



## Construction of agrarian policies in Brazil: the case of the National Program to Strengthen Family Farming (PRONAF)

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### Summary

The implementation of PRONAF, which got under way in the 1990s, has had a major impact on Brazilian agriculture. Specifically, it has enabled family farmers to increase their acreage and raise production. The program's original systems approach consisted of matching different types of producers to a range of production systems and strengthening farmers' operations with loans, land or technology. The process of creating PRONAF was heavily influenced by the FAO/INCRA study and pressure from the rural trade union movement. This article describes the evolution of PRONAF, its institutional framework and modus operandi. The program's management dynamics have made the participants more disciplined financially, encouraging them to make the most efficient possible use of resources, and helped to enhance the system of complementary policies needed to promote the effective consolidation of family farms.

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## Background to PRONAF and the program's creation and implementation

During the process of modernizing Brazilian agriculture in the 1970s, public policies for the rural milieu, especially the agricultural sector, gave priority to the most capitalized sectors and the production of commodities for the international market. Those policies had a highly detrimental effect on the production of family farmers, who were excluded from the benefits of rural credit, minimum prices and agricultural insurance.

In general, until the beginning of the 1990s there was no national public policy in place to meet the specific needs of family farmers. Following the enactment of the 1988 Constitution, the State was reorganized. Priority was given to the decentralization of the State's actions, making it possible to introduce new mechanisms for the social management of public policies intended to democratize access to public resources.

With the development of PRONAF in 1994, the United Nations Food and Agriculture Organization (FAO) and the Brazilian government's Institute for Colonization and Agrarian Reform (INCRA) signed

what became known as the FAO/INCRA Agreement, for the purpose of mapping out an agricultural policy that would incorporate the issue of land tenure into a set of measures designed to promote and strengthen family farming in Brazil.

The agreement marked a break with the centralizing policy inherited from the military regime of the 1950s, under which it had proved impossible to develop a broad, fast-working and effective policy for modernizing the operations of small-scale family farmers and the landowners involved in the agrarian reform process. At that time, INCRA, as the executing institution, was criticized for failing to involve the citizenry and for its ineffectiveness in implementing its tasks.

Following the signing of the FAO/INCRA agreement, various measures were proposed to secure greater support for the government's land policy, including revamping the instruments available that affected family farmers. The problem was that, while new settlements were being established as part of the agrarian reform process, other family farmers were being



forced off their farms by an agricultural policy that failed to offer them support in the areas of production, marketing and technology.<sup>3</sup>

The creation of PRONAF also coincided with the revival of a long-standing grievance of the organizations of rural workers that made up the National Confederation of Agricultural Workers

(CONTAG). They were demanding the formulation and implementation of specific rural development policies for that segment of Brazilian agriculture.

In response to those demands, in 1994 the government created the Program for the Recovery of Small-scale Rural Production (PROVAP), most of whose operating resources came from the National Development Bank (BNDES). Although the amount of resources available was meager, the program was important because it paved the way for a public policy based on the division of rural producers into categories. Until that time, smallholders had been defined as “mini and small-scale producers” and obliged to vie for resources with the large landowners, who historically had been the principal beneficiaries of credit available for agriculture.

In 1995, PROVAP was completely redesigned, including its conceptual approach and coverage. The changes made it possible to institutionalize PRONAF by means of Presidential Decree N° 1946 of

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3 With a view to devising a policy to support family agriculture based on effective, decentralized tools, a document was drawn up entitled, “Policy guidelines for the sustainable development of family agriculture” (FAO and INCRA 1995). This document was coordinated by Carlos E. Guanziroli, chief FAO consultant at the time, with the collaboration of José Eli de la Veiga (USP), Ademar Romeiro (UNICAMP) and John Wilkinson (UFRJ). Before the document’s proposals were implemented, a broad process of discussion took place in every region of Brazil between November 1994 and May 1995. FAO and INCRA coordinated the organization of five seminars involving roughly 5000 representatives of different sectors in the regions, such as social movements, universities, nongovernmental organizations (NGOs), agricultural research institutions, and state and municipal governments. The debate that took place made it possible to correct some points of the proposal and incorporate others that were unclear. The final version was completed in May 1995. The proposal included a diagnostic assessment of family agriculture in Brazil and certain proposals related to agricultural policy and the improvement of institutions.

28 July 1996. From that point on, PRONAF effectively marked the legitimization of a new social category - family farmers, who until then had been referred to, pejoratively, as “small-scale farmers,” “low-income producers” or “subsistence farmers.”

Initially, PRONAF was part of the Ministry of Agriculture, Livestock and Supply (MAPA), specifically under the supervision of the Secretariat of Rural Development (SDR). Subsequently, thanks to the efforts of CONTAG, responsibility for the SDR was transferred to the Special Ministry for Land Tenure Policy, which included the INCRA. Thus, the bodies responsible for small farmers –the INCRA, which already formed part of the Ministry for Land Tenure Policy, and the SDR of the Ministry of Agriculture– were placed within the same ministry. In 2000, the two units became part of the newly created Ministry of Agricultural Development (MDA).

To provide more input for PRONAF, the government asked the group that was coordinating the FAO/INCRA Project to characterize Brazil’s family farmers. A profile of family agriculture was drawn up based on Brazil’s Agricultural Census (FAO *et al.* 2000; Guanziroli *et al.* 2001).<sup>4</sup>

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The principal methodological innovation used to establish the profile was the definition of family farming and an estimation of its contribution to the economy. The concept of “family farmer” used in the methodology was not the same as the concept of “small farmer.” A family farmer was defined and distinguished from an *agricultor patronal* (farmer who uses hired labor) based on the social relations of production, i.e. the type of labor used on the farm rather than its size or the income that it generated. Thus, family farms were defined as those that used more family members than wage-earning or hired workers - “more family labor units than hired labor units” (FLU > HLU). This was different from the method used in other countries, based on farm size or farm income.

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4 The census categorized farmers by the size of their farms. This is not necessarily the only characteristic of family farms, since a farmer can employ workers on a small surface area (e.g., irrigated agriculture) or run a large farm with family members, as is the case with grain and livestock production. The methodology used adopts the criterion of “existence of more hired labor than family labor.” A family farm uses more family labor than hired labor.



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The other category, that of “small farmers,” can mask different social relations (small farms that use hired labor or large, family-run farms). However, the important thing is to identify farmers who work the land with little hired labor and also live in the countryside, because family farms

generate most employment, help to diversify land tenure and define the course of rural development.

Using this methodology, family farms can be quite large, because size is not considered important. The maximum size adopted for each region was the equivalent of 15 times the size of the average “*módulo fiscal*” in each region.<sup>5</sup> As a result, the size ranged from 279.3 hectares in the Southern Region to 1155.2 hectares in the Northern Region. In the Central-Western Region, the cradle of export agriculture, the maximum farm size was 650.7 hectares.

5 A *módulo fiscal* is the minimum amount of land needed to maintain a family by means of farming. In Brazil, the INCRA produces an average index of agricultural productivity for each municipality, which makes it possible to calculate the prospects of generating enough income to meet the needs of a typical family.

**Table 1. Farms, acreage, gross value of production and percentage of total rural financing in Brazil.**

Categories	Total number of farms	Percentage of all farms	Total acreage (ha)	Percentage total acreage	Percentage total gross value of production	Percentage of total rural financing
Family farms	4,139,369	85.2	107,768,450	30.5	37.9	25.3
Farms that employ workers	554,501	11.4	240,042,122	67.9	61.0	73.8
Clerical institutions	7,143	0.2	262,817	0.1	0.15	0.1
Public entities	158,719	3.3	5,529,574	1.6	1.0	0.8
Total	4,859,864	100.00	353,611,242	100.0	100.0	100.0

Source: FAO *et al.* 2000.

Applying special tabulations of microdata from the 1996 Agricultural Census conducted by the Brazilian Institute of Geography and Statistics (IBGE), it was concluded that Brazil had 4,139,369 family farms (85.2% of the total) with a total surface area of 107.8 million hectares. Those farms accounted for 37.9% of Brazil's total agricultural production (see Table 1).

It is clear from Table 1 that family farms account for 30.5% of all farmland and receive barely 25.3% of all rural financing. Furthermore, they account for 37.9% of the gross value of national agricultural production. This shows that the farmers use their land more efficiently. In proportional terms (with less land and fewer resources), their operations contribute more production than farms with hired labor. Family farms generate an average of R\$104 per hectare, while

farms with hired labor generate barely R\$44 per hectare.

Family agriculture is also the principal creator of jobs in Brazil's rural milieu. Family producers farm barely 30% of the total acreage but account for 76.9% of people in work. As many as 13,780,201 of Brazil's 17.3 million agricultural workers work on family farms.

In addition to the positive data, the FAO *et al.* study (2000) also highlighted the problems and weaknesses of family agriculture in Brazil: half of the farms were very small (with an average surface area of 5 ha.), barely 16% received technical assistance, only 27% used mechanical traction, very few had electricity, less than 20% of the farmers were members of cooperatives or associative organizations and soil conservation was practically nonexistent.

## PRONAF: target audience, operations financed and conditions of payment

Some of the issues on which PRONAF currently focuses were included in the FAO and INCRA proposal (1995) and in the CONTAG's demands. These and other issues that were gradually modified are listed below:



- There were calls for “a line of financing for integrated overall development plans.” Loans were to be used to restructure the production activities of farms, reinforcing the investment in infrastructure (stables, fences, machinery, planting of permanent crops, etc.). It was seen as a way of implementing the principle of a “differentiated” short-term credit policy designed to meet the specific needs of so-called “family farmers.”
- It was proposed that technological messages be produced for areas faced with edaphoclimatic and water limitations, based on a systems approach, mainly the use of mixed systems to manage micro-watersheds (e.g., agro-forestry and agro-silvo-pastoral systems).
- This proposal was based on a new system of comprehensive technical assistance built on a foundation of secondary education specific to rural areas (alternative education), along with vocational and technical training for all farmers who took out a loan.
- With respect to the categorization of family farms, the size limits were reduced and family farmers were deemed to be those with an acreage equivalent to less than four *módulos fiscales* (the figure in the FAO/INCRA study was 15). This translated into farms ranging from 60 ha in the south of the country to a maximum of 200 ha in the north. Furthermore, a maximum of only two permanent employees was allowed and at least 80% of family income had to be derived from agricultural activities.
- In practice, PRONAF only worked with small farmers but under the new version of the FAO/INCRA project the farmers were more like those of the US family farm model (relatively high farm size, living in the countryside and family members doing the work).
- In terms of the system's format, PRONAF included three lines of action: a) support for the infrastructure of producers and municipalities (PRONAF Infra-Estructura); b) credit for family farmers (PRONAF Crédito); and, c) technical assistance.
- Subsequently, PRONAF became a system of short-term operating credits to cover day-to-day farm expenses; it provided little or no technical assistance and no longer supported infrastructure to any significant degree, thus setting aside one of the core areas of emphasis that had originally served as a response

to the de-structuring of family farms following decades of total exclusion.

Loans were granted based on a specific typology of family farmers, in an attempt to channel more subsidies to the poorest farmers and those who had benefited from the agrarian reform process. The original PRONAF typology had divided farmers into the following four groups:

- PRONAF A: (for beneficiaries of the agrarian reform process) loans of up to R\$7500, with 4% annual interest and a R\$3000 discount on the capital, payable over eight years with a three-year grace period and no amortization.
- PRONAF B: for mini-projects with non-refundable loans of up to R\$1500
- PRONAF C: loans of up to R\$3700 with a R\$700 rebate on the capital and discounted interest (for projects involving poor family farmers).
- PRONAF D: up to R\$15,000, with 6% interest, with guarantees, no discount, payable over eight years and with a three-year grace period for better capitalized family farmers.

PRONAF E was added in 2000, but the rules were simplified in 2008, leading to the elimination of PRONAF groups C, D and E and the creation of a single category called "family farming." Interest rates were also lowered. The annual interest rates for short-term operating credits were held between 1.5% and 5.5%.

- Special lines of credit, such as PRONAF Florestal, PRONAF Jovem, PRONAF Agroecología, PRONAF Mulher and PRONAF Agroindustria, were created between 2002 and 2008



**Table 2. Current terms of PRONAF loans.**

Short-term operating credits	
□ Financing – annual interest rate	
	Up to R\$5,000 - 1.5%
	From R\$5,000 - R\$10,000 - 3%
	From R\$10,000 - R\$20,000 - 4.5%
	From R\$20,000 - R\$30,000 - 5.5%
Investment loans	
□ Financing - annual interest rate	
	Up to R\$7,000 - 1%
	From R\$7,000 to R\$18,000 - 2%
	From R\$18,000 to R\$28,000 - 4%
	From R\$28,000 to R\$36,000 - 5.5%

**Source:** Prepared by the authors based on SAF 2009.

and remain in place. The annual interest rates were cut to 1-2%.

- In addition to short-term operating credits, or loans to cover day-to-day farm expenses, the government supported marketing efforts through the Family Farm Support Price Program (PGPAF), which permits family farmers who take out these operating credits with PRONAF to link their loans to the PGPAF support price. The support price reflects the average production cost in the region, established by the National Supply Company (CONAB).





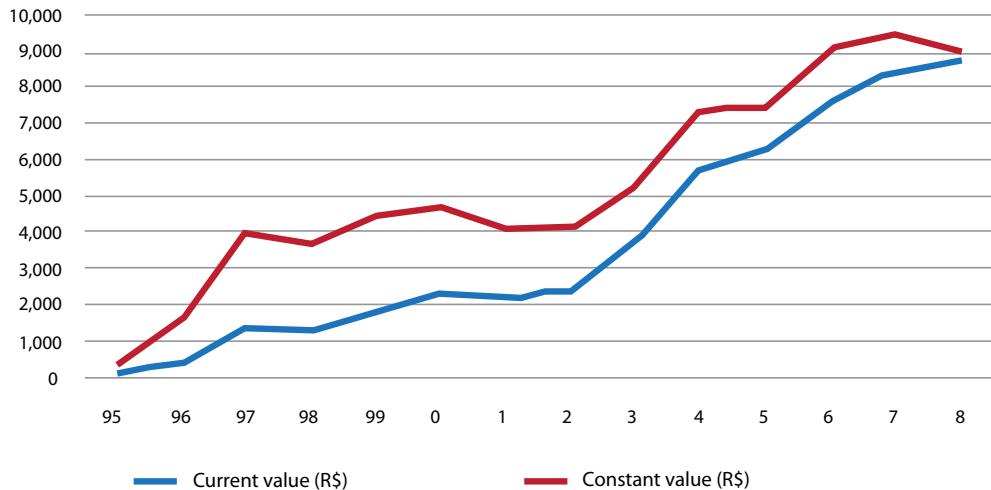
- For the 2008-2009 harvest, the products whose prices were guaranteed were rice, coffee (arabica and conillon), cashew nuts, onion, beans, milk, castor oil, corn, black pepper, cassava, soya, tomato and wheat.
- Furthermore, if their harvest is damaged by weather events, family farmers can activate their rural insurance, which covers 100% of any financing and more than 65% of the income that was anticipated but not received.
- To afford family farmers full protection, the Food Purchase Program (PAA) was created in July

2003. It stimulates family agriculture by distributing agricultural products produced on family farms among people in a state of food insecurity (Zero Hunger) and by building up strategic reserves.

### Evolution of PRONAF in numbers and regional coverage

Since it was created in 1995, PRONAF has grown in terms of both the number and value of the loans granted, as can be seen in the data included in Table 3 and Figure 1.

**Figure 1. Evolution of the total amount loaned by PRONAF.**



**Source:** Prepared by the authors based on SAF 2009.

PRONAF grew steadily, if not sharply, between 1995 and 2002, and then grew much more rapidly from 2003 to 2008. It is probably the single Federal Government program that has made the greatest progress.

Granting resources to farmers entails a counterpart cost for the Treasury, which is required (under Decree N° 1946 of 28/01/1996) to use budgetary resources to make up the difference between the interest collected from borrowers (1-5% per year) and the SELIC (interbank rate), a practice known as equalization. The amount required for equalization is falling but remains quite high in comparison with other agricultural policies. On average, 44.5% of the total resources released are used to equalize interest rates and offset the cost of capital discounts or subsidies, as can be observed in Table 4. PRONAF, therefore, is an expensive and highly

**Table 3. Amounts financed with PRONAF credit.**

Year	PRONAF: value of loans	
	Current value (R\$)	Constant value (2008 R\$)*
1995	89,961,000	306,047,073
1996	558,895,000	1,695,693,841
1997	1,408,067,000	3,954,892,642
1998	1,371,787,000	3,692,095,993
1999	1,830,554,000	4,449,508,696
2000	2,189,000,000	4,657,015,972
2001	2,153,000,000	4,157,450,981
2002	2,405,000,000	4,111,732,047
2003	3,807,000,000	5,261,667,846
2004	5,747,000,000	7,262,275,659
2005	6,300,000,000	7,485,951,320
2006	7,611,000,000	8,890,802,347
2007	8,433,000,000	9,388,732,912
2008	8,997,000,000	8,997,000,000

\*Constant values updated based on the General Market Price Index (IGP-M) average for each year.

**Source:** Prepared by the authors based on SAF 2009.

**Table 4 . Resources released by PRONAF and the amount required for equalization**

Year	N° contracts (a)	Amount of credit (R\$ X million) (b)	Amount required for equalization (c)	c/b
2000	969,000	2,189	1,191	54.4
2001	910,000	2,153	1,268	58.8
2002	953,000	2,405	1,447	60.1
2003	1,138,000	3,807	1,594	41.8
2004	1,611,000	5,747	2,794	48.6
2005	1,800,000	6,300	1,782	28.2
<b>Total</b>	<b>7,381,000</b>	<b>22,601</b>	<b>10,076</b>	<b>44.5</b>

**Source:** Mattei 2006, for contracts and amount of credit; Gasques *et al.* 2000 for amount required for equalization.

subsidized program. For that reason, it needs to be monitored closely, using indicators of results that show how efficient and effective it is.<sup>6</sup>

In 2008, according to data from the MDA (2008), the amount required for equalization accounted for 37.39% of the credit provided by the ministry.

In addition to the cost of equalization, the banks charge an overhead for lending the resources. The General Budget of the Union (OGU) includes payments to the banks for their mediation services. In 2002, for each short-term operating credit to farmers in groups C and D the bank received 8.99% per year plus a monthly rate for managing each contract. That same year, the average cost per operation was approximately 17.83% of

the total amount loaned. Furthermore, the Bank of the Northeast received an average rate of 11.97% per year (Petrelli and Silva 2005).

With regard to the distribution of the resources available for each geographical region of the country for the 1999 harvest, almost 50% of the program's resources were concentrated in the Southern Region. Around 26% were allocated in the Northeast Region, 16% in the Southeast, 5% in the Central-Western Region and barely 3% in the Northern Region. Between 1999 and 2007, some changes were made, but the program was still not actually a policy to support rural development in all regions of the country. The Southern Region continues to receive the lion's share (44%) of the program's total resources, while the Northeastern

<sup>6</sup> Large producers received generous subsidies in the 1970s and 1980s. In the 1990s, they defaulted on R\$120 billion in loans from the Bank of Brazil, commercial banks and input companies.

**Table 5. Distribution of PRONAF resources by region (in percentages).**

Region	1999	2004	2007
Northern	3	12	7
Northeastern	26	18	20
Central-Western	5	6	7
Southern	50	47	44
Southeastern	16	17	22

Source: Petrelli and Silva 2005; Aquino 2009.

Region's share fell from 26% in 1999 to 20% for the last agricultural harvest.

The distribution of resources by type of loan has remained virtually unchanged. Producers with a stronger capital base (groups D and E) received ten times as much money in short-term operating credits as the poorest farmers (group B) in the same period, although the latter now account for a larger proportion of all loans granted than in 1999.

This distribution was foreseen by the team responsible for implementing PRONAF, which knew that the most vulnerable family farmers would not have access to the financial system. The original designers of PRONAF thought that the emergence of a new group of family farmers (groups D and E) could benefit the category as a whole (spillover effect).

In fact, the FAO/INCRA project (1995) proposed differentiated policies for the various categories of family farmers and placed special emphasis on infrastructure

**Table 6. Distribution of PRONAF resources by income category (in percentages).**

Category	1999	2004	2007
A	21	8	4
B	1	7	6
C	22	25	15
D	48	37	40
E		12	20
Others		11	15

Note: Group A includes the beneficiaries of the agrarian reform process; the others are listed in ascending order of income.

Source: Mattei 2006 and Aquino 2009.

**Table 7. Family farmers - monetary income (MI) by farm, according to the types of families established in the 1996 Agricultural Census.**

Type	Total no. of farms	Percentage of all farms	MI/farm (in R\$/year)
A	406,291	8.4	11,898
B	993,751	20.4	2,172
C	823,547	16.9	714
D	1,915,780	39.4	(104)
Total	4,139,369	85.1	

Note: The groups are organized in descending order of income (the opposite of the way in which PRONAF lists them). Therefore, groups C and D are the poorest.

Source: Guanziroli *et al.* 2001 (Technical Cooperation Project, based on the 1995-1996 Agricultural Census - IBGE); FAO *et al.* 2000.

loans for farmers classified as in transition and with agrarian and social policies for marginal farmers who, with support, were expected to move up to a higher income category. This was based on the distribution of monetary income at the time, as shown in Table 7.



According to the data presented in Table 7, in 1996 over half of all family farms (groups C + D = 56% of the total number) were unable to earn a reasonable annual minimum income (ranging from R\$714 to a negative value of R\$104). Many family farmers survived with off-farm income, such as pensions, the sale of labor or participation in non-agricultural activities.<sup>7</sup>

On the poorest family farms, especially subsistence farms, income was often negative, but once the value of the food produced and consumed on the farm was included, it became positive.<sup>8</sup>

It is evident that before PRONAF was implemented many properties were classified as farms by the IBGE but the people living on them were not real farmers. According to research carried

out by the Brazilian Institute of Social and Economic Analyses (IBASE), quoted by Bittencourt and Abramovay 2003, 50% of the farmers who received loans from PRONAF had never previously performed an operation involving bank financing.

The structural exclusion of marginal farmers can be seen even more clearly in the data for technical assistance and the family farming infrastructure at the time when PRONAF began, as shown in Table 8.

As can be seen, at the time barely 16.7% of family farmers were receiving technical assistance and almost half of them were using manual tools (working “with a shovel”). The situation was even worse when the data was disaggregated by income brackets.

For that reason, before granting them loans it was necessary to resolve basic issues and strengthen the farms. This work involved, in addition to the issues already mentioned, educational matters, land tenure, health and micro-business organization. The indices for all these factors were also extremely low among the marginal farmers.

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7 Although farmers are often involved in other activities, such as handicrafts and rural tourism, most of their income comes from agricultural activities, the processing of their products (milk, cheese, honey, etc.) or payment for work carried out on larger farms, retirement pensions, social benefits, government assistance, etc.

8 There are also *quintas* (weekend homes) that spend more than they produce and *chacras* (smallholdings) where pensions are used to produce food for consumption.

**Table 8. Family farmers with access to technology and technical assistance (in percentages).**

Region	Use of technical assistance	Use of electricity	How work is carried out			Use of fertilizers	Soil conservation
			Using only animal traction	Using only mechanical or mechanical + animal traction	Manually		
Northeastern	2.7	18.7	20.6	18.2	61.1	16.8	6.3
Central-West	24.9	45.3	12.8	39.8	47.3	34.2	13.1
Northern	5.7	9.3	9.3	3.7	87.1	9.0	0.7
Southeastern	22.7	56.2	19.0	38.7	42.2	60.6	24.3
Southern	47.2	73.5	37.2	48.4	14.3	77.1	44.9
<b>BRAZIL</b>	16.7	36.6	22.7	27.5	49.8	36.7	17.3

Source: FAO *et al.* 2000.

## Evaluation of the impact of PRONAF

As stated at the start of this article, the aim was to ascertain whether the increase in the amount of resources provided by PRONAF has contributed to a rise in income and the value of production, and in the training of family farmers.

Most of research on PRONAF has evaluated the implementation of the program (delivery, timing), not its impact. That research suggests that PRONAF worsened the situation of the recipients of loans, compared with farmers who did not have access to them.

The evaluation by Feijó (2001), although fairly negative for the years prior to 2000, suggests that the program began to have a productive impact after that date.

The findings of the research vis-à-vis higher income and improved living conditions are fairly weak. The recipients of loans from PRONAF experienced no, or only a small, increase in income. Logically, that meant they had difficulty repaying their loans to PRONAF, as can be seen in Table 9.

**Table 9. PRONAF short-term operating credits for groups, A, B, C, D and E, contracted up to the period 2005 -2006.**

Status of loan repayments	Percentages Group A	Percentages Group B	Percentages groups C, D and E
Up to date	71	53	80
In arrears	28	46	19
Uncollectible	1	1	1
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: Prepared by the authors, based on SPE/MF data (2009), adapted by Chrysostemos 2009.



*The FAO/INCRA project (1995) proposed differentiated policies for the various categories of family farmers and placed special emphasis on infrastructure loans for farmers classified as in transition and with agrarian and social policies for marginal farmers who, with support, were expected to move up to a higher income category.*

As can be seen in Table 9, a considerable number of farmers are in arrears with their loan repayments. In the case of Group B, nearly half are in arrears. This is the line of credit targeted at the poorest farmers, whom, as can be seen, have difficulty repaying their loans. A sizeable number (28%) of the beneficiaries of the agrarian reform process (Group A) are also behind with their repayments. The only ones that are relatively up to date are groups C, D and E, the most capitalized family farmers.

According to Chrysosthemos (2009), most of the farmers in arrears are to be found in the Northeast Region, where 70% are behind with their repayments (73,000 of the 100,000 loans granted). An average of 15% are in arrears in the Southern Region and 20% in the Northern Region (where more than 10% of the loans are already regarded as uncollectible).

The field research cites some factors that have had a negative effect on the farmers' income generation efforts, making it hard for them to repay their loans. The main factors involved are as follows:

**a. Insufficient or poor-quality technical assistance.** According to Olalde (2005), government agencies do not

have enough technical staff to provide farmers with one-on-one assistance. Local offices have only two or three technical staff and they are expected to service several municipal districts (more than 5000 farmers). The result is the standardization of projects and limited technical support. In most cases, technical staff only visits farmers to assess whether they should receive further resources (Olalde 2005).

The profits that the farmers are expected to make are calculated based on unrealistic technical coefficients. After the harvest, it usually becomes apparent that farmers failed to plan properly most of the activities for which the loan resources were used. Consequently, the farmers have difficulty repaying their loans.

**b. Difficulty managing loan resources.**

In some cases, not all the resources are used for what they were intended. The farmer may cut corners on inputs and crop care, either because he needs additional resources to invest in other production activities on the same property or because he does not have enough cash to feed his family.

**c. The technical staff's lack of a systemic vision.**

The evaluation and recommendations of the technical personnel may be at odds with the farmer's practical experience, which is often not respected.

**d. Lack of integration into markets, a marketing structure and value-**



**added.** The classic vision of technical personnel trained during the Green Revolution was to produce large quantities with higher productivity, without ascertaining properly whether there would be a market for the products concerned.

Despite the above, there is concrete evidence that while PRONAF's resources may have facilitated only a small increase in the monetary income of family farmers, or none at all, they have helped to expand productive capacity, leading to increased acreage both for products for on-farm consumption and those that are sold. This is clear from the analysis of the preliminary results of the 2006 Agricultural Census, specifically with respect to family farming, calculated using the same methodology as for the previous census (FAO/INCRA).

In other words, ten years after the 1996 census, which also coincides with the life of PRONAF, the number of family farms rose from 4,139,000 to 4,551,967. That is, 87.95% of all farms in Brazil. Family farms' share of the gross value of production increased from 37.9% in 1996 to 40.03% in 2006. That production was produced on 32.36% of all farmland (106 million hectares), while in 1996 the figure was 30.48%. The percentage of workers working on small farms also rose, from 76.8% to 78.76% (13,048,855 people).

The increase in family farming's share of the total production of the agricultural sector, in a decade in which the sector grew strongly, confirms the economic importance of this segment. In addition

to producing food, this group became part the most important agricultural production chains and is contributing to the dynamism of Brazilian agribusiness.

**Table 10. Family farms in Brazil as a percentage of selected variables, in 1996 and 2006.**

Variable	1996	2006	Percentage point increase
Number of farms	85.17	87.95	2.12
Gross value of production	37.91	40.03	1.88
Farmland	30.48	32.36	1.91
No. of people working on farms	76.85	78.76	2.12

**Source:** FAO *et al.* 2000.

If family agriculture were synonymous with "subsistence" or "*campesino*" farming, the agribusiness boom would have relegated it to a position of insignificance. As can be seen, this has not occurred in the last decade.

Therefore, some of these farmers have operations big enough for them to develop modern, business-oriented operations, with scale production. They could take advantage of the profits generated by the principal agribusiness chains (e.g., soybeans, fruit-growing and dairy products), as U.S. family farms do. Other farmers are content to take part in food chains, which also helps to increase their share of the gross value of production, and there are also subsistence and single-crop farmers, among others.





*The institutional framework and PRONAF's current modus operandi also need to be reviewed, in order to strengthen financial discipline, encourage borrowers to use the resources as efficiently as possible and improve the system of complementary policies required to promote the effective consolidation of family farmers.*

This increase in the contribution of family farming is due largely to PRONAF's loans, which undoubtedly promoted and spurred the planting of new areas, with the corresponding increase in production. The efforts to support marketing (PGPF) and the creation of markets (PAA), as well as other provincial programs, must have complemented the effort of the credit program.<sup>9</sup>

## Conclusions

Given PRONAF's impact on Brazilian agriculture, and on the rural population in particular, from the 1990s onwards, it needs to be reviewed and evaluated continually. The program should also be improved constantly, given its high financial cost to the State and the need to continue to stimulate the participation of family farmers in national life, especially to enable them to expand their acreage and increase their production. Further research is also needed, to verify whether the program has also had a positive impact on the income and living standards of the rural population that it was intended to help.

When public policies set such broad goals, quality control and efficiency usually suffer. In the case of PRONAF, for example, the systems view that had originally been advocated by technical personnel and advisers (which entailed matching different types of producers to a range of production systems) was abandoned. If those categories could be better defined, it would make it possible to determine more precisely the products within the systems for which loans, land or technology are needed.

In any subsequent evaluation of PRONAF, it will be difficult to verify which production chains were actually strengthened. The credit needs of the chains that the government and society identified as a priority are not known, because the officials responsible for the program failed to include that factor.

In addition, more information is needed about the strengths and weaknesses of each type of producer in each chain, specifically with regard to the levels of agroindustrial concentration, price transmission, contractual standards, the flow of financing within the chain, the regularity of purchases and of the flow

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<sup>9</sup> The economic stability after the *Plano Real* placed agriculture on a firmer footing and contributed to the fall in the price of land. This made it easier for family farmers to purchase land.

of inputs, the technologies available, the characteristics of marketing and the conditions for integrating into processing activities, excessive or normal middlemen's profits, etc.

Another critical aspect of the program concerns the ability of borrowers to repay their loans. The authorities do not seem to have thought this through, since they continually need to renegotiate or guarantee loans that are in arrears or uncollectible.

Therefore, the institutional framework and PRONAF's current modus operandi also need to be reviewed, in order to strengthen financial discipline, encourage borrowers to use the resources as efficiently as possible and improve the system of complementary policies required to promote the effective consolidation of family farmers. In this regard, it is vital that responsibilities be assigned throughout the PRONAF chain, so that the different actors, such as the MDA's Secretariat of Family Agriculture (SAF), banks, technical assistance, state commissions and farmers assume responsibility for their actions and make a commitment to the results.

Furthermore, the authorities must determine whether the discounts on capital and heavily subsidized interest rates for loans should be maintained. Borrowers could find loans like PRONAF A and B confusing. Since 40% of the capital



can be forgiven, they may wonder whether they were given a loan or a donation. This could affect their attitude toward commercial loans in the future.

The ideas presented in this article are designed to promote improvements in the program, so that it continues to achieve its objectives effectively, at a lower cost to society and in an equitable and fair manner, for the well-being of the rural population and for the benefit of Brazilian agriculture in general.

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## ► Mise en place de politiques agraires au Brésil : cas du Programme de renforcement de l'agriculture familiale (PRONAF)

Le PRONAF a eu un impact considérable dans l'agriculture brésilienne à partir des années 90. En particulier, il a permis aux exploitations familiales d'accroître les surfaces cultivées et d'augmenter leur production. La vision systémique adoptée au départ consistait à mettre en relation une typologie de producteurs et une typologie de systèmes de production, dont le renforcement passait par le crédit, la terre ou la technologie. Le processus de création du PRONAF a eu diverses répercussions dont, notamment, l'étude FAO/INCRA et les pressions du mouvement syndical rural. Le présent article décrit l'évolution du PRONAF et ses mécanismes institutionnel et opérationnel, et montre comment les méthodes de gestion ont renforcé la discipline financière des participants, jusqu'à rechercher le maximum d'efficacité dans l'utilisation des ressources et améliorer le système de politiques complémentaires nécessaires pour favoriser une véritable consolidation de l'exploitation familiale.

## ► Formulação de políticas agrárias no Brasil: o caso do Programa Nacional de Fortalecimento da Agricultura Familiar (PRONAF)

O PRONAF causou um impacto considerável na agricultura brasileira a partir da década de 1990. Especificamente, permitiu que os agricultores familiares conseguissem ampliar as áreas cultivadas e aumentassem a produção. Sua visão de sistemas originalmente implicava relacionar uma tipologia de produtores com outra de sistemas produtivos, que precisavam ser fortalecidos mediante crédito, terra ou tecnologia. As grandes influências do processo de criação do PRONAF foram as seguintes: o estudo FAO-INCRA e as pressões do movimento sindical rural. Neste artigo, apresenta-se a evolução do PRONAF, sua institucionalidade e forma de operação, cujas dinâmicas de gestão fortaleceram a disciplina financeira dos participantes até alcançar o máximo de eficiência na utilização dos recursos e melhorar o sistema de políticas complementares necessárias para promover a efetiva consolidação do agricultor familiar.

## ► Construcción de políticas agrarias en Brasil: el caso del Programa de Fortalecimiento de la Agricultura Familiar (PRONAF)

El PRONAF causó un impacto considerable en la agricultura brasileña a partir de la década de los noventa. Específicamente, permitió que los agricultores familiares logran ampliar las áreas plantadas y aumentaran la producción. Su visión de sistemas originalmente implicaba relacionar diferentes tipos de productores con diversos sistemas productivos, los cuales requerían fortalecerse mediante crédito, tierra o tecnología. Las grandes influencias que tuvo el proceso de creación del PRONAF fueron: el estudio FAO/INCRA y las presiones del movimiento sindical rural. En este artículo se presenta la evolución que ha tenido el PRONAF, su institucionalidad y forma de operar, cuyas dinámicas de gestión han reforzado la disciplina financiera de los participantes, hasta buscar el máximo de eficiencia en la utilización de los recursos y mejorar el sistema de políticas complementarias necesarias para promover la efectiva consolidación del agricultor familiar.