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Fostering investment of the family remittances in value chains

Case studies in the Dominican Republic,
El Salvador and Guatemala

Ramón Padilla Pérez
Federico Stezano
Francisco G. Villarreal



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This document was prepared by Ramón Padilla Pérez, Chief of the Economic Development Unit of the Economic Commission for Latin America and the Caribbean (ECLAC) subregional headquarters in Mexico, Federico Stezano, Economic Affairs Officer with the same Unit, and Francisco G. Villarreal, Economic Affairs Officer with the Economic Development Division of ECLAC. The Commission is grateful for the financial support it received from the International Fund for Agricultural Development (IFAD) and the European Union to carry out the case studies this document is based on.

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Introduction

Family remittances, defined as recurrent transfers by migrant workers abroad to their families in the country of origin, are a major source of external funding for many countries. In 2018, family remittance flows to the countries of Latin America and the Caribbean totalled 91.05 billion dollars, representing over 30% of GDP in Haiti, about 20% in El Salvador and Honduras and over 10% in Guatemala, Jamaica, and Nicaragua.

At the aggregate level, remittances contribute to poverty reduction, increased private consumption and economic growth in the receiving country, among other things. At the household level, they increase economic resources and well-being, and this is reflected in greater consumption and availability of resources to meet education, housing, and health needs. At the global level, approximately 75% of remittances received are used to cover the basic needs of recipient households (food, health, and housing), thus helping to achieve the Sustainable Development Goals (SDGs) where these households are concerned (IFAD, 2017). Remittances also have the potential to boost economic growth through investment in income-generating activities, with multiplier effects in the areas where remittances are received as these trickles down through the local or regional economy.

However, the use of family remittances in income-generating productive activities and entrepreneurship is still low (Finkelstein and Mandelman, 2016; Woodruff and Zenteno, 2007). One factor limiting investment in activities capable of generating income from these resources is that they are usually too fragmented among remittance-receiving households for these to be able to finance production projects with them. Other constraints include limited business capabilities, low

returns on local investments and lack of confidence in macroeconomic stability (Gundel, 2002; Delgado Wise and Rodríguez, 2001).¹

This document summarizes the main findings of the technical collaboration project carried out by the Economic Commission for Latin America and the Caribbean (ECLAC) and the International Fund for Agricultural Development (IFAD) with the governments of the Dominican Republic, El Salvador and Guatemala with a view to fostering greater investment of remittances in selected value chains.² A key point at the outset was to recognize the strictly private nature of family remittances. The work carried out with recipients and senders of these resources and the strategies designed always centred on the realization that the only way to secure investment of a portion of remittances in value chains was through incentives, advice, and facilitation measures.

A second key element is the need to supplement family remittances with additional resources from the financial system so that productive investment initiatives are large enough to significantly impact the economic and social upgrading of the value chain. Accordingly, strategies to promote greater financial inclusion are another key part of the proposal summarized in this document.

The document is organized into six sections. The first presents the background to the collaboration between ECLAC and IFAD, and between them and the governments of the Dominican Republic, El Salvador, and Guatemala. The second section sets out the key elements of the methodology used. The third section discusses the most salient features of the three value chains selected. The fourth section presents the central analysis of the document, discussing what is entailed by the link between remittances, financial inclusion processes and the implications of investing family remittances in productive activities. Setting out from this last point, the fifth section briefly describes a set of strategies and lines of action based on the empirical evidence discussed previously and international good practices and aimed at fostering investment of family remittances in value chains. The final section concludes with six lessons learned from the analysis of the three case studies on the link between financial inclusion, the use of remittances for productive activities and investment in strengthening value chains.

¹ Empirical evidence on the economic contribution of remittances to recipient countries is abundant. Their contribution is significant in terms of consumption, education, housing and access to health services, among others. However, remittances can also have adverse effects on local economies, such as a decrease in labor supply or pressure on the exchange rate, which is commonly known as Dutch disease (Padiilla Pérez, Santamaría and Villarreal, 2020).

² The "Economic and Social Upgrading of Rural Value Chains through Innovative Financial Inclusion Policies to Leverage the Use of Remittances and Diaspora Investment in Latin America and the Caribbean" project was implemented by ECLAC between 2017 and 2020, with funding from IFAD and the European Union. The project results and publications, which present the case studies in detail, are available on the following website: <https://www.cepal.org/es/proyectos/cepal-fida-cadenas-valor>.

I. Background

The technical collaboration initiative undertaken with the aim of fostering investment of remittances in value chains is part of a broader collaboration between ECLAC and IFAD on the analysis and development of strategies and policies to diversify and strengthen economic activities in rural areas. A key instrument in these efforts have been public policy analyses and proposals for strengthening rural value chains in Latin America and the Caribbean, where one of the most common and persistent constraints is restricted access to sources of financing.^{3 4} These initiatives have been part of ECLAC efforts to formulate and implement public policies aimed at structural change conducive to progress towards more knowledge-intensive sectors, with improved social conditions and environmental sustainability (ECLAC, 2014).

An initiative launched by the IFAD Financing Facility for Remittances (FFR) and the ECLAC subregional headquarters in Mexico with funding from the European Union seeks to contribute to the design of strategies and policies for improving the quality of life of remittance-sending migrant workers and their families through economic and social upgrading of rural value chains.

In line with recent IFAD and ECLAC collaborations on value chains (Padilla, 2017)⁵ and financial inclusion (Villarreal, 2017), government authorities in the Dominican Republic, El Salvador and Guatemala were contacted with a view to working on three value chains. The Ministry of Economic Affairs of El Salvador selected the tomato and green pepper chain, the Ministry of Economic Affairs

³ Between 2014 and 2017, with financial support from IFAD, ECLAC provided five countries in the region (Costa Rica, the Dominican Republic, El Salvador, Guatemala and Mexico) with technical assistance in the design of strategies to strengthen rural value chains. For further information, see Padilla (2017) and Padilla and Oddone (2016 and 2017).

⁴ In 2018, ECLAC began a new collaboration with IFAD in the context of the new rural paradigm, with the aim of highlighting territorial disparities and contributing to national development strategies for progress on the Sustainable Development Goals and well-being in rural areas. For further information, see Gaudin (2019), Fernández, Fernández and Soloaga (2019) and Dirven and Candia (2020).

⁵ See footnote 2 of this document.

of Guatemala asked for efforts to be focused on the tourism chain in the department of Sacatepéquez, and the Ministry of Industry, Commerce and Micro, Small and Medium-sized Enterprises of the Dominican Republic chose the dairy chain to work with. The selection criteria and the characteristics of the chains are detailed in the following section.

The subject matter of this paper arose from the conjunction of three branches of the economic development literature that have rarely been analysed together: migration and remittances, financial inclusion, and production development (with a focus on value chains). Firstly, the project summarized here sets out from a cyclical conception of international migration.⁶ Actions to promote greater investment of remittances in value chains are aimed at improving the economic and social conditions of communities so that their people are not forced to migrate. At the same time, by generating new economic activities and strengthening existing ones, they create incentives for migrants to return to their communities of origin (Rosado, Villarreal and Stezano, 2020).

Remittances, defined as “the transfers of the wages or cumulative resources that migrants make, primarily to their country of origin, and are used to support dependants, repay loans, make investments and for other purposes” (ECLAC, 2020, p. 9), are a direct consequence of migration. According to empirical studies conducted by IFAD on migrants and the use of remittances around the world, it is estimated that a migrant worker spends 75% of his or her income on expenses in the host country, sends about 15% as remittances to relatives in the country of origin and saves the remaining 10%. Some 75% of the remittances sent are used to cover immediate needs and about 25% go towards saving or investments. This distribution varies by country and migrant profile, but in general the amount allocated to saving and investment is the smaller (IFAD, 2017).

Secondly, the studies mentioned introduce the perspective of financial inclusion resulting from the receipt of remittances. This means not only increasing people’s access to financial services but improving the conditions in which they are used. Effective financial inclusion entails access to a wide range of formal financial services, i.e., services offered by regulated financial institutions that meet people’s financial needs and are provided on an ongoing basis and on affordable and attractive terms (IFAD/World Bank, 2015). Financial inclusion is not an end in itself but an instrument that has the potential to enhance people’s well-being by facilitating transactions and the safe accumulation of assets, with the ability to leverage available assets for investment in human and physical capital; by minimizing any loss of well-being through the reduction of risk associated with unexpected events; and by allowing consumption to be spread over time (Rosado, Villarreal and Stezano, 2020).

Lastly, the value chain approach is used for empirical analysis and public policymaking purposes. Value chains are understood as the set of activities required for a product or service to pass through the different stages from conception to delivery to consumers and final disposal after use. The different stages in the production and delivery of a product or service are known as links. Each link is made up of a group of companies and producers that compete or cooperate in providing the good or service (Padilla and Oddone, 2016).

⁶ Migration is not a linear process but is characterized by cycles and differences in each of its stages. The main stages of the cycle are departure, transit, arrival, settlement, integration and return (ECLAC/FAO, 2018).

The value chain methodology used in the collaborations between ECLAC and IFAD is characterized by a comprehensive and systemic approach to analysis and a participatory approach to implementation that focuses on the active participation of stakeholders in the different value chain links and of those responsible for designing and implementing public policies that affect value chain performance.

Two key concepts when it comes to strengthening value chains are economic upgrading and social upgrading. Economic upgrading means the economic transformation of the links in the chain, and of the chain as a whole, so that they move towards better products and services, improved production processes or more knowledge-intensive activities with greater value added. In rural value chains such as the three mentioned as forming the basis of this document, economic upgrading occurs, for example, when the quality of an agricultural product is improved by the incorporation of new technologies, when a new agricultural crop technique is introduced (precision agriculture, soil analysis, use of ecological fertilizers, new forestry practices), when commodities are processed into agro-industrial products, when new actors are incorporated into service provision, when market access improves and when economic activities are made to yield higher incomes.

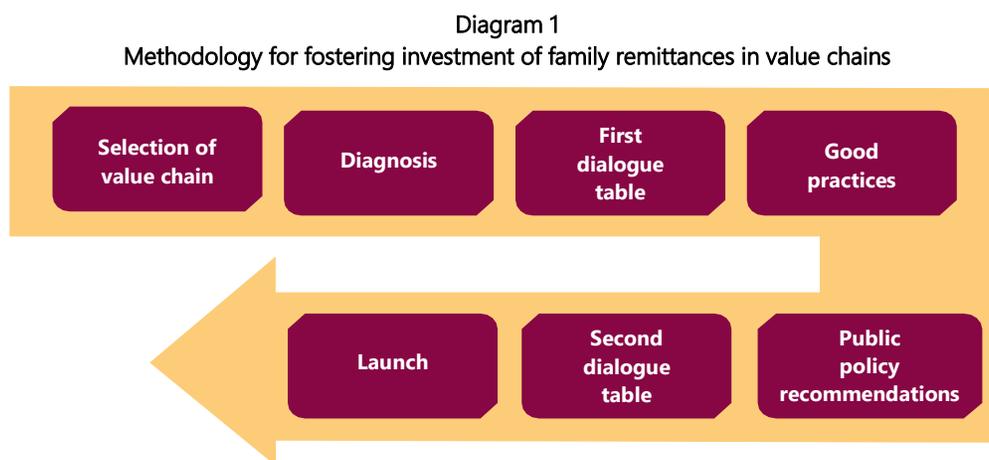
Social upgrading refers to the impact of improved value chain performance on the quality of life of members of the chain and their communities in the form of greater and better labour market participation with decent employment conditions, better wages, social protection, labour rights and a safe working environment (Padilla and Oddone, 2016). In the past two decades, the role of remittances in the development process has been approached from the perspective of the debate about the link between migration and development (Nyberg-Sørensen, Van Hear and Engberg-Pedersen, 2002). Remittances affect this link because they operate as an enabler of development impacts once migration occurs.

In view of this, a process linking development, migration and remittances can be identified. If development is conceived as a process involving changes in social and economic structures (Rosado, Villarreal and Stezano, 2020), remittances can be seen as a critical factor in development, since they provide additional resources that ease the budgetary constraints on the households receiving them. These resources are mainly used for food, health care, education, housing and, to a much lesser extent, for investment in income-generating productive activities. Another widely recognized effect of remittances is their ability to act as a driver of financial inclusion.

In low-income countries, remittances are often the spur for recipients' first interactions with financial institutions, fostering them to use financial services such as credit, saving and insurance. In this way, remittances support some social transformations essential to development (Carling, 2020). Collaboration with the governments of the Dominican Republic, El Salvador and Guatemala made it possible to design specific intervention strategies to integrate production development and financial inclusion policies, the aim being to use family remittances to strengthen rural value chains.

II. Methodology

The methodology used to prepare the diagnosis and design the strategies is systematized in a methodology guide.⁷ The main components are summarized below. Earlier experience with efforts to strengthen value chains⁸ was drawn on to develop a methodology for the design of strategies to promote greater investment of family remittances in value chains. This consists of seven steps, as illustrated in diagram 1.



Source: Prepared by the authors.

⁷ See *Designing Strategies to Promote Investment of Family Remittances in Value Chains: A Toolkit*, in ECLAC (2020).

⁸ See Padilla Pérez y Oddone (2016).

A. Selection of value chains

There need to be criteria for selecting the chains in which efforts are to be strategically concentrated, given the administrative and resource constraints that governments face. These decisions must be taken as part of a development strategy, and in the interests of transparency it is desirable for them to be made explicitly and openly, rather than implicitly and opaquely (Ocampo, 2014).

The selection can be based on both quantitative and qualitative criteria. The former involves the construction of indicators that estimate the contribution of the chain to the fulfilment of national, regional, or sectoral objectives. With regard to the strengthening of value chains through investment of family remittances, a key indicator is the presence of families receiving these resources in the regions and the production activities associated with the chain. Other indicators to be considered concern the characteristics of the value chain and its potential to promote local development in terms of creating jobs, incorporating small producers and creating greater value added, among other things.⁹ Qualitative indicators align with national priorities relating, for example, to regional or sectoral development. In the particular case of the effort to enhance the role of remittances in the economic and social upgrading of value chains, the selection criteria should include the relative scale of the remittances received in the chains selected.

B. Diagnosis

This stage falls into two parts: diagnosis of the value chain and a review of actors in the chain to determine their degree of financial inclusion, the remittances they receive and the use they make of them. The aim of the first part is to identify constraints on efforts to strengthen the value chain. Constraints, also known as bottlenecks, are the obstacles or problems affecting the links in the chain or the chain as a whole (systemic constraints) that make proper functioning or coordination difficult and stand in the way of economic and social upgrading. A particular concern is to analyse how family remittances can be used to overcome the constraints faced by the actors in the chain being studied. This means identifying the incentives required to induce migrants who send remittances, and the families receiving them, to invest a portion of them in income-generating activities.

For the second part of the diagnosis, a questionnaire was designed and applied to a representative sample of chain actors to obtain fuller information on aspects related to financial inclusion and to the receipt of remittances and their possible investment in income-generating productive activities in order to overcome the constraints on economic and social upgrading of the value chain. The questionnaire included 61 questions, organized into four sections: economic participation, financial inclusion, remittances, and sociodemographic characteristics.

Continuing with the systemic approach to studying the value chain, the surveys were supplemented by interviews with actors identified as playing key roles in relation to remittances and financial inclusion in addition to those already included in the initial diagnosis, examples being the bank supervisory authority, remittance companies, development banks and ministries of foreign affairs (because of their links to the diaspora). In this way, value chain analysis provides a means of identifying opportunities for investing family remittances in income-generating activities by distinguishing challenges and opportunities in each link of the chain. It also provides tools for

⁹ See Gomes, Padilla and Villarreal (2017) for further details of the chain selection process.

identifying particular interventions within links, targeting groups of actors with the fewest capabilities.

C. Dialogue tables

As mentioned, a core feature of the methodology is its participatory spirit. Chain actors, along with public, private, and academic organizations, are involved from the outset of the process (the setting of meta-objectives and selection of the chain) and in the various stages of information-gathering for the preparation of the appraisal. The dialogue table discussions are a vital stage in this collective involvement. The dialogue or round tables are meetings at which the various actors in the value chains and the public and private bodies that regulate and provide support and services to the chains are presented with and discuss an initial diagnosis or set of strategies, sharing views and experiences. This methodology calls for round tables to be held at two particular points in the process, to validate and further develop the information processed in the diagnosis and the strategies.

D. Good practices

Good practices complement the diagnosis as an input for strategy design. Research into good practices is based on the selective observation of a set of experiences in different contexts, the aim being to identify those that can be extrapolated to the situation that needs changing. To identify good practices in relation to the financial inclusion of remittance recipients and to promote greater investment of remittances in value chains, the first step taken was an exhaustive review of the literature on international experiences that could be extrapolated to the countries being studied, with particular emphasis on the usefulness of financial services for promoting investment in income-generating productive activities among remittance recipients. Once the success stories had been identified, the best practices common to them were extracted. Subsequently, interviews were conducted with key actors to obtain more detailed information on the cases selected. Lastly, the good practices were discussed and further developed in meetings and forums with experts.

E. Strategy design

Strategy design sets out from the constraints and opportunities identified in the diagnosis, and from good practices. Specific micro-level strategic lines are developed, ideally leading to the identification of implementation responsibilities and timeframes. In accordance with the logical framework methodology, strategy design started with the construction of a decision tree. This serves, first, to systematize the causes giving rise to an identified constraint or a barrier preventing opportunities from being adequately exploited and, second, to identify the means of dealing with them and the results expected. The next step is to develop the strategies, each with specific lines of action. These are elaborated further and validated in working meetings with representatives of public bodies and the financial sector, and subsequently at the second dialogue table.

F. Launch

This is a participatory and media-oriented event at which the authorities responsible for implementing the policies designed to deal with the constraints convene representatives of the links in the chain and announce the commitments made. Publicizing this event promotes consensus among the actors and serves as a demonstration of effectiveness to other chains that would like to initiate a similar process. The next challenge, implementation, is beyond the scope of this methodology guide and lies with the local public and private actors who have expressed their interest in and commitment to the process. The resources available and the steps to be taken will be determined once the strategies have been prioritized and the main decision-makers identified.

III. Value chains selected

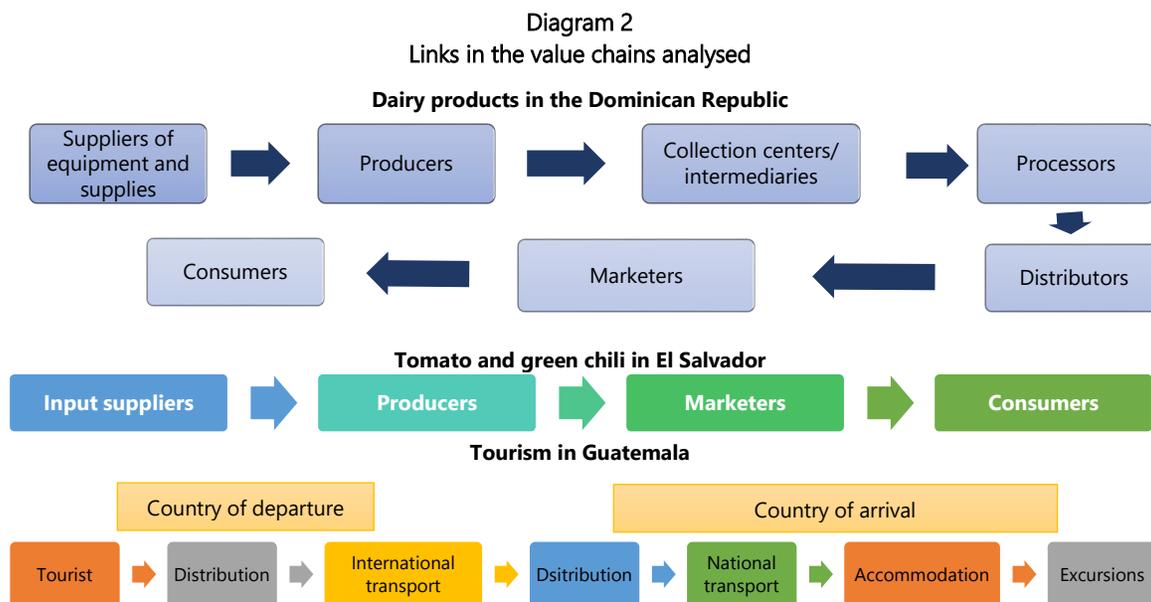
The three chains selected all share a significant rural component. In this framework, the study adopted a broad definition of the rural environment that combines economic, demographic, and territorial criteria, so that it includes not only primary activities but also agro-industry, handicrafts, and services, such as rural tourism. The analysis thus incorporates a new rurality concept that recognizes the profound transformations rural areas have undergone, such as the growing importance of non-agricultural employment and the increase in connectivity and interaction with urban and intermediate spaces (Gaudin, 2019).

Ministries in each country were responsible for selecting a value chain, starting out in each case from the chains worked with earlier as part of the assistance provided by ECLAC and IFAD. The three value chains analysed represent cases from three different rural contexts: (i) a processing chain (dairy products in the Dominican Republic); (ii) a commodity chain (tomatoes and green pepper in El Salvador); and (iii) a service chain (rural tourism in Sacatepéquez, Guatemala).

The three value chains have a predominantly rural character, but with incredibly significant productive, economic, and technological differences, which gives room for cross-lessons. That of the tomato and green chili is a traditional agricultural chain strongly concentrated in primary activities. The cultivation of vegetables in El Salvador is concentrated in seven of the 14 departments of the country. Great heterogeneity is observed among producers in terms of harvested surface area, capacities, and productivity. The productive structure of the chain is of a traditional type, with little technification; the producers are atomized and with few commercial farms. The plantations of tomato and chili producers are distinguished by the small size of their plots and the low volume of their production. The vast majority of Salvadoran tomato and sweet green chili producers sow open-air (96.6%). The total number of registered vegetable producers in 2014 was 28,929, among them commercial (25,975) and subsistence (2,954) producers (Oddone and others, 2017).

The dairy chain in the Dominican Republic combines the primary activities of livestock and milking with the transformation and marketing of milk and derived products such as cheeses and sweets. National livestock production involves some 58,000 producers who are responsible for raising and reproducing livestock; Of these, around 17,000 are dedicated exclusively to milk production, while the rest are used for dual-purpose production: meat and milk (Gomes and Oddone, 2017).

The conceptualization of the rural tourism value chain in the department of Sacatepéquez in Guatemala is based on the recognition that it is tourists who move between the services provided by the different links in the value chain. One prominent feature of the chain is that the urban area of La Antigua Guatemala serves as a hub for the economic and social activities of the surrounding municipalities, which are mainly rural. Approximately one third of the international tourists who visit Guatemala go to La Antigua Guatemala, a total of some 650,000 people (Oddone and Alarcón, 2017). In 2019, as part of the analysis of the value chain and remittance use, the sample framework identified a universe of 1,235 tourism service providers (hotels, restaurants, tour operators and artisans, among others) (López, Padilla and Villarreal, 2020). Diagram 2 shows the links that make up each of the value chains studied.



Source: Prepared by the authors on the basis of R. Padilla, *Rural Industrial Policy and Strengthening Value Chains* (LC/PUB.2017/11-P), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2017; R. Padilla, J. Santamaría and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de tomate y chile verde en El Salvador", *Projects Documents* (LC/TS.2020/19; LC/MEX/TS.2020/84), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020; J. López, R. Padilla and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de turismo de Sacatepéquez en Guatemala", *Projects Documents* (LC/TS.2020/85; LC/MEX/TS.2020/20), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020 y R. Gilbert, R. Padilla and F. G. Villarreal, "Estrategias para para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de lácteos en la República Dominicana", *Projects Documents* (LC/TS.2020/86, LC/MEX/TS.2020/21), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020.

The main goal of value chain diagnosis is to identify the constraints on further development of the chain, in both economic terms (productivity, efficiency, competitiveness, value added) and social terms (quality of life of chain actors, decent work, community development). Table 1 presents a brief summary of the constraints which the financial resources from family remittances could be particularly helpful in overcoming.¹⁰

Table 1
Constraints on the rural value chains analysed

Value chain	Productive heterogeneity	Lack of linkage between chain actors	Other constraints
Dairy products in the Dominican Republic	This chain is made up of very heterogeneous links distributed throughout the country. It is dominated by small rural producers with little technological or financial knowledge, little access to financing and limited marketing capabilities. ^a	There are few linkages between small producers: relations between producers and processors are based on systems that compete with one another. The small producers' association has not prospered because of their small scale of production and lack of a culture of collaboration.	Inadequate application of good production practices and traceability. Lack of refrigeration equipment, so that products deteriorate. Low productivity of herds and a small scale of production. Dependence on imported inputs, which are expensive. Lack of access to specialized knowledge. Obstacles preventing products from being marketed promptly and at fair prices.
Tomato and green pepper in El Salvador	Two production systems coexist in the chain: (i) producers with access to technology that gives them high yields and quality and the ability to apply good agricultural practices, enabling them to enter formal markets, and (ii) small subsistence farmers with low yields and vulnerable crops, with 96.6% of producers belonging to this second group. ^b	Trust between value chain actors is low, and this manifests itself in a pricing dynamic characterized by a lack of agreements and disadvantageous conditions for producers.	High input costs. Inadequate application of good agricultural practices. Little implementation of biosecurity and traceability programmes. Small production scales. Low levels of farmland ownership, which discourages investment and limits access to financing. Little processing of primary products. Obstacles preventing products from being marketed promptly and at fair prices. Limited access to financing.

¹⁰ For further details of these constraints, see Padilla, Santamaría and Villarreal (2020), Oddone and others (2017), López, Padilla and Villarreal (2020), Oddone and Alarcón (2017), Gilbert, Padilla and Villarreal (2020) and Gomes and Oddone (2017).

Value chain	Productive heterogeneity	Lack of linkage between chain actors	Other constraints
Tourism in Sacatepéquez, Guatemala	The chain is made up of a wide variety of actors with a high degree of heterogeneity in terms of technical and managerial skills and tourism service provision capabilities.	The connections between and within links of the chain are weak. Actors do not share a systemic vision or an understanding that the competitiveness of the chain depends on the quality of its links taken individually and together.	Unawareness of how the sector and the chain work, with actors embarking on their businesses without any training in technical and administrative skills, in the belief that tourism is lucrative. Lack of an effective strategy to promote the chain, whether through physical or electronic media. Prevalence of actors too small to deal with large groups or attend international fairs. Low quality in some services because of a lack of investment in equipment, furnishings, and training.

Source: Prepared by the authors on the basis of R. Padilla, J. Santamaría and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de tomate y chile verde en El Salvador", *Projects Documents* (LC/TS.2020/84; LC/MEX/TS.2020/19), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020; N. Oddone and others, "La cadena de valor de tomate y chile verde dulce en El Salvador", *Fortalecimiento de cadenas de valor rurales*, N. Oddone and R. Padilla (eds.), pages 81-134, Economic Commission for Latin America and the Caribbean (ECLAC)/International Fund for Agricultural Development (IFAD), 2017; J. López, R. Padilla and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de turismo de Sacatepéquez en Guatemala", *Projects Documents* (LC/TS.2020/85; LC/MEX/TS.2020/20), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020; N. Oddone and P. Alarcón, "Fortalecimiento de la cadena de turismo de La Antigua Guatemala y de los municipios rurales del departamento de Sacatepéquez", *Fortalecimiento de cadenas de valor rurales*, Santiago de Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2017; R. Gilbert, R. Padilla and F. G. Villarreal, "Estrategias para para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de lácteos en la República Dominicana", *Projects Documents* (LC/TS.2020/86, LC/MEX/TS.2020/21), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020; C. Gomes and N. Oddone, "Fortalecimiento de la cadena de valor de los lácteos en la República Dominicana.", *Fortalecimiento de cadenas de valor rurales*, N. Oddone and R. Padilla (eds.), pages 135-184, Economic Commission for Latin America and the Caribbean (ECLAC)/International Fund for Agricultural Development (IFAD), 2017.

^a Small producers are those with fewer than ten head of cattle.

^b Small farmers include subsistence farmers, whose output is usually seasonal and who grow on an area of less than 0.35 hectares. Non-specialized commercial producers have between 0.35 and 1.4 hectares of planting area

Thus, a problem common to all the chains is the low level of production and management capabilities, particularly among small producers, who make up the bulk of chain actors. The lack of capabilities is clearly reflected in the difficulties attending efforts to invest with a view to improving production, whether this involves incorporating new technologies or implementing better production practices, including good farming practices, good manufacturing (processing) practices and higher customer service standards. Weak capabilities make it harder for them to generate value added and market their products and services under fair conditions and are also a factor in low production yields and difficulties in obtaining and managing production financing.

A second constraint common to all three chains is the lack of connections and associativity between and within links. A problem much like the one already discussed arises here as well: the very actors facing the greatest capability and skill constraints are the ones who struggle most to associate with their peers and coordinate negotiations with other links in the chain. Actors'

management skills are vital for developing partnership and linkage strategies that can benefit the chain as a whole. There are also sociocultural factors associated with poor social and relational capital accumulation processes at the collective level. These issues explain why actors with fewer capabilities struggle to take an overview (rather than a partial view) of the value chain and thus evaluate the potentially positive effects that combining their efforts could have on their productive and economic effectiveness.

As regards the particular constraints faced by small producers of both primary and agro-industrial goods, the main ones are the difficulty of acquiring inputs, in terms of quality, availability and pricing, and obstacles to marketing their products on fair terms. Among actors in the tourism chain, lack of access to financing is a crucial constraint, since it limits their ability to buy equipment and furnishings, as is a lack of the training needed to meet high standards of service.

These constraints, which negatively impact a chain's productivity, competitiveness, and quality, also have a direct impact on the incomes and living standards of chain actors. Furthermore, because they earn little from their businesses, producers and service providers do not have the financial resources to overcome the constraints. They are sometimes forced to engage in a second economic activity to supplement their income, which often means that they cannot spend enough time on the first activity to manage it properly, leading to a vicious circle. Lastly, the pressure of economic and social conditions often means that insufficient attention is paid to the environmental impact of the activities in the chain.

IV. Remittances, financial inclusion and the production characteristics of the three value chains analysed

A. Basic description of the value chain participants surveyed

The second stage of the diagnosis involved the design of a representative survey that was then applied to actors in the chain. A challenge in all three case studies was that there was no list available of the population making up the value chain to provide a sampling framework for gathering information. Neither public bodies nor private associations had such a list. Various strategies thus had to be resorted to in order to obtain the most reliable and complete directory of actors possible:

- Telephone calls and field visits, using basic information supplied by public bodies and producers' associations.
- Information estimates and updates, drawing on earlier censuses and surveys.
- Integration of different directories available from producers' associations and public bodies.
- Preliminary identification of the core of the chain (e.g., milk producers) based on information from population censuses. Surveys of these actors asked for the contact details of actors belonging to other links in the chain, thus building a network from which the sample was randomly selected.

Once the population had been estimated, a sample design was developed to ensure statistical representativeness. The aim was for the exercise to be representative in two dimensions: the territorial dimension (the selected localities where the chain operated) and the actor dimension

(going by the links making up each chain). The survey was aimed at both recipients and non-recipients of remittances. A total of 517 people were interviewed in the El Salvador chain, 436 in the Dominican Republic chain and 337 in the Guatemala chain.

Table 2 presents the basic socioeconomic characteristics of the respondents in the three value chains, taking in four key dimensions: (i) whether or not they were in receipt of remittances; (ii) gender composition; (iii) levels of education; and (iv) access to information and communication technologies.

Table 2
Socioeconomic characteristics of respondents in the three value chains,
differentiating between remittance recipients and non-recipients, 2018
(Percentages)

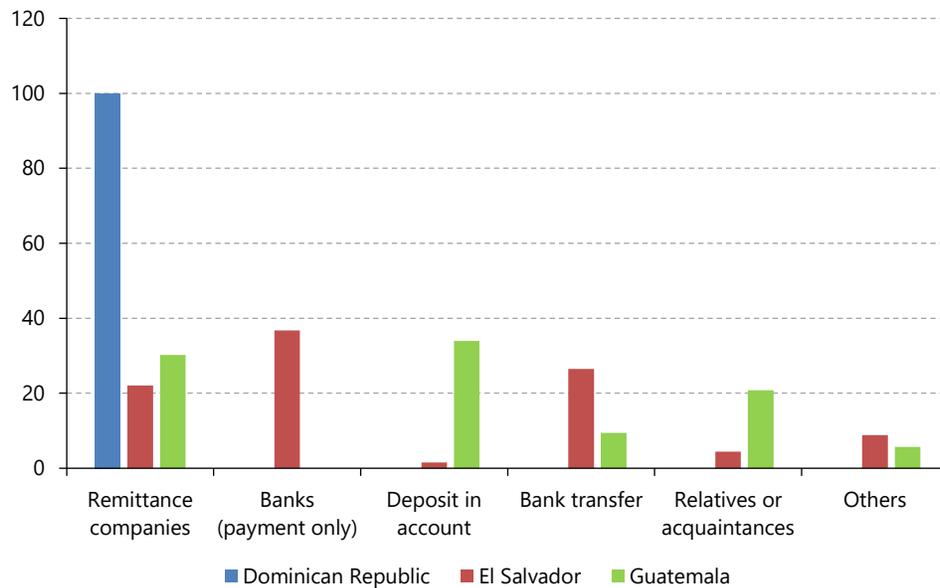
	Dominican Republic			El Salvador			Guatemala		
	Recipients	Non-recipients	Total population interviewed	Recipients	Non-recipients	Total population interviewed	Recipients	Non-recipients	Total population interviewed
Population	6.19	93.81		13.15	86.85		24.3	75.7	
Gender									
Male	74.1	85.6	84.9	85.3	82.2	82.6	54.5	59.2	58.1
Female	25.9	14.4	15.1	14.7	17.8	17.4	45.5	40.8	41.9
Schooling									
None	11.1	12	11.9	14.7	14.5	14.5	7.2 ^a	9.5 ^a	9 ^a
Basic	40.7	57.2	56.2	61.8	68.8	67.9			
Secondary	44.4	25.2	26.4	17.6	12.5	13.1	58.0	61.9	61
Higher	3.7	5.6	5.5	4.4	2.9	3.1	34.8	28.6	30
Information and communication technologies									
Mobile phone access	88.9	90.2	90.1	86.8	84.2	84.5	100	99.7	99.8

Source: Prepared by the authors on the basis of R. Padilla, J. Santamaría and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de tomate y chile verde en El Salvador", *Projects Documents* (LC/TS.2020/84; LC/MEX/TS.2020/19), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020; J. López, R. Padilla and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de turismo de Sacatepéquez en Guatemala", *Projects Documents* (LC/TS.2020/85; LC/MEX/TS.2020/20), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020 and R. Gilbert, R. Padilla and F. G. Villarreal, "Estrategias para para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de lácteos en la República Dominicana", *Projects Documents* (LC/TS.2020/86, LC/MEX/TS.2020/21), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020.

^a Includes no education and basic education.

The lowest proportion of recipients among the population interviewed was observed in the Dominican Republic (6.19%), the country where family remittances are least important. The main methods of receiving remittances in El Salvador are via commercial banks (36.8%), followed by payment orders (26.5%). In the Guatemala chain, remittances are predominantly sent through the formal financial system (55% use banks, deposits, and electronic transfers), while in the Dominican Republic remittance companies were the only means of sending remittances reported by respondents.

Figure 1
Dominican Republic, El Salvador and Guatemala: main methods of receiving family remittances
(Percentages of the total)



Source: Prepared by the authors on the basis of R. Padilla, J. Santamaría and F. G. Villarreal, “Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de tomate y chile verde en El Salvador”, *Projects Documents* (LC/TS.2020/84; LC/MEX/TS.2020/19), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020; J. López, R. Padilla and F. G. Villarreal, “Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de turismo de Sacatepéquez en Guatemala”, *Projects Documents* (LC/TS.2020/85; LC/MEX/TS.2020/20), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020 and R. Gilbert, R. Padilla and F. G. Villarreal, “Estrategias para para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de lácteos en la República Dominicana”, *Projects Documents* (LC/TS.2020/86, LC/MEX/TS.2020/21), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020.

In the Dominican Republic, respondents in the dairy value chain reported a monthly average of 156 dollars in remittances received, slightly below the monthly average of 183 dollars reported by the Central Bank. The survey showed remittances varying significantly by the recipients’ main role in the chain. Manufacturing processors and agricultural input suppliers received the most on average (212 dollars and 225 dollars, respectively). Self-employed workers and finished product intermediaries received the lowest average monthly remittances (50 dollars and 100 dollars, respectively).

In Guatemala, the average monthly remittance amount among those interviewed was 57.1 dollars,¹¹ a much lower figure than the national monthly average per household of between 379 dollars (IOM, 2017) and 426 dollars (Cervantes González, 2017). This low amount reflects the characteristics of the relationships between migrants and those who receive remittances. In contrast to the Dominican Republic and El Salvador, where the relationship between migrants and remittance recipients is usually of the first degree (spouses, parents, children), in Guatemala there is a higher incidence of second-degree relations (uncles, cousins, etc.), who send smaller amounts

¹¹ Remittance income captured in the survey could be underreported due, for example, to fear of reporting high amounts in a context of insecurity.

less often. A second factor that could explain the lesser scale of remittances might be the greater earnings of actors in the chain (such as restaurateurs and hoteliers).

In El Salvador, 18% of households nationally receive remittances from abroad, which is higher than the 13.2% of respondents stating that they received remittances. These averaged 110 dollars and 130 dollars per month, below the average of 200 dollars received in rural areas nationally.

Regarding the gender composition of the survey universe, the two agro-industrial chains (in the Dominican Republic and El Salvador) are heavily male-dominated (82.6% and 84.9% male respectively), while in Guatemala's tourism services chain the composition of the total universe is much less differentiated (58% male and 42% female). The tourism chain tends to provide more scope for female employment than the average for the economy (Hess, 2020).

The tourism chain in Guatemala presents notably higher levels of education than the two value chains that do not belong to the service sector. While the majority of those surveyed in the Dominican Republic and El Salvador were in the strata with no education and basic education only (82.4% and 68.1% respectively), 91% of the Guatemalan sample replied that they had secondary or higher education. This finding reveals a key difference between the two goods chains and the service chain analysed: the latter is dominated by actors providing a wide variety of tourist services, which commonly require a higher level of education.

Where access to information and communication technologies (ICTs) is concerned, there are high levels of access to mobile phones in all three chains. This is an especially important element to consider in the design of public policies aimed at increasing financial inclusion and strengthening the capabilities of rural actors through greater and better access to information (e.g., technological and market information). There are differences between remittance recipients and non-recipients, with recipients in all three chains generally having a higher average level of education, greater access to ICTs and higher incomes.

B. Financial inclusion

A second topic analysed in the survey was respondents' levels of financial inclusion, with the comparison between remittance recipients and non-recipients again being central. By way of a summary, table 3 presents five questions that provide an indication of inclusion: whether the respondent has a bank account or card; main financing sources; reasons for using the main financing source; channels of access to products; and, lastly, the reasons why respondents are excluded from or do not participate in the financial system.

The findings for the three chains analysed show a pattern of greater financial inclusion among remittance recipients than among non-recipients. Furthermore, remittance recipients are more likely to hold a bank account or card than the national average and use the financial system more frequently. The proportion of respondents in Guatemala who had an account or card was very high (100% of remittance recipients and 91% of non-recipients), which is consistent with the close links the value chain has to the financial system, given that it provides tourism services.

Conversely, owing to the nature of their business, the members of the tomato and green pepper value chain surveyed in El Salvador were far less likely to hold an account, even if they received remittances. Among chain respondents in El Salvador, just 33.8% of remittance recipients and 18.3% of non-recipients had an account. Falling between the two is the dairy chain in the Dominican Republic, where 55.6% of remittance recipients and 31.3% of non-recipients had a bank account.

Table 3
Indicators of financial inclusion among respondents in the three value chains studied,
differentiating between remittance recipients and non-recipients, 2018
(Percentages)

	Dominican Republic			El Salvador			Guatemala		
	Recipients	Non-recipients	National figure ^a	Recipients	Non-recipients	National figure ^a	Recipients	Non-recipients	National figure ^a
Bank account	55.6	31.3	55.0	33.8	18.3	29.0	100.0	91.0	44.0
Access to formal credit	14.8	6.6	23.0	23.5	29.2	9.0	38.3	14.2	10.0
Access channels									
Branches	51.9	25.7	52.0	13.2	13.4	30.0	27.3	25.4	50.0
ATM	11.1	10.8	39.0	10.3	3.6	66.0	19.8	19.2	37.0
Reasons for exclusion ^b									
Prefer cash	80.0	51.2		27.3	43.9		77.7	82.6	
Low rates	1.7	0.0		18.2	1.7				
High commissions	3.0	6.7		18.2	15.8		10.8	17.4	

Source: Prepared by the authors on the basis of R. Padilla, J. Santamaría and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de tomate y chile verde en El Salvador", *Projects Documents* (LC/TS.2020/84; LC/MEX/TS.2020/19), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020; J. López, R. Padilla and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de turismo de Sacatepéquez en Guatemala", *Projects Documents* (LC/TS.2020/85; LC/MEX/TS.2020/20), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020 and R. Gilbert, R. Padilla and F. G. Villarreal, "Estrategias para para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de lácteos en la República Dominicana", *Projects Documents* (LC/TS.2020/86; LC/MEX/TS.2020/21), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020.

^a The World Bank, Global Findex Database (2014, 2017).

^b The options do not add up to 100% because only the most representative ones have been included.

Access to formal credit, a second indicator of financial inclusion, is generally low in all three chains. Once again, the highest level is found in Guatemala: 38.3% of remittance recipients and 14.2% of non-recipients among respondents in this chain had accessed formal credit. In the tomato and green pepper chain of El Salvador, 23% of remittance recipients and 29.2% of non-recipients had access to these financing channels. In the Dominican Republic, lastly, only 14.8% of remittance recipients and 6.6% of non-recipients had accessed formal sources of credit. Access to formal credit among remittance recipients was higher than the national average. In all three chains, bank branches are the main channel of access to the financial system, especially in the Dominican Republic, where they were the first point of contact with the system for 51.9% of the remittance recipients and 25.7% of the non-recipients surveyed. ATMs are the second most common means of access to the financial system, especially in Guatemala.

As regards the causes of exclusion from the financial system, the main reason stated for not using it in all three cases analysed was a preference for cash. This was especially striking in Guatemala (where 77.7% of remittance recipients and 82.6% of non-recipients who did not use the system identified this preference as the main reason for their exclusion) and the Dominican Republic (where a preference for cash was the main reason given by 80% of the remittance recipients and 51.2% of the non-recipients who did not use the financial system). In El Salvador, however, the percentages were more evenly distributed between three main rationales: the preference for cash already referred to, low interest rates on deposits and high commissions.

Leaving aside national peculiarities and the characteristics differentiating remittance recipients from non-recipients, this set of data mainly highlights the need to design instruments that can foster financial inclusion for a large percentage of the actors actively involved in production activities.

C. Productive activities of remittance recipients and non-recipients

This section summarizes some of the productive characteristics of remittance recipients and non-recipients, covering four main dimensions: (i) the use of sales receipts as an indicator of tax formality; (ii) membership of an association or cooperative; (iii) whether or not they receive support from some public programme; (iv) their main reasons for starting the business; and (v) whether they earn enough from their activity in the value chain to make investments. The following table presents the data obtained.

Table 4
Productive activities in the three value chains analysed,
differentiating between remittance recipients and non-recipients
(Percentages)

	Dominican Republic			El Salvador			Guatemala		
	Recipients	Non-recipients	Difference	Recipients	Non-recipients	Difference	Recipients	Non-recipients	Difference
	Sales receipts								
Yes	33.3	33.3	0	0	3.6	3.6	97.0	96.6	0.4
None	66.6	66.6	0	100.0	96.4	3.6	3.0	3.4	0.4
	Member of some association or cooperative								
Yes	11.1	21.0	9.9	47.0	35.4	11.6	7.3	5.0	2.3
	Received support from some public programme								
Yes	0.0	1.0	-1.0	51.5	60.4	8.9	2.5	0.8	1.7
	Main reasons for starting the business								
Entrepreneurship	59.3	48.7	10.6	70.6	61.0	9.6	69.5	74.1	-4.6
	Earnings are adequate for investment								
Yes, enough	44.4	36.3	8.1	55.0	38.7	16.3	100.0	98.1	1.9

Source: Prepared by the authors on the basis of R. Padilla, J. Santamaría and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de tomate y chile verde en El Salvador", *Projects Documents* (LC/TS.2020/84; LC/MEX/TS.2020/19), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020; J. López, R. Padilla and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de turismo de Sacatepéquez en Guatemala", *Projects Documents* (LC/TS.2020/85; LC/MEX/TS.2020/20), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020 and R. Gilbert, R. Padilla and F. G. Villarreal, "Estrategias para para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de lácteos en la República Dominicana", *Projects Documents* (LC/TS.2020/86, LC/MEX/TS.2020/21), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020.

As regards sales receipts, the issuing of which should be seen as an indicator of administrative and fiscal formality in production activities, there are two contrasting situations: more than 96% of those surveyed in Guatemala issued some kind of legally valid receipt, while more than 96% in El Salvador did not. The first case reflects a more organized administrative system, oriented towards the provision of tourism services. The situation in El Salvador, by contrast, reflects the nature of the chain's activities but is also associated with profound weaknesses in managerial capabilities. In the Dominican Republic, the level of formality is low, albeit not so low, with just one third of respondents providing fiscally valid sales receipts.

Where associativity among chain members is concerned, there are three different situations: (i) a medium level in El Salvador, where 47% of remittance recipients and 35.4% of non-recipients belonged to some association or cooperative; (ii) a low level in the Dominican Republic, where 11.1% of recipients and 21% of non-recipients belonged to some collective grouping; and (iii) a very low level in Guatemala, where only 7.3% and 5% of recipients and non-recipients, respectively, belonged to some form of association.

Support from public programmes is almost non-existent in two of the value chains studied, those of the Dominican Republic and Guatemala. In Guatemala, 2.5% of remittance recipients and 0.8% of non-recipients received public support, while in the Dominican Republic only 1% of non-recipients stated that they had received support from public programmes. In El Salvador, over half of respondents had received public support, with figures of 60.4% for non-recipients and 51.5% for recipients of remittances. This is because the tomato and green pepper chain in El Salvador has received public support recently from, for example, the Ministry of Agriculture and Livestock and the Ministry of Economic Affairs.

Entrepreneurship was the main reason people cited for starting their business in all three chains, encompassing aspects such as: (i) the desire to earn more; (ii) a realization that the activity was a good business opportunity; and (iii) a positive assessment of it as a production activity or professional practice.

Lastly, with regard to the question of whether producers earn enough to make investments in value-generating activities, there are marked differences between the three cases analysed. In Guatemala, almost all respondents said that they earned enough. In the other two chains, however, the proportion of affirmative responses was much lower. In the El Salvador chain, only 55% of remittance recipients and 38.7% of non-recipients stated that they earned enough to invest, something that reflects the productive and technological weaknesses characterizing the chain. The figures for the Dominican Republic are even lower: 44.4% and 36.3% of remittance recipients and non-recipients, respectively. These findings confirm the importance of having family remittance resources that, if leveraged in the financial system, would make it possible to invest in order to upgrade the activities of the chain and strengthen the capabilities of its links and their producing members.

D. Differentiation inside the links

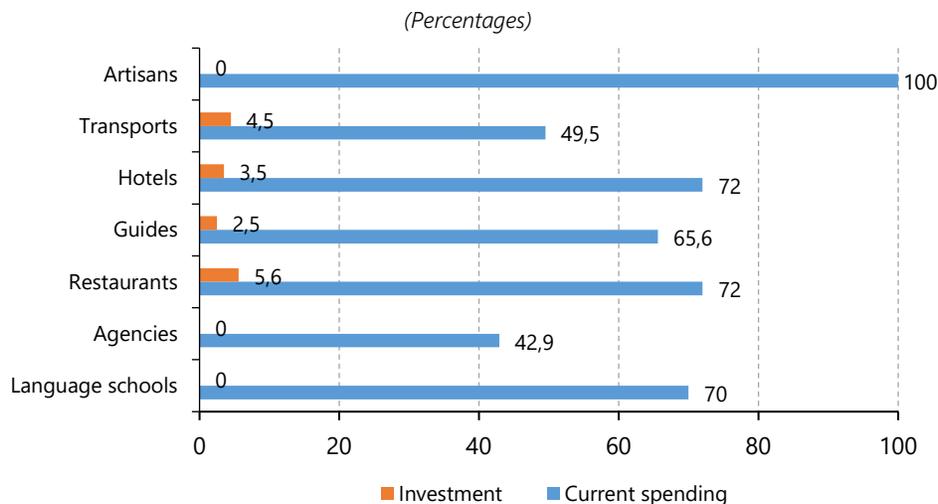
This section summarizes the variations found within each chain, differentiating its links by three variables: capabilities and income, financial inclusion, and use of remittances. In the El Salvador tomato and green pepper chain, the difference between the links in terms of capabilities can be seen in the percentage of those who have no formal education: 17.4% of producers who only farm, 11.6% of those who both farm and market their produce, and 8.3% of those who carry out both farming and processing. This last result is unexpected, since it might be expected that diversification into other chain activities would give greater scope for the appropriation of value added. The evidence suggests that the processing activities carried out by primary producers themselves are of low added value.

Where financial inclusion is concerned, those who carry out both farming and processing are relatively badly placed. Conversely, those who only farm have a higher level of both income and financial inclusion. This confirms the relationship between capabilities (education), financial inclusion and income. This evidence, which allows the analysis to be disaggregated between the links in the chain, is particularly useful for the design of targeted public support instruments. The main differences in the tourism value chain in Guatemala are then presented. With regard to the capabilities measured, marked differences are identified in the proportion of individuals with higher education by type of business, as it ranges from 100% in Spanish language schools to 43.8% and 35.2% among hoteliers and restaurateurs, respectively, and only 5.4% in the craft market.

With respect to financial inclusion, artisans are the worst placed. This is usually the link with the least working capital and the fewest productive and financial capabilities. Tour guides, tour operators and those working in Spanish language schools fall somewhere in between, since although they are more likely to have a saving account, their use of credit and investment products is limited. Actors in this link have acquired higher levels of education and training for tourism activity. Meanwhile, restaurants, hotels and transport operators were the most likely to use credit and investment products. This link is made up of larger enterprises with greater assets and revenues, factors that provide them with better access to the formal financial system.

This segmentation of inclusion profiles between links affects the sources of funding they use. While artisans are highly likely to be excluded from financing, Spanish language schools mainly rely on family and friends. In contrast, tour guides and hoteliers are more likely to use regulated sources of funding, while travel agencies, transport operators and restaurants are mainly self-financing. With regard to the uses made of remittances, lastly, the responses indicate that four links employ them to invest in the value chain (see figure 2). The percentage varies between links, with figures of 5.6% for restaurants, 2.5% for tourist guides, 3.5% for hotels and 4.5% for tourist transport. The artisans, travel agencies and Spanish language schools interviewed did not report allocating remittances to saving and investment.

Figure 2
Guatemala: proportions of total remittances used for current spending and investment, by productive activity in the tourism value chain of La Antigua and municipalities of Sacatepéquez, Guatemala, 2018



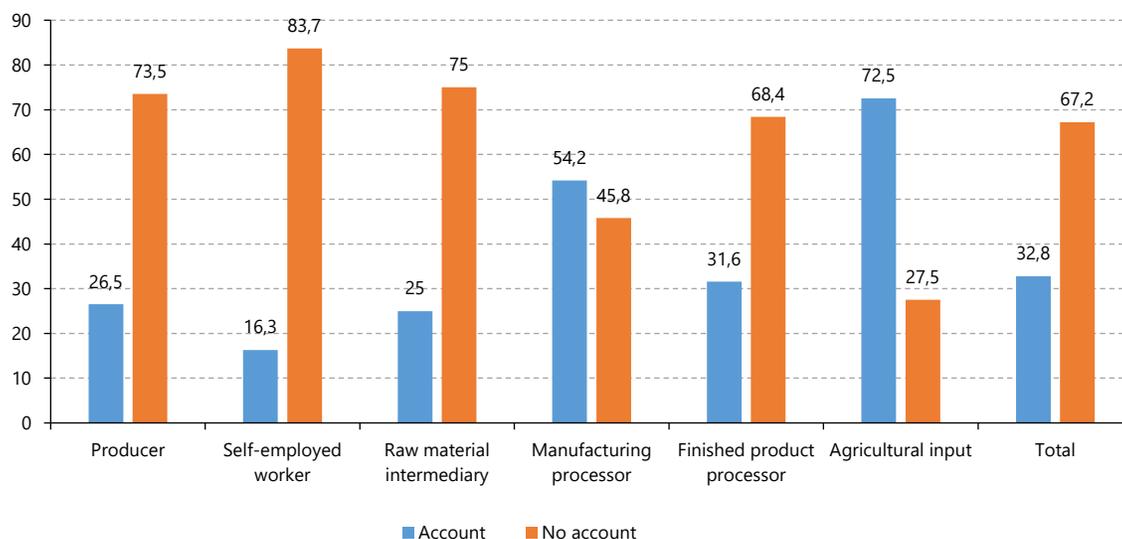
Source: Prepared by the authors.

Lastly, the dairy value chain in the Dominican Republic also shows major internal differences between its links. Self-employed workers have the lowest average level of education and the lowest family incomes and are the least likely to hold accounts in the formal financial system for managing their personal finances. In contrast, input suppliers are the most likely to have been through higher education and to hold accounts in financial institutions, as well as having the highest incomes. The most numerous group, producers (61.2% of respondents), have a low average level of education (79.2% have basic education at most), their family incomes are only a third those of input suppliers, and only 26.6% state that they hold an account in a financial institution.

The proportion of actors in the dairy chain who have at least one account in some bank or financial institution is 32.8%. There is greater financial inclusion among actors whose business is carried out in fixed establishments. In fact, 72.5% and 54.2% of agricultural input suppliers and manufacturing processors, respectively, have a bank account. Among self-employed workers and producers, the percentages drop to 26.5% and 16.3%, respectively. The disaggregated data are presented in figure 3.

Where the use of remittances by chain actors is concerned, an average of 93.8% of the money received goes on household expenses, with the remaining 6.2% going to the production activity or business. To differentiate between links, the greatest expenditure on chain-related production activities is by producers (10%), while self-employed workers, intermediaries and input suppliers do not spend anything on this item. Within the producer category, 5.6% is spent on production management (machinery, vehicles, tools, technology, and training), 3.8% on financial management (financing, debt payment, working capital) and 0.6% on other business expenses.

Figure 3
Dominican Republic: proportion of people with some type of account in a financial institution, by link in the chain
(Percentages)



Source: Prepared by the authors.

E. The association between the use of remittances, financial inclusion, and investment in value chains

Statistical and econometric analysis of the surveys carried out provided information on the relationship between receipt of remittances, financial inclusion, and investment in value chains. In particular, the following three main findings were arrived at:

- (i) There is a positive correlation between receipt of remittances, through whatever channel, and the likelihood of using formal financial products and services.
- (ii) Access to credit for income-generating activities is strongly dependent on the use of formal financial services for personal use.
- (iii) Access to formal credit incentivizes investment in value chains.

The analysis of financial inclusion among respondents yields two statistically significant results: (i) a positive relationship between capabilities, measured by the level of education, and financial skills, estimated from a financial literacy index; and (ii) a positive relationship between an individual's status as a remittance recipient and higher levels of financial inclusion.

Regarding capabilities, there is a causal relationship between education, income from productive activities and the holding of an account in some institution, as an indicator of financial inclusion. Thus, in Guatemala, for example, having completed secondary and higher education increases the likelihood of financial inclusion by a factor of 4.7 and 3.3, respectively. The figures are also high in the Dominican Republic, at 4.7 and 20.12 times, respectively.

Table 5
Summary of statistical and econometric findings for the association between financial inclusion, investment in value chains and receipt of family remittances

	Dominican Republic	El Salvador	Guatemala
Individual financial inclusion	<p>Women are only 43.29% as likely as men to hold an account.</p> <p>Recipients of remittances are 4.55 times as likely to hold an account.</p> <p>The level of financial inclusion is 4.7 and 20.12 times as great, respectively, among people who have completed secondary and higher education as among those who only have basic education.</p> <p>The higher people's monthly income, the more likely they are to hold a bank account.</p>	<p>Women are only 11.2% as likely as men to hold an account.</p> <p>The level of financial inclusion is 4.7 and 3.3 times as great, respectively, among people who have completed secondary and higher education as among those who only have basic education.</p> <p>The level of financial inclusion is 2.3 times as great among households reporting income of between US\$ 200 and US\$ 500 a month as among those with incomes of less than US\$ 200 a month. The level of inclusion is 12 times as great among those receiving over US\$ 500 a month as among those receiving less than US\$ 200.</p> <p>Recipients of remittances are more likely to have a bank account.</p>	<p>Women are only 34.36% as likely as men to hold an account.</p> <p>Recipients of remittances are 2.14 times as likely to have credit and investment products.</p> <p>Business owners have a 94.16% likelihood of holding credit and investment products.</p>
Financial inclusion in business	<p>The evidence indicates that those holding an account at a financial institution for personal use are twice as likely to apply for financing for income-generating productive activities. Moreover, the fact of having compared financial products as part of the decision to open an account for personal use is positively associated with the decision to invest.</p> <p>The findings show a clear positive relationship between an entrepreneurial motive for starting a business and the use of formal sources of funding, and to a lesser extent other sources of funding.</p> <p>The likelihood of people seeking financing other than their own resources increases with the age of the business.</p>	<p>Holding an account with a financial institution to manage their personal finances makes respondents significantly more likely to apply for and obtain financing.</p> <p>Respondents who obtained funding from formal sources to start their business are more likely to apply for and obtain funding.</p> <p>Migrants who returned to the country and decided to engage in a productive activity are most likely to turn to family members for start-up financing and are less likely to apply for subsequent financing.</p> <p>There is a positive relationship between the size of the business and the likelihood of applying for funding.</p>	<p>Remittance recipients are more likely to turn to formal sources for business financing. Similarly, those who use formal credit products for personal finance are more likely to seek financing from formal sources.</p> <p>Hotels are the link that shows the greatest propensity to apply for formal financing, while artisans almost never apply for formal financing.</p> <p>Both the age and the revenues of businesses are positively associated with the likelihood of using formal financing sources.</p>
Investment in the value chain	<p>Women are 68% less likely to invest.</p> <p>Returning migrants and those who started their own businesses have a lower propensity to invest (47.49% and 69.46%, respectively) than those who are not returning migrants and did not start their own businesses.</p> <p>Producers are most likely to invest in the value chain.</p>	<p>People are 1.64 times as likely to invest in the value chain when they have applied for and obtained formal financing beforehand.</p> <p>Receipt of remittances does not significantly influence the decision to invest in the value chain (i.e., there is no significant difference in the propensity to invest between recipients and non-recipients).</p>	<p>Financial inclusion makes individuals 8.7 times as likely to invest a portion of the remittances they receive in income-generating productive activities.</p>

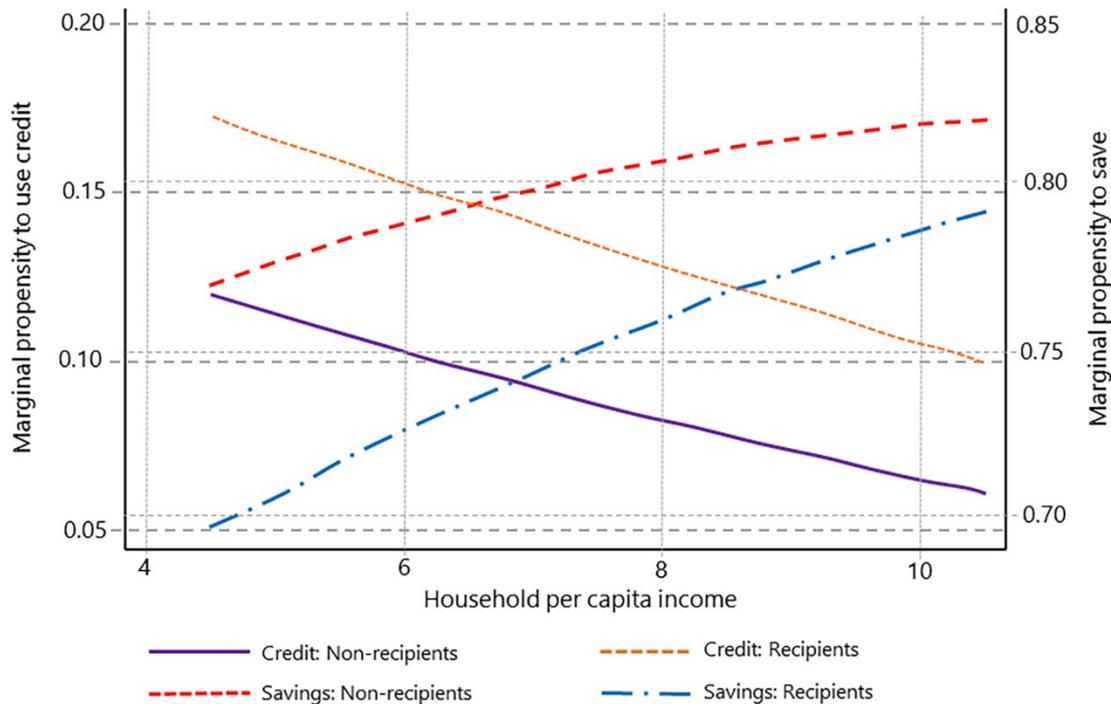
Source: Prepared by the authors.

In all three cases, the data also pointed consistently to the receipt of remittances being a decisive influence on the financial inclusion process. A positive relationship between the receipt of remittances and financial inclusion was found in all three chains, and there was likewise a link between financial inclusion and investment in the value chain. In El Salvador, being a remittance recipient increases the likelihood of someone having an account by a factor of 1.24 times, although with low statistical significance. In Guatemala, being a remittance recipient makes someone 2.14 times as likely to hold credit and investment products.

The connection between remittances and financial inclusion is a graduated one. People holding an account to manage their personal finances are more likely to use more sophisticated products and services (credit for income-generating productive activities and insurance). In all three cases, remittance recipients were found to make more extensive use of financial products and services. At the same time, the fact of holding a personal account for financial management has a positive and significant effect on the proportion of remittances going to productive activities. Thus, in Guatemala, for example, individuals who are in the financial system are 8.7 times as likely to invest a portion of their remittances in the value chain.

Figure 4 shows the positive effect that the receipt of remittances has on the use of both types of financial instruments in this chain. In both cases, the curve for remittance recipients is above that for non-recipients. It is also observed that the likelihood of using a saving account is positively related to household income. In contrast, the marginal propensity to use credit products falls as income rises, perhaps because the budgetary constraints faced by households are eased by higher incomes.

Figure 4
The tourism value chain in La Antigua, Guatemala: marginal propensity to use only a saving account and at least one credit product over the income distribution among remittance recipients and non-recipients



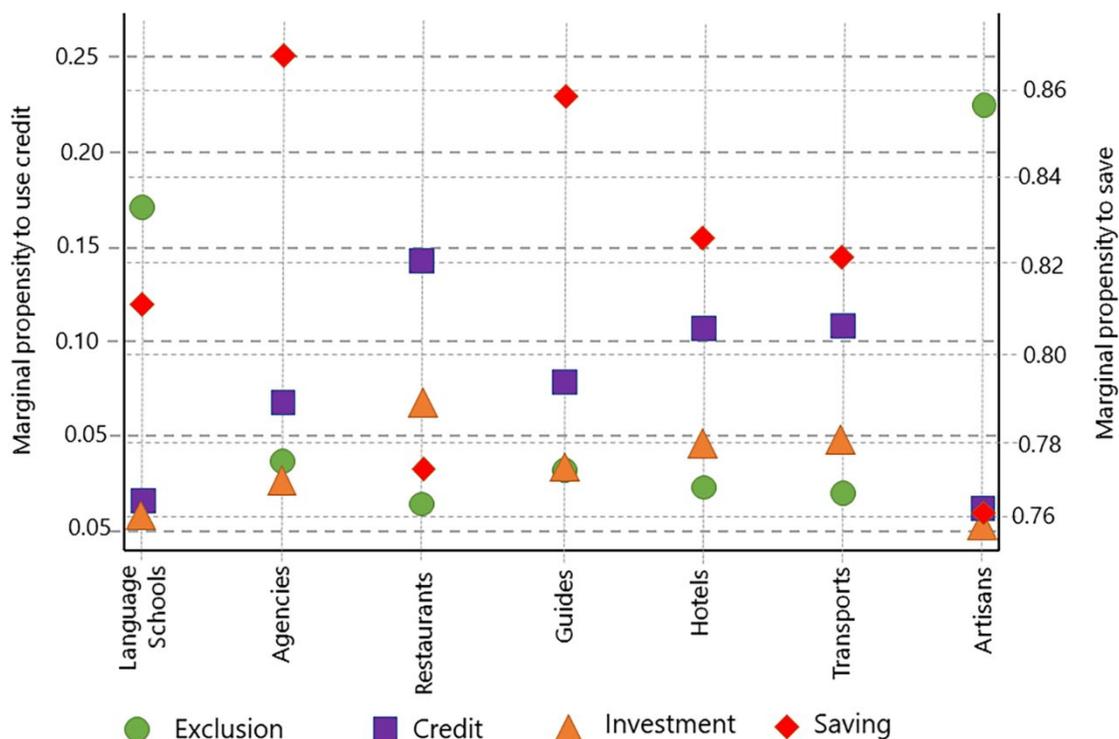
Source: Prepared by the authors.

Some findings differentiated by actor within each value chain will now be highlighted. In El Salvador, the following two differences stand out: (i) producers of green pepper and tomatoes are more likely to obtain financing from different types of sources than producers of green pepper alone, something that is associated with diversified producers' generally greater capabilities; and (ii) those who produce and market are 1.95 times as likely to invest in the value chain, while those who produce and process have a negative probability of investing in income-generating activities (76%).

In the Dominican Republic, the first major difference between links in the chain is between producers and non-producers: indicators of financial inclusion are much higher for producers. They are also the most likely to have made investments in the value chain in the last year.

In Guatemala, there are two basic groups of actors in the chain: (i) Spanish schools, travel agencies and tour operators and the handicrafts market, which have a lower degree of financial inclusion; and (ii) restaurants and hotels, which have a higher degree of financial inclusion. Membership of different links in the tourism chain is associated with different propensities to make use of financial services for personal finance. These trends are illustrated in figure 5.

Figure 5
Guatemala: marginal propensity to belong to the different financial inclusion categories by economic activity



Source: Prepared by the authors.

As regards the association between financial inclusion and productive activity, the differences between links can be more clearly identified by considering the main source of production financing: self-employed workers are 4.62 times as likely to seek formal financing as milk producers, who are highly likely to use their own resources. Again, raw material and finished product intermediaries are 3.34 and 11.26 times as likely as producers, respectively, to turn to informal moneylenders, while input suppliers tend to finance themselves from their own resources. These

types of differences between the various actors in the chain confirm the urgent need to design specific financial products that match the needs and capabilities of each type of actor (López, Padilla and Villarreal, 2020).

F. Potential use of family remittances to strengthen value chains

Table 6 summarizes the opportunities identified for the use of family remittances to strengthen the three value chains analysed. More details on these opportunities can be found in the comprehensive documents presenting the three case studies, as mentioned above. The core proposal is to use financial products and services to leverage a proportion of the family remittances received in order to increase investment in income-generating productive activities, particularly with a view to addressing the constraints identified. Efforts to amplify the impact of remittances on the economic and social development of recipient communities by using them in the value chains operating in the territory are a crucial opportunity to improve the productivity and competitiveness of the three chains analysed.

While the constraints and the potential use of remittances vary between chains, it is possible to identify areas of investment common to all three case studies:

- Acquisition of higher-quality inputs.
- Purchase of production equipment and machinery.
- Availability of working capital on more attractive financial terms.
- Enhancement of the managerial, technological, and productive capabilities of producers and service providers in value chains through training and access to sources of knowledge.
- Enhancement of the quality of the products and services supplied by implementing good agricultural and manufacturing practices and service quality standards.
- Purchase of specialized transport equipment and access to market information.
- Acquisition of specialized technological know-how and services to improve products, production processes and the services supplied.
- Development of publicization and marketing campaigns for the products and services supplied.
- Procurement of specialized services to design environmental impact mitigation and climate change adaptation strategies.

Table 6
Selected examples: potential use of family remittances to strengthen value chains

Dairy products in the Dominican Republic	Tomato and green pepper in El Salvador	Tourism in La Antigua, Guatemala
Buy inputs, machinery, and equipment for milk production	Buy seeds, fertilizers, agrochemicals, and specialized transport	Buy in specialized services to analyse and design new business models and tourism services
Buy in laboratory and technical assistance services to improve production quality and yields	Buy in laboratory and technical assistance services to improve production quality and yields	Secure working capital on more favourable financial terms
Invest in technical assistance for the design of environmental impact reduction strategies	Invest in training to develop managerial and financial capabilities: management and accountancy, cost and profit analysis, financial concepts and use of instruments	Invest in technical assistance and training to improve service quality and meet local and international standards
Buy in technical assistance and specialized services to improve production quality and implement good stockbreeding and manufacturing practices	Cover the costs of harvesting, cleaning, and separating the product to reduce losses	Invest in technical assistance and training to improve financial and human resource management and administration capabilities
Design and launch an advertising strategy to promote consumption of the product	Implement traceability systems and good agricultural practices	Buy in specialized services to develop collective brands for traditional products supplied in the territory
Secure greater access to market information	Implement or improve logistics services throughout the chain	Incorporate payment systems (point of sale terminals and mobile applications) to facilitate transactions with tourists
Secure working capital on more favourable financial terms	Secure better access to information on input markets, prices and materials	Design and launch a marketing campaign to promote La Antigua as a tourist destination
Purchase specialized storage and transport equipment (refrigerated trucks)	Invest in machinery and equipment and specialized technical assistance for product processing (e.g., production of tinned tomatoes)	Buy in specialized technical assistance to strengthen the development and marketing of local products (handicrafts, foods)
Invest in technical assistance and specialized equipment to turn milk more effectively into high-quality dairy products that are more attractive to consumers	Invest in technical assistance to design environmental impact reduction and climate change mitigation strategies in chain activities	Invest in equipment to improve the quality of the services provided (transport equipment, hotel and restaurant furnishings)

Source: Prepared by the authors, on the basis of R. Padilla, J. Santamaría and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de tomate y chile verde en El Salvador", *Projects Documents* (LC/TS.2020/84; LC/MEX/TS.2020/19), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020; J. López, R. Padilla and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de turismo de Sacatepéquez en Guatemala", *Projects Documents* (LC/TS.2020/85; LC/MEX/TS.2020/20), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020 and R. Gilbert, R. Padilla and F. G. Villarreal, "Estrategias para para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de lácteos en la República Dominicana", *Projects Documents* (LC/TS.2020/86, LC/MEX/TS.2020/21), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020.

V. Strategies to promote greater investment of family remittances in value chains

Increasing investment of family remittances in order to strengthen value chains requires active public policies to provide information and technical assistance, strengthen capabilities, facilitate access to financing and promote partnerships. This section summarizes the strategies designed for the three case studies.

The preparation of these strategies set out from the empirical evidence collected and analysed and the international good practices identified.¹² Dialogue tables were held to discuss and develop a preliminary version of the strategies with representatives of the public bodies that regulate and promote chain activities, representatives of the financial sector and actors from the chains themselves. The construction of the strategies started with the preparation of a decision tree. This serves to systematize, first, the causes giving rise to an identified constraint or a barrier that is preventing opportunities from being properly exploited and, second, the means to address them and the expected results.

Seven strategies were designed for the three chains, organized into two major areas: financial inclusion and production development. Each strategy has different lines of action, totalling 21 (see table 7).¹³ These strategies and lines of action were subsequently developed in detail for each chain in the light of the institutional capacities of each country, the progress made in the area and the specific characteristics of the chain. Although the strategies are set out separately, they need to be applied in an integrated and coordinated manner for the expected results to be achieved, albeit

¹² See Aldasoro (2020) for a summary of the good practices identified.

¹³ This table summarizes the seven strategies and 21 lines of action detailed in Padilla, Santamaría and Villarreal (2020), López, Padilla and Villarreal (2020) and Gilbert, Padilla and Villarreal (2020).

with a sequencing adjusted to suit the conditions of each value chain and the institutional capacities of each country.

Table 7
Strategies for fostering greater investment of family remittances in value chains

Public policy areas	Strategy	Lines of action
Financial inclusion	1. Strengthen the institutional architecture to promote financial inclusion	1. Strengthen and expand consumer protection mechanisms 2. Coordinate a national digital payment strategy 3. Adapt the legal framework to foster financial inclusion 4. Use existing legislation on collateral to help small rural producers gain access to financing
	2. Strengthen financial capacities	5. Strengthen the financial capacities of financial service users 6. Develop and strengthen the ability of financial service providers to incorporate unserved population segments
	3. Design new financial products	7. Develop financial products and services to meet the financial needs of migrants 8. Develop financial products and services to meet the financial needs of remittance recipients 9. Develop financial products and services to meet the financial needs of women
	4. Improve the supply of finance	10. Access to second tier financing 11. Reduction of financial costs
Production development	5. Strengthen associativity and integration within the chain	12. Design programmes for using remittances for income-generating activities and incentivize vertical linkages 13. Design and implement programmes for using remittances in productive activities and integrating these horizontally 14. Implement marketing support instruments among small producers in receipt of remittances 15. Implement an instrument to develop suppliers and provide access to good-quality, affordable inputs for small rural producers
	6. Strengthen the managerial and technical capabilities of small producers	16. Provide technical assistance for the formulation and management of production projects that use family remittances 17. Strengthen the production and technological capabilities of producers who invest family remittances in production activities
	7. Foster migrants to invest in income-generating activities in their home communities	18. Develop financial intermediation mechanisms 19. Design sustainable financial models 20. Promote partnership between migrants 21. Launch a campaign to publicize the project or initiative among migrants

Source: R. Padilla, J. Santamaría and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de tomate y chile verde en El Salvador", *Projects Documents* (LC/TS.2020/84; LC/MEX/TS.2020/19), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020; J. López, R. Padilla and F. G. Villarreal, "Estrategias para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de turismo de Sacatepéquez en Guatemala", *Projects Documents* (LC/TS.2020/85; LC/MEX/TS.2020/20), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020 and R. Gilbert, R. Padilla and F. G. Villarreal, "Estrategias para para fomentar la inversión de remesas familiares y la inclusión financiera: estudio de caso de la cadena de valor de lácteos en la República Dominicana", *Projects Documents* (LC/TS.2020/86, LC/MEX/TS.2020/21), Mexico City, Economic Commission for Latin America and the Caribbean (ECLAC), 2020.

Below are some examples of the specificities of each of the strategies and lines of action included in table 7, depending on the value chain studied:

- The main constraint on access to finance in the La Antigua tourism chain is the cost of the collateral required to borrow. Movable guarantee, reciprocal guarantee and guarantee fund mechanisms are presented as possible solutions to ease these constraints, but they need to be matched to the financial needs of remittance beneficiaries.
- Design of financial products and services targeted at women participating in the tourism chain in La Antigua. They are usually heads of families and need to be offered products such as saving, access to credit, profitable investments in income-generating productive activities, insurance and financial education. The fact that assets are not usually registered in their name limits women's access to financing.
- Extension of the financial inclusion of small dairy producers in the Dominican Republic who receive remittances, building on successful experiences in the Dominican financial system itself: (i) the remittance banking programme of the Credit and Savings Bank (ADOPEM), which enables recipients to open savings accounts and apply for credit in order to invest; and (ii) the practices of Banco BHD León, which treats a portion of customers' remittance flows as part of their income for credit evaluation purposes if they are highly recurrent.
- For the dairy chain in the Dominican Republic, it is suggested that newly designed actions should be combined with existing programmes from bodies such as the Ministry of Agriculture and the National Council for the Regulation and Promotion of the Dairy Industry (CONALECHE). For small producers, product traceability (quality, safety) is crucial to access a market of large private buyers (milk processors) or public institutions (e.g., the School Meals Programme), currently supplied by large domestic producers or imported inputs.
- Collaboration with the network of consulates and the Vice-Ministry for Salvadorans Living Abroad to coordinate the creation of interest groups or unions of people among the Salvadoran diaspora in the United States, with the aim of investing in and directly supporting the strengthening of the tomato and green pepper value chain, particularly in the areas they originally came from.

Differences in emphasis and specificities in the value chains studied are due, among other possible factors, to the dynamics of each of them. Each value chain has developed in unique and distinct ways, depending on its origins, its productive and technological characteristics, the social, political and cultural environment in which it is embedded and its governance characteristics. The sectoral nature of each chain entails different productive, technical and competitive configurations. For example, the two goods chains (the Dominican Republic and El Salvador) are predominantly made up of small rural producers with limited productive and technological capabilities, while in the services chain there is a larger presence of tourism service providers with greater capabilities. This gap is also plain to see when it comes to financial inclusion. Both the productive and the financial aspects are critical to people's willingness and ability to invest a percentage of their remittances in upgrading value chains.

In addition to economic and productive factors, there are conditions of industrial organization that also determine chain dynamics, for example: the characteristics of productive actors' organizational learning and the public organizations involved; the history and social and cultural development of each territory; and the institutional arrangements that make up the chain's support and regulation network.

Once the strategies had been validated and refined by each ministry, complementary lines of work were developed to facilitate implementation, thus ensuring the continuity and sustainability of the technical assistance provided. Accordingly, in agreement with the Ministry of Economic Affairs of Guatemala (MINECO), ECLAC prepared the preliminary guidelines for a public programme that combines a number of strategies and lines of action: the Programme to Promote Greater Investment of Family Remittances in Value Chains through Financial Inclusion. Three elements of the programme should be highlighted: (i) the government undertakes to provide resources to strengthen the chains, supplementing the resources committed by remittance recipients; (ii) these two sources are supplemented by funding from the formal financial sector; and (iii) public support is provided to associations (formally or informally constituted) of small rural producers who belong to the value chain and receive remittances.

The Ministry of Economic Affairs (MINEC) of El Salvador expressed particular interest in strategy 7 (see table 7). This strategy matches one of the main thrusts of the current government's economic and foreign policy (2019–2024), which is to attract investment and promote trade among members of the Salvadoran diaspora. ECLAC, with financial support from IFAD, carried out an empirical analysis to identify the challenges and opportunities involved in attracting investment from members of the Salvadoran diaspora in the United States to income-generating productive activities in their home country.

VI. Conclusions and lessons learned

This section presents six lessons learned from the design and execution of the three case studies. The analysis of value chains in three countries and three different sectors identified a considerable variety of factors affecting the relationship between financial inclusion, investment of remittances and production development. Accordingly, this document sets out to exploit the heuristic value of analysing chains in rural areas and three different national and sectoral configurations. This multiplicity of explanatory factors provides greater empirical and analytical support for public policymaking.

A first lesson learned concerns the scope and limits of financial and productive inclusion for small rural producers. There is a clear need for strong political support focused on strengthening the capabilities of such producers. As the three case studies show, the investment of remittances in value chains does not happen automatically and requires public policies to foster associativity, provide technical and commercial advice and promote financial inclusion. Financial education for both recipients and senders of remittances has a central role in building capabilities with a view to greater investment of remittances in value chains. The design of financial education strategies should consider the needs and characteristics of the actors in the chains, as well as the institutional architecture available (Rosado, Villarreal and Stezano, 2020).

A second lesson learned is that remittance recipients are better placed on average in terms of financial inclusion and economic participation than non-recipients. This shows the potential for greater use of family remittances to upgrade value chains. It should be emphasized that this finding considers both the sociodemographic differences between value chain actors and the way they participate in the economy. However, the impact of remittances on business performance (in terms of income, employment, and investment) is still quite limited. It is important to stress that although remittances represent an additional income for households, the findings of the case studies indicate that those who receive these resources exhibit socioeconomic characteristics which place them at

an advantage over those who do not. This may be due to their already having received remittances in years prior to the survey, giving them more resources to invest in housing, education, and health, among other things.

The case studies also showed the importance of fostering a gradual process of financial inclusion, seeking first to provide access to personal financial management services, and then to progressively move up to credit, insurance, and other instruments. In Guatemala's value chain, for example, remittances have a threshold effect on the decision to invest in value chains: the receipt of remittances triggers the decision to invest. This does not imply, however, that the magnitude of the remittances is associated with the size of the investment. People who invest in value chains tend to have bank accounts, smaller households (less demand to cover basic needs) and higher incomes.

The third lesson learned is related to the previous two, and it concerns the importance of developing commercially sustainable models for extending and adapting financial services to the needs of small rural producers, in particular, and those with lower incomes in the general population. The findings of the three studies show the existence of a positive relationship between income and financial inclusion, the outcome being that a large majority of small producers do not have bank accounts owing to a lack of income. However, low income does not imply lesser financial needs. On the contrary, the vulnerability entailed by low and volatile incomes heightens the potential offered by appropriate financial solutions for accumulating assets safely, leveraging available assets for investment and managing risk. All this reaffirms the need to design products aimed at meeting the needs of the lowest-income segments of the population. It also reveals scope for adapting the supply of financial products to the needs of actors. The evidence also shows that these needs vary even within links.

The El Salvador case study reveals that producers who started their businesses with funding from public programmes were dramatically less likely to have access to formal financial sources for subsequent funding. This confirms the need to build up a track record with financial institutions as an inclusion strategy and underscores the need to consider the possibility of negative externalities in the design of production development programmes. This case study shows a positive relationship between business size (measured by number of workers) and the likelihood of obtaining financing. The challenge here is to build specific mechanisms to channel financing to smaller producers.

The fourth lesson learned relates to the fact that, although there are opportunities to increase the amount of remittances devoted to income-generating activities, the investments needed to improve the prospects of running a successful business require supplementary resources. For one thing, resources from remittances are small, and the percentage available for investment in value chains is even smaller. Partnerships among remittance recipients are necessary to achieve the minimum scale of resources required for a significant and sustainable upgrading of value chains. With the same objective, these resources need to be leveraged in the financial system. Accordingly, the strategies designed included two key elements: associativity and complementarity of financial system resources.

The fifth lesson starts from the recognition that the use of family remittances is strictly personal. Therefore, the aim of public policies should be to incentivize and facilitate so that recipients see advantages in investing a portion of their remittances in strengthening value chains, in distinction to any other use. A key public sector incentive is to provide finance to match the amount of remittances invested, i.e., for each peso or dollar invested by the recipients, the

government donates or finances a proportional amount at preferential rates. The detailed chain analysis shows that the degree of financial inclusion and the production capacities of actors in the chain differ significantly. This points to the need for targeted public policies to facilitate the use of remittances for greater local productive development. Strengthening the chain thus requires comprehensive policies that recognize the strengths and weaknesses of recipients and non-recipients.

A sixth lesson concerns the methodology followed. The value chain approach serves to identify specific opportunities for investing a portion of remittances in upgrading chains. The starting point is diagnosis of the constraints holding the chains back from raising productivity, improving quality, and achieving better marketing of their goods and services, among other factors. This is complemented by an analysis of the capabilities of chain actors, their degree of financial inclusion and the receipt and use of remittances. The second element is the identification of international good practices in terms of strategies and public policies to promote greater use of remittances in income-generating activities and greater financial inclusion.¹⁴ Analysis of the different links and of relations within and between links serves to design targeted strategies and to identify very specific areas for investment of family remittances in income-generating activities. The approach followed also makes it possible to identify differentiated capabilities and needs among the members of the chain (between links and within links).

The methodology also provides lessons on the challenges of constructing public policies based on sound evidence, given that there is not enough public and private information to construct sample frameworks that support statistical inference. Likewise, the participatory character of chains shows the importance and usefulness of designing evidence-based policies in conjunction with actors as a central element for validating, enhancing, and appropriating the process.

The limited managerial and technical capabilities of small producers and service providers in rural areas prevent them from identifying opportunities for improvement and strategically planning new production initiatives. The low level of associativity among producers makes it difficult for them to access credit, market their products on better terms and invest in more productive and profitable projects.

Lastly, in all three case studies, sociodemographic characteristics are positively associated with greater financial inclusion of individuals, including age, education, and household income. Analysis of these characteristics also revealed a strong negative bias against the financial inclusion of women, something that is not exclusive to the chain but is generally observed in the countries analysed and indeed globally, and of the smaller actors in the chain. This aspect confirms the importance of designing products and outreach strategies, with gender perspective, aimed at serving traditionally excluded groups and strengthening their financial capacities.¹⁵

¹⁴ See Aldasoro (2020) for further information on good practices.

¹⁵ See Gilbert, Padilla Pérez and Villarreal (2020).

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Family remittances represent an important source of resources and external financing for many Latin American and Caribbean countries, helping greatly to reduce poverty, increase private consumption, and boost national economic growth, among other things. Although a large share of remittances are intended to cover basic needs, such as food, health care and housing, some of them could be used to finance income-generating activities.

This document summarizes the main findings of the technical collaboration project carried out by the Economic Commission for Latin America and the Caribbean (ECLAC) and the International Fund for Agricultural Development (IFAD) with the Governments of the Dominican Republic, El Salvador and Guatemala, focused on promoting the investment of remittances in rural value chains. Given the strictly private nature of family remittances, the strategies aimed at the recipients and senders of these resources always centred on the realization that the only way to secure investment of a portion of remittances was through incentives, advice and facilitation measures. This document offers a summary of the methodology used, the spaces in which remittances can be used to strengthen value chains, and the strategies and lines of action aimed at encouraging the investment of remittances in these value chains.

