIs or cooperatives (60 cases) and commercial banks (41 cases). Only two clients declared repaying informal loans, which may be an understatement considering the relevance of informal finance in Ecuador. 61 out of the 97 clients (63%) took the **additional loan to invest in the business,** complementing the loan from FACES; other uses included home improvements or purchase of household assets (18 cases), consumption (13), repayment of other debt (11) and emergences (5).

Figure 13 displays the results regarding **savings**, with the majority of the clients declaring to have saved in the previous 12 months (65%), a figure clearly above the correspondent statistic in the Global FINDEX survey in 2017 (33.9%). However, only 23% of the clients had done this as a regular practice, putting aside a part of the income every month. In addition, the data collected from the new clients seems to corroborate one of the findings of the focus groups, i.e., on average, younger clients are more likely to save more frequently.

[13] Respondents could choose more than one option.

Figure 13 – Savings Frequency (previous 12 months)



Those who have saved used two main mechanisms: 131 of the clients had **formal savings accounts** at commercial banks and cooperatives, while 117 preferred to save at home. Informal savings groups were rarely mentioned, here in line with the Global FINDEX survey (only 5.1% of the respondents declared to have saved at an informal savings club or with a person outside the family).

The clients who declared saving every month were asked if they have a specific **purpose for these savings**, with multiple answers being considered. Invest in the business was mentioned as an objective by 31 clients, followed by response to emergencies (30), education expenses (25), health expenses (15) and acquisition of household fixed assets or home improvements (15).

The questionnaire included also questions regarding private **insurance and remittances**. These are financial services comparatively less used by FACES clients. There was a small percentage of clients whose households had private policies of life or health insurance (13.6%); two clients have mentioned agriculture insurance, which is rarely the case of the small farmers in the region. In regard to remittances received from abroad, although 13.9% mentioned having received money during the previous 12 months, for only 4% this was a regular income.

A final note concerning a non-financial service provided by FACES. Among the new clients, 8% (31) had participated in **training sessions** organised by the MFI considering the sessions useful. These sessions were in different areas, including business (17 clients), financial literacy (9) and health (5). Moreover, 75% of those who had not participated in any of these sessions showed interest in attending future events. These findings seem to be in line with the opinions expressed by the existing clients during the focus groups.

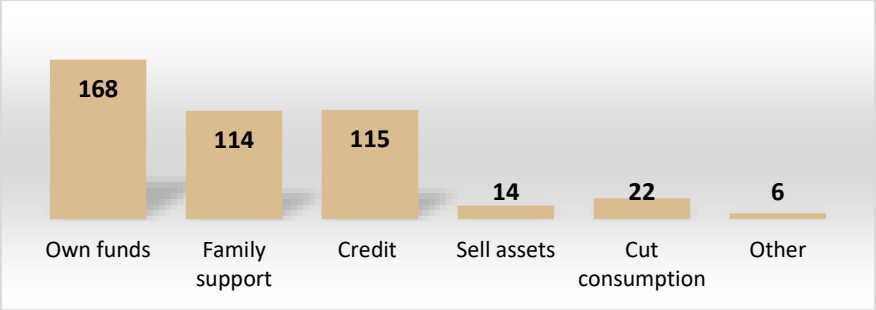
5.2.5. Other information

The questionnaire included questions on **community participation** and the decision process within the household. The results show that only 25 clients report participating in community organisations, including religious, political and social organisations. From those actively participating, 17 were women. Regarding the **decision-making process on money use and household activities,** it is interesting to note that the percentage of clients taking decisions alone regarding the use of money (51%) was higher than regarding daily household activities (41%). In both cases, FACES clients, either alone or jointly with other household member, were involved in these decisions (clients reporting not being involved on money decisions and household activities correspond to 5% and 12%, respectively).

The clients were also asked if they had faced an emergency or external shock during the previous 12 months, and how they had dealt with the costs associated with that event. 40 clients (11%) reported experiencing an external shock, in most cases resulting from the death of a member of the household or a relative. The expenses associated with these shocks (including the organisation of funerals) were covered mainly by own funds (24 cases) or family support (14). There were, however, clients who have resorted to credit (6), selling household assets (2) and cutting consumption (1).

The remaining clients were asked how would they cope with an unexpected large expense (e.g. to pay for a medical emergency), with responses being presented in Figure 14 below. Relatively to the 40 'real' cases, the major difference is the relevance of the use of credit, which is seen as a potential strategy by a significant part of the clients (35%).

Figure 14 – Strategies to Cope with Unexpected Expenses



Note: Responses from 324 clients (possibility of selecting more than one option)

One final note to highlight that 95% of the clients with active businesses were **optimistic** in respect to their business in the near future and, similarly, 97% of all respondents declared to be optimistic regarding their personal and family lives.

5.3. Rural and urban clients

The analysis into client heterogeneity focused mainly on location inequalities as statistically significant differences between rural and urban clients were found for many of the variables at the individual level.[14] There are 92 clients located in rural areas, half of them associated with the branch of Malacatos.

Table 7 highlights the main differences between the rural and urban respondents.

[14] Detailed results of the non-parametric statistical tests conducted can be consulted in Annex II.

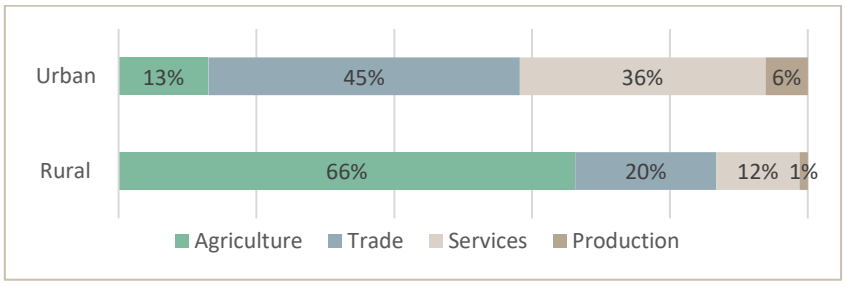
Table 7 – Rural vs Urban Clients: Differences at Individual Level

Variable (average)	Age (years)	Only Primary School (%)	Business Time (years)	Formal Business (%)	PPI score (0-100)	Home-owners (%)
Rural clients	35	27%	4.0	23%	56	62%
Urban clients	38	17%	5.0	53%	68	45%

Other statistically significant differences include:

- Percentage of clients working alone in the business and total employment: the percentage of entrepreneurs working alone in the business was lower for the rural businesses (51%) compared with their urban counterparts (80%). Understandably, the number of 'jobs' (paid or unpaid) associated with the active businesses was higher for the rural businesses (1.5 vs 1.2 workers).
- Clients from rural areas were more likely to complement their main business with other activities (34% vs 20% for the urban clients).
- There were, as predictable, differences regarding the type of activities developed in rural and urban areas, as it can be observed in Figure 15.

Figure 15 – Rural vs Urban Clients: Type of Activities



No statistically significant differences between rural and urban clients were found regarding financial practices (savings frequency, insurance, remittances), the prevalence of chronic health problems within the household, and income indicators.

5.4. Comparison with non-clients

The sample of non-clients includes 247 households, with the composition of the sample in terms of geographic distribution not differing much from the client sample (Table 8).

Table 8 – Non-client Sample Location/Gender Distribution

	No.	(%)		No.	(%)
Female	162	66%	**Cariamanga**	49	20%
Male	85	34%	**Catamayo**	64	26%
			Loja	100	40%
Rural	43	17%	**Malacatos**	34	14%
Urban	209	83%	**Total**	247	100%

There are, however, some differences regarding gender, with a lower percentage of women in the client sample (58%); and percentage of households located in rural areas, which is higher for the clients (25%). The analysis has taken into account the observed average differences between the sub-groups as well as the results of non-parametric statistical tests on the equality of the variable means (detailed results in Annex III). The main findings were:

- Non-clients were older (42 vs 37 years for the clients) and more likely to be married (62% vs 49%).
- They were more likely to live in their own house (59% vs 50%) and have a car for exclusive personal use (26% vs 18%).
- They were more likely to manage a formal business (71% vs 46%) and to be more experienced in managing the business (6.5 vs 4.8 years).
- Despite trade being the main type of activity for clients and non-clients, it had a much greater weight for the non-clients (65%) compared with the clients (39%). In contrast, agriculture-related activities were substantially more important for the clients (26%) than for the non-clients (8%). Non-clients were less likely to declare additional activities (17% vs 25%).
- Half of the non-clients interviewed reported not having saved during the previous 12 months, a percentage significantly higher than for the clients (35%), although still lower than the findings of the Global FINDEX survey at national level (66%).
- The average PPI score was higher for the non-clients (69.9 vs 65.3), indicating a lower probability of the households being identified as poor. This may in part result from a more urban sample in the case of the non-clients.

In what concerns the impact assessment, it would be desirable that these differences for the variables of interest are minimal so that the sub-group of non-clients can be a strong control group in the longitudinal analysis. In our study, the main variables are the PPI scores and income indicators, as well as their variation in future rounds of the survey. The tests conducted allow to conclude that, although PPI scores are significantly different when analysing the whole sample (614 observations), these differences are not significant when comparing sub-groups (i.e. rural clients and non-clients, or urban clients and non-clients). Neither are there significant differences between clients and non-clients for the income indicators.

6. Recommendations and Conclusions

The report presents the main findings of the baseline survey conducted in Ecuador within the LWC impact assessment project. It gives a detailed description of the new clients in the selected branches of FACES in 2019. At this moment, it sets the ground for the longitudinal study, hence the recommendations included in this section focus mainly on the following stages of the project.

The analysis of the indicators included in the survey seems to suggest that the sample of clients participating in the household survey presents some differences regarding the total population of clients of the MFI. Having as reference FACES annual report 2018, it can be noted that there are relevant differences in respect to location in rural or urban areas and, associated with this, to type of activity/business. The majority of the clients in the sample survey live in urban areas (75%), which contrasts with only 38% for the total population of the institution. They run mainly trade and services businesses (39% and 30%, respectively), followed by agriculture-related activities, including cattle breeding (26%), whereas in the institution's portfolio the main sector funded is agriculture and related industries (42%). These differences most likely result from the branch selection, implying that while the results are representative of the clients supported by LWC, there should be some caution when extrapolating results for the whole institution and comparing with other studies where different sampling criteria were used.

The findings of the survey show that there are significant differences between rural and urban clients (and non-clients), and these should be considered in the preparation of the questionnaire for the second round of the survey. However, in order to maintain a short questionnaire, these issues may alternatively be explored through other methodologies, including focus group discussions or in-depth interviews with a small number of selected cases (e.g, one very good and one bad example in terms of income generation for rural/agriculture clients and urban/trade clients).The survey results also point towards differences between clients managing formal and informal businesses. Indeed, formality appears in different analysis as a major factor for the differences found between different segments of clients. It is, thus, recommended that in the next round of the survey, particular attention should be given to the impact of formality on the growth of the businesses and the economic situation of the households.

In regard to the timeline of the project, the next round of the household surveys should be implemented after clients have finished repaying their first loan, or have paid a significant part of the loan amount. Since the average duration of loans in the sample is 15 months, the suggested period for implementation of the second wave of the survey is March - April 2021. By this time, there will be a group of clients that will not have completed repaying their first loan, which should be taken into account in the analysis.

Finally, the experience during the implementation of the survey as well as the findings presented in this report, call for a thorough preparation of the second questionnaire and an intensive training period of the enumerators, especially if recruiting a different team of interviewers.

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Annexes

- Annex I – Non-parametric Tests on differences on PPI and Income Indicators
- Annex II – Statistical Tests comparing Rural and Urban Clients
- Annex III – Statistical Tests comparing Clients and Non-clients

Box 2 – Non Parametric Tests

The results presented in the three following annexes are based on the implementation of non-parametric tests using STATA16, namely the Wilcoxon rank sum and the Kruskall Wallis tests.

These are used to test the null hypothesis of the distribution of the selected variables being equal for defined sub-groups. In practice, this means that if the test probability (*p*) is inferior to 5%, the null hypothesis is rejected and the existence of differences between the sub-groups for that variable is demonstrated at a level of confidence of 95%. In the tables, these cases are highlighted in bold and the conventional notation - * for a significance level of 10%, ** for a significance level of 5% and *** for a significance level of 1% - were used.

The sub-groups are associated with clients' characteristics and they were chosen considering the results from the baseline survey and qualitative information collected throughout the project. In Annex I, dummy variables were used to define the sub-groups regarding location (branches), gender (female), rural/urban (rural) and formality of the businesses (formal). The tests focus on PPI, income and expenses indicators. Annex II extends the analysis in regard to the sub-groups based on the rural/urban classification to most variables included in the questionnaire. Annex III presents the results for the same list of variables but for sub-groups based on the participation in the microcredit programme for the total sample (clients vs non-clients), and also for the rural sample (rural clients vs rural non-clients) and the urban sample (urban clients vs urban non-clients).

Annex I - Non-parametric Tests on differences on Client PPI and Income Indicators

Dummy Variable (1)	PPI Score		Monthly Personal Income		Monthly Household Income		Monthly Household Expenses	
	Statistic	*p*	*Statistic*	*p*	*Statistic*	*p*	*Statistic*	*p*
Cariamanga	**3.148 (***)**	**0.0016**	**2.246 (**)**	**0.0247**	**2.371 (**)**	**0.0177**	-1.320	0.1869
Catamayo	0.641	0.5213	-1.656 (*)	0.0977	**-2.105 (**)**	**0.0353**	**-2.904 (***)**	**0.0037**
Loja	**-3.620 (***)**	**0.0003**	-1.926 (*)	0.0541	-1.103	0.2701	1.441	0.1495
Malacatos	0.979	0.3289	**2.152 (**)**	**0.0314**	1.412	0.1581	**2.667 (***)**	**0.0077**
Female	1.791 (*)	0.0734	**2.824 (***)**	**0.0047**	0.315	0.7529	-0.849	0.3957
Rural	**4.583 (***)**	**0.0000**	1.183	0.2368	1.559	0.1191	**2.817 (***)**	**0.0048**
Formal	**-2.777 (***)**	**0.0055**	**-4.156 (***)**	**0.0000**	**-4.067 (***)**	**0.0000**	**-3.369 (***)**	**0.0003**

Annex II – Non Parametric Tests comparing Rural and Urban Clients

Quantitative variables	***Statistic***	***P***
PPI Score	**4.583 (***)**	**0.0000**
Monthly Personal Income	1.183	0.2368
Monthly Household Income	1.559	0.1191
Monthly Household Expenses	**2.817 (**)**	**0.0048**
Loan Amount	1.673 (*)	0.0944
Age	**2.365 (**)**	**0.0180**
No. Workers in the HH	-0.105	0.9163
Business Time	**2.251 (**)**	**0.0244**
Total Employment	**-2.980 (***)**	**0.0029**
Working hours/week	1.698 (*)	0.0894
Food Expenses in HH Expenses	-0.007	0.9943

Categorical Variables	*Statistic*	*p*
Education Level	**6.812 (***)**	**0.0091**
Sales	0.209	0.6473
Savings Frequency	0.161	0.6886

Dummy Variable	***Statistic***	***P***
Own house	**-2.737 (***)**	**0.0062**
Rented house	**4.289 (***)**	**0.0000**
Car for Personal Use	**2.613 (***)**	**0.0090**
Formal	**4.858 (***)**	**0.0000**
Agriculture	**-9.174 (***)**	**0.0000**
Trade	**4.201 (***)**	**0.0000**
Services	**4.235 (***)**	**0.0000**
Production	1.866 (*)	0.0620
'Solo' worker (1)	**3.436 (***)**	**0.0006**
Complementary Activities	**-2.979 (**)**	**0.0290**
Private Insurance	0.888	0.3743
Receive Remittances	-0.083	0.9337
Chronic Health Problems	0.145	0.8846
External Shocks	1.509	0.1313
Assets Acquisition	1.432	0.1520
Improvements House	-0.109	0.9136

Notes:

1. Wilcoxon rank sum tests were used for the quantitative and dummy variables, and Kruskall Wallis for the categorical variables.
2. Total Employment includes the entrepreneurs and any paid or unpaid employees (each part-time employee was counted as 0.5). 'Solo' worker refers to clients without employees (paid or unpaid).
3. The variables concerning private insurance policy, receiving remittances from abroad, prevalence of chronic health problems in the household, external shocks, acquisition of household assets and improvements in the house were asked in reference to the previous 12 months.
4. Sales corresponds to the evaluation of the revenues in the previous 12 months (growing, stable or decreasing), as reported by the clients. Savings Frequency refers also to the previous 12 months, with clients choosing the option that most represented them - never saved, saved occasionally or saved every month.

Annex III – Non Parametric Tests comparing Clients and Non-Clients

Variables	*Total Sample*		*Rural Sample*		*Urban Sample*	
	Statistic	*P*	*Statistic*	*P*	*Statistic*	*P*
PPI Score	**2.435 (**)**	**0.0149**	1.747	0.8060	1.432	0.1522
Monthly Personal Income	1.064	0.2876	-0.260	0.7949	1.194	0.2325
Monthly HH Income	1.325	0.1853	-0.327	0.7440	1.442	0.1494
Monthly Household Expenses	**2.299 (**)**	**0.0215**	-0.247	0.8048	**2.360 (**)**	**0.0183**
Age	**4.690 (***)**	**0.0000**	**4.673 (***)**	**0.0000**	**2.656 (***)**	**0.0079**
No. Workers in the HH	-0.337	0.7362	1.416	0.1569	-0.912	0.3619
Business Time	**2.563 (**)**	**0.0104**	**2.523 (**)**	**0.0117**	1.333	0.1824
Total Employment	1.093	0.2746	-1.257	0.2089	**2.110 (**)**	**0.0348**
Working hours/week	**5.414 (***)**	**0.0000**	**2.966 (***)**	**0.0030**	**4.396 (***)**	**0.0000**
Food Expenses in HH Expenses	0.671	0.5020	0.901	0.3678	4.396	0.7493
Married	**3.143 (***)**	**0.0017**	**2.280 (**)**	**0.0226**	**2.397 (**)**	**0.0165**
Own house	**2.218 (**)**	**0.0266**	1.336	0.1817	**2.199 (**)**	**0.0279**
Rented house	-0.997	0.3186	0.932	0.3514	-1.838 (*)	0.0661
Car for Personal Use	**2.444 (**)**	**0.0145**	0.580	0.5619	**2.037 (**)**	**0.0417**
Formal	**6.086 (***)**	**0.0000**	**3.792 (***)**	**0.0001**	**4.571 (***)**	**0.0000**
Agriculture	**-4.986 (***)**	**0.0000**	**-3.851 (***)**	**0.0001**	**-2.599 (***)**	**0.0093**
Trade	**6.802 (***)**	**0.0000**	**3.741 (***)**	**0.0002**	**5.404 (***)**	**0.0000**
Services	-1.610	0.1073	1.619	0.1054	**-2.716 (***)**	**0.0066**
Production	-0.104	0.9172	1.329	0.1839	-0.696	0.4866
'Solo' worker (1)	-0.634	0.5263	1.369	0.1710	-1.758 (*)	0.0788
Complementary Activities	**-2.202 (**)**	**0.0277**	**-2.657 (***)**	**0.0079**	-0.813	0.4161
Private Insurance	**2.300 (**)**	**0.0214**	1.943 (*)	0.0521	1.577	0.1149
Receive Remittances	.	.	-0.071	0.9432	-0.831	0.4058
Health Problems	1.398	0.1621	1.345	0.1787	0.921	0.3569
External Shocks	-0.341	0.7331	-0.341	0.6704	-0.397	0.6911
Assets Acquisition	0.764	0.4451	-0.040	0.9678	0.0644	0.5198
Improvements House	-0.121	0.9040	-0.315	0.7526	0.015	0.9884
Education Level	0.272	0.6022	0.251	0.6162	0.194	0.6599
Sales	**7.192 (***)**	**0.0073**	**4.019 (**)**	**0.0450**	**4.415 (**)**	**0.0356**
Savings Frequency	**12.022 (***)**	**0.0017**	**5.682 (**)**	**0.0171**	**7.743 (***)**	**0.0054**