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**PROTECTION, PRODUCTION, PROMOTION:
EXPLORING SINERGIES BETWEEN SOCIAL PROTECTION AND
PRODUCTIVE DEVELOPMENT IN LATIN AMERICA
EXECUTIVE SUMMARY**

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Introduction: Conditional Cash Transfer Programs and Rural Development in Latin America

Jorge Higinio Maldonado¹

John Alexander Gómez²

Almost 27 million poor households in Latin America and the Caribbean are beneficiaries of aid through conditional cash transfer programs (CCT), which mobilize close to US\$ 540 million every month. A significant proportion of these households are rural inhabitants and therefore potential subjects of rural development programs (RDP) such as those implemented by the International Fund for Agricultural Development (IFAD) or similar projects. The households that are beneficiaries of both types of intervention (CCT and IFAD-type projects) may find different ways of managing resources to ensure complementarity exists between them. The connection between social protection programs, labor markets and entrepreneurship projects is especially relevant for Latin America. For example, as part of the goal of overcoming intergenerational poverty, the region's social protection programs seek to strengthen the human capital of children. However, this effort is fruitless unless it fosters the ability for the beneficiaries to be connected with the labor market or with entrepreneurship projects (Cecchini and Madariaga, 2011; Rangel, 2011). These connections may provide a step towards the possibility of simultaneously structuring a path to deal with poverty in the short-term, and to strengthen the productive capacities not only of the children of beneficiary households but also those of their parents or tutors.

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Within this framework, the Center for Studies on Economic Development (CEDE) at Universidad de los Andes leads a project known as “Conditional Cash Transfer Programs and Rural Development in Latin America,” funded mainly by IFAD and executed with the collaboration of six other recognized institutions in the region. The project’s overall goal is to improve the impact of IFAD operations in Latin America and the Caribbean, through the search for, and the assessment and conceptual construction of the synergies between the conditional transfer programs and IFAD-type rural development programs, which reach tens of millions of poor rural households in the region.

The project has three specific goals. On the one hand, through a number of empirical analyses, it seeks to describe and understand the mechanisms (at household and community level) through which synergy between RDP and CCT exists or may exist. On the other, given the potential development that may be obtained from the topic, the project seeks to inform national level policy makers and international organizations that provide funding for CCTs and RDPs, among others, of the potential synergies between the programs, and about alternative designs that could exploit or improve these synergies. Finally, its last goal is to provide feedback that will allow IFAD and its teams in each country to adequately exploit the potential synergies that they may find in the particular interventions that they promote.

The results complement the discussion on effective strategies for rural poverty reduction, which, in most of the region’s countries, is lagging behind its urban counterpart. They also offer input to strengthen existing results in the social assistance platforms, which —in most of the region’s countries— already revolve around transfer programs. Similarly, identifying the synergies offers information that facilitates the construction of scaling up strategies in the IFAD interventions within the framework of the CCTs, which means that resources can be used more efficiently to reduce rural poverty and food shortages.

Although research in this field is as yet incipient, there are already a number of important indices to explore the interactions between the programs. Studies such as those undertaken by Sabates-Wheeler et al. (2009) and Tirivayi et al. (2013) explore the topic and conclude that it is important to continue studying the subject more deeply. The households that are beneficiaries of both types of intervention (CCT and IFAD-type projects) can find different ways to manage the funds from both sources, making them complementary. For example, the income obtained through the CCT may modify the beneficiary households’ preferences of productive development projects when faced with risks; the households can redistribute their production, capital or work factors

in order to take advantage of other opportunities, or new economic activities may appear and grow in the communities as a result of the capital injection. Also, given that the CCTs focus on women, they could potentiate the effects of gender equality and the participation of women in productive projects.

In the institutional and operative sphere, there are elements that contribute to the topic of interactions, given that each of the initiatives has gained experience that may be of use to the other. On the one hand, the social protection programs —and in particular, the conditional transfer ones— stand out due to their growth and capacity in terms of the technical selection of their beneficiaries, and to their inclusion of assessment as a primordial aspect of their design. Such factors tend to be rather unremarkable in rural productive initiatives. On the other hand, the productive development programs bring with them vast experience in the formulation and implementation of a broad variety of projects in rural areas, this being a growing requirement of the transfer programs (Cecchini & Madarriaga, 2011; Rangel, 2011). However, it is important to point out that the concept of productive development programs includes a very heterogeneous variety of interventions, whereas the transfer programs tend to be much more homogeneous, even between countries.

Understanding the channels through which such interventions are given is relevant for the formulation of policies in contexts whereby households are beneficiaries of multiple interventions. In this respect, Sabates-Wheeler et al. (2009) point out that the relationship between social protection and agricultural growth is complex and at various levels —after having been understood and analyzed— fundamental for the design of public policies in these spheres. In addition, even though until now the positive effects of the interaction between the two types of program have been explored, we cannot rule out undesired effects at both individual and collective levels. These include, for example, the generation of disincentives in terms of participating in rural productive development programs in order not to lose eligibility for the transfer programs, or conflict within households regarding whether to keep the children in school to fulfill the co-responsibilities of the transfers or whether to involve them in working on the development of new enterprises.

The logic of establishing interactions or joint interventions has also been perceived as being enacted by policy makers, and there is already evidence of a number of attempts to complement different programs. In Brazil, for example, efforts have been made to complement Bolsa Família with Pronaf in poor rural households, and to procure individual interactions in the Brasil Sem Miséria platform. In El Salvador, the transfer program, Comunidades Solidarias, contains an axis of action

for income generation and productive development. There are also two very recent initiatives deliberately aimed at taking advantage of the possible synergies between transfer and other programs: the Haku Wiñay program in Perú, and Familias Campesinas in Colombia.

The book *Production, Protection, Promotion: Exploring Sinergies Between Social Protection and Productive Development in Latin America* constitutes a compilation of the main results obtained throughout the project lifespan from its inception to its culmination in 2015. With the idea of establishing the existence of synergies in the region, CEDE, at the Universidad de los Andes School of Economics, coordinated and supervised the development of six assessments in different countries in the region.

A first group of countries includes those that enjoyed consolidated conditional transfer programs, with extensive databases and significant experience that could support other countries in the region with its results. This group incorporates assessments for Brazil, Chile and Mexico. California Riverside University together with the Fundación Getúlio Vargas led the assessment of synergistic effects between the recognized transfer program Bolsa Família and the Programa Nacional de Fortalecimiento da Agricultura Familiar (Pronaf). The Latin American Center for Rural Development (Rimisp) carried out the corresponding case for Chile, developing an assessment of the existence of synergies between the predecessor to the recognized transfer program, Chile Solidario, the Ingreso Ético Familiar (IEF) program and the FOSIS enterprise support programs. Although the idea of these evaluations was to use existing databases in these countries, the project also supported, in the case of Chile, a timely and important phase of primary information collection. Finally, in Mexico, the civil association Desarrollo y Alimentación Sustentable led the assessment of the existence of synergies between what used to be the transfer program Oportunidades, now known as Prospera, and the restructured rural productive development program Procampo.

The three remaining experiences examine the results obtained in countries that, despite having growing transfer programs, their experience and consolidation are reduced when compared to the cases described above. As the representative for Central America, the Salvadoran Foundation for Economic and Social Development (FUSADES) assessed the synergies between the program Comunidades Solidarias Rurales, predecessor of Red Solidaria, and the productive development program Plan de Agricultura Familiar, in El Salvador. For its part, the Institute for Peruvian Studies (IEP) led the assessment of synergistic effects between the Programa Nacional de Apoyo Directo a los Más Pobres – Juntos, and the IFAD Sierra Sur project. Finally, as well as

coordinating the project execution, CEDE also implemented and executed the methodological strategy to derive the possible synergistic effects between the recently restructured transfer program Familias en Acción and the IFAD program for rural development Oportunidades Rurales.

Table 1. Assessment of Cases of Countries with Consolidated Programs

	Brazil	Chile	Mexico
RDP	Pronaf	FOSIS–entrepreneurship line	Procampo
Type of rural development program	Subsidized credit lines	Enterprise and formal credit promotion	Cash transfer
Institution in charge	Ministry of Agricultural Development	Solidarity and Social Investment Fund	Support and services for agricultural and livestock commercialization
CCT	Bolsa Familia	Ingreso Ético Familiar	Progresa - Oportunidades - Prospera
Institution in charge	Ministry of Social Development	Ministry of Social Development	Ministry of Social Development

Table 2. Assessed Programs in the Case of Countries with Programs in the Process of Being Consolidated

	Colombia	El Salvador	Perú
RDP	Oportunidades Rurales	Plan de Agricultura Familiar	Sierra Sur
Type of rural development proposal	Technical assistance, financing of assets and promotion of savings	Technical and non-technical assistance, personal and social skills-building	Technical assistance, financing of assets and promotion of savings
Institution in charge	Ministry of Agriculture and Rural Development	Ministry of Agriculture and Livestock	Ministry of Agriculture
CCT	Familias en Acción	Comunidades Solidarias Rurales	Juntos
Institution in charge	Department of Social Prosperity	Social Investment Fund for Local Development	Ministry of Development and Social Inclusion

In order to guarantee the scientific rigorousness of the methodologies and results using an innovative approach, the Scientific Committee supported CEDE to prepare, design and execute each

of the studies, and it also reviewed each of the chapters of this book. The Scientific Committee included the participation of Michael Carter (University of California, Davis), Karen Macours (Paris School of Economics), Graciela Teruel (Universidad Iberoamericana de México), Nora Lustig (Tulane University) and, initially, Francisco Ferreira (World Bank). They all had an in-depth knowledge of the development and assessment of productive development or social security programs in the region's rural areas. We sincerely thank each and every one of them.

In addition to the nation-wide studies, a study led by Ignacia Fernández (Rimisp Director) analyzed the institutional conditions that define and affect the potential realization of such synergies. This chapter, on institutional analysis, was reviewed by Pablo Yanes (research coordinator at the sub regional CEPAL branch in Mexico).

The book is made up of nine chapters. The first constitutes a conceptual exercise developed by the CEDE project coordinators, and seeks to technically explore the possibilities of interaction between the programs and in particular the possible existence of synergies. The chapter therefore defines and expands the concepts of RDP and CCT and, of course, the concept of synergies. As such, it seeks to build a conceptual framework, based on a review of the existing literature, and it proposes a theoretical model to approach how the effects and the possible channels through which these are transmitted relate to each other in order to create such synergies. The chapter also explores the related literature in the light of different possible channels of interaction between RDP and CCT. The following six chapters (Chapters 2 to 7) present the studies relating to the countries for which evaluations were developed, beginning with the three that already have consolidated programs (Brazil, Chile and Mexico), and followed by the three cases that correspond to countries with emergent programs (Colombia, El Salvador and Perú). Each chapter ends with a technical conceptual note by one of the members of the Scientific Committee and a political conceptual note by an external reviewer. Some of the chapters have corresponding annexes that, due to lack of space, are not included in this publication. These are, however, available on the book's Web page at: (<https://economia.uniandes.edu.co/centros-de-investigacion/cede/web-de-proyectos-cede/fida> o <http://sinergiasrurales.info/librosinergiarural>).

Finally, to conclude, Chapter 9 gathers the most important lessons learned from the studies, the implications of the results and the limitations, as well as the context in which these results should be understood. The chapter also includes a discussion on the future prospects of this type of study and its application in public policy.

Synergies between Social Protection Policies and Rural Development Projects: An Approach Based on Existing Literature and Theory

Jorge Higinio Maldonado³

John Alexander Gómez⁴

Viviana León Jurado⁴

Traditionally, social agricultural policy intervention programs and projects have been managed through different organizations with different logics as they seek to attend to the households' different types of problems. As such, the existence or possibility of taking advantage of possible interactions between programs was never part of their work agendas. However, even without coordination, some interactions between the programs happen organically, in particular when these target what would seem to be the same population. Given that conditional cash transfers (CCT) target mainly the poor and/or the extremely poor population, and that poverty exists largely in rural areas where rural development programs (RD) are naturally implemented, it is understandable that some interaction may indeed exist. This is why the *Conditional Cash Transfers and Rural Development in Latin America* project seeks to assess the possible synergies within the structure of the two types of intervention.

In Latin America, the CCTs have turned into a public-policy tool whose accelerated growth, and the proof of their results have been noticed by experts and public policy makers. The term covers

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those initiatives based on the delivery of financial resources to families that classify within a certain focus, in exchange for their committing to fulfil a series of co-responsibilities.

Although RD programs are aimed mainly at improving life conditions and economic productivity in rural areas, their goals are varied and broad ranging, and sometimes there are several goals to be reached at the same time. The interventions can range from basic, specialized or entrepreneurship projects to direct subsidies and soft loans for investments, equipment, improvement of seeds, improved technology, and even business formalization processes, food security, irrigation projects and non-agricultural interventions such as rural housing, basic sanitation, and infrastructure. Since 1977, IFAD has mainly funded food production development projects in developing countries, given its strong links to poverty in rural areas (IFAD, 2014).

Just as the concept of rural development is broad, rural producers are also characterized by their diversity. On the one hand, agricultural production has traditionally been divided into two categories: business-oriented agriculture and family farming. It is understood that RD programs mainly target family farmers, characterized by the predominant use of family labor, the limited access (in quantity and quality) to land and capital resources, and a diversification of income generating activities in the household (Echenique, 2006). Maldonado et al. (2007), basing themselves on Echenique (2006), propose three categories of family farm households (1) Subsistence family farming, (2) Transition family farming, and (3) Consolidated family farming. The RD projects can directly target one of these groups in particular, or they can try to cover all three groups. This type of targeting is important when it comes to defining the scope and success of project implementation.

As a first step to guide the discussion on the synergies between the two types of programs, it is necessary to identify the existing literature that can allow us to propose and support hypotheses in relation to the variables in which the synergies could present themselves. As such, in this section, we present the conceptual base for this project by proposing and developing a theoretical model that allows us to understand this notion of synergies between interventions, and we advance in the identification and analysis of the possible interactions between rural development programs and social protection ones. The chapter also seeks to synthesize and present the hypotheses dealing with the synergies, and the literature that could support the possible paths through which these two programs could complement each other.

Synergies between Social Protection and Rural Development

There are two forms of interaction between the productive development and social protection interventions, which occur when they target the same space and population. A first type of interaction is what we call complementarity, in which both types of intervention can foster results on the same variable without these implying additional results from the *interaction* between them. In these cases, there is no added result of the interaction, given that the result is given by the added effect of the two interventions (the sum of the individual effects). A second type is when a program is able to potentiate the results of another so that the interaction generates an added value, in terms of the variable of interest, to the value that results from the sum of the individual effects. That is to say, the interaction has a value in itself and the result is greater than that of the sum of the two interventions. In this case, we call this a synergy.

The interactions may occur in terms of particular aspects or variables subject to specific contexts. On the one hand, they can be planned so that based on the design of the programs or the coordination of the entities in charge of their implementation explicit spaces for interaction are opened. On the other hand, the interactions could also come about organically, but this only happens when programs coincide within a household. Despite this potential, traditionally, the entities in charge of social protection or of rural development have not undertaken explicit actions to coordinate the programs; in fact, they have acted in isolation, perhaps missing out on the opportunity to take advantage of the interactions between different initiatives.

One way of understanding this process is through the theoretical modeling of the effects of the programs on the households, as shown below:

The Theory behind the Synergies

In order to understand how the CCT and RD programs affect decision-making in rural households, we propose a theoretical model inspired in the one formulated by Singh et al. (1986) and applied from different perspectives, as is the case for De la Montaña et al. (2014).

The model proposes that the rural households derive their well-being from the consumption of goods, be they agricultural or not, or self-produced or not. This suggests that based on describing a function for utility ($U = F^{\alpha_f} (\gamma A)^{\alpha_a}$) and one for production ($A = \psi \theta^{\phi} L_a^{\beta}$), it is possible to represent the rural households' decision in relation to agricultural production (A), to the propor-

tion of the production destined for household consumption (γ), to the consumption of non-agricultural goods (F) and to the inputs for agricultural production (Own labor – L_a and other technological inputs – θ), as well as the results of decisions aimed at maximising the well-being of the households subject to technical, budgetary and time limitations.

The model allows us to see what the optimum decisions would be and, more importantly, to see the effect on the households' decisions produced by conditional cash transfers (S) and changes in productivity (ψ), which are supposedly brought about by the CCT and RD programs, respectively.

Table 3. Comparative Static

X	$\frac{\partial X}{\partial S}$	$\frac{\partial X}{\partial \psi}$	$\frac{\partial X}{\partial S} + \frac{\partial X}{\partial \psi}$
Productive agriculture inputs (θ)	0	$\frac{\theta^*}{\psi(1-\beta-\phi)}$	$\frac{\theta^*}{\psi(1-\beta-\phi)}$
Length of time worked in farming (L_a)	0	$\frac{L_a^*}{\psi(1-\beta-\phi)}$	$\frac{L_a^*}{\psi(1-\beta-\phi)}$
Agricultural production (A)	0	$\frac{A^*}{\psi(1-\beta-\phi)}$	$\frac{A^*}{\psi(1-\beta-\phi)}$
Level of household consumption (γA)	$\frac{\alpha_a}{P_a}$	$\frac{\alpha_a(P_a A^* - wL_a - C_a \theta)}{P_a(1-\beta-\phi)}$	$\frac{\alpha_a}{P_a} \left(1 + \frac{P_a A^* - wL_a - C_a \theta}{(1-\beta-\phi)} \right)$
Level of consumption of goods not produced in the household (F)	$\frac{\alpha_f}{P_f}$	$\frac{\alpha_f(P_a A^* - wL_a - C_a \theta)}{P_f(1-\beta-\phi)}$	$\frac{\alpha_f}{P_f} \left(1 + \frac{P_a A^* - wL_a - C_a \theta}{(1-\beta-\phi)} \right)$

One way of observing possible interactions between the two interventions is based on the assessment of the combined effects of both variables on the decision variables. Table 1 highlights the fact that the model suggests that the cash transfers do not affect the consumption of productive inputs or the decisions dealing with labor allocation. However, empirically, it is possible to see changes in agricultural activity as a result of the cash transfers or other unpredicted effects of the model. Thus, the question is, what could the model be ignoring that stops us from observing other interactions (complementarities or synergies) between the programs? The literature points to two reasons for which the model may not show other interactions. First, the model supposes that market failures do not exist, and, second, the theoretical model is abstracted from the internal differences of the households by treating all the members as a unit, with the same preferences and making the same decisions.

In sum, although the theoretical model offers some clues on the possible complementarities or synergies (if the markets exhibit failures), the answer to the question regarding the existence or not of such interactions becomes fundamentally empirical.

Empirical Evidence of Synergies and Complementarities

Studies such as those by Farrington et al. (2004), Holmes et al. (2007) and Tirivayi et al. (2013) look into the possibility of the existence of synergies and complementarities between the two types of intervention. In the first instance, according to Holmes et al. (2007) and Farrington et al. (2004), the possible synergies between these two perspectives is limited, due to the fact that the two types of policy were conceived separately, in government departments that worked independently from one another, and were therefore considered from different perspectives. However, Farrington et al. (2004) found that there was ample space to introduce aspects from one type of program into another and vice versa.

In recent years, documents have been added to the literature that seek to find empirical evidence of the possible synergies and complementarities between the productive and social protection programs, in particular, the conditional cash transfers. Tirivayi et al. (2013) looked for evidence in earlier studies, finding, in the same way as Sabates-Wheeler et al. (2009), that there is evidence of complementarities insofar as alleviating liquidity constraints, the development of local agricultural markets, and food security, among others. Covarrubias et al. (2012), Boone et al. (2013), and Asfaw et al. (2014) present evidence for Sub-Saharan Africa, finding positive evidence of child

labor, productive assets, dietary diversity, and credit and liquidity restrictions in some particular cases.

According to Sabates-Wheeler et al. (2009) and Holmes et al. (2007), a number of minimum conditions are required for the interactions to be successful. Sabates-Wheeler et al. (2009) highlight the relevance of the context in which the two interventions are implemented in terms of whether or not complementarities take place. Secondly, the country's level of agricultural development is relevant given that it is impossible to assume that complementarities or synergies based on good market performance will work in all countries (Sabates-Wheeler et al., 2009). In relation to this last point, Holmes et al. (2007) and Sabates-Wheeler et al. (2009) affirm that the complementarities or synergies will manifest depending on the beneficiary's type of vulnerability, given that if the individual suffers from high levels of poverty, she is not very likely to invest in production. Thirdly, agricultural sector policies need to be made stable, for they need to provide a context with clear regulations that will allow farming households to make decisions with the least level of uncertainty possible. Finally, the guarantee and regularity of cash transfers is essential in modifying the behavior of the beneficiaries of the two types of program (Sabates-Wheeler et al., 2009).

Opportunities for Interaction

The identification of each of the types of program as interventions that use specific instruments to foster specific results, through particular channels, could, on the one hand, facilitate the conceptualization of these interactions between the programs. As such, a complementarity may be identified when both programs have direct and concerted effects on the same result but through different channels. A synergy, on the other hand, could be identified as: (1) cases in which the same result is affected but through different channels that could support each other or (2) as indirect results of a type of program that potentiates or affects the mechanisms through which the effects of the other program are developed. In order to foster a soundly based approach to the topic, we set out a number of particular aspects in which it is possible to observe interactions between the programs.

Agricultural Production

A good number of the RD strategies —at least those that target productive development—are aimed at increasing the levels of production or particular changes in the technology, which lead

to greater production. As suggested by Tirivayi et al. (2013), RD programs have proved to have positive effects on agricultural productivity and the levels of protection. In contrast, increasing production levels is not one of the goals of CCT programs.

The possible synergies of the two programs in terms of increased levels of production must be seen in the light of the potential indirect results of the social protection programs. The FAO (2014) highlights that, in Sub-Saharan Africa, cash transfers have affected agricultural activity by increasing the use of inputs in production and land use, and in increased production. Now, if the RD interventions offer mainly information and additional inputs for production, which people could not have in their absence, there is a possibility that the results in terms of production will be potentiated due to greater liquidity provided by the cash transfers.

Food Security

It may be that food security is being affected by both types of programs. The CCT programs could be having this effect through two main channels: by alleviating liquidity constraints (Cecchini and Madariaga, 2011) and by nutrition training (Fiszbein and Schady, 2009; Dfid, 2011). Now, RD programs may place food security as a direct or indirect goal. Authors such as Asfaw et al. (2014), Boone et al. (2013), Tood et al. (2009) and Martinez (2004) found evidence of a better alimentary situation thanks to the increased consumption of food produced by the households themselves. Tirivayi et al. (2013) found that one of the most solid results of the RD programs is their impact on variables such as level of income, productivity and level of production, which may in turn be related to improved levels of food security.

In particular, a possible space for synergies would be given based on the training provided by the cash transfer programs, which may redirect the use of income and additional production obtained through the RD programs. The training and child health verification channels, together with the greater prevalence of the programs in comparison with RD ones, may be addressing these differences and as such strengthening the channels and their effects on food security.

Formation of Productive Capital

The productive capital is understood as the access to inputs, assets, and technology for the development of the households' productive activity. The effect of the RD programs on such aspects is

clearer, given that the lack of these elements for the productive capital is one of the reasons for its existence. In contrast, CCTs do not include the construction of productive capital as a direct goal, but there is increasing evidence on their indirect effects.

The indirect effects of the CCTs may potentiate the channels through which RD programs affect the construction of productive capital. Some documents seem to suggest that the security of cash transfers and the reduction of liquidity constraints may potentiate the direction provided by the RD programs on investments or the use of inputs. In the same way as for the previous hypotheses on synergies, there is no evidence on the interaction of these channels, but in this particular case there is evidence on how the CCTs have generated productive investment. Thus, the hypothesis rests on RD interventions being effective to guide such investments.

Access to productive assets could, therefore, be understood as being available through the following two channels: (1) credit market mechanisms, and (2) a reduction in the perceived risk pertaining to productive investments. Credit restrictions are a problem for small-scale producers, given that they do not allow them to invest optimally in their productive activity (Sabates-Wheeler et al., 2009). A household that benefits from the two types of program could increase its access to credit and formal financial services. In the same way as with credit restrictions, adequate risk management is a channel through which productive capital can be increased. The main channel through which CCT and RD programs could improve risk management is through assuring a part of the households' income.

Training the Human Capital

Both the RD and CCT programs intervene in the training of human capital in some way. The CCTs have a positive impact on human capital training through the conditionalities that foster incentives for the formal training of the households' youngsters. The RD programs foster informal and specific training to increase the rural communities' productive capacity.

The RD programs offer training aimed at productive activity and the creation of added value, whereas the CCTs foster human capital training. If CCTs promote the creation of basic and secondary formal education, and the RD programs promote the creation of productive knowledge, the intersection between the two types of intervention may foster incentives to increase formal education at technical and professional levels. Also, formally trained youngsters would have a better chance of understanding and assimilating training in productive practices and, as such, obtaining better results from the RD interventions.

According to Tirivayi et al. (2013), social protection programs reduce the need for the adoption of coping strategies for unpredicted situations, among them, school absenteeism. In contrast, the rural development programs may be increasing the workload in the households and, as such, increasing the opportunity cost of the rural households sending their children to school. It may be that the meeting of the two types of program generates different effects. Given the evidence that suggests that the CCTs do not really reduce child labor, and that this opposes the programs' condition of school attendance, it is not possible to determine to what point the interactions could be negative (by increasing the pressure on family labor), or positive (by relieving part of the pressure expected for the RD programs with cash transfers).

Transversal Effects: The Case for Gender and the Environment

Tirivayi et al. (2013) suggest that as part of the interaction between the two types of program, there are transversal variables that explain the reach of their effects on particular results. Two particular transversal topics are important: gender and the environment.

The role of women within the cash transfer programs has been a widely discussed topic and the results of its impact have been variable, although, in general, also favorable. Although it is known that some of the RD programs prioritize women, and despite the fact that the effect of this allocation has not been analyzed, we do know that women benefit from such programs.

The possible interaction between the programs would also create spaces for the generation of synergic effects in terms of gender. In particular, while the empowerment achieved through the transfers would seem to come about based on the increase of women's financial power in household decisions, the empowerment expected of the RD programs is aimed at strengthening their productive capacities.

In terms of the environment, while the possible effect of the programs is indirect, the impact of RD is direct, given that, in general, such programs have sought to affect the variables positively. The assessment of the available RD programs have aimed to find out how eco-friendly strategies, which are being encouraged, would affect the variables such as the income or production of the recipients. Tirivayi et al. (2013) reach the conclusion that the results are as yet unstable. There is only a limited amount of literature dealing with the effects of the programs on environmental variables; however, one report affirms that the cash transfer program in Mexico (Oportunidades)

is associated with greater levels of deforestation (Alix-Garcia et al., 2013), as it encourages the consumption of land-intensive goods and is, therefore, transforming forest areas.

Thus, a valid question would be to see whether it is possible to confirm and reverse these effects at the moment when these two types of program are present at the same time. The monitoring of environmental variables is essential for rural development and, in fact, a number of programs in this area promote it. Meanwhile, the negative effects of the CCTs come from the inappropriate use of cash transfers from the environmental perspective. Given this, the use of cash transfers, accompanied by the orientation of the RD programs, could make the result of the interaction different to that which is expected within the framework of each program independently.

It is important to mention the effect of the programs on variables related to the capacity of the beneficiaries to adapt to extreme climatic events. Although this variable is not in itself an environmental variable, it has a close relationship with one of the most important current climatic problems, which is that of climate change. The DFID (2011) affirms that there is a growing interest in the role of cash transfers as part of an integrated response to climate change. Integrating this aspect with the services offered by the RD programs could lead to synergies based on the utility of the latter to introduce adaptation strategies, particularly in relation to the beneficiary communities' production levels.

Conclusions

This introductory section highlights how the relationship between conditional cash transfer programs and rural development programs provides a relatively new research field and that there is, as yet, no consensus on the existence of complementarities or synergies, even in result variables that seem obvious. This lack of evidence is due, to a large extent, to the fact that even though impact has been assessed in both dimensions, not very much has been assessed in terms of the impact of the interaction between the interventions.

In the literature review, we propose various channels through which these interactions can be observed: agricultural production, household consumption and household food security, and the creation of productive and human capital. We also mention the role played by the interaction between RD and CCT programs in topics such as women's empowerment, or decisions related to the environmental management of the plots of land. But the list is not exhaustive. There may be other channels and other forms of interaction between different interventions. For

example, the issue of the farmers' community participation may be decisive when it comes to taking advantage of the programs, and the formation of social capital within the communities or producers' organizations may be subject to positive or negative impacts based on interaction between the interventions.

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CONDITIONAL CASH TRANSFERS AND RURAL DEVELOPMENT POLICIES IN BRAZIL: EXPLORING POTENTIAL SYNERGIES BETWEEN BOLSA FAMÍLIA AND PRONAF

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This paper examines possible synergies between conditional cash transfer programs (CCTs) and rural development policies in Brazil. Policy synergies could exist for a variety of reasons. In environments where there are market failures for credit and insurance, CCTs could provide liquidity and reduce vulnerability to shocks, thereby contributing to the success of rural development interventions. CCTs might improve the nutrition and health of households, allowing them to work more productively and increase the independence and bargaining power of women, permitting them to participate more fully in community-based development projects. Synergies could also run in the opposite direction. Rural development policies that succeed in raising income could enhance the impacts of CCTs on the health and education of children. To the extent that synergies exist, government officials might seek to coordinate the design and delivery of these policies in order to take advantage of complementarities and increase program impacts. In this paper, we test for the existence of policy synergies and estimate their magnitude in rural Brazil.

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Conditional cash transfer and rural development policies have grown rapidly in Brazil since the mid-1990s. The first conditional cash transfer program —Bolsa Escola— was introduced in the municipality of Campinas in 1995, and by 2002 had become a federal program operating in nearly all Brazilian municipalities. The program was modified and expanded under President Lula. In its current form, Bolsa Família reaches over 13 million households. Among the rural development policies, we focus on the National Program to Strengthen Family Farming (Pronaf). Pronaf was created in 1996 and expanded rapidly in the early 2000s. There were more than 1.8 million credit contracts with family farmers in 2012. We are not aware of any research that has sought to identify potential synergies between the two programs.

The possibility of designing and implementing policies to take advantage of policy synergies —and thereby leverage possible policy multipliers— is extremely important even in a country like Brazil, where rural poverty remains quite high. Although rural poverty declined rapidly between the early 1990s and 2005, falling from 62% to 46% between 1992 and 2005 and continuing to do so at least up until the recent global recession, it continues to be more than double the rate of poverty in urban areas. It tends to be concentrated in the Northeast of the country, where rural poverty rates are twice as high as they are in the Center-South of the country.

In this chapter, we examine the evidence for three hypotheses about potential synergies between Bolsa Família (BF) and Pronaf. The hypotheses are formulated as follows: Households that are beneficiaries of BF and Pronaf will have more success in 1) increasing agricultural productivity, 2) increasing agricultural income, and 3) reducing child labor in agriculture, than households that just receive one type of intervention (BF or Pronaf) or households that do not receive any intervention. We used a difference in differences methodology with municipal level fixed effects to investigate whether municipalities in which BF and Pronaf incidences increased more were associated with greater increases of productivity and income and a greater decrease of child labor. We limited ourselves to these three outcome variables because they are the ones that we can best address with the available data. The models are estimated with municipal level data on farms under 500 hectares drawn from the 1995-1996 and 2006 Agricultural Censuses in Brazil. Limitations of the data and identification strategy prevent us from claiming —with a high degree of certainty— that these are causal estimates. Reverse causality, however, is ruled out in a number of cases, and the robustness and heterogeneity of the results are explored. Taken as whole, the results suggest that significant relationships exist across programs and with the outcome variables.

The econometric analysis of Bolsa Família and Pronaf is complemented by results from approximately 30 interviews with federal and state level policy makers, government officials, and the directors of rural development projects in Brazil. The interviews were semi-structured in order to help us gain a deeper understanding of what government officials and project directors think about the potential synergies between conditional cash transfers and a broad set of rural development policies in Brazil. We asked about synergies at two levels. First, we investigated their views about the importance of policy interactions for the beneficiary households, which provided insight into the relevance of the hypotheses being studied, as well as the potential mechanisms that facilitate or impede policy synergies. Second, if government officials believe that synergies exist and that policies work better jointly than in isolation, we would expect them to coordinate the design and execution of those policies. The extent of coordination in policy making and implementation is also explored in this paper.

Findings and Conclusions

The descriptive portion of this paper showed that average land productivity among establishments with 500 hectares or less rose by 61% in the ten-year period, as a reflection of increased input usage and technical change in the sector. Yet, because the value of inputs also increased sharply, real agricultural income per family worker increased by only 43%, and child labor fell from roughly one child working on every two establishments to one child working on every five. In terms of the program variables, the percentage of farms under 500 hectares with access to Pronaf increased from zero in the baseline data to 12.3% in 2006, and the percentage of farms with access to social programs rose from zero to 14%. Seventeen per cent of the farms that received social programs also had access to Pronaf, and nearly 20% of the farms with Pronaf also benefited from social programs. In all cases, there was considerable variation across the more than 4,000 municipalities that were studied.

The econometric results suggest that where Bolsa Família grew more quickly, child labor declined more rapidly, and we have no reason to doubt that this reflects the causal impact of the program. There was also a strong negative relationship between the growth of social programs and the growth of land productivity and income. Additional research should seek to identify whether these associations are causal or not. With regard to the relationship between the growth of Pronaf and land productivity, there appears to be heterogeneity across regions, with a positive relationship in the South and a negative one in the Northeast. Other research has documented a much

larger flow of Pronaf resources to the South, and more evidence of potential impacts on productivity there. Thus, the results are suggestive of the fact that Pronaf resources might be used much more effectively in the South. Finally, we observed no significant relationship between the growth of Pronaf and the growth of income, either for Brazil as a whole, in specific regions, or for smaller farms. A plausible explanation is that the growth of Pronaf has been associated with both the growth in inputs and the growth in the value of output, and that these have offset each other.

In terms of synergies, the econometric results uncovered no evidence to support this hypothesis in the case of child labor. We suspect that this is because Bolsa Família and other government policies have targeted this outcome directly, and have already been quite successful. It is also possible that the Bolsa Família and Pronaf policies have opposing effects that cancel each other out. In contrast to child labor, evidence of positive synergies was observed for the outcome variables land productivity and income, and these results were consistent across regions and even when attention was restricted to farms under 100ha. With both variables, the positive synergies were quite large, with the potential to have a significant impact on income growth and poverty reduction. There are a number of possible explanations for these results. Cash transfers can improve basic nutritional outcomes, and this may allow the beneficiaries of rural development policies to focus more of their time and energy on the success of the projects; CCTs may offer credit and insurance functions that can help relax liquidity constraints and prevent a loss of assets when households are faced with a crisis, or they may facilitate access to other public services, such as technical assistance. Future research should seek to distinguish between these alternative explanations.

The econometric results also suggest that the aggregate impact of the policy interactions was limited by the fact that a relatively small share of households received both programs simultaneously. While nearly 20% of the establishments that accessed Pronaf also received Bolsa Família in 2006, the group that received both programs only represented 2.4% of all establishments under 500 hectares. In order to gain further insight into why this might be the case, we turned to interviews with policy makers and program directors. We emphasize five key conclusions.

First, there was substantial agreement about the obstacles to poverty reduction that result from a lack of policy coordination. In the period under study, Bolsa Família and Pronaf both expanded dramatically, but with little, if any, relationship between them. These were policies that were prioritized by different ministries (the Ministry of Social Development in the case of Bolsa Família, and the Ministry of Agrarian Development in the case of Pronaf), with different goals (poverty reduction and human capital accumulation vs. the development of family farming), different target

populations (the poor vs. family farmers), and different instruments (cash transfers vs. subsidized agricultural credit). In some cases, as with poor family farmers who qualified for the Pronaf B line of credit, there was considerable overlap in the target populations and goals. But in general, the isolation of policies at the federal, state and municipal levels appears to be a significant problem. Political obstacles, with their roots in the individual logic of politicians, the heterogeneous governing coalitions that are often formed, or in the archaic practices of traditional elites in Northeast Brazil, were also identified as reasons for a lack of policy coordination.

Second, a promising area where policy coordination does seem to have emerged is through the *Brasil Sem Miséria program*, a signature effort by President Rousseff. As a result of leadership and the designation of priorities from the very highest level of authority, the Ministries of Social Development (MDS) and of Agrarian Development (MDA) do seem to have collaborated extensively on this effort. For the first time, they have merged databases for the poor from the *Cadastro Único* (Single Registry) and for family farmers eligible for Pronaf (DAP), in order to target the intersection of the two. Policies aimed at “productive inclusion” have been designed across the ministries with a relatively high level of collaboration and common purpose. Several examples of similar experiences at the state level — often led by a strong governor — also emerged in the interviews. Leadership is a key element. An important policy recommendation that emerges from this experience is that the government should seek to extend the use of the Single Registry — which determines eligibility for Bolsa Família — to improve the targeting of a host of other policies aimed at rural development and reducing rural poverty.

Third, it is clear that policy makers face budget constraints and trade-offs, and that they do not only make decisions as a result of impact evaluations and evidence-based research. There is no doubt that institutional constraints, interest groups, and political calculations are important. But it was clear from many of the interviews that policy makers and the directors of rural development programs were hungry for information and evidence. They did not hesitate to acknowledge gaps in their information set, and seemed eager to find research and evidence that could help guide their decisions. It was also clear that budgetary and political restrictions were not the main obstacles to the success of Bolsa Família and Pronaf. Both programs saw their clientele and budgets grow dramatically since they were created, and both programs were important enough to survive the political transition from the Partido da Social Democracia Brasileira (PSDB) to the Partido dos Trabalhadores (PT) governments in 2003 (although with some changes in the name and design in the case of Bolsa Família). One of the key obstacles that they both face relates to

weak administrative capacity at lower levels of government. The success of both programs relies on collaboration with municipal governments for the creation and maintenance of the Single Registry, and with state and municipal governments for the provision of technical assistance to family farmers. It is at this level that budgets, personnel, and technical and administrative capacity is often lacking.

Fourth, there are some hopeful signs of progress in fighting rural poverty in Brazil. A new generation of IFAD and World Bank rural development projects in the Northeast of Brazil appears to be cognizant of the importance of policy coordination. These views were expressed by the directors of these programs, but also by others who do not participate in them. Government officials throughout the Northeast, and in Brasilia, appear to share these opinions. Examples of successful coordination can be found, and these seem to have their roots in either the resolute and focused leadership of the president or a governor, or in a particular state-level structure that centralizes the responsibility for coordination in a single agency.

Finally, many officials shared the view that the importance of IFAD rural development projects in Northeast Brazil goes far beyond their direct impact on the participants in these projects. IFAD projects can be examples of successful policy coordination, and can serve as references for what is possible with a comprehensive approach and sustained effort. As in the case of Bahia, there is awareness that lessons can be learned from these projects and scaled up to policies that reach a much larger public in the Northeast. In this regard, comprehensive rural development projects do not necessarily compete with more narrowly focused policies that can reach a much larger public. The two can, in fact, be complementary. Yet a degree of caution is in order. If some of the success of IFAD projects does in fact result from the entire package, and the synergies that are created across policies, then scaling up isolated pieces might not work. Quantitative studies, and impact evaluations, should seek to shed light on these issues.

SYNERGISTIC EFFECTS BETWEEN INGRESO ÉTICO FAMILIAR AND THE ENTERPRISE SUPPORT PROGRAMS IN CHILE, 2012-2014

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This work lies within the framework of the joint effort of six countries to: a) quantitatively study the existence of synergies between conditional cash transfer programs (CCTs) and productive development programs (PDP), and b) qualitatively assess the political economy following the possible decisions of articulation between these programs. This, in order to take advantage of the aforementioned synergies, analyzing, in particular, the opportunities and restrictions for financial and institutional coordination and the political valuations that this brings.

In this chapter, we specifically assess the synergetic effect between Ingreso Ético Familiar (IEF) and a limited set of productive development programs (PDP) executed by the Solidarity and Social Investment Fund (FOSIS) in Chile, based on the assumption that the collective execution of these programs has a positive effect on the well-being of the beneficiary households. We also carried out an institutional level qualitative assessment of the constraints and opportunities in terms of moving forward towards greater articulation between them.

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Description of the Programs Studied

Ingreso Ético Familiar (IEF)

In its fight against extreme poverty, Chile implemented the Subsystem of Social Protection and Promotion Seguridades y Oportunidades in 2012, more commonly known as Ingreso Ético Familiar (IEF). This program attends to those in extreme poverty and is targeted through the Ficha de Protección Social, an instrument used to establish the socioeconomic status of households in Chile. The following sectors benefit from the program: i) people 65 and over that live alone or with another person and that are living in poverty, ii) people living in the streets, and iii) children and teenagers whose adult guardian is in prison.

The program is structured around four components:

- Axis Program, in charge of family analysis, elaboration of an intervention plan, monitoring and evaluation of the participation and generation of the social programmatic offer, combined with the articulation of local networks based on the households' needs.
- Accompaniment Programs, consisting in psychosocial and/or socio-labor accompaniment with the purpose of promoting skills-building that will allow users' social inclusion and personal development. This contributes to the achievement of the goals included in the intervention plan defined in the Axis Program.
- Cash transfers that are delivered based on three pillars: Dignity, that delivers non-conditional transfers to ensure a minimum subsistence income; Duties, that delivers conditional transfers to ensure that children have access to health checks and school attendance of at least 90%; and Achievement, that delivers bonuses for achievements in order to generate recognition of the results obtained in the areas of work and education.
- Offer, which proposes to ensure the beneficiaries' access to activities, programs and social security benefits based on the demands arising from analyses or that are detected during the accompanying programs.

FOSIS Entrepreneurship Line

FOSIS, a public service that depends on the Ministry of Social Development, used the implementation of IEF in 2012 to organize its offer in three programmatic lines: Social skills-building, including IEF's psychosocial and socio-labor accompaniment, entrepreneurship, and labor.

The service works jointly with IEF so that the Yo Emprendo Semilla program (from the second FOSIS programmatic line) is geared mainly towards attending system users. However, this institutional articulation is not established with the rest of the FOSIS entrepreneurship programs, thus, there are no formal interconnections at the more advanced levels of the entrepreneurship line. This means that IEF beneficiaries do not have preferential access.

Impact Assessment

Below is a detailed outline of the study hypotheses, together with the variables assessed to prove the existence of synergies between the FOSIS, PDPs and IEF.

***Hypothesis 1.** The CCTs contribute to increasing the human capital of their beneficiaries. To analyze this hypothesis, we assessed the households' participation rate in job training courses, their participation rate in remedial programs, the school attendance rate for children between 7-18 years of age, and the school attendance rate for children under 6.*

***Hypothesis 2.** PDPs contribute to improve households' autonomous income generation capacity, as well as adults' willingness to spend part of the money on the education of or care for the children so that they can go out to work. The variables observed are the independent per capita incomes, participation rates in training courses, labor participation of members of the household, female labor participation, participation in job training courses, participation in remedial courses, and the school attendance rates for children under 6.*

***Hypothesis 3.** The joint execution of CCTs and PDPs has greater beneficial effects on the beneficiary households, than the action of these programs independently. Thus, the impacts observed on the aforementioned variables should have even greater synergetic impacts than the assessment of individual programs.*

Data

The data for this study was obtained from a panel survey applied (first in 2012 and then in 2014) to IEF beneficiary and non-beneficiary households below the poverty line. It corresponds to a representative sample for the regions of Valparaíso and Los Ríos, including 2,457 households and a sampling error of 8%.

The number of beneficiary households (of both programs) changed between one year and the next, with an increase of the IEF beneficiaries (from 416 to 604), which is consistent with the progressive expansion of the number of beneficiaries established by the program, and a reduction in the case of the FOSIS beneficiaries (from 224 to 176). We also observed an increase in the overlap of beneficiaries in both programs (from 73 to 108).

Empirical Method

Given that IEF and FOSIS program assignment is not random, as a first step, we estimated the conditional probability of participating in them, be it in each one separately or both at the same time. To do this, we selected a group of baseline explanatory variables (2012) related to the calculation model of the scores for the Ficha de Protección Social (FPS), the instrument used by Chile's Ministry of Social Development to target these types of program.

To assess impact, we selected a quasi-experimental fixed-effect method proposed in its simple or standard form as the following regression model:

$$Y_{it} = \delta_1 IEF_{it} + \delta_2 FOSIS_{it} + \delta_3 (IEF \cdot FOSIS)_{it} + \gamma_i + \lambda_t + \varepsilon_{it}$$

Where Y_{it} is an indicator of impact observed in two periods of time (0 and 1); IEF_{it} is a binary participation variable that takes the value of 1 if the individual participates in IEF and a value of 0 otherwise; $FOSIS_{it}$ is a binary participation variable that takes the value of 1 if the individual participates in FOSIS and a value of 0 otherwise; γ_i are the fixed effects of the households (observable and non-observable characteristics that do not vary in time); λ_t corresponds to time-fixed effects (constant among all households); ε_{it} is a random error. Parameters δ_1 , δ_2 , δ_3 are the estimators of the programs' individual impact and their synergy, respectively.

Four specifications of the model were estimated in order to produce robust results. The first corresponds to the simple model; the second, to the simple model with the inclusion of co-variables to correct the bias of relevant variables excluded from the model; the third is a weighted model for the likelihood of participating to correct the bias caused by the existing differences in the assessed groups; and the fourth is a weighted model with co-variables.

Results

This study estimated the individual and synergetic impact on seven indicators. None of the cases (individual programs and program synergies) exhibited statistically significant impacts. Thus, we cannot affirm that these programs or their synergies have any impact.

Not finding any significant effects could be explained, in part, because the number of treated individuals is low in relation to the control group, due to the fact that when the survey was applied, IEF coverage was less than expected, or because of FOSIS' low coverage (given that the programs are short). This fosters less statistical power in the hypothesis testing, for it lacks the condition to detect significant statistical differences.

Institutional Analysis

Political Constraints and Opportunities for Institutional Articulation

- Among government authorities and officials, there is a positive valuation of the articulations between CCTs and PDPs. This is founded on the fact that the PDP can deal with the situation of poverty through capacity building for independent income generation. They also argue that PDPs tend to increase the assets, which leads to an added value for the IEF beneficiaries, that would otherwise be subject to a dynamic of intervention and skills-building that is purely individual.
- A number of interviewees spoke of their doubts with respect to how PDPs and CCTs could be made compatible, particularly in terms of the financial resources required to implement such strategies in parallel. Public services in Chile are subject to the State Budget, which contemplates an annual definition for the budget for the following year. Once the resources have been approved and published in the Budget, the ministries and services are not able to modify this until the next budgetary allocation process.
- The Budget Office points out that the feasibility of approving major resources for actions articulated between two institutions greatly depends on whether they both clearly prioritize such initiatives in their budgetary proposals.

Main Technical Constraints and Opportunities for Articulation

- IEF beneficiaries do not have the right profile for most of the FOSIS and PDP programs. Adjusting the offer so that it is adapted to the IEF beneficiaries is very complex, as is their

application to FOSIS programs. This is due to the fact that accessing such programs generally involves participating in a contest that is particularly cumbersome, and beneficiaries generally do not have the material means or the skills required to complete the applications without help.

- The programs have different targeting criteria and there is no way of knowing whether the participating populations overlap. Although, technically feasible, there are currently no records that allow us to know whether a PDP beneficiary is also an IEF beneficiary. There are also a number of difficulties at the structural and functional level of registration and monitoring informatics systems, none of which, be they for IEF, FOSIS or any other public service, are connected to any other and as such do not allow for the transfer of information between the different institutions.
- The lack of information on IEF results affects its possibilities of being articulated to the rest of the public offer, as this does not allow a perspective of which instruments, actions or services the beneficiaries need in their struggle to overcome poverty.
- One of the opportunities found is the local level as a preferred space of articulation. The municipal teams in charge of IEF perceive that articulation is indeed being fostered with the FOSIS offer in the areas of employability and enterprise, promoting people's access to such programs to the extent that they are adapted to their profiles. The IEF employment consultants are attentive to the call processes and the publications regarding the number of places available in the FOSIS programs. They also work to generate the necessary information to allow the incorporation of their beneficiaries to the programs.

Reflections and Recommendations

This study delivers scarce quantitative evidence in favor of the impact of IEF, FOSIS and the existence of synergies. However, it clearly shows that there is a positive valuation of the potential impact of the synergies between cash transfer programs and productive development ones among the authorities in charge of such policies.

There is also evidence that in order to move forward towards greater levels of articulation, it is necessary to take advantage of local spaces. The FOSIS programs need to be pertinently adapted to IEF beneficiaries, so as to guarantee that the requirements and deadlines of the entrepreneurship processes are adapted to the effective possibilities of the households. Also, we highlight that it is of the utmost importance to move forward with the implementation of integrated information systems that allow an adequate vision of people's association trajectories with different social protection instruments. It is indispensable to strengthen the different resources and capacities developed by the different programs, without intervening too much.

THE FIGHT AGAINST POVERTY PROGRAM AND RURAL DEVELOPMENT POLICIES IN MEXICO: IMPACT ASSESSMENTS AND ALTERNATIVE POLICIES

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This chapter presents the main characteristics and results of a study in which we assess the impacts of the most significant cash transfer-based rural development policies applied in Mexico since the 1990s. We also discuss the additional measures or alternatives based on other types of instruments that link government interventions aimed to combat poverty with production policies, including those providing public goods and services.

The topic is relevant, since after more than 25 years of economic reforms, including agricultural liberalization under the North American Free Trade Agreement or NAFTA, in 1994, food insecurity and poverty in Mexico's rural areas subsist. For example, according to estimations made by the National Council for the Evaluation of Social Development Policy (CONEVAL, Spanish acronym), the incidence of rural poverty decreased between 1994 and 2006, but rose again in 2008, when, for the first time since the financial crisis of 1995, there was a significant upturn in the incidence of extreme poverty.

The federal government of president Peña-Nieto (2013-2018) recognizes that poverty-reduction policies of the last decades have improved education, health and nutrition conditions among their beneficiaries, although these policies have only just managed to contain the growth of

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poverty (Robles et al., 2014). Based on this diagnosis, the current government created the National Crusade Against Hunger through which it links social with productive policies and instruments its purpose to democratize productivity.

Our main research goal was to quantitatively estimate the effects of the two main contemporary cash transfer-based federal programs applied to the rural areas in Mexico during the last decades: Progresa-Oportunidades, and Apoyos al Campo or Procampo.

Progresa-Oportunidades has been the most important poverty reduction program. It is based on conditional cash transfer enacted through the Ministry of Social Development (SEDESOL, Spanish acronym) created in 1991. Some characteristics of the program have been changed as has its name: Progresa, Oportunidades, and Prospera or Programa de Inclusión Social. Prospera was created in 2014 to articulate and coordinate government development actions, including those related to productive purposes, income generation, financial access, waged labor inclusion, education, health and nutrition, geared to the extremely poor population.

Since 1994, Procampo has supported the incomes of farmers who produce those staple crops considered non-competitive within the NAFTA framework. The program includes small-scale farmers and was restructured in 2013 to create Proagro Productivo. Until this change took place, access to Procampo's cash transfers was only conditioned to legal land-use, and not to the cultivated crop; thus, it has been disassociated from the beneficiary farmers' production decisions. When the program began, the only condition imposed on farmers to benefit from the program was that they produce non-competitive staple crops (Cerón, 2008).

By studying the impacts of Oportunidades and Procampo, we expect to contribute to answer questions related to their effects on Mexican rural households' poverty reduction in income terms, as well as on their production. We undertook the study applying two approaches: one is econometric and quasi-experimental and the other is based on simulations using a microeconomic multi-sectorial-agents' model. The quasi-experimental approach is based on the propensity score matching methodology applied at the household level, which has been used for impact assessments in Mexico and other countries. The multi-sectorial perspective is innovative as it combines the microeconomic models of rural households' farms —exposed in the literature on economic development— with applied general equilibrium models. We describe this combination as a Computable General Equilibrium Agent-based Model, CGEAM.

The CGEAM is a microeconomic multi-sectorial model in which we consider the double characteristic of rural households as both producers and consumers, as well as the diversification of their activities and income sources. This model also captures the heterogeneity of rural households by distinguishing them in accordance with the transaction costs they face in several markets, the assets they own, their preferences, and the technology used for their production activities. Using the CGEAM we undertook counterfactual simulations to estimate the direct and indirect effects of Oportunidades and Procampo in the economy of Mexican rural households. Using the calibrated CGEAM we also inquire about the possible effects on the economy of these agents of rural development policies that promote both production and markets.

The data used in our research were provided by the two rounds of Mexico National Rural Household Survey that provide data for 2002 and 2007 (ENHRUM, Spanish acronym), a panel survey representative of the country's rural households in localities with between 500 and 2,499 inhabitants. The information contains economic and socio-demographic variables of these agents and their localities (www.das-ac.mx).

The econometric estimations of the impacts of Oportunidades and Procampo based on the quasi-experimental approach indicate that, during 2002-2007, neither Oportunidades nor Procampo increased significantly the probability of Mexican rural households exiting poverty. These findings differ from those of other studies that statistically quantify the effects of the two programs, particularly those referring to Oportunidades. The above may be due to several reasons, among which we highlight the following: (1) ENHRUM coverage is different to the sources used in other studies (generally the information used comes from the National Survey of Households' Income and Expenditure periodically applied by the National Institute for Statistics, Geography and Informatics or INEGI), (2) eligible ENHRUM households did not benefit from the transfer of the programs (we have verified the above for the case of Procampo) (Taylor et al. 2014), (3) there are differences between the periods covered by the studies, given that ours is subsequent to the beginning of the application of the programs, but more recent than other studies (it may be, for example, that the effects of the programs became diluted over time), and (4) there are differences in terms of the used outcome variables.

The results of the counterfactual simulations (elimination of cash transfers from Oportunidades and from Procampo) based on the CGEAM provide evidence that does not contradict the one found with the quasi-experimental approach. This means that the reduction of rural households' real net income is not significant if the programs disappear: the average effect on income

caused by the elimination of Oportunidades would be of 6.6%, and that of ending Procampo, less than 1%.

The later findings can be explained basically because the cash transfers of these programs impact the productive activities of the rural households only very slightly, including their agri-food activities; that is, the indirect general equilibrium effect on rural agricultural production of Oportunidades or Procampo does not exceed 0.4% and 0.3%, respectively.

Based on the above, our argument is that the cash transfers of both programs offer liquidity to their beneficiaries, among them poor rural households that produce food, but that this does not contribute to creating considerable multiplier effects in the economy of rural Mexico. An additional conclusion is that there is no evidence of synergies between Oportunidades and Procampo, due to their low impacts on rural production and to the fact that, by design, their beneficiary populations are different (Procampo beneficiaries are not necessarily poor).

Our results, together with the current goals of the Mexican federal government to democratize productivity, led us to carry out a simulation based on an exogenous 5% increase in total productivity of the factors used in the production of commercial crops by rural households. The results indicate that supply of such cash crops increases more than proportionally to the initial simulated shock. This is due to the fact that an increase in productivity would open new opportunities for the producers, which they put into practice by reassigning the factors at their disposal to the different activities they undertake. In particular, an increase in production raises the employed workforce in the commercial agricultural sector and the area sown by 6% and 3%, respectively. This factor reassignment leads to an increase of 8.7% in cash crops production, and all this leads to a 2.8% growth of the rural economy.

Another policy option —additional to the promotion of agricultural productivity— would be investments in public infrastructure (e.g., communications and transport) that would reduce transaction costs in rural markets. Based on the CGEAM, we simulated the above in a stylized manner, by estimating the impacts on rural production and food production in particular of a public rural infrastructure program based on temporary employment of rural households' members. The findings indicate that the general equilibrium effects of programs of this type would be practically neutral in terms of rural households' production and incomes. The result applies when household farmers have a surplus of family labor force, which is common in rural areas because of the cyclical nature of agricultural production.

In sum, the results of the policy options simulated using the CGEAM show that productive interventions may have favorable consequences for Mexico's rural development and for the income and well-being of its households. If we consider that cash transfers provide liquidity to the beneficiaries, but that these have not managed to significantly reduce the incidence of rural poverty in the mid- and long-term, it could be argued that it is necessary and urgent to link social support with productive support.

The changes to social-and production-related public programs of the current government provide an account of its intentions to implement government policies that are inclusive, efficient, and effective, highlighting: 1) the objective to make Prospera (previously Oportunidades) go beyond assistance through the productive and social inclusion of the poor; 2) the goal to focus Proagro (previously Procampo) support on agricultural producers in plots of land smaller than 20 hectares (previously limited to 100 hectares), improving the coverage of small-scale producers in regions where marginalization is high or very high; 3) the promotion of access to credit for small-scale producers and, finally, 4) to democratize productivity.

These goals can be framed within the strategy of the current federal administration known as the National Crusade Against Hunger (CNCH, Spanish acronym), through which the government proposes, among other strategies, to link the State's social actions with productive ones in order to contribute to the food security of the Mexican population.

In this respect, the advance made in the last months is reflected in the Programa Territorios Productivos (PTP, Spanish acronym). The PTP is at a pilot stage, with the technical assistance of the International Fund for Agricultural Development (IFAD/FAO) to the Mexican government (Berdegué et al., 2015). The PTP began in 2015 and is set within the framework of the CNCH.

Based on a territorial approach, the PTP's general goal is to reduce poverty among the rural population by promoting its independent production and income. Specifically, one of its goals is for this sector of the population to increase its total factor productivity, the income obtained through its agricultural and non-agricultural economic activities, and to contribute to food security, all through effective access to public policies and productive development programs for which it qualifies.

The potential PTP population is households that live in CNCH municipalities, and the target population is formed by Prospera beneficiaries (i.e. poor households) that live in municipalities in which small-scale agriculture is an important activity.

The PTP strategy has six objectives: 1) to take advantage of the liquidity of government monetary transfers as an enabling floor level; 2) to promote the development and strengthening of local organizations for economic development; 3) to create a system of technical specialists to assess the productive projects of the organizations; 4) to propose a coherent set of investments and initiatives aimed at producing public goods that eliminate or mitigate the main restrictions of the territorial productive axes; 5) to promote a down to up articulated demand for a minimum set of public services that support productive development; and 6) to target the program in functional territories that link rural localities with small and medium urban centers.

The application of the PTP began as a pilot project in 86 small localities belonging to 13 functional territories in five Mexican states, in localities that have economic links with nearby small and medium-sized cities. The pilot is subject to a follow-up, monitored and evaluated in order to learn from design mistakes, successes and bottlenecks that come up during its application. The results of this follow up will provide information to evaluate the extension of the program to other localities and territories that qualify based on a rigorous targeting process.

Considering recent experiences related to rural development public policies, and given the persistence of poverty incidence and the subsequent food insecurity suffered by the poor, we are convinced that strategies and actions such as those of the PTP will help improve the well-being of rural households in Mexico in a sustained manner.

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RURAL POVERTY ALLEVIATION PROGRAMS IN COLOMBIA: AN ASSESSMENT OF THE SYNERGIES BETWEEN OPORTUNIDADES RURALES AND FAMILIAS EN ACCIÓN

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Over the past decade, Colombia has experienced a sustained decrease in poverty levels. According to official data, the proportion of people in poverty fell by 18.8 percentage points passing from 49.4% in 2002 to 30.6% in 2013 (DANE, 2014). However, the rural areas, where 26% of the Colombian population lives, have not experienced the same dynamic and increasingly lag behind the urban areas; in 2012, 48% of rural households still lived in poverty and over the last decade, the poverty gap between urban and rural areas has become considerably more pronounced. The factors behind these gaps in the socioeconomic development of the urban and rural areas are many and mostly related to the armed conflict, land use and concentration, the orientation of agricultural policy, the low provision of public goods in rural areas, and multiple market failures.

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The national government has implemented a number of poverty alleviation programs among which are *Familias en Acción*, a conditional cash transfer program for the poorest households in the urban and rural areas, and *Oportunidades Rurales*, a program providing technical assistance for poor rural household organizations. These two programs are, to a degree, a starting point in overcoming poverty in rural areas, as revealed by the fact that the former is defined as a state policy and the latter as one of the essential programs in the National Development Plan.

Although these two programs have already been assessed, it still has not been possible to identify whether the programs complement each other or whether OR has had positive impacts on the households. Considering the importance of the programs and the fact that they are aimed at the same sector of the population, it is important to assess their complementarities and synergies and whether they facilitate the households' exit from poverty. This document sums up all the main results of the impact assessment for *Oportunidades Rurales* and its interaction with *Familias en Acción*. The analysis sheds light on the links between the social programs which, in theory, could generate a greater potential in the fight against poverty but that, in practice, fall short in their attempts because of design and targeting problems.

Oportunidades Rurales and Familias en Acción

The Development Program for Rural Microbusinesses Asset Investment and Capitalization Opportunities — *Oportunidades Rurales* — was implemented in 2007 in order to increase the productive, social, human and financial assets of small-scale rural producers belonging to SISBÉN levels 1 and 2.¹⁵ To do this, *Oportunidades Rurales* provides co-financed resources to microbusinesses of small-scale rural producers to enable them to contract technical assistance and, as such, develop their business initiatives and strengthen their capacity to generate resources. *Oportunidades Rurales* also includes a number of initiatives to broaden access to financial products and information. Between 2007 and 2013, *Oportunidades Rurales* helped 1,817 organizations made up of 47,018 households. The results of a mid-term assessment (*Econometría*, 2010) indicate that *Oportunidades Rurales* had a positive but transitory impact on the beneficiary households' incomes, sales of their produce, and their access to the financial system.

15 System for the identification of possible beneficiaries for social programs.

For its part, Familias en Acción targets households in poverty belonging to Sisbén level 1.¹⁶ Familias en Acción's goal is to complement the income of poor households and encourage improvements in the areas of health and education of youngsters under the age of 18 based on the types of transfers. The first type of transfer corresponds to a bimonthly subsidy for each member of the household that is under 18 and studying, with the condition that she or he attend at least 80% of annual school days. The second corresponds to a subsidy for each member of the household under 7, with the condition that he or she have regular growth and development check-ups. The importance of Familias en Acción as an axis of the policies against poverty is undeniable, as can be deduced by its definition as a State policy in 2012 and by the increase in program coverage, which rose from 300,000 beneficiary households in 2002 to 2,589,064 households in 2010, corresponding —at that time— to 21% of the country's population. In fact, the program has produced many positive impacts on school attendance rates, educational achievements, and improved performance in State exams, among others.

Assessment Methodology

There are serious challenges in the impact assessments of social or development programs; the biggest rests in solving the selection problem and defining the treatment and control groups that allow us to identify the evolution of different variables of interest after the program and in its absence. In the case of assessment for Oportunidades Rurales and Familias en Acción, the challenges are greater given that future impact assessment for Oportunidades Rurales was not considered when the program was implemented, and the assessment of synergies requires treatment and control groups for both programs simultaneously. These challenges completely impede the implementation of traditional econometric techniques such as matching and difference in differences, or selection on observables.

Strategy to Assess the Impact of Oportunidades Rurales

To assess the impact of Oportunidades Rurales and analyze the synergies and complementarities with Familias en Acción, a detailed survey was applied to 729 households, belonging to 68 organizations that participated in the former between 2008 and 2013. This information was

16 The population covered by Familias en Acción also includes victims of forced displacement that are registered in the Victims' Register (RUV) and extremely poor Indigenous and Afro-Colombian households.

complemented by the application of a survey to the 68 organizations and the gathering of qualitative information from 7 organizations through focus groups and semi-structured interviews.

This sample design allowed us to identify the impact of Oportunidades Rurales based on the variation at the time the organizations entered the program. In other words, the assessment of Oportunidades Rurales consisted in comparing the households that joined the program at an early stage (2008 and 2009), and at an intermediate stage (2012), and those that joined at a late stage (2013). The latter group of households serves as a counterfactual in that they were beginning the program when the information for assessment was gathered. This is equivalent to estimating the following equation:

$$Y_i = \beta_0 + \beta_1 1(OR_{08-09}) + \beta_2 1(OR_{12}) + \beta_3 \bar{X} + \varepsilon_i \quad (1)$$

Where Y_i represents the variable of interest per household i , $1(OR_{08-09})$ and $1(OR_{12})$ are dichotomous variables that take the value of 1 if the household was treated by Oportunidades Rurales in 2008 or 2009, or in 2012, respectively. \bar{X} is a matrix of the households' socioeconomic and demographic characteristics.

The assessment strategy presented three advantages compared to other econometric methods: first, it allowed us to solve the selection problem given that all the households applied and were selected. Second, it allowed us to identify the program's short- and mid-term effects, based on the comparison of the different groups. This is useful because some of the impacts can be immediate and/or transitory, whereas others may appear in time. For example, while the impacts on the adoption of new techniques or on household investments can come about automatically, the effects on consumption, production or asset ownership can only materialize in time. Finally, the strategy allowed us to identify whether the effects of Oportunidades Rurales are greater for those organizations that were treated on more than one occasion.

The validity of the assessment strategy is based on whether the households and organizations entered the program at the same level of development and under similar conditions. That is, that the point in time at which they entered the program was not correlated with different observable and non-observable variables, of the households and organizations.

Although this supposition is rigorous and difficult to prove, the data gathered in the survey applied to households and organizations show that there are no significant differences between

the households belonging to the organizations that entered the program at different points in time (see Table 3 in this chapter). We can see, first, that the households in the different groups were similar in terms of different demographic and socioeconomic characteristics. In like manner, we can see that the average scores for CREAR —used to assess and qualify the organizations applying for Oportunidades Rurales— are similar in all the different groups, suggesting that the organizations included in the sample entered at similar levels. Finally, we can see that the sample is balanced in relation to how long the households belonged to the organizations before entering Oportunidades Rurales and in terms of the incidence of shocks or receiving aid from other entities. Thus, it is possible to affirm that the time of entry into the Oportunidades Rurales program was exogenous to the observable characteristics of the households and organizations.

Strategy for the Identification of Synergies between Oportunidades Rurales and Familias en Acción

For its part, to identify the synergies between these two programs, we analyzed whether the impacts of Oportunidades Rurales vary for those households that were receiving conditional cash transfers when they joined it, compared to those that joined Familias en Acción after having taken part in Oportunidades Rurales. In other words, the exercise restricts the sample to the Familias en Acción beneficiary households and looks into whether the impact of Oportunidades Rurales is greater if the households were receiving Familias en Acción simultaneously and were able to take advantage of the two interventions at the same time.¹⁷ This is equivalent to estimating the following equation:

$$Y_i = \gamma_0 + \gamma_1 1(OR_{08-09}) + \gamma_2 1(OR_{08-09}) 1(FeA_{t>08-09}) + \gamma_3 1(OR_{12}) + \gamma_4 1(OR_{12}) 1(FeA_{t<12}) + \gamma_5 \bar{X} + \varepsilon_i \quad (2)$$

Where $(FeA_{t<08-09})$ y $(FeA_{t<12})$ are dichotomous variables that indicate whether the household was treated by Familias en Acción before the 2008-2009 or 2012 periods, respectively. The validity of this strategy is given under the assumption that entry into Familias en Acción conditioned to the time of receiving Oportunidades Rurales is exogenous to households' characteristics. The validity of

¹⁷ We also implemented a Propensity Score Matching (PSM) to compare households that had been treated by the two programs with those that had only received Oportunidades Rurales intervention regardless of the year they entered the program.

this assumption can be justified in two ways: First, the data from the surveys applied to the households reveal that, for all the Oportunidades Rurales groups, there are no significant differences between the households that received Familias en Acción before Oportunidades Rurales and those that received it afterwards. That is, the households that were beneficiaries of Familias en Acción when they joined Oportunidades Rurales were similar and comparable in their demographic and socioeconomic profiles, in their exposure to shocks, and their reception of aid from other programs, to households that received Oportunidades Rurales intervention without having been included in Familias en Acción. In fact, the reason for which they joined Familias en Acción after their participation in Oportunidades Rurales is because of the sustained expansion of the former in time; as it became law and a policy of State, Familias en Acción considerably increased its coverage in the municipalities that had already been subject to the intervention.

Results

In general, the results of the assessment indicate that Oportunidades Rurales did not have positive or persistent impacts on the well-being of the households or on their productive capacity (Table 1, Columns 1 and 2). In particular, we did not observe statistically significant impacts on the households' levels of production, food consumption or food security. Similarly, the results reveal that the program did not foster necessary changes in the behavior of the beneficiaries or in their access to financial and commercial markets. The only dimensions where more persistent and positive impacts can be observed are in the value of productive assets and the number of family workers. In contrast, we observed negative impacts on subjective well-being, SISBÉN scores, the amount of investment, and the percentage of land used in the plots.

This implies that Oportunidades Rurales only had transitory impacts on some of the dimensions and was not able to persistently change the beneficiary households' socioeconomic dynamics. In fact, the qualitative information supports these affirmations as it reveals that although the households benefitted from their access to technical assistance, they did not have the resources to finance new projects or implement the new practices and knowledge. This is not surprising, however, since given the multiple market failures, the technical assistance programs are just one part of the puzzle and on their own are not able to break the dynamic of poverty and exclusion in rural areas.

The results also indicate that there is no evidence on complementarities between Oportunidades Rurales and Familias en Acción, and that the impacts of Oportunidades Rurales on assets accumu-

lation correspond to assets accumulation by the households that did not receive conditional cash transfers at the same time as benefitting from the rural development program. In contrast, the results indicate that being beneficiaries of both programs at the same time may have had negative effects. These results may be surprising, but the following three reasons may explain these limited effects.

TABLE 4. Impacts of Oportunidades Rurales and Synergies with Familias en Acción (Summary)

	Impact of OR		Synergies with FeA	
	OR _{2008/09}	OR ₂₀₁₂	OR _{2008/09}	OR ₂₀₁₂
	[1]	[2]	[3]	[4]
A. Well-being				
Total food consumption	-	-	-	-
Total consumption	-	-	↓	-
Food security index	-	-	-	-
Subjective well-being	↓	-	-	-
B. Behavior				
Amount of investment	-	↓	↓	-
Land used (%)	↓	-	-	-
Daily working hours	↑	-	-	-
Number of laborers	-	-	-	-
Number of family workers	↑	↑	-	-
C. Capital				
Greater production	-	-	-	-
Micro insurance	↓	-	-	-
Formal credit	-	-	-	-
Informal credit	↓	↓	-	↓
Total productive assets	↑	-	↓	↓
Total assets	↑	-	↓	↓
Assets index 2014	-	-	↓	-

Continue

	Impact of OR		Synergies with FeA	
	OR _{2008/09}	OR ₂₀₁₂	OR _{2008/09}	OR ₂₀₁₂
	[1]	[2]	[3]	[4]
D. Expectations				
Well-being expected in t+1	↓	-	-	-
E. Intergenerational				
School attendance (12-18)	-	-	↓	-
Lag (12-18)	-	-	↓	-
Time spent working (12-18)	-	-	-	-
Time spent in education (12-18)	-	-	-	-
Time spent on household work (12-18)	-	-	-	-

Note: The arrows indicate the dimensions where we found significant results for the Oportunidades Rurales program (Columns 1 and 2) and synergies with Familias en Acción (Columns 3 and 4). The arrows pointing upwards [downwards] indicate that the program had positive effects [negative or temporary] in the degree that households with early (OR_{2008/09}) or intermediate (OR₂₀₁₂) treatment find themselves in a better situation than the ones with late treatment (OR₂₀₁₃).

First, the qualitative and institutional analysis revealed that one of the obstacles faced by Oportunidades Rurales to promote exit from poverty is the Familias en Acción beneficiary households' fear of no longer being eligible for the conditional cash transfers if they also join a rural development program. In particular, there is a perception that participation in Oportunidades Rurales and investment in productive activities may mean that the households have to leave the conditional cash programs without being guaranteed a sustainable level of future income.

Second, the local actors interviewed during the institutional analysis were, in general, skeptical of the existence of synergies between the two programs given that Oportunidades Rurales and Familias en Acción are designed for different segments of the population. On the one hand, Oportunidades Rurales is designed to provide assistance to rural micro-entrepreneurs that are part of productive organizations, whereas Familias en Acción targets poor households that do not necessarily have the means or tools to become involved in income generation programs or households that face other obstacles that go beyond the lack of access to technical assistance.

Third, program-targeting problems are another limitation for the poorest households as well as Familias en Acción beneficiaries that have also been beneficiaries of Oportunidades Rurales. In particular, we observed that only 61% of the beneficiaries surveyed were effectively eligible, and in 25% of the organizations, more than 50% of the beneficiaries joined the organization a year

before beginning to receive resources from Oportunidades Rurales. This is conflictive with the program objectives aimed at favoring small-scale producers' organizations with trajectories in community-based work and it becomes an obstacle in terms of the appearance of synergies and complementarities.

Discussion

The evidence on the limited impacts of Oportunidades Rurales and the absence of synergies with Familias en Acción offers a negative panorama in terms of the possibility of rural development programs, conditional subsidy programs, and the fight against extreme poverty complementing each other to potentiate poverty alleviation. These results, although possibly surprising, are related to the design of the programs and the incentives they generate as well as the nucleus of the country's rural development policies, or the absence of a real rural development policy.

First, Oportunidades Rurales is not a rural development program as such, but rather a component of a rural development program. In this sense, the resources it provides to access technical assistance programs are not enough in a context where the land markets, credits, insurance and labor either fail or do not exist for the poorest households. Oportunidades Rurales' limited impact and the absence of synergies with Familias en Acción can be explained, therefore, by the fact that the households lack the capacity to generate income and have limited access to public goods and services.

Second, Oportunidades Rurales and Familias en Acción are designed for two different segments of the population. Technical assistance or improved technological skill-building are not among the most urgent needs of Familias en Acción beneficiaries. Also, Familias en Acción beneficiaries do not have the tools, skills or resources to make full use of the technical assistance programs and to continue with the investments required.

Third, the design and incentives of the two programs present a number of incompatibilities. In particular, the information gathering process sheds light on Familias en Acción beneficiaries' fear of participating in Oportunidades Rurales should they lose their SISBÉN classification, which, in turn, would imply that they have to leave the Familias en Acción program. Thus, the design of Familias en Acción does not consider interlinking with other programs in order to increase the possibilities of exiting poverty but, instead, has fostered perverse incentives that condition the behavior of households so as not to lose eligibility for Familias en Acción.

Fourth, we identified faults in Oportunidades Rurales' targeting. In particular, we observed that a year before joining the program, some organizations allowed people from the lowest SISBÉN levels to join in order to fulfill the requirements and, as such, receive funds for technical assistance. This sheds light on processes of public resource capture, and the question of whether all program beneficiaries participated in the technical assistance processes, or the resources were captured by people who did not fulfill the requirements and to whom the program was not targeted, remains. In fact, the statistical analysis revealed that in some cases Oportunidades Rurales did have positive effects, but these effects were given above all for households that did not comply with the profile of the program beneficiaries.

To sum up, Oportunidades Rurales and Familias en Acción assessments revealed that the strategies used to fight against rural poverty must be conceived as integral strategies and focus on the provision of rural public goods and services, such as education, health and infrastructure. That is, provide the population with productive capacities and adequate spaces to materialize these, based on properly targeted programs and a design that does not foster perverse incentives or an assistance-based culture. This recommendation goes against Colombian agricultural policy, characterized by the delivery of direct subsidies and tax breaks, at the expense of the adequate provision of public goods and services.

Conditional Cash Transfer Programs and Rural Development in El Salvador

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This study seeks to identify synergies and complementarities between conditional cash transfer programs (CCTs) and productive projects (or rural development programs, RD), such as those promoted by IFAD, in order to better understand how households react to intervention by both programs simultaneously, compared to participation in only one program or none at all, in terms of key variables such as productive factors, poverty reduction, gender equality and financial inclusion. If these synergies are identified, rural development projects could be made more effective in terms of poverty reduction, and CCT programs would have better graduation strategies.

The CCT and Rural Development Programs

The Comunidades Solidarias Rurales (CSR) CCT program, executed by the Social Investment Fund for Local Development (Fondo de Inversión Social para el Desarrollo, FISDL), includes US\$15 monthly education or health transfers for eligible households, and US\$20 transfers for those eligible for both. The program also requires the participation of the children's guardians, mainly women, in monthly training sessions in community participation and organization, child health and nutrition, the importance of education, gender equality, children's rights, domestic violence, comprehensive healthcare for couples, healthy housing, etc.

CSR is executed in the 100 municipalities with the highest poverty rates, which entered the program between 2005 and 2009 according to their level of extreme poverty.

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The rural development project analyzed in this study is the Programa de Agricultura Familiar (PAF). The program was launched in 2011 by the Ministry of Agriculture and Livestock (MAG), as a broad and unified strategy of agricultural development. From its inception, the IFAD projects (PRODEMORO and PRODEMOR-Central) reclassified their activities into some of the PAF components described below:

1. *Food and Nutritional Security* (Seguridad alimenticia y nutricional, SAN), for subsistence farmers and their households. The program includes agricultural field schools (ECA) to help improve traditional crops (corn and beans), vegetable gardens and natural resource management, as well as home and health workshops to improve sanitation, nutrition and cohabitation in the home. According to the program design, each extension agent is in charge of 16 disseminating households, responsible for transferring knowledge and technology to a group of 18 receiving households, covering 304 households per extension agent.
2. *Productive Chains* (Encadenamientos productivos, EP), aimed at small and medium scale commercial producers in ten strategic chains: basic grains (corn and beans), fruit, honey, aquaculture, dairy products, vegetables, cocoa, coffee, handicrafts and rural tourism. The activities include ECAs, efforts to improve associativity to buy supplies and sell produce, as well as the construction and operation of storage centers. The producers in the EP component tend to be more advanced than households in SAN and, before entering the program, were linked to producers' or community organizations.

SAN or EP components were identified in 77 of the 100 CSR municipalities; however, these components are also present in 98 other municipalities that do not have CSR presence. The biggest coincidence between the two interventions is given for SAN projects: almost 87% of their participants are located in municipalities with CSR presence, while of the EP participants, only 37% reside in such municipalities.

Research Questions

In this context, the main research question of this study is: In terms of key variables such as the use of productive factors, levels of family income, financial inclusion and the empowerment of women, are households that are beneficiaries of both CCT programs and productive ones better off than those that only receive one type of intervention?

We are also interested in answering the following complementary questions: i) Are the synergies different for the populations that have access to EP or SAN? ii) Given that the CCTs are of small

sums of money, and that they have been constant since 2005, if synergies are identified, are they due to monetary cash transfers or to other CSR components such as training, and the strengthening of social organizations? And iii) is the addition of a productive project a good “exit strategy” when households cease to be part of CSR?

Methodology

To answer the research questions, we used a mixed-methods methodology combining quantitative and qualitative techniques.

Target population was made up of the rural households that are eligible for both programs — be they are participants or not— and that reside in municipalities where the CSR program and some RD projects are implemented.

To compare the two regions, we identified four comparison groups according to whether or not they receive CCT and whether or not they participate in RD projects, identified by the letters A, B, C and D. For the case of El Salvador —among households that do not receive CCT— some used to receive them, which is why two additional groups were identified: those that no longer receive them but that participate in a RD project (AC), and those that do not take part in such projects (BD) (See Table 1).

The sampling frame for the quantitative survey was generated by combining official lists of participants provided by FISDL and MAG; only households that allowed the construction of appropriate treatment and control groups were included. Table 2 presents the comparison groups that could be built and the aspects that can be explored based on them. The survey included 1,301 previously selected households (650 men and 651 women).

TABLE 5. The Possible Comparison Groups

		RD projects		
		Participants	Others	
Comunidades Solidarias Rurales	Receives CCT	A (CCT+RD)	B (CCT)	
	Does not receive CCT	Left the CSR program	AC (exCCT+RD)	BD (exCCT)
		Never received CCT	C (RD)	D (None)

The identification strategy used was the simple-differences method. Given that eligibility for the CSR program included a maximum age limit for the households' children, we applied an additional criteria based on the concept of regression discontinuity to define the treatment and control groups: households that when the program began in their community had, at least, one child two years younger or older than the age limit that had not finished primary school. The possible initial differences were controlled by using matching techniques and we estimated the intent-to-treat effect on the treated groups.

TABLE 6. Comparison Groups Constructed Based on the Information Available and Aspects to be Explored

General aspects	Aspects to explore		Comparison group		RD Type	
		Specific aspects	Treatment	Control	EP	SAN
To assess whether having access to both types of intervention yields better results than only participating in one.		Assesses whether participation in CSR and RD is associated to better results than only participating in RD.	A (CCT+RD)	C (RD)	Yes	Yes
		Assesses the effect of have receiving CCT before and being participant now in RD, with regard of only being participant of RD:	AC (exCCT+RD)	C (RD)	No	Yes
Assesses whether the synergies between CSR and RD are generated because of the monetary value of the CCTs or because of other CSR elements (training that empowers the beneficiaries or greater social interaction).		- If synergies are not identified here, but they were found it in the comparison between A vs. C, then it would be an indicative that this is the monetary value. - If synergies are identified here, and if they are similar to the ones identified in the comparison between A vs C, then it would be an indicative that this is not the monetary value.				
		Assesses whether it is the monetary value that generates the synergies. If no differences are identified between these groups the synergies found could be attributed to the comparison of A vs. AC to the other CSR elements.	A (CCT+RD)	AC (exCCT+RD)	No	Yes
Assesses whether RD projects are a good "exit strategy" for CSR beneficiaries.		Assesses the effect of having previously received CCTs and now participating in RD with respect to not participating in RD given that they are no longer receiving CCTs.	AC (exCCT+RD)	BD (exCCT)	No	Yes

For the qualitative component, we used a combination of semi-structured interviews and focal groups with 98 individuals that were selected among those who answered the quantitative survey using purposive sampling.

Results

SAN households tend to have lower levels of education, to have less assets and have less income, whereas EP households tend to have a higher level of economic and social development. The total income of EP households is practically double that of SAN households, and the assets index that includes both household and productive goods is greater for households that participate in EP projects than for those that participate in SAN projects.

Almost all those interviewed cultivate the land; however, SAN households are more inclined to cultivate only basic grains. Between 15% and 18% of those interviewed introduced some agricultural or livestock item since 2012, when they began to participate in a RD project. Productivity per area achieved by the EP households is considerably greater than the levels achieved by SAN households. In some cases, it is almost double. Participation of EP households in associations, be they community or producers associations, is almost double that of SAN households.

The lack of variety in the households' diets is notable. Almost 90% of households (both EP and SAN) stated that they ate something different from tortillas or beans less than five times a week. More than 20% indicated that, faced with a shortage of money, they had to sell something or spend their savings to buy food.

Around 40% of EP households indicated that they had formal credit or accounts in financial institutions, whereas the percentage of SAN households with credits or accounts was between 15% and 22%.

In SAN households, women that participate or have participated in the CCT program tend to have greater decision-making power —mainly in domestic issues— than those that have not. Households that do not participate in RD have lower empowerment indices, except in terms of leadership.

A summary of the most important results of the impact assessment is presented in Table 3 and discussed below.

- a. *The Additional Effect of Participating in CSR as Well as RD Projects (A vs. C).* This comparison takes into account households that participate in RD projects and differentiates them according to whether they are CCT beneficiaries (group A) or whether they have never been CCT beneficiaries (group C). Having access to both types of intervention does not yield better results in terms of income or productivity than only having access to EP or SAN. Nor do there seem to be any significant impacts on women's empowerment indicators. For EP households, to have access to both programs leads to an increase of 10 to 15 percentage points in the proportion of households that introduced a new productive agricultural or livestock category. For SAN households, we identified impacts on financial inclusion: the proportion of households with access to formal credit lines increased between 13 to 15 points, and, although small, we identified an increase of around three percentage points in participation in productive associations.
- b. *The Effect of Continuing to Receive CCTs as Well as Participating in RD Projects (A vs. AC).* This comparison takes into account households that participate in SAN projects, differentiated between those that continue to participate in CSR (group A) and those that have already left the program (group AC). When they began to take part in SAN in 2012, both groups had already received transfers and participated in the other CSR activities for between 3 and 7 years. We identified no impacts for any of the main indicators. These results seem to confirm the hypothesis that it is not continuing to receive cash transfers that could foster synergies but rather that it could be the benefits obtained through the other components. Nevertheless, we recognize that the CCTs are an incentive for the households to meet their conditions and are therefore important in helping to create these synergies.
- c. *The Effect of Taking Part in SAN Projects Having Previously Participated in CSR (AC vs. C).* This comparison considers households that participate in SAN projects and differentiates them according to whether they had previously participated in the CCT program (group AC) or never had (group C). The hypothesis behind this comparison is, on the one hand, that not finding significant differences would indicate that the impacts observed when comparing A vs. C (see point a., above) are due to the fact that group A continues to receive the transfers. On the other hand, obtaining similar results in both comparisons (AC vs. C and A vs. C) would indicate that what brings about the synergy is not the monetary value of the transfers but rather other CSR elements.

As with the comparison of A vs. C, the comparison of AC vs. C identified no impacts for production or income indicators, but it did obtain positive results for the financial inclusion indicators: the proportion of households with access to formal credit increased between 5 and 8 points among households that had previously participated in CSR. In this comparison, we identified positive impacts for the indicators of women's empowerment in the production area.

- d. *The Effect of Having Participated in CSR and, after Leaving, participating in SAN projects (AC vs. D).* This comparison considers households that participated in CSR and differentiates them depending on whether, after leaving the CCT program, they participated in SAN (group AC) or not (group D). We identified no impacts for the production or income indicators. However, those households that had previously been part of CSR obtained better results in terms of financial inclusion. On average, the proportion that had access to credit lines is between 6 and 8 percentage points greater and the proportion of households with access to either a bank account or formal credit is between 8 and 11 percentage points. They also obtained a higher index of goods and greater variety in their diets. Finally, we identified positive impacts for the women's empowerment index.

TABLE 7. Summary of results: Impacts Identified

Area	Indicador	EP		SAN	
		A vs. C	A vs. C	AC vs. C	AC vs. BD
Production	Only grow basic grains, %				
	Introduced new categories since 2012, % (crops or animals)	++			
	Productivity (US\$/block), log				
Income	Agricultural income (US\$)			-	
	Independent income (US\$)				
	Total annual income (US\$)				
Income proxy	Assets index (household and productive)				+
	Lack of variety in the diet: they eat something different to tortillas and beans in less than 5 meals a week, %				-
	Used savings or sold something because they did not have anything to eat, %				
Financial inclusion	Have a bank account			++	
	Have formal credit		+++	+	++
	Have a bank account or formal credit, %		++	+	++
Participation in associations	Community				
	Productive		++		
	Community or productive				
Empowerment	Empowerment index, both sexes				+
	Empowerment in the production area, both sexes				+
	Empowerment index, women				+
	Empowerment in the production area, women			++	
	Empowerment index, men				
	Empowerment in the production area, men				

+/- represents the direction of the impact identified. The number of +/- represents whether the impact is significant at 0.1(+/-), 0.05 (++/-) and 0.01 (+++/-).

The results of the qualitative assessment allow us to explain, in part, the results described above. Implementation flaws were identified in the RD projects that may have diluted the results. For example, there was no appropriate monitoring process undertaken by the extension agents; many of those interviewed reported that their knowledge transfer process was “informal” and, finally, mainly for the SAN households, the materials and methodology used for the training sessions may not have been adequate for the educational level of the participants. In addition, in the case of the SAN, whose main activities (vegetable gardening and poultry farming) are apparently more attractive to women than to men and youths, the purpose identified was subsistence rather than productivity. This may be influencing the limited results in terms of income generation.

We perceive that the synergies are greater among women, and the fact that it is mainly women that participate in the processes accentuates the idea that the factors that most influence the participants’ change of perception in terms of their own development and expectations are the CSR training and accompaniment processes.

Conclusions

The CSR vision is one of social protection and this allowed us to identify a greater overlap with SAN beneficiaries. The goals of EP projects are aimed at a population with different characteristics. The possibilities of synergies differ according to the type of intervention (SAN or EP) and to the skills of households that participate in each one. There are greater synergies when combining the CCT program with SAN than with EP, given that it seems that poorer households with lower levels of human and physical capital benefit more from these projects.

The combination of quantitative and qualitative results provides a better understanding of what would be the logical path along which possible synergies could be generated or potentiated. CSR activities, training and socialization opportunities contribute to generating basic skills in households, such as women’s empowerment in the domestic area, that allow them to take better advantage of the rural development programs. These skills are maintained even after the transfers are no longer received, suggesting that participating in a productive project could be an exit strategy for households that no longer receive CCTs from the CSR programs.

Results are clearer for SAN projects as they represent an intermediate step to aspiring to a next stage, consisting in the implementation of support strategies to convert this intermediate step into improvements that allow households to generate greater income.

Sierra Sur and Juntos: An Analysis Based on the Joint Implementation of Both Programs in Chumbivilcas, Cusco, Perú

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The central theme of this study is the analysis of the average and differentiated impact of the Sierra Sur productive project on the beneficiaries of the CCT, Juntos. This analysis was undertaken for Juntos households in the Chumbivilcas province, in Cusco, Perú. The study analyses two additional topics. First, it describes the characteristics of the Peruvian institutional framework relevant for articulation between productive projects and the Juntos program, and second, it undertakes an exploratory analysis of the effects of Juntos on the households' productive activities.

Program Description

The Juntos program consists in a bimonthly monetary incentive of S/.200 (US\$75 approximately) for households that meet their commitments in terms of health (pregnant women and/or children have regular health checks) and education (children and/or adolescents attend school).

The Sierra Sur Project project includes various components. In this assessment, the treatment group (or the group for which the SS effect is estimated) is made up of users of the Business Development (BD) subcomponent and the natural resource management (NRM) component. The BD subcomponent included the delivery of productive technical assistance to members of

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producers' associations grouped around a productive line, and the NRM component included the delivery of technical assistance and participation in inter-household and inter-community contests. The inter-household contests reward the improvements achieved in the household agricultural unit and in the infrastructure of the house itself. The inter-community contests reward organizations for their management instruments, community improvement activities through collective community work, and the sustainable management of community resources.

In both cases —BD subcomponent and NRM component— the users had to provide a proportion of the funds to participate in the project.

In our treatment group, 83% of the households participated in productive training sessions, 33% participated in inter-community contests and 47% belonged to a community that participated in inter-community contests. It is important to point out that despite the fact that the sample of the treatment group is given by households that participated in the NRM component or the BD subcomponent, some members of the treatment group also participated in the savings promotion program (16%).

Participation in Sierra Sur

In the case of Chumbivilcas, participation in SS is slightly higher among the Juntos households (17%) than among the households that do not receive transfers (13%). Moreover, this 17% participation rate is higher than the total participation rate for the rural population in the SS coverage area: in the first stage of the project, 8% of the rural population in the provinces within SS coverage participated in the project.

Juntos households are able to participate because they own productive assets such as land and cattle, despite their level of poverty.

Average Effects on Direct Beneficiaries

Methodology

The main challenge in the estimation of the impact of the Sierra Sur Project is derived from the selection process of the project beneficiaries. The households that participate in the project have to be interested in participating and willing to pay a proportion of the funds. This initial filter

is called the “demand filter.” In addition, the beneficiary organizations have to pass what we call the first supply filter and the second supply filter. In the former, local offices had to approve the work plans presented by the organizations and, in the case of BD, there was also a field visit in which the viability of the line of business chosen by the organization was assessed. All these filters could mean that the beneficiaries are differentiated from others, making project impact assessment difficult.

The aim of the method we used was to control for these filters. In this method, the treatment group is given by a sample of Juntos households that passed the first supply filter and that reside in the Chumbivilcas province.

This treatment group was compared with various control groups. To control for the demand filter, these groups were formed on a basis of hypothetical questions applied to a sample of Juntos households residing outside of the Sierra Sur coverage area.

The first of these control groups is given by households willing to participate in Sierra Sur and pay the minimum amount of money paid in Chumbivilcas, by the beneficiaries. However, the percentage of households that passed this filter is very high. Probably many of those interviewed would become discouraged when having to invest so much time in receiving technical assistance, but we expect this probability to be lower for households that showed a high willingness to pay the money that constitutes the contribution of the beneficiaries. To check whether the results are biased by including households with a very low probability of participating in SS, we included two additional control groups.

The first is given by households willing to pay above the 20th percentile of what is effectively paid in Chumbivilcas. The second group is made up of the households that are willing to pay above the 50th percentile of the money paid by the beneficiaries in Chumbivilcas. If the results of the impact assessment are maintained as statistically significant with the three control groups, we can affirm that our imperfect way of controlling for the demand filter was not introducing bias into the results.

With respect to the first supply filter we have that, since the households that are part of the treatment are those that passed this filter, it is important to control for the variables that are taken into account to decide whether the organization passes the filter or not. These variables should be included as controls in the estimations carried out. We used the propensity score method to balance the treatment group sample with the control groups in these variables and other

variables that could affect the results indicator. With respect to the second supply filter, we have that it is not necessary to control for it, as the treatment group does not exclude those that do not pass the filter.

The control zone, to which the households of the control groups belong, was chosen using the matching method at district and populated center level. However, the qualitative fieldwork revealed that in the control zone, the transport was much more fluid and the area presented better climate in the year the survey was applied (2013), so the results may reflect these differences between the areas. This point is particularly important for the income variables, because both climate and transport are clear determinants of the households' income.

Results

The results of comparing the treatment group with the control groups yield that Sierra Sur has a positive effect on the adoption of a broad set of practices promoted in the training sessions. For example, the probability of having made genetic improvements to a species of animal owned by the household increases by approximately 16%, whereas the probability of having planted a new variety of grass to feed the animals increases by approximately 18%. Moreover, the data highlight that the adoption of such practices continued in recent years, after the project had already concluded.

The results also show a positive effect of the project on investment in agricultural assets of around 200 dollars, and a positive impact on investment in livestock assets of around 60 dollars.

These positive impacts in the adoption of new technologies and investment in assets should translate into higher levels of income. However, the results show negative effects on the net income. These results contrast with those found in the study's qualitative approach, whereby the users manifested that the practices implemented within the framework of the project had indeed helped them improve their production and income.

These estimated negatives might be due to the better transport system in the area and the fact that the control zone presented better climatic conditions in the period when the survey was applied.

Effects on Indirect Beneficiaries

Methodology

The study also explores whether the presence of the Sierra Sur project fostered a greater adoption of new technologies among households that were not direct Sierra Sur beneficiaries, but that are located in Chumbivilcas.

To capture these indirect effects, we estimated the impact of residing in Chumbivilcas on the probability of those who were not Sierra Sur users adopting the practices promoted by the project. In this estimation, a different treatment group was used for each practice. This group includes the Juntos households located in Chumbivilcas, which have not participated in Sierra Sur and have not received training for this particular practice from any other source. This treatment group was compared to various control groups.

The first of these control groups includes the households that reside in the control zone and that have not received training in the practice in question; however, this control group inconveniently includes households that would probably participate in Sierra Sur. Considering that those who are willing to pay a higher amount of money have a greater probability of participating in the project, we considered two additional control groups: 1) the households in which the interviewees' willingness to pay is equal to or below the 25th percentile²⁰ and that have not been trained in the practice for which the estimation is being made, and 2) the households whose willingness to pay is less than or equal to the minimum amount paid and that have not been trained in the practice in question.

In case the results are maintained as statistically significant with the three control groups, we can affirm that they are robust to distinct levels of demand for Sierra Sur.

Results

The results highlight that residing in Chumbivilcas effectively increases the probability of adopting various practices promoted by the project. For example, the probability of implementing

20 With respect to BD, we consider a willingness to pay of less than the 20th percentile, and to NRM, of less than the 25th percentile. This as a result of the hypothetical questions referring to percentile 20 in the case of BD and percentile 25 in the case of NRM.

genetic improvement increases by 10% and that of planting a new variety of grass increases by around 8%. This diffusion of knowledge probably took place through social networks, given that none of the households in Chumbivilcas —among those that did not receive Sierra Sur— hired anyone to provide them with technical assistance. The qualitative work highlighted the role of local fairs and visits from other communities in the diffusion of this productive knowledge.

Differentiated Effects on Direct Beneficiaries

Methodology

To estimate the impact of different conditions on the effect of the intervention, estimations were carried out in which the dependent variable is the difference between the results indicator of each treatment observation and the counterfactual observation estimated for this observation. These estimations were carried out using the ordinary least squares method (OLS).

Results

As for the differentiated impact of the project, we found that its effect on the implementation of practices, investment, and income increases with the average educational level of the couple in charge of the household. We also found that the effect of the project on investment in assets decreases with the initial value of the households' productive assets, but that the effect on their income increases with this initial value.

Among these results, the positive relationship between the households' educational levels and the effect of the project on their incomes is particularly important, as is the relationship between this effect and the initial value of the households' assets.

The possible mechanisms behind the positive association between educational level and the project's impact on income are the following: the greater liquidity available for households with higher educational levels, and the greater ability of these households to understand the information received in the training sessions. Also, the possible mechanisms behind the positive effects of the initial value of assets may be due to the greater liquidity associated to greater asset ownership or to the greater drive generated by the new technology when more assets are available (for example, the effect of new technology, such as the planting of improved grass varieties, is greater the more cattle the household owns).

The Effects of Juntos on the Productive Activities of the Households

The estimations of the differentiated impact of the Sierra Sur project have shown that the effect on income increases with the educational level of the couple in charge of the household and with the value of its productive assets. These results suggest two ways in which Juntos and Sierra Sur could be complementary.

In the first place, the positive association between the effect of Sierra Sur and the value of the assets suggests that Juntos would help increase the impact of the project. In second place, the fact that the impact of Sierra Sur increases with the educational level of the couple in charge of the household suggests that the program could have an important impact for future Juntos beneficiaries.

However, in the qualitative assessment, we also found tensions between Juntos and the development of households' productive activities. In the interviews, the users expressed that participating in Juntos implied a significant investment of time, and that, therefore, they had less time to dedicate to productive activities.

Institutional Framework

The institutional analysis shows that Perú is going through a timely moment to implement productive projects in Juntos households, given the political will to implement projects of this type in households that receive transfers.

The institutional analysis also shows that the articulation between Juntos and other productive projects, such as Sierra Sur, requires the development of management instruments that facilitate coordination between the institutions in charge of each type of program. This articulation would allow the increased participation of Juntos users in productive projects, and foster additional supervision mechanisms for these projects through the participation of Juntos managers.

Conclusions and Recommendations

The results point out that the Juntos households, in Chumbivilcas, have a relatively high participation in Sierra Sur and that, at the same time, the project has had a positive effect on investment in assets and on the adoption of new technologies. These results indicate that a project such as Sierra Sur can be useful to these households, despite their condition of poverty. The institutional

analysis shows that it is a timely moment for Perú to implement productive projects in Juntos households, given the political will to implement projects of this type in households that receive transfers.

The analysis of the differentiated effect of Sierra Sur shows that the effect of the project on the households' income is positively associated to the initial value of the household assets. These results suggest that projects that deliver or induce greater investment in productive assets could be considered complementary to the productive project.

The study of the project's differentiated effect shows a positive association between the educational level of the household and the project's effect on income. The results also propose two possible alternative measures of policies that should be evaluated. The first is to strengthen the practical content of the training sessions, and the second, to complement productive projects such as Sierra Sur with adult education programs.

The positive effect of assets on the project's impact on households' income suggests that Juntos would help increase the effect of Sierra Sur. However, the qualitative assessment also shows that there are tensions between Juntos and the households' productive activities, because of the program's time demands on the participants. Thus, Juntos would foster changes that point to the better development of the households' productive activities as well as changes that would lead to their detriment.

Opportunities and Constraints in Program Articulation: The Institutional Arena of the Synergies

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Within the framework of the general concern for existing synergies between the conditional cash transfer programs (CCT) and the productive development programs (PDP), this chapter looks into the dimension of public policies and asks questions about the political, financial, and institutional opportunities and restrictions to promote integrated rural development strategies that combine investment in human capital permitted by the conditional cash transfer programs, with investment in people, social capital and the territories that undertake rural productive development programs.

Strategic Dimension: The Added Value of the Articulation

Conditional cash transfer programs (CCT) began to expand throughout the region in the mid-1990s, in order to protect against sudden stoppages of income in households that lack the means to protect themselves against such events privately, through contributions made to public and private social security systems. For their part, rural productive development programs aim to foster rural households' capacity for sustained and permanent exit from poverty. Such programs invest in productive assets and capacity (human capital, physical, social, financial) that seek to improve conditions for sustained individual income generation.

There is growing consensus with respect to the need to articulate the two types of intervention, given that CCTs "face serious difficulties in contributing to the generation of independent

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income, given that they do not foster incentives for new jobs, or for long-term skills-building for the labor market (De la Briere and Rawlings, 2006)” (Fernández, 2014: 6). They therefore do not fulfill the assumption relating to the economic inclusion of their beneficiaries.

Advancing towards greater articulation between the two types of initiative means modifying the predominant focus that splits the social policies and those related to overcoming poverty from economic and productive policies, and situating again social policy within the context of a broader concern for development, considering its central role in the achievement of social inclusion and cohesion.

But going from an intellectual consensus to its instrumentation by means of public policies is a challenge in the making. These are the challenges studied in this book, based on an institutional analysis undertaken in the six countries of the project, whose goal was precisely to investigate the political and technical constraints and opportunities in terms of institutional articulation.

Political Constraints and Opportunities

We have said that there seems to be increasing consensus among policy makers in Latin America in terms of the importance of combining efforts in monetary aid and other types of aid aimed at capacity building and income generation among the extremely poor population. This study confirms an evident and explicit will of the political authorities in Colombia, Mexico, and Perú, to seek more and better complementarity between the types of programs being analyzed.

However, beyond political will, when we look at the strengths and weaknesses of the institutions in charge of driving such strategies we find evident difficulties. A number of those interviewed in different countries appeal to the different *competencies* of the Ministries of Agriculture and Social Development, that do not only have to do with technical issues, but also with the most complex realization of institutional jealousy, based on the disinterest of the authorities in place in coordinating activities with other organisms. Essentially, the authorities express fear of the loss of functions or roles specific to their ministry, which may come about as a result of the implementation of joint programs.

Emerging Articulation Initiatives as a Sign of Political Will

Despite the restrictions, the will to move forward with the types of articulation proposed in this work is beginning to become concrete —to a greater or lesser extent— in practically all of the countries studied. In Mexico, Prospera replaces Oportunidades, providing options that develop the productivity of the beneficiary households. In Brazil, the Brasil Sem Miséria plan highlights the importance of the State’s intersectorial action. In Salvador, the Ministry of Agriculture, in partnership with the Social Investment Fund for Local Development (FISDL), initiated a pilot program for productive insertion in ten municipalities already benefitted by Comunidades Solidarias Rurales. In Colombia, the Programa de Agricultura Familiar was born of an articulation between the instruments of the Ministry of Agriculture and Rural Development (MADR), the Ministry of Commerce, Industry and Tourism, and other organisms. In Perú, the pilot intervention by Foncodes, known as “Haku Wiñay” or “Mi chacra emprendedora,” has been put to work in areas where the Juntos program has a high percentage of populational presence (more than 40% of the population in the territories). Finally, in Chile, efforts have been made to articulate Ingreso Ético Familiar and the offer of FOSIS programs that support work and enterprises.

The Local Space as a Preferred Space for Articulation

The actors interviewed in different countries point out that the effective possibilities of coordination are fundamentally related to the role attributed at local level program management. The local level acquires centralism as a preferred space for articulation and some countries have advanced in the adoption of a territorial focus in the design of their programs.

The centrality acquired by the local level as a preferred space of articulation is such, that some countries have gone a step further towards the adoption of a territorial focus in the design of their programs.

The only exception we found is the case of Brazil. This can be explained, at least partially, because the territorial extension of some of the municipalities is greater than some entire European countries. This means that some of the opportunities derived from this kind of outreach work, as observed at the local level in the other countries studied, cannot be given in Brazilian administrative territories.

Technical Aspects: Constraints and Opportunities Derived from the Design of the Interventions

Asfaw et al. (2012) maintain that there is a logical conversion between social protection policies and productivity policies in terms of their goals, design, and target population. Thus, greater articulation could benefit both types of policy. At a macro level, efficient investments for productive development could reduce budgetary requirements for social protection programs. At the same time, through the promotion of employment, in the long term, resources can be transferred to be used for the funding of greater social protection networks with broader coverage.

However, despite these potential benefits, there are restrictions and difficulties that make such an articulation complex.

Budgetary Restrictions

Although it seems feasible to expect a high degree of difficulty associated to differences and obligations derived from the regulations pertaining to the budgetary management of each program, the institutional analysis undertaken in the six countries included in this study shows few restrictions.

In general terms, the authorities interviewed point out that it is feasible to transfer funds if the processes are well defined and adequate transparency norms are established. Such processes may be established in the budgetary laws of each of the countries.

Targeting Criteria

Although CCTs have been geared towards working with households, often their selection combines criteria of geographical focus (that consists in identifying the territorial areas in which the program will be executed, and in some countries, verifying the capacity of education and health services to attend to increasing demand) with the subsequent identification of the households in the selected territories that have the attributes of the CCT target population.

In the case of productive development programs, we found initiatives with different targeting criteria. On the one hand, there are those that target poor people and households, through the same logic as the CCT, as is the case with the programs studied in El Salvador, Mexico and Chile. On the other, those that define territorial targeting criteria, combining investment in people with

the development of collective capabilities and investment in the territories' own assets, as happens in Perú and Colombia.

When the two types of program combine mechanisms of individual and territorial targeting, we can see a practical opportunity for articulation, derived from the possibility of focusing the goals of both types of intervention in the same territories. The institutional analyses undertaken in various countries also show that there is a positive valuation of the potential impact of such an articulation for the households' sustained poverty reduction in the territories in question, since the PDP target on the strengthening of local economies through the improvement of the production and distribution chains of small-scale producers. This can, in turn, contribute to increase the multiplier effect of the income received through transfers by the CCT beneficiary households. Also of value is the contribution to poorer households derived from joint participation in development projects together with other beneficiaries in relatively better socioeconomic situations.

Scale of Intervention

Conditional cash transfer programs tend to have a greater scale of intervention than productive development ones. These programs, due to their welfare provision modality, can cover a large section of the population at low administrative costs, as they tend to operate their payment systems through banks and they systematize the beneficiary selection and follow-up mechanisms. Thus, progressively broadening coverage of this type of program is not a complex task.

The case for the PDP is very different. Such projects require intensive technical assistance and accompaniment for the beneficiaries during the whole cycle of intervention, given that the State's investment in each beneficiary is much higher in terms of time, money and qualified human resources; therefore, coverage of such programs tends to be much more limited, and with more economic, management and human resources-related difficulties in broadening its scale of intervention.

Target Population

Another hindrance to successful articulation lies in the fact that the target population of each type of program is different. Whereas the target population for CCTs is the extremely poor, the productive development programs require some assets or skills from their beneficiaries in order

to allow them to participate in the technical assistance, commercialization or access to credit activities that are usually inexistent in the extremely poor population.

Some of the problems arise, for example, when the productive development programs require their beneficiaries to be in an association. Households in extreme poverty do not generally have the funds to become members of producers' associations and, besides, many of these require future members to fill out forms or participate in contests for which CCT beneficiaries generally lack skills.

Even though the differences may seem irreconcilable, it is possible to advance in terms of articulation strategies that manage themselves. One plausible alternative consists in accompanying the transfer programs with processes of psychosocial accompaniment in order to help households build the basic conditions that will enable them to subsequently take part in productive development programs and improve their involvement with the public offer of programs and public services in general. Another possible and complementary strategy consists in understanding the process by which poor households increase their assets as an on-going process, which is associated with a roll in and roll out series of linked programs of lesser to greater complexity, through which the producers and their households transit, as they fulfill the requirements to escalate from one step to another in the entrepreneurship chain.

Areas of Opportunity for Greater Complementarity

Below is a characterization of the types of emerging articulations, and their potential strengths and weaknesses:

1. Type 1. Different and independent programs run by different institutions that (coincidentally) are targeted on the same population.
2. Type 2. Programs designed in a complementary way, run by the same institution, which make up an integrated strategy.
3. Type 3. Different programs with complementary goals run by different institutions articulated amongst each other.

The first case corresponds to the type of (non) articulation assessed in the six countries studied. That is, programs that are designed and implemented, each one according to its own technical and institutional logic, that coincide in a specific space and group of beneficiaries.

Cases in which Conditional Cash Transfer Programs Design their Own Economic-Productive Inclusion Programs (Type 2)

We found, in this category, that in three of the six countries studied: (i) the new component of the *Inserción Productiva de Comunidades Solidarias Rurales* program had been implemented as a pilot program in 2010, and as a regular program since 2014 in El Salvador, run by FISDL; (ii) the *Haku Wiñay* program run by MIDIS has been active in Perú since 2013, in territories with a great participation of *Juntos* beneficiaries; (iii) the coordination carried out by *Ingreso Ético Familiar* in Chile with the FOSIS lines of entrepreneurship and employability.

These are rather recent initiatives whose goal is to deliver technical assistance to the transfer beneficiaries to begin enterprises, increase agricultural productivity or improve their commercialization networks and access to credit, in order to substantially increase the income generation capacity of the households. They do this by avoiding coordination difficulties, since the social ministries themselves design their own productive programs. However, the lack of technical expertise for the implementation of productive programs is one of the possible problems.

Inter-Institutional Articulation Pilots for the Synergies (Type 3)

The programs emerging in Colombia, Mexico and Brazil are aimed at articulating a set of previously existing but disperse initiatives around an axis program called *Programa de Agricultura Familiar*, in Colombia; *Territories Productivos*, in Mexico; and the productive inclusion axis of *Brasil Sem Miséria*, in Brazil.

The opportunities and restrictions of these cases are the opposite of the above. While possible problems in terms of duplicity and lack of technical expertise are avoided, it is not clear how feasible it will be to guarantee that the coordination required will be available in a timely and pertinent manner.

Conclusions

The above analysis is based on the findings of a study of the political and technical opportunities and restrictions for the articulation of monetary transfer and productive development programs in Latin America. It allows us to conclude that the bases for the beginning of a new cycle of social policy are already given. There are three fundamental bases to this argument: first, the

growing realization of the difficulties related to the CCT in terms of reducing poverty among their beneficiaries (Trivelli and Clausen, 2015). Second, passing from the conceptual recognition of poverty as a multidimensional phenomenon to the design of public policies that incorporate this perspective when seeking integrated answers to deal with the multiple manifestations of poverty in the individuals and households, and finally, the implementation of new-style social programs, consistent with this focus, like the ones described in this work.

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Final Reflections (Conclusions)

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Latin America is experiencing a time of great transformation, and although its countries are becoming consolidated in economic and social terms —due to the region’s close relationship with global markets and economies—, it is subject to the pressures arising from financial crises and political transformations occurring beyond its borders. For example, whereas the end of the twentieth century saw an accelerated growth of its economies, the first decade of this century is more readily associated to a slowing of poverty reduction rates and an important gap between urban and rural contexts in terms of growth, well-being, and access to public services. This is because much of the progress is concentrated in urban areas, whereas the countryside has maintained its alarming conditions of poverty and extreme poverty.

The progress made in the struggle against poverty and the insertion of the countries into the global economy has required significant volumes of public expenditure through their own resources or multilateral loans. Almost the entire region has made great fiscal efforts to try to reduce intergenerational poverty through conditional cash transfer (CCT) schemes. While this intergenerational process takes place, it is also important to resolve the households’ current poverty situation. This makes it necessary to think about mechanisms that will enable households to generate incomes to improve the quality of their lives. This confluence sheds light on the need to think about models that simultaneously offer social protection (as is the case with the cash transfers) and strengthen rural households’ own income-generation capacities, or about intervention schemes where policies are mutually supported in order to potentiate the multiplier effects of simultaneous interventions. Especially relevant for the rural sector is the confluence

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of social protection policies with rural development or productive programs. From here arises the central question for this project: Can there be synergies between social policy interventions and policies that promote rural production? And, if this is possible, how do they manifest themselves and what is their reach? How can they be strengthened to foster multiplier effects in the fight against rural poverty?

To answer these questions, Universidad de los Andes, through its Center for Economic Development Studies (CEDE), funded by FIDA and in association with institutions in six countries, developed large-scale projects to identify the existence of such synergies as well as understand their manifestations in key development indicators for rural households. There were many lessons learnt both in terms of understanding the synergies and in terms of the methodological challenges that such studies have to deal with as well as the implications of the observed results on public policy. The purpose of this section is to collect these lessons and outline paths into the future to understand and take advantage of these synergies in Latin America and in other developing countries, where rural poverty continues to be a great concern.

Implications of the Results

The studies undertaken in the six countries can be divided into two categories. The first gathers the cases of countries with consolidated transfer programs (Brazil, Chile and Mexico), which have been monitored and evaluated for a long time. These studies could therefore be based on information previously gathered in official databases or information from previous studies. The second category includes countries that have emerging transfer programs or ones that are in the process of being consolidated (Colombia, El Salvador and Perú), whereby primary information collection was required. This differentiation fostered diversity in terms of the methodological approaches used to deal with the research question on the synergies, as we can see in Table 1. Moreover, besides the in-field quantitative and qualitative analyses, an additional institutional analysis was undertaken in all countries in order to document how the institutional architecture can facilitate the search for and use of such synergies between social protection and the promotion of productive development, or not, as the case may be.

TABLE 8. Summary of the Quantitative and Qualitative Strategies Undertaken in each of the Countries in the Study

	Emerging programs			Consolidated programs		
	Colombia	El Salvador	Peru	Brasil	Chile	Mexico
Quantitative strategy	Analysis of the intensity of the cash transfer programs on the execution of rural development projects.	Identification using matching system design (PSM) and regression discontinuity.	Control group building simulating the program filters, hypothetical questions and regional PSM, refined with households' PSM.	Identification based on panel data and difference in differences estimators with fixed and co-variable effects.	Doubly robust approach, combining PSM, fixed and co-variable effects.	Identification by generalized PSM (for multiple treatments).
Data base	Cross-sectional survey			Brazil agricultural census panel	FONDECYT-Uniandes households' panel	ENHRUM households' survey
Period studied	2014	2014	2013-2014	1995-1996 y 2006	2012 y 2014	2002 y 2007
Unit observed	Households	Households	Households	Municipalities	Households	Households
Qualitative strategy	Interviews applied to entity agents and beneficiaries. Focus groups used with beneficiaries			Interviews applied to entity agents		
Additional topics studied	Impact assessment of the RDP using intensity analysis.	Identification of the RDP can serve as a graduation strategy.	Indirect effects of RDP training on the beneficiaries.	Impacts of social protection and rural development in municipalities	Impacts of CCT and RDP programs.	Microeconomic multi-sectorial model (CGEAM)

The first group of results deals with the variables that measure the households' well-being. The qualitative analyses shed light on evident synergic effects between social protection and rural development programs in the case of Brazil (for agricultural income) and Perú (for gross and net income). The case for Colombia allowed us to differentiate between short and mid-term effects and, as such, shed light on the slight reduction in consumption, although not in food consumption. In other cases, the results did not have the sufficient statistical power to show significant synergic effects.

Another group of variables deals with the responses in terms of behavior and agricultural practices. The case of Perú stands out because improvements were detected in the use of productive practices, an increase in the assets dedicated to production, and the increase of the value of the working capital. El Salvador shows an increase in diversification with the inclusion of new crops or animals. Among the countries with consolidated programs, the study was only carried out in Brazil, where some evidence of an increase in land productivity was detected.

In addition to these results, we highlight that the participation of producers' organizations in El Salvador increased and that there is no effect whatsoever on the use of children's time in work or school participation in Chile. Finally, we highlight the positive and significant effects insofar as access to banks and the use of formal credit (El Salvador) and a small effect on the use of micro insurance (Colombia), as well as the generation of sustainable environmental practices in productive activity (Perú).

These results show that there is some evidence on the existence of synergic effects or complementarities among social protection programs and rural development projects. However, the results are not convincing in the sense that they were not observed simultaneously throughout the different projects, which may be due, among other reasons, to methodological challenges. In this sense, it is worth mentioning that in addition to the methodological efforts made by the authors to find designs and strategies that would allow them to capture the synergies expected for each country, there are general characteristics and those particular to each study that may have affected the observed results. In the next section, we present a discussion related to some of these characteristics.

Methodological Challenges

Identifying the impact of an intervention requires conditions that are not easily observed or guaranteed in practice. One of these is the availability of a baseline or control group, which for the case of this study is an important limitation given that the assessed programs began to be implemented without this information. Thus, exploring the existence of synergies between social support programs and development initiatives, in practice, comes up against a series of challenges that make it difficult to identify their impacts.

Despite the effort put in by the teams, the identification strategy in each case may have been affected by a number of factors: (1) given that the two programs were different and that they

came from different entities with different goals, finding the groups that would have been exposed to both programs simultaneously was not an easy task; (2) the data bases containing information relating to both programs are not easy to compare and are sometimes even precarious; and (3) the fact that the programs had been implemented a long time ago required different approaches to understand the processes and results observed, including the combination of qualitative and quantitative methods, and institutional analyses, as explained further on.

Targeting

Despite the fact that both interventions are applied in a rural context, their coverage and targeting is different, among other reasons, because of the particular goals set out, making the expression of possible synergies complicated. In addition, the complexity of the rural sector, where we can find a broad range of actors, makes the coordination and integration of programs even more difficult. Thus, the intersection between programs is, in the best of cases, limited.

In particular, social protection given through the CCTs with a protector approach concentrates on the poorest people in the rural sector, whereas, in general, the rural development programs require households to possess a minimum of endowments and capacities, which, in turn, restricts the occurrence of coincidences between the groups.

If we combine the different types of social protection (Devereux and Sabates-Wheeler, 2004) with the different groups of family agriculture (Maldonado et al., 2007; Echenique, 2006), we can see that it is not necessarily possible to find interactions that generate or make use of synergies in all cases. For example, it would be expected for productive development projects to require particular previously existing skills or endowments; that is, consolidated or transitioning family farmers will have a better chance of developing synergies with social protection policies if these are promotional. Another example would be that of the conditional transfer programs that help the most vulnerable groups through protection policies, whereas the rural development projects do not necessarily target the poorest groups.

Identification

Another challenge for the analysis was the lack of adequate identification and follow-up of public action beneficiaries, in particular with temporary and geographically dispersed programs. In contrast to cash transfer programs, this involves mainly productive development projects that,

by being implemented in a complex rural setting, turn the identification of the beneficiaries and their subsequent follow-up in order to assess the results and impacts of the interventions, into a task that is not only expensive but that also requires a high degree of administrative effort.

Assessment

Using unpredicted designs to carry out cross-sectional analyses of existing programs fosters another methodological lesson: the need to combine assessment methods and approaches that can overcome technical difficulties related to the precise identification of the control and treatment groups and complement the strictly quantitative methods with qualitative and institutional analyses. The latter to help us understand the processes that underlie the observed results of the impact variables, to gain external validity in the quasi experimental exercises developed, and to comprehend how the entities and beneficiaries perceive the potential synergies.

By doing this, and based on the application and combination of different approaches and, in some cases, the use of innovative strategies, we were able to deal with the methodological complexity of the studies presented in this book and associated not only with not having an adequate counterfactual, but also with the challenge of analyzing two interventions acting simultaneously.

Recommendations of the Articulation of Policies

Although the studies found evidence of synergies in some countries, the findings are not uniform or consistent in all the cases analyzed. However, this does not mean that there are no synergies or complementarities between social protection programs and rural development projects; there are, in fact, clues that point to the benefits of articulating the programs. Below is a discussion on some of the implications of policies that may arise from the quantitative and qualitative results of these studies.

In as much as the offer is concerned, a greater coordination of the public programmatic offer would contribute to reduce implementation costs and speed up processes. Specifically, the articulation of policies may yield positive results in terms of cost reduction and inter-institutional efficiency. However, this does not necessarily imply that the policies should be merged into a

single policy. In practice, we can see that there are different degrees of interaction between policies based on the simple juxtaposition of beneficiaries, from the promotion of policies or joint implementation, to proposals designed by a single institution, offering different components of social protection and productive development. In this sense, it is worth highlighting two possible extreme articulation models. On the one hand, the articulation given between different programs and projects, which, through modifications made to their regulations and general operational schemes, seek to cross and complement each other in the target territory and population. The second model works under the assumption that new interventions that seek new target populations can be included within the same project. Thus, for example, in the case of cash-transfer programs, it would be possible to think about adding new models, conditions and incentives that, through the already established structure of the program, strengthen the notion of a network of social protection and promotion of productive development of the beneficiary households within the same program.

Although the possibility of synergies seems direct, it is not clear that the synergies can be easily scaled-up. The evidence suggests the need to find spaces for the joint work of local and regional project-implementing entities in order to take advantage of the local experience of working directly with the beneficiaries, and providing an institutional scenario that is favorable for the generation of synergies.

On the other hand, the conditional cash transfer programs have the advantage of having a coverage and user identification system that would allow the productive development programs to be better targeted. In this sense, a general registration system for all public program users would make it easier to monitor the policies more effectively and efficiently.

Another point to be considered is the type of productive interventions to which the CCT beneficiary population would have access, based on their capacities given that these abilities define the type of agriculture practiced or the economic activity chosen. For this reason, the type of intervention proposed by the rural development programs will make some synergies possible in some cases whereas, in others, this simply will not happen. For example, productive initiatives that require certain preliminary capacities and endowments will probably not be notoriously present in the poorest groups dedicated to subsistence agriculture, and which are the beneficiaries of social protection programs.

However, interventions that offer social protection and improve the households' capacities or income can provide participants with tools to enable them to take better advantage of the rural development interventions. If this is the case, interventions carried out at intervals would be more effective than simultaneous ones, given that the rural development programs can be turned into graduation strategies for households that have overcome certain levels of vulnerability as a result of the social protection policy.

Another important topic is that the effect of the programs seems to fade for some variables in the mid- and long-term. This fact can be observed in a number of interventions when the communities are not able to sustainably continue with the behavioral changes expected in the beneficiaries, and the impact is a response to the conjuncture of the program. This has been and continues to be a challenge for both social and productive development programs.

In the end, the households could take better advantage of the different programs if one of the interventions helps overcome the limitations that the beneficiaries face when it comes to taking better advantage of the other intervention. However, adverse or undesired effects can also appear. The transfer beneficiaries may fear that the progress brought about by the productive activity promoted by the productive development projects could lead to the loss of their social protection benefits. This, in turn, could make them act strategically so as not to endanger their regular and safe benefit from the cash transfers for other possible unstable benefits from an uncertain, and therefore risky, productive activity.

Future Perspectives

Finally, it is important to point out that in a number of the region's countries, the political agendas are being redirected towards schemes whereby interventions are not implemented on their own. Even though there is no firm evidence on the benefits of this, governments have been noticing the positive externalities that can be fostered when social policies are somehow articulated to rural development or productive ones. The trend of designing and implementing programs that articulate different policies is increasingly evident from different approaches, as is the case of Brazil (Brasil sem Miséria), Mexico (Programa Territorios Productivos), Perú (Haku Wiñay), El Salvador (PAF) and Colombia (IRIS). Also, the recent assessment of the graduation programs (inspired by the BRAC model) manifest the advantages associated to the proposals of interventions with different social and productive components (Banerjee et al., 2015).

To understand this need for greater articulation between social protection and the promotion of productive development, it is necessary to consider the priorities and particularities of each country. Thus, offering results and guidelines that enable us to understand how to strengthen these articulations, how to improve the efficiency of the policies, and how to more effectively reduce rural poverty in the region is a task in which scientific research has a central role.

This task presents several challenges for the assessment of such synergies. In the first place, it is necessary to develop the capacity to assess simultaneous interventions and understand the impact they generate. This understanding implies the need to clearly identify the channels or mechanisms through which synergic effects can be fostered or strengthened, as well as the need to develop analyses that capture both the benefits and the costs of carrying out a synergic intervention, including the opportunity costs of not doing so.

Another aspect that arises from this new wave of coordinated interventions is the challenge of articulating the public programmatic offer at the central government level and the need to achieve coordination at territorial level. The former implies an effective coordination not only with sectorial actors (in this case, Ministries of Agriculture, Rural Development and Social Development), but also with the active participation of the fiscal authorities (Finance Ministries), responsible for the formulation, distribution and follow-up of the public budget. The latter deals with an operational coordination, given that the public budget is executed and public policies become concrete projects at the local level. Hence, the need to analyze and understand the scope of this new wave promoting coordinated interventions from a territorial perspective.

In a context in which financial growth and social progress has lost its momentum in recent years, it is worth exploring the long-term potential of synergies related to provision of human and social capital that underlies both types of intervention. The standard model of conditional cash transfer programs assumes that school age household members must accumulate human capital attributes over time by remaining at school and monitoring their general health and nutrition. For their part, schemes that promote productive development for small-scale rural producers rest on associativity as a base from which they can take advantage of economies of scale. In time, by combining the two types of intervention, improvements can be expected in areas such as technology adoption and interaction with public institutions, among others.

This gives rise to the need to rethink the temporality and sequence of the interventions; for example, the design of staggered programs that offer support once certain capacities have been

achieved. One case to consider would be that of rural youngsters that finish their school training, made possible by the conditional cash transfer programs, who could begin an agricultural and livestock training program in order to be able to join the labor market in the best conditions possible.

A central element to make operative any coordination effort between the two types of program has to do with the in-field actors responsible for project execution. The public functionaries that are in direct contact with the beneficiaries constitute the “most direct and visible face of the State,” and in the case of the productive development projects, this figure is much clearer based on rural technical assistants and service providers, than in the case of social protection, whereby the interaction is diluted among more actors. Thus, when it comes to designing schemes that combine elements of social protection with those pertaining to the promotion of productive development, these can be perceived in two modalities.

On the one hand, there is the possibility of maintaining this group of actors who directly attend to and provide goods and services to the beneficiaries. Alternatively, we could think of trying a scheme whereby *ad hoc* skills building for public functionaries could enable them to facilitate the beneficiary households’ access to the public programmatic offer.

Finally, this study also gives rise to some central questions from a political point of view, such as: Which is the optimum level or degree of interaction between public programs to which we should aspire? And should we take advantage of the intersection between programs in the same territory and targeted to the same group of beneficiaries, or should we promote the creation of integral programs that offer the different tools? These questions will have to be answered in the very near future if permanent and effective exit from rural poverty is to finally become a reality.

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