MARKET ALTERNATIVES FOR SMALLHOLDER FARMERS IN FOOD SECURITY INITIATIVES:

LESSONS FROM THE BRAZILIAN FOOD ACQUISITION PROGRAMME

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Danuta Chmielewska Darana Souza

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International Policy Centre for Inclusive Growth (IPC - IG)

Poverty Practice, Bureau for Development Policy, UNDP Esplanada dos Ministérios, Bloco O, 7º andar 70052-900 Brasilia, DF - Brazil

Telephone: +55 61 2105 5000

E-mail: ipc@ipc-undp.org • URL: www.ipc-undp.org

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MARKET ALTERNATIVES FOR SMALLHOLDER FARMERS IN FOOD SECURITY INITIATIVES: LESSONS FROM THE BRAZILIAN FOOD ACQUISITION PROGRAMME*

Danuta Chmielewska** and Darana Souza**

1 INTRODUCTION

Policies that support the livelihoods of smallholder¹ farmers are crucial in efforts to tackle poverty and hunger, especially when they are designed to combine different sectors of public intervention. Small farmers account for a significant share of developing countries' rural poor, who in turn account for 75 per cent of the total poor population in those countries (World Bank, 2008). Smallholdings are typically operated by the poor, who make substantial use of labour from their own households and from their equally poor or even poorer neighbours. Moreover, much of their income is usually spent on locally produced goods and services, thereby stimulating the rural off-farm economy and creating additional jobs (Hazell et al., 2007). They are also vital for food production and can play a significant role in increasing the availability of and access to food (United Nations, 2008).

Small farmers use several different strategies to secure their livelihoods, with a view to ensuring that their food requirements are met and that they generate enough income for their immediate consumption needs, social purposes and investments. Interaction with agricultural markets is an essential part of these strategies. Markets are where, as producers, smallholders buy their agricultural inputs and sell their products; they are where, as consumers, smallholders use income from the sale of crops or from their non-agricultural activities to buy food and other consumption goods. Improved market access, therefore, is not only important for better-off producers or for the production of cash crops rather than food crops; it is also very important for smallholder farmers (IFAD, 2003).

Many smallholders, however, are unable to interact directly with markets. That circumstance is a major constraint on the improvement of their living standards in many parts of the developing world. There are several reasons for these difficulties. They can stem from inadequate physical access to markets because of factors such as distance and lack of roads. They might be the result of unbalanced market relations between producers and traders. They can also be related to producers' lack of skills and market information (such as prices of goods or the quantities and quality required) or limited organisational capacity, which constrains competitiveness and bargaining power (IFAD, 2003).

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^{**} International Policy Centre for Inclusive Growth.

Consequently, policies that support smallholders' livelihoods, particularly through market access, can play a vital role in reducing poverty and enhancing food security. In this context, approaches that combine giving vulnerable segments of the population access to food (through food distribution, subsidised food sales, supplementary feeding and so forth) with giving smallholder farmers opportunities to access markets and generate income can offer critical benefits.

Integrated programmes of this kind are being implemented in several developing countries. Providing farmers with market opportunities to sell their crops is at the heart of Purchase for Progress (P4P), a pilot project that connects smallholder farmers to markets and that was launched by the World Food Programme (WFP) in September 2008. P4P is part of the global effort to promote smallholders' agricultural production and market access in the context of tackling food insecurity and poverty. P4P purchases now account for a small percentage of WFP's overall local procurement in each of the 21 countries where it is being implemented across Africa, Asia and Latin America. Through P4P, WFP is moving a small share of its local and regional procurement from the higher levels of the marketing chain—large-scale traders and processors who comprise WFP's traditional suppliers—to the lower levels represented by farmers' organisations and small/medium-scale traders. The aim is to have a more direct impact on smallholders' income and livelihoods (FSN, 2009).

In a similar approach, India's Public Distribution System (PDS) targets large-scale traders. The PDS procures, stores, rations and subsidises the retailing of major staple food grains in India through an enormous network of government warehouses and food retail outlets. Although the PDS has created an impressive system of outlets in the deep hinterland and is the lifeline of food security for millions of food-insecure people, it has failed to secure the food and income interests of small food producers² (CES, 2001).

Another pertinent approach to the broader question of poverty-related food insecurity is Brazil's Food Acquisition Programme (*Programa de Aquisição de Alimentos*, PAA). Created in 2003, the PAA allows for the public purchase of food items from targeted family farmers, without a competitive bidding process, for distribution in the social assistance network and to build a strategic food reserve.³

This study looks at the outcomes of the latter programme for farmers' market access. Our goal is to identify and discuss key elements that could be explored in further international debate, sharing lessons learned from programmes that combine supporting food production (through trading opportunities targeted at or open to smallholder farmers) with giving vulnerable populations access to food. This is the first study in a series to be conducted by the International Policy Centre for Inclusive Growth (IPC-IG) to compare experiences of this kind. The next phases of the research will discuss India's PDS and WFP's Purchase for Progress.

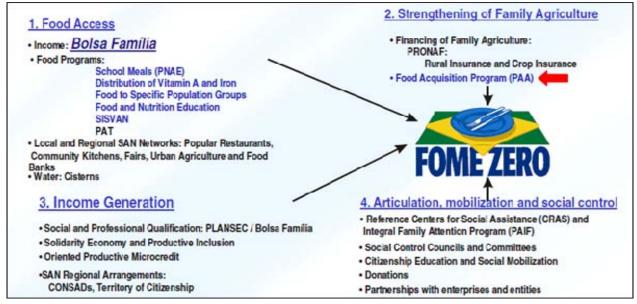
2 THE BRAZILIAN FOOD ACQUISITION PROGRAMME: PROBLEM DEFINITION

An essential question about policies that seek to foster socioeconomic inclusion and income generation—for which there is much potential in many market-access programmes—is their capacity to guarantee a sustainable process for the continued growth of their beneficiaries' economic productivity and capacity. Brazil's PAA can be discussed from this perspective

because, from the supply side, it offers an optimal market opportunity, among other benefits, for targeted food producers. The programme is a strategic part of Brazil's food security policy framework formally known as *Fome Zero* ("Zero Hunger"), a multidimensional approach with four axes of intervention. PAA is part of "strengthening family farming", as shown in the figure below.

FIGURE 1

Zero Hunger



Source: Aranha (2010).

The programme focuses on the two basic conditions for food security: food availability and food access. Its main goal is to "guarantee access to food in the proper quantity, quality and regularity according to the needs of populations living in food and nutritional insecurity, as well as to promote social inclusion in rural areas by strengthening family agriculture" (MDS, 2010a).

Family farmers are recognised in this context by the National Family Farming Act.⁴ The act is an outcome of a long journey made by the Brazilian state and social movements towards recognition of the economic and social importance of family farming, as well as the legitimacy of its demands. Family farmers are allowed to register formally when they have met four requirements:

- the rural establishment (or area of activity) does not exceed four fiscal modules;⁵
- the labour used in the related activities is predominantly family-based;
- the family's income is mainly from activities related to farming and the smallholding; and
- the establishment is directly managed by the family.

PAA is a federal government programme funded by the Ministry of Agrarian Development (MDA) and the Ministry of Social Development and Fight against Hunger (MDS). It is gaining

importance among Brazil's initiatives for family farming support. Between 2003 (when it was first implemented) and 2008, the federal government spent more than US\$ 1 billion through the scheme to buy nearly 2 million tons of food. In 2008, about 120,000 farmers were selling products within PAA, and those products were donated to 16.8 million people. PAA's allocated budget for 2009 stood at about US\$ 300 million. It is important to note that family agriculture in Brazil is much larger than that: according to the latest Brazilian Agricultural and Livestock Census (2006), there are 4.3 million rural establishments for family agriculture (IBGE, 2009).

About 111,000 farmers were selling products through the PAA in the year of the census, and therefore only around 2.5 per cent of family farmers were involved in the PAA that year. Another survey has indicated that about 40 per cent of Brazilian households (some 72 million people at that time) experience food insecurity (IBGE, 2006). In general terms, therefore, we can suggest that about 25 per cent of the population that faces food insecurity is being supported by the PAA.

PAA is a complex programme with various components that have different procedures and purposes, and that are not necessarily implemented in the same locations. Given our interest in initiatives that combine food access and food production through the direct purchase of agricultural goods, the present study concentrates on the components that specifically target those areas, thereby allowing a more comprehensive analysis. The components considered, therefore, are those that comprise the Purchase for Simultaneous Donation (Compra para Doação Simultânea): Local Direct Purchase from Family Agriculture (CDLAF) and Purchase from Family Agriculture for Simultaneous Donation (CPR-Donation).

These two components together account for 40 per cent of the total resources disbursed through the PAA between 2006 and 2009, and cover 60 per cent of all farmers involved in the programme during the same period (MDS, 2010b). They seek to promote links between family farmers' production and local demands for food in governmental and non-governmental institutions through an agreed sales project. The project is prepared with the involvement of different stakeholders, including the producers and the institutions that will receive the goods, allowing for the choice of food items that are produced and consumed locally. All types of food products can be bought, whether of vegetable or animal origin, processed or not, as long as they meet the standards set by the Ministry of Agriculture, Livestock and Supply (MAPA) for animal-origin products, and the National Health Surveillance Agency (ANVISA) for vegetable-origin products. CDLAF and CPR-Donation are closely related to the creation and consolidation of local production, marketing and consumption networks, since the purchased goods are distributed in neighbouring institutions—such as schools, day-care centres, community associations, hospitals and so on—free of charge to a population suffering food insecurity.

CDLAF is implemented by state and municipal governments through a formal agreement with the MDS. The various stakeholders—government, family farmers and social institutions—are involved in preparing a project that will relate demand for food in these latter institutions with the supplies that farmers are able to provide. The proposal must include a list of producers, the prices to be paid for each type of product, the total value of purchases and the institutions that will receive the goods. The purchase price must be based on the local retail price as defined after three price surveys. Individual farmers and formal or informal producers' organisations can participate in CDLAF. These agreements can be in effect for a maximum of 18 months and may be extended by an addendum on the basis of concrete reasons justifying the change. The entire period, including any extension, cannot exceed 60 months.

CPR-Donation is implemented by the National Supply Company (CONAB) in collaboration with formal farmers' organisations. It is established by a document known as the *Cédula de Produto Rural* (CPR), which specifies the value of the financial transaction, its time period, the address for the product delivery, the circumstances under which adjustments to the quantity are allowed, and instructions for the CPR's termination. CONAB determines the price for each product on the basis of local wholesale prices.⁷ This component is solely available to farmers in formal groups (associations or cooperatives).

These two components provide clear market opportunities and alternatives for smallholders, who otherwise are likely to be excluded from public procurement because of administrative requirements for mandatory bidding processes and because of their size/capacity to deliver. In both components these new opportunities are limited by the maximum purchase value of R\$ 4,500 (roughly US\$ 2,500) per family per year (Brasil, 2009). This amount might seem small, but note that the average monthly income in, for instance, Sergipe state is R\$ 163.5 (R\$ 1,962 a year), and the amount available from PAA is twice as much their average income (UNDP, 2010).

It is important to understand how these schemes affect the capacity of beneficiary farmers to build more advantageous links to markets. More specifically, a pertinent question is whether (and in which sense) the programme's benefits allow market practices to be improved or whether they hinder such improvement, in the sense that they constrain producers' interest in developing their potential for market insertion in other areas. The present study aims to investigate these questions further.

The following research question guided the study: is the PAA facilitating the development of its beneficiary farmers' market-oriented production and organisation-related practices?

A subset of additional questions were:

- 1. What market-oriented practices are being developed in the areas of agricultural production, organisational processes and marketing?
- 2. How are market-oriented practices complemented by other support interventions?
- 3. What are the challenges to the development of market-oriented practices?
- 4. What would happen to such practices if the PAA ended?

3 SCOPE AND METHODOLOGY

3.1 METHODOLOGY

Since our main interest is to understand the development of farmers' practices and of their organisations, we judged it appropriate to consider a restricted geographic location so as to deepen our analysis of the circumstances that these farmers face.

A case study was used to determine how the programme changed family farmers' market-oriented practices. A case study is an empirical enquiry used to secure a deep understanding of a real-life phenomenon within its context, on the basis of a specific logic of design, data collection and data analysis (Yin, 2009). This qualitative research strategy takes into consideration stakeholders' perspectives and allows the researcher to capture various ongoing processes among people and their lives. Contextual conditions are very important

in understanding the changes wrought by the PAA, and the specific operational challenges that family farmers faced when they joined the programme. This matter underlines the relevance of this research approach, since this strategy assesses the social context in which these interactions take place.

The primary data were obtained from semi-structured interviews with farmers, leaders of farmers' associations, technical specialists, representatives of social movements, municipal and state governments, and representatives of the institutions that receive donations. The social actors and institutions involved were identified through the beneficiary registry maintained by governmental bodies, as well as through successive interviews.

A total of 72 interviews were conducted and a saturation point was reached, since the information collected became repetitive to a large extent. In the case of CPR-Donation, we interviewed nine of the ten organisations that were accessing or have accessed the PAA in these locations. Direct observation in the institutions, as well as in the farmers' workplaces, complemented this information. The data collection was the result of three weeks of field research in November and December 2009.

The analysis focused on the individual perceptions of relevant stakeholders, especially family farmers. The goal was to examine the changes brought about by the PAA according to the causal links identified by the programme's beneficiaries. Since the views of different types of stakeholders—farmers, local policymakers, technical specialists and so on—were similar and complementary to each other, they were considered jointly.

The information presented in this study was supplemented by quantitative and qualitative secondary data. These data were obtained from a review of the literature, as well as through consultations with government agencies executing the programme and local social organisations involved in the PAA. This information was mainly used to choose the components and the research location.

3.2 RESEARCH LOCATION

The municipality was considered to be a relevant unit of study. The agreements between MDS and local governments for the implementation of CDLAF are at the municipal level, and many farmers' organisations operate at that level, which is relevant for CPR-Donation. In line with the availability of resources for the fieldwork, three municipalities were chosen according to the following criteria: level of development, presence of family farmers, volume of resources allocated by PAA, and presence of the programme components chosen for research.

Brazil's Northeast region has the country's lowest human development index. It has received a large share of PAA resources in general (30 per cent in 2008) and of CPR-Donation resources in particular: 37 per cent in 2008 (CONAB, 2009). The region also has 50 per cent of Brazil's family farms (MDA, 2009). Hence this region was chosen as the broader context of the study.

Within the region, the state of Sergipe was chosen on the basis of the following information. Some 43 of its municipalities have accessed CPR-Donation (that is more than half of the municipalities in the state) and 12 municipalities have accessed CDLAF (about 15 per cent of its municipalities). Sergipe also has a large concentration of family farmers, who own 90 per cent of the state's agricultural establishments (IBGE, 2009). Moreover, unlike other

states in the Northeast, such as Bahia and Pernambuco, there has been little research on the PAA in Sergipe; it was included only in the participatory documentation held by CONAB (2006).

The municipalities were chosen according to the following data:

- Estância was the only municipality of Sergipe that was using CDLAF in 2009.
 As regards CPR-Donation, it was first accessed in Estância in 2006, and in 2009 two associations were involved in projects.
- 2. Indiaroba was one of the municipalities with the largest number of farmers joining CPR-Donation. The latter was first accessed in 2006, and in 2009 five associations were involved in projects.
- 3. Lagarto is located near Estância and Indiaroba; CPR-Donation was first accessed in 2006, and in 2009 three associations were involved in projects.

4 CONTEXT OF THE STUDY

4.1 LOCATION

FIGURE 2

Sergipe is Brazil's smallest state, but it is prominent as regards the PAA. In 2008, it accounted for 21 per cent of the volume (kg) of food bought by the programme in the Northeast. That represents 15 per cent of the total resources allocated in that year to that region, a sum of about US\$ 4 million (CONAB, 2009).

CPR-Donation and CDLAF operations are prominent in Sergipe, accounting for more than 90 per cent of the resources allocated by the PAA in the state (CONAB, 2009).

Location of the State of Sergipe



In a brief presentation of the municipalities of Estância, Indiaroba and Lagarto, it is worth noting that only in Estância does the majority of the population live in urban areas (86 per cent); this is higher than the state average (71 per cent). Indiaroba and Lagarto have a

higher concentration of residents in rural areas, and urbanisation rates of 36 and 49 per cent, respectively (IBGE, 2003). According to the 2000 census, Estância has 59,002 inhabitants, Lagarto 83,334 and Indiaroba 13,152. In the three municipalities, the services sector stands out. The agricultural sector has greater prominence in Indiaroba (17 per cent), a circumstance that is certainly related to its low urbanisation rate (IBGE, 2003).

In all three municipalities, more than half the population are poor (UNDP, 2010). As regards the agrarian structure, family farms account for more than 80 per cent of the agricultural establishments (IBGE, 2009).

The three municipalities are included in the Territories of Citizenship⁸ of the State of Sergipe: Indiaroba and Estância in Southern Sergipe, and Lagarto in the Western Semi-Arid region.

4.2 PRODUCERS' ORGANISATIONS

This section offers a general profile of the associations that access or have accessed CPR-Donation.

In the locations visited, no cooperatives participated in the programme, only associations. Among the nine organisations interviewed, two are in Estância, five in Indiaroba and two in Lagarto. Six associations have been in existence for 10 to 20 years; the others were founded in the present decade. These groups were founded for very diverse reasons, including access to energy, housing for land reform settlements, improvement of agricultural production and other activities that would be best undertaken by a formal group. The prospect of accessing the PAA was not identified among these purposes, despite the changes wrought by the programme in the regulation and building of the organisations, as discussed later.

The vast majority of the groups have 20 to 40 members, who are mainly from the same neighbourhood or nearby areas, but rarely from different municipalities. There is one exception: the Agricultural Cooperation Association of the Rural Settlers of Southern Sergipe (ASCOSUL) has individual members and also serves as a central networking association for several municipalities.

Most organisations have accessed CPR-Donation for at least two years. The two organisations that used that component for just one year enrolled at least two CPRs that year. The number of farmers involved in each CPR varies widely, ranging from 7 to 53 people.

4.3 FARMERS' PROFILE

Family farms in Brazil comprise a diverse set of rural properties composed of small and medium farms, agrarian reform settlements and traditional rural communities (extractivists, riverine populations and the descendents of slaves—quilombolas—among others).

The 2006 Brazilian Agricultural and Livestock Census shows that, since the previous census, the family farming sector had grown, produced more, provided more jobs, generated more income and guaranteed food security to the Brazilian population (see Table 1).

TABLE 1
Representativeness of Family Farming in Brazil

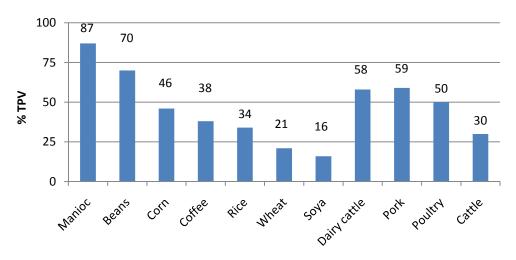
Total establishments	4,367,902 establishments	84.4%
Total area	80 million ha	24,3%
Gross productive value	R\$ 54 billion	38%
Personnel	12.3 million people	74.4%

Source: IBGE (2009).

Brazil's family agriculture is also marked by diversified production (see Figure 3), which is mainly devoted to subsistence and to the internal market. Most of the basic foodstuffs consumed in Brazil come from family farms: for example, 87 per cent of the cassava and 70 per cent of the beans (IBGE, 2009). In that light, the marketing of family farmers' production is an important element in the country's food security. The advantage of promoting a local cycle of production and consumption is that local consumers have the same eating habits, and thus what family farmers produce is what consumers from neighbouring areas consume. By contrast, in countries where smallholder farmers concentrate on cash crops instead of staple foodstuffs, the threat to food security can be critical.

FIGURE 3

Percentage of the Total Produce Value (TPV) of Family Agriculture



Source: IBGE (2009).

With respect to the farmers considered in this study, most of the interviewees are male. Their ages range from 34 to 74. The group has strong ties to agriculture; all respondents said they have always been farmers: "I was born on the land and have always lived on it." Most of them are originally from Sergipe. Most live in rural settlements that emerged from agrarian reform in recent decades, and say that they have been in those areas since they were set up.

The areas of cultivation are generally small, ranging from two to thirty hectares,⁹ and the vast majority are up to ten hectares. Both permanent and temporary labour are used, although permanent labour is generally confined to one person. The main crops in the PAA are fruits and

vegetables and, in Lagarto, honey. Other products of animal origin, such as meat, eggs, dairy products and processed goods, are rarely acquired by the programme in these locations. This is mainly because of difficulties in sanitary compliance, as discussed later.

An important characteristic of the population of farmers in this study is their strong presence in land reform settlements, of which there are many in the region. Most farmers also take part in an association (even those who access CDLAF). Besides the PAA, they also participate in a few other projects, generally confined to some type of technical assistance, which they see as insufficient. Of the institutions providing such support, the state government is prominent through the Sergipe Agricultural Development Company (Emdagro) and the Sergipe Development Company for Water Resources and Irrigation (Cohidro), as is the Landless Workers' Movement (MST).

5 CHANGES IN FARMERS' MARKET-ORIENTED PRACTICES

This section discusses the changes observed in the productive, organisational and commercial activities of the PAA's beneficiary producers, in the context of the components and locations considered in the study. Since it was not possible to identify significant differences between the municipalities, the analysis covers the three locations. Similarly, we did not examine changes according to the producers' profiles, since the profiles were very similar. Indeed, the pertinent comparative elements emerged mainly from the PAA's components and the distinct profiles of producers' organisations. Both are discussed in this section.

5.1 CHANGES IN PRODUCTION-RELATED PRACTICES

In general, the changes in the production-related practices of farmers involved in the PAA are the result of greater investment in production and the optimisation of existing resources.

An increase in the cultivated area and/or in the variety of available products was common among producers participating in the programme. ¹⁰ In particular, there was an expansion and diversification of the production of fruits and vegetables, the main product categories marketed by the PAA in these locations. This was a process of experimentation: with resources available and a guaranteed market, farmers explored new crops and reintroduced old ones that had been abandoned, such as various kinds of cassava. This happened with annual crops, such as watermelon, yucca and beetroot, as well as with permanent crops, such as oranges, coconut and passion fruit. Animals were also bought, particularly pigs, cattle and poultry, although not necessarily for trading purposes.

In some cases, local stakeholders also identified the marketing of products that were not explored economically outside the programme. Examples of this adjustment include the sale of colouring products found in the families' backyards and of fruit that previously was wasted.

Participation in the PAA also led to a vast increase in the use of agricultural inputs.¹¹ The beneficiary farmers noted various changes: an increase in the use of fertilisers and pesticides, the purchase of seeds, the renting of tractors, investment in infrastructure irrigation systems, and acquisition of protective equipment and material for fumigation in beekeeping.

The farmers report an equally notable PAA impact on labour use. Greater employment of permanent and temporary rural workers on beneficiaries' properties was often mentioned.

On the other hand, there were cases where producers involved in the programme, who acted as day workers for other farmers, stopped working for others or worked less for them so that they could dedicate more time to their own production. As one PAA beneficiary said: "people used to sell their day; today they work their land to produce for CONAB". 12

Interviewees mentioned greater attention to product quality,¹³ particularly in CPR-Donation. This was because of the programme's quality control and farmers' commitment to delivering quality food to the institutions involved. The proximity of producers to consumers, which creates a local cycle of production and consumption, was one factor behind this commitment. It resulted in more detailed product selection by producers' organisations and modification of delivery processes, illustrated by the use of boxes rather than plastic bags to transport, so as to lessen the damage to products.

Additionally, in certain situations the PAA provided an incentive to take distinct approaches to production. This was observed in locations where other projects already provided support to agro-ecological practices and/or conversion to organic farming. It was the case in the irrigated area of Lagarto municipality, which receives technical assistance from Cohidro. Since the programme sets higher prices for organic products, it offers a valuable opportunity for producers. According to them, in the only other market channel they know for these products (street fairs), the consumers have little awareness of organic practices and their limited purchasing power does not allow the acquisition of more expensive goods.

Conversely, it should be noted that the use of credit to fund agricultural production did not increase, according to the beneficiary farmers. On the contrary, in some cases the additional income generated by the programme allowed farmers to repay loans previously accessed through the National Programme to Strengthen Family Farming (PRONAF). As a general rule, the investments observed in this study were made with the farmers' own resources, obtained through PAA, suggesting a higher level of income and greater self-reliance.

In fact, as will be explained here, the observed changes in the different stages of the production process sprang from confidence in accessing profitable markets through the PAA. In other words, the programme offers farmers an income guarantee, which encourages the development of their production-related activities. ¹⁴ One beneficiary farmer noted: "We have no motivation to plant for middlemen because we know we will sell at low prices."

The PAA components analysed here do indeed offer a secure market. Since the total value to be paid to each producer is specified and agreed upon in the project presented to CONAB or MDS, along with the price to be paid for each product, the farmer is better placed to manage risk and is substantially protected from unfavourable fluctuations in market price and demand. The programme's ability to attenuate issues that pose a considerable risk of losses brings security to the farmers, and this is the element most praised by the beneficiaries: "With the PAA we have the guarantee of planting, knowing where to deliver", said one of them. Another commented: "there is nothing better than the confidence that you will receive money to solve anything."

The prices offered by the PAA are generally profitable for producers. As mentioned earlier, the values used in CPR-Donation are based on wholesale market prices, while those of CDLAF are determined by retail prices. It should be noted that these methodological differences in setting prices cause problems when both components are available in the same location.¹⁵

Since the CDLAF prices are higher, there are cases of producers abandoning CPR-Donation to use CDLAF. This competition can have adverse effects on local collective action because CDLAF, unlike CPR-Donation, allows producers to participate individually in the programme.

In reality, in most cases the prices paid by both components are better than those that the producers can command in other channels. This is because of their limited bargaining capacity and/or limited market access. Beneficiaries mentioned some differences between prices offered by the programme and what they could command locally; these included advantages of 65 per cent per kilo for honey and 20 per cent per kilo for passion fruit. In CDLAF the differences were wide: the PAA price for coconuts, for example, is 10 times higher than what producers previously obtained when they sold in the wholesale market.

In some situations, however, the PAA does not offer the most profitable price point for farmers because of market price fluctuations during the year. At the time of this research (November 2009), for instance, the values paid in both components for a kilo of oranges were lower than producers claimed to obtain through other channels. Nonetheless, apart from the fact that they could hardly sell all of their production through these channels because of limits in market demand, the importance that the beneficiaries ascribe to the price guarantee offsets temporary price disadvantages. One PAA beneficiary said: "I prefer selling for CONAB because it is sure money."

Despite the challenges, there is little doubt that the CDLAF offers significant opportunities to the farmers, for whom other market possibilities are normally limited. They are restricted to local street fairs and to middlemen, who visit the properties and acquire goods from individual producers. This constraint poses a significant risk of losses for producers because of the possibility that prices will be unprofitable, payment will not be made, or the marketing of their produce will be difficult. Farmers pointed out that they have had to sell their produce at less than the production cost and in extreme cases have had to discard products because there as no market for them.

A final important matter to be considered as regards farmers' profitability is responsibility for transporting the goods to the institutions involved. This responsibility varies according to the agreements between the parties. In the case of CDLAF, the local government of Estância municipality covers delivery for most goods, which are transported from each farm directly to the institutions. For CPR-Donation the circumstances are different for each project: either the producers themselves or the recipient institutions bear the transport costs.

In brief, according to the interviewees, the two factors discussed above—the sales guarantee and profitable prices—represent a safe and advantageous market opportunity that will encourage changes throughout the production process. They emphasised that the guaranteed income and marketing offered by the programme have significantly influenced farmers' means and decision to invest, as well as optimise production.

5.2 CHANGES IN MARKETING AND IN FARMERS' ORGANISATIONS

As regards producers' access to other sales channels, the changes encouraged by the PAA were quite limited. There is a general lack of initiatives geared to diversification of clients among individual farmers and their organisations. In fact, since their normal sales options (local street fairs and middlemen) are limited and involve considerable risk, farmers generally

perceive the PAA as their best market possibility. Unfortunately, unprofitable markets that offer limited opportunities for negotiation are a reality in most poor rural areas (Bijman et al., 2007). It can be extremely difficult for farmers to find and enter markets that provide them with better prospects. In the PAA, therefore, all new efforts made by beneficiaries are geared to increasing and improving production to sell within the programme.

ASCOSUL is an exception in this regard. It is bigger than most of the other organisations taking part in the PAA in the region; indeed, it consists of several smaller associations. ASCOSUL can offer its members market opportunities that go beyond the limits of their individual sales in street fairs and to middleman. The association is developing market relations with other local partners, such as restaurants and supermarkets.

Nevertheless, the PAA has a clear impact on farmers' existing market links. Various producers claim that, because of the prices offered by the PAA, they can negotiate higher prices with middlemen. This affects a wide range of food products, most particularly fruits, vegetables and honey. On the other hand, farmers note that the supply of products in local street fairs has fallen because of sales to the PAA (in some cases beneficiary farmers have entirely stopped using these channels), which has led to an increase in the price of fruits and vegetables in particular. This probably affects the capacity of others in the community to buy these goods. As a result, both beneficiary and non-beneficiary producers gain. This price rise should not go higher, however, so as not to pose risks to local consumers.

In some cases the programme has made it possible for farmers to invest in higher value-added products, though the current trade in processed goods is limited to yucca flower, cakes and honey. The most organised associations taking part in CPR-Donation have expressed an interest in investing in the production and marketing of fruit pulp and honey biscuits, with a view to profiting from the income and market opportunities offered by the programme. According to farmers, however, compliance with sanitary requirements makes it difficult to market processed goods. The Local Inspection Service (SIM) is non-existent is most municipalities and it is hard for small organisations to access the sanitary regulations from the National Agency of Sanitary Surveillance (ANVISA). These circumstances hamper the local trade in processed food and animal-based goods.

There were also significant changes geared to strengthening the farmers' associations that participate in CPR-Donation. This latter component encouraged formal groups to regularise their legal situation. Although these associations had been founded before the programme was set up, in many cases official documents had not been kept up to date. Additionally, farmers and their representatives perceived a general increase in the number of members and in their involvement in group activities, as illustrated by greater participation in meetings.¹⁶

Another matter identified in all organisations was knowledge-building for the preparation and implementation of projects in the fields of agricultural production and marketing. According to the interviewees, this capacity was built gradually on the basis of successes and setbacks during their participation in the programme. Initially, the organisations needed general external support to undertake the projects; now, some of them can independently manage their participation in the PAA.

Furthermore, the larger groups were able to allocate resources to infrastructural improvements. Apistreze, for instance, an association that produces honey, has repaired its headquarters and bought land to build a processing facility. These investments were made possible by the income generated through commercial transactions facilitated by the PAA.

Finally, it is worth mentioning an ASCOSUL initiative on bank accounts. The association facilitated dialogue with a bank and encouraged its members to open an account to receive the PAA resources. Most of the farmers involved had never had access to banking services before joining the programme.

5.3 CHALLENGES FOR THE DEVELOPMENT OF MARKET-ORIENTED PRACTICES

Farmers involved in the PAA face several challenges, some of which directly affect the development of the farmers' market-oriented practices. This section presents those challenges, with a view to encouraging discussion on ways and means of tackling them.

The traditional dilemma of what is planned *versus* what is executed is also evident in the cases studied, and is a usual result of project-oriented programme implementation. In general, small farmers face great difficulties in maintaining delivery of the quantity and quality of the items originally proposed. Hence all the items specified in the project are not always delivered. This difficulty reflects farmers' current planning capacities as well as matters beyond their control, such as weather-related damage to their crops. In some cases the problem is exacerbated by delays in approval of the projects by the government institutions responsible, which can result in the farmers selling their produce elsewhere, perhaps at a loss.

Where these variations occur, the associations (in the case of CPR-Donation) and the individual farmers (CDLAF) are notified or suspended because of the delivery of products that were not specified in the project or, in cases judged more extreme, because of delivery by farmers not enrolled in the programme. In the case of associations, these measures strike the group as a whole, even if not all members were involved in the irregularities. This is problematic when one farmer's failure touches everyone. There is also a need to clarify how changes to the project should be handled. This flexibility formally exists in the programme, and knowledge of the proper procedure would avert suspensions. The suspensions are an additional risk to farmers and, among their many other consequences, they cause delays in payment.

Payment delays are seen by farmers as one of the programme's most serious pitfalls. This has stemmed from other operational issues beyond the imposition of suspensions. Usually, farmers' organisations have to submit a report and related invoices for the products purchased and distributed as a pre-requisite for receiving payment. Sending incorrect documentation, such as an incorrectly completed invoice, directly affects payment. Moreover, because of associated costs, such as printing, dispatch of documents and so on, the organisation opts to submit the information monthly rather than weekly, which delays payment to the individual producer.

These payment delays can prevent farmers from covering costs for basic production inputs such as water and maintenance fees, potentially resulting in debt. In these cases, the resources received from the Programme are then used to pay off debt rather than for reinvestment. And these delays create further misunderstanding between members and associations—mistrust, threats, retaliation and declining confidence in the system and the approach.

Another critical matter is the time gap between projects. This is the interval between the finalisation of a CPR and the establishment of a new one (in the case of CPR-Donation) and between the end of an agreement and the establishment of another (in the case of CDLAF). Such discontinuity is more frequent on the first renewal, when organisations or local governments are not yet familiar with the procedures. In these cases, when the gap might be weeks or months, any product that was previously being delivered for the PAA is redirected to other markets, often leading to a surplus and a dramatic drop in prices. This also jeopardises the flow of goods to beneficiary consumers. The CPRs often finish in the last quarter of the year, a period when many producers in these locations are beginning to harvest some fruit crops. Only a few, such as organisations dealing with non-perishable food or processed products, can deal with the discontinuity by storing products. Hence the need to deepen discussion of different ways of moving from one project to another, and also to increase the alternatives available to farmers so that delays in the PAA's institutional processes do not lead to a severe drop in income.

All the above-mentioned circumstances create difficulties for farmers and can have an adverse effect on the development of production and organisation-related practices. It is therefore essential to undertake an evaluation of these circumstances in order to find ways of confronting and resolving them.

6 CONCLUSIONS

This paper has discussed the development of the market-oriented production and organisation-related practices of smallholder farmers in Brazil, as encouraged by the PAA. The goal was to analyse the outcomes of the programme for farmers' market-oriented practices, and to identify elements for further international knowledge-sharing on experiences that combine market access for food producers with food access for vulnerable segments of the population. The study focused on the supply side, and specifically on the productive inclusion of the beneficiary farmers into the food supply chain provided by the PAA. The case study in Brazil's Northeast region considered the components of the PAA that offer commercial alternatives for agricultural goods through public procurement.

Our analysis of the PAA indicates that initiatives that jointly support food production and food access through agricultural market options for smallholder farmers can simultaneously offer an important commercial possibility for producers and play a significant role in improving their market capabilities. In the cases considered here, the PAA has provided a crucial market access opportunity for its beneficiary farmers, and has been an important instrument for capacity building. The programme promotes various changes in farmers' productive and organisational processes, mainly the result of optimised use of resources, further investments and the greater involvement of beneficiary farmers in these processes.

As regards agricultural production, we have noted market use of previously non-traded products, as well as new investment initiatives. The latter resulted in an increase in cultivated land, diversification of produce, greater use of inputs (seeds, fertilisers, pesticides, tractors and so son) and labour, and greater quality control, among others. These changes, however, are hampered by specific operational challenges faced by the programme, such as payment delays, sanctions on producers and gaps between each procurement project.

The PAA has also strengthened farmers' organisations, particularly in the case of CPR-Donation, which requires public purchases to be made from formal groups. We have noted regularisation of associations' legal status, an increase in their membership, greater involvement by the members in the associations' activities and, in some cases, investments in the organisations' infrastructure.

Changes in production and organisation-related capabilities were possible because of the farmers' regular access to markets that were advantageous in terms of pre-defined quantities to be bought and pre-set purchase prices within the PAA. The farmers' other commercial options are quite limited and unstable. They are confined to individual sales through local channels in the form of street fairs or via middlemen who visit the farms. These channels offer no prospect of prior commercial agreements, and the consequent price and demand fluctuations pose considerable risks for producers. Hence the programme's guarantee of sales at profitable prices is a critical condition for farmers to invest in their production and their organisations.

For farmers, these stable conditions constitute an important opportunity to optimise resources, invest in economic activities and engage in organisations. It is important to note that all the investments observed were made with the farmers' own resources derived from PAA sales. Credit, for instance, was not used to complement investments, suggesting that the PAA guaranteed price not only met production and subsistence costs but also allowed for reinvestments in the production system. In some cases, however, resources gained from the PAA were used to pay off debts previously acquired in credit support programmes.

Moreover, the PAA has affected the two other market channels to which these farmers have access, since it brings about an increase in prices. On the one hand, farmers use the PAA values as reference prices in negotiations with middlemen. On the other, the reduced supply of products in the local markets (a result of the programme) encourages higher prices that favour both beneficiary and non-beneficiary producers. This price increase in the local markets, however, needs to be carefully followed and managed, so as to obviate threats to the food security of local consumers (that is, their access to food).

The involvement of new commercial partners is still an obstacle for the farmers who take part in these components of the PAA. The observed changes in production-related practices and farmers' organisations are essential to bringing abut the participation of these producers in agricultural markets, since they represent an increase in the available supply, diversification of the produce on offer, attention to product quality, the prospect of adding value through processing, among other benefits. But they are not leading naturally to further market access. This is because in most cases the PAA has become the main or sole market for its beneficiaries, given its advantages and the limits that producers face in their other commercial options.

Access to complementary support actions is quite limited; they consist mainly of technical assistance, which most farmers still regard as insufficient. Since currently there is no factor in addition to the PAA that would sustain the changes observed in the study, it can be assumed that if the programme ends its beneficiary farmers will return to conditions similar to those they experienced before their participation in the programme.

The matter of the beneficiaries' "dependency" on the programme should be discussed in this context. The changes brought about by the PAA significantly increase the potential for market access and thus provide the basis for any further aspiration towards independence.

At the moment, however, these changes do not lead automatically to engagement with new commercial partners. While there is no building of trading capacities to follow the development of production and organisation-related practices, and in particular while there is no diversification of commercial partners with which farmers can establish an advantageous link, the programme will remain the only means of sustaining the observed changes.

Given these considerations, we stress that the following factors should be taken into account in the design and implementation of food production support initiatives that ensure markets for smallholder farmers. Attention to these factors will foster the greater development and sustainability of the beneficiaries' production and organisation-related practices, thereby allowing farmers to invest properly in their production and build new commercial alternatives.

- The commercial opportunity should be complemented by additional support to farmers' production and organisational process, in order to address the difficulties faced by beneficiaries and to develop potentials properly. In the case analysed here, as regards agricultural activities, there is a clear need for technical assistance services in the area of production planning. This is an important factor to be improved in the programme, as well as for conversion to organic or agro-ecological production, which offers the possibility of higher income for farmers and greater attention to environmental issues. In terms of collective action, it is crucial to promote access to processing technologies and sanitary licensing. The building of management capacities, including knowledge of financial and legal procedures, would also be appropriate.
- It is important to consider the risk that any short-term interruption in support would pose to the beneficiaries' capacity building. In the PAA, gaps between the ending and beginning of procurement projects pose threats to producers, since the sudden increase in supply to other market channels leads to substantial price reductions. Moreover, ending the marketing guarantee would most probably paralyse investments and jeopardise the sustainability of the changes made during the farmers' participation in the programme. If the practices observed in this paper are to be consolidated, it is crucial to ensure the programme's long-term continuity. As one beneficiary farmer of from the municipality of Indiaroba said: "If the PAA ends, it will end the lives of many farmers."
- Finally, it is very important to consider complementary actions that facilitate farmers' access to other commercial channels where long-term and profitable relationships could also be established. This would allow for greater sustainability and the further building of beneficiaries' market capacities. In this context, the proper combination of access to private and public markets is an appealing option. In situations where viable private markets are limited, however, direct procurement actions will probably be more effective and necessary. The established PAA quota sets a limit on direct public purchases in the programme; other markets are therefore to be developed in the private sector or though other public programmes.¹⁷ Complementary support to private market access, of course, must take account of basic variables such as the scope of the markets to be approached and the means of accessing them. In the Brazilian areas considered in this study, nearby markets should be prioritised as a viable step towards developing the capacities analysed in the paper, exploring the example of ASCOSUL. Given the observed limited trading opportunities for individual producers,

support should concentrate on farmers' organisations—taking account, for example, of initiatives that organise local commercial networks. One PAA beneficiary farmer commented: "When we have the opportunity to sell more, we will plant more; otherwise it is only losses."

The Brazilian experience analysed in this study offers important lessons for debate with other initiatives such as WFP's Purchase for Progress programme and India's Public Distribution System. The case studied clearly shows that initiatives which combine food access and food production can offer significant opportunities for smallholder farmers, since they can open up new market options from which these producers can benefit. They also have the potential to explore nearby markets, thereby consolidating local production, marketing and consumption networks.

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NOTES

- 1. There is no international consensus on the precise characterisation of a smallholder farmer, sometimes known as a family farmer. Definitions consider different criteria such as land area, limitation of resources, orientation of production, source of labour and so on (IFAD, 2009). The analysis in this paper is based on the Brazilian conception of "family farmer" as explained in section 2, and particularly those farmers who are beneficiaries of the PAA in the case studied, as described in subsection 4.3.
- 2. From a different perspective, reflecting on a consumer-led initiative, an interesting case is that of the 'community foodbaskets' (*canastas comunitarias*), in Ecuador. These emerged as a neighbourhood purchasing group interested in buying more abundant and varied food at lower cost. Their success inspired greater involvement and more ambitious proposals for change. Internal discussion processes have enabled participants to develop a critical awareness of their food purchases, leading to creative alternatives such as direct purchasing from farmers (Garcés and Kirwan, 2009).
- 3. Strategic food reserve: a reserve that is part of the national regulation of stock; in this case, under the administration of the CONAB and therefore public stock. The public stock regulates the market; purchases and sales are made in order to regulate prices and stocks.
- 4. Law 11,326 of July 24th 2006 (Brasil, 2006).
- 5. The fiscal modules are units of measure expressed in hectares, fixed for each municipality, considering the following factors: type of farming in the municipality, income from the predominant farm activities and the concept of family agriculture (INCRA, 1980).
- 6. A resolution recently published in the Official Gazette (*Diário da União*) establishes new guidelines for setting reference prices to be used in CPR-Donation (Brasil, 2010).
- 7. Brasil (2010)
- 8. To improve the quality of life of Brazilians living in the neediest regions, especially in rural areas, in 2008 the federal government instituted a programme called Territories of Citizenship (*Territórios da Cidadania*). Its purposes are economic development and universal access to basic programmes through a strategy of sustainable territorial development. Social participation and integration of actions among the federal government, states and municipalities are crucial to the development of this strategy. Each Territory consists of a set of municipalities with the same economic and environmental characteristics; identity and social cohesion; cultural and geographic traits. Larger than the municipalities and smaller than the states, the Territories demonstrate more clearly the reality of social groups, economic activities, and institutions in each of them. This approach facilitates the planning of governmental actions for the development of these regions.
- 9. As explained earlier, the maximum area established for family agriculture is four fiscal modules (FM). In Estância and Indiaroba, one FM is equal to 10 ha, and thus the maximum area allowed is 40 ha. In Lagarto, one FM is equal to 35 ha, and the maximum area allowed is 140 ha (INCRA, 1980).
- 10. These changes were also observed by Ghizelini (2006) and Doretto and Michellon (2007) in the state of Parana, as well as by Mattei (2007) in the state of Santa Catarina.
- 11. Greater use of technology for crop production was also observed in a study in Paraná by Doretto and Michellon (2007), and in Santa Catarina by Mattei (2007).
- 12. Farmers commonly refer to CONAB when they participate in CPR-Donation.
- 13. Another study made in Paraná by Ghizelini (2006) indicated improvement in food (selection) quality, packaging and transportation as impacts of the PAA.
- 14. Ghizelini (2006) and Doretto and Michellon (2007) also highlighted farmers' enthusiasm in planning their production in order to take part in the PAA.
- 15. Resolution 39 of the PAA managing group seeks to eliminate these conflicts between components by defining a single procedure to set prices (Brasil, 2010).
- 16. These impacts were also observed by Müller et al. (2007) in Rio Grande do Sul.
- 17. The law establishing the new directives and mode of implementing the National School Meal Programme (PNAE) was approved in June 2009. It is the oldest Brazilian food programme, originating in a proposal by Josué de Castro in the 1940s. The new law establishes that school meals are a right for elementary school students at public schools, and creates an institutional link between the food offered at public schools and family farming in the regions where they are located. From the total financial resources transferred by the federal government, at least 30 per cent is to be used to acquire food directly from family farming.



International Policy Centre for Inclusive Growth (IPC-IG)

Poverty Practice, Bureau for Development Policy, UNDP Esplanada dos Ministérios, Bloco O, 7º andar

70052-900 Brasilia, DF - Brazil Telephone: +55 61 2105 5000

E-mail: ipc@ipc-undp.org • URL: www.ipc-undp.org