As políticas públicas para a agricultura familiar brasileira em clima semiárido: do combate à convivência

Public policies for Brazilian family farming in a semiarid climate: from combat to coexistence

Las políticas públicas para la agricultura familiar brasileña en clima semiárido: del combate a la convivência

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Resumo

O trabalho apresenta as políticas públicas direcionadas para as famílias agricultoras, fundamentalmente aquelas que vivem em regiões de clima semiárido, tendo como objetivo geral apresentar as ideologias das políticas públicas de combate à seca, realizadas no início do século XX, comparando-as com as políticas de convivência com o clima semiárido, que trazem uma nova configuração de estratégia para a sustentabilidade do desenvolvimento local. Para tanto, apresentou-se a importância das políticas públicas para a pequena agricultura e promoção do desenvolvimento sustentável, tendo como cenário principal o ciclo das secas, no período compreendido entre 1900 e 1970, bem como as mudanças de paradigmas nos modelos de produção da agricultura familiar, desde os modelos convencionais, transitando pelo período que ficou conhecido como revolução verde, até a agroecologia.

Palavras-chave: Políticas Públicas. Agricultura Familiar. Semiárido.

Abstract

The work presents public policies aimed at farmer families, especially those who live in semiarid regions, with the general objective of presenting the ideologies of draught-fighting public policies at the beginning of the 20th century, and comparing them with policies made for coexistence with the semiarid climate, which brings a new strategic configuration for the sustainability of local development. We therefore presented the importance of public policies for small-scale agriculture and the promotion of sustainable development against the backdrop of the droughts cycle in the period between 1900 and 1970, as well as paradigm shifts in family farming production models, starting with conventional models, through the period that became known as the green revolution, and up to agroecology.

Keywords: Public Policies. Family farming. Semiarid.

Resumen

El trabajo presenta las políticas públicas dirigidas a la agricultura familiar, fundamentalmente aquellas que viven en regiones de clima semiárido, con el objetivo general de presentar las ideologías de las políticas públicas de combate a la sequía, celebradas a principios del siglo XX, comparándolas con las políticas de convivencia con el clima semiárido, que traen una nueva configuración de estrategia para la sostenibilidad del desarrollo local. Para ello, se mostró la importancia de las políticas públicas para la agricultura en pequeña escala y la promoción del desarrollo sostenible, teniendo como escenario principal el ciclo de las sequías, en el periodo comprendido entre 1900 y 1970, así como los cambios de paradigmas en los modelos de producción de la agricultura familiar, desde los modelos convencionales, en el período que se conoció como la revolución verde, hasta la agroecología.

Palabras clave: Políticas Públicas. Agricultura Familiar. Semiárido.

Introduction

With the objective of broadening discussions about the importance of family farming, of public policies for the promotion of sustainable development in the semiarid region and of access to these policies by family farmers, this work aims at showing the importance of family farming in national agricultural production, the major policies that exist for these farmers and paradigm shift in public policies for family farmers in the semiarid region.

We have observed the role of the State and of family farming in agricultural production, based on public policies for family farming in semiarid regions that are in agreement with the local reality, identifying their importance and historical evolution.

To accomplish the objective proposed, at a first moment we present the importance of family farming for national agricultural production. Then, we highlight the importance of public policies for family farming and identify these policies, taking into consideration that it is a major challenge to identify them. After acknowledging the existence of policies directed to farmer families, we draw attention to their relevance and comment on access to them by farmer families.

Then, the work offers a historical approach of the drought cycles and of existing policies to fight drought; finally, it discusses the paradigm shift and the transition to agroecology, pointing to a new ideology of coexistence with the semiarid climate.

In light of these conceptual transformations, we believe that the outcome of this work becomes relevant as it presents society with the importance of its participation. Thus, considering the State's effective intervention with specific actions aimed at family farming, it is necessary for society to take ownership of this information and act as a catalyst, so that policies can effectively reach farmer families.

In the final comments we approach the perception that no strategy exists yet that can be used as a model to solve the family farming issue.

In this process we highlight the importance of the State in promoting sustainable development in family farming through policies to stimulate the rural population, and also the fact that ideologies – based on government strategies – change in order to meet the complexity of the semiarid region, presenting an increasing and sustained evolution of public policies for family farming.

The importance of family-based agriculture and public policies

Family farming has a relevant role in Brazil's agricultural production. According to the 2006 Agricultural Census (IBGE, 2006), family farming is responsible for over half of Brazil's national production of selected crops, as is the case of cassava, with 87 % of national production; beans, with 70 % of national production coming from family farming; and milk, with 58 % of national production. We also highlight corn, with 46 %, and coffee, with 38 %. The importance of family farming is also significant to livestock farming. Again according to the 2006 Agricultural Census, family farming accounts for 59 % of the country's pig herd, 50 % of fowl and 30 % of the cattle herd.

In view of these relevant aspects, it is important to pay attention to discussions about State structural perspectives, which, together with the country's major companies, would be the sole promoter of development, exhibiting notable strengthening of local economic activity. This would guarantee that family farming¹ would be of fundamental importance to national agricultural production. It is possible to note in this brief context the importance of the State and its relationship with civil society (MOURA, 1998).

According to Teixeira (2002), public policies reflect the way in which political power is exercised, and since power is a social relation involving many actors, social and institutional mediation is required if public policies are to be legitimate and effective.

Faced with the need to promote and regulate socioeconomic relations to fight the imbalance imposed by capitalism, public policies should

¹ For this study, we considered the definitions of family farming as the criterion adopted in a study by FAO/Incra (2000), which basically called family farming any establishments where the work was directed by the producers themselves, and family labour was more numerous than hired labour. Both characteristics should be met simultaneously.

invest in strategic areas, capable of promoting economic development and social welfare (TEIXEIRA, 2002).

According to Toledo (2002), with the separation between State and the economy, and also with the attempt to depoliticise economic and social relations, liberalism – a social movement that prevailed until the 1970s – became decadent. From then on, neoliberalism gained a foothold.

Teixeira (2002, p. 4) observes the collapse of the protective State as well as the escalation of social crises during this period. Neoliberalism proposes to rethink the structure of public policies and reduce social spending, because it holds interventionism accountable for stagnationism. Here is what the author says about public policies:

Globalisation makes policy-making more complex, because there are international interests at stake in each country now, represented by social forces that have a strong influence on decisions when these are not directly dictated by multilateral agencies.

From then on, given the bond between society and the State as the promoter of public policies, we observed that the single neoliberal perspective reinforced by the need to adjust policies at the end of the 1970s, especially those created by the exhaustion of the phase called import substitution, had run over equitable growth (SANTOS, 2007).

With the advance of neoliberalism in Brazil and the world, socialism was increasingly regarded as a form of social organisation without future or perspective. This scenario indicated the advancement of globalisation based on the logic of the subordination of agriculture to industrial and financial capital (MOURA, 2011).

However, as pointed by Santos (2007), the beginning of the 1980s pointed to a drop in this neoliberal orthodoxy. In this process of change in the relationship between State and society, family farming policies also went through many conceptual transformations, including present-day participation of society in policy-making.

Brazil's family farming policies were either agricultural or agrarian. Denardi (2001) highlights that agrarian policies were almost non-existent in Brazil.

On the other hand, agricultural policies had for the last four decades been in fact public policies geared to agriculture, including family production. Based on the Agricultural Policy Law (no. 8,171 of 17/01/91), Teixeira (2002, p. 10) defines agricultural policy as follows:

[...] from a formal point of view, [it] defines fundamental principles, objectives and institutional powers, provides resources, establishes actions and instruments. The law emphasises economic aspects (productivity, improvement of production, regular supply), while the Constitution uses the social function of property as a reference. Matching these two dimensions in our agrarian structure is opting for productivism and technification, regardless of their social and environmental impacts.

Family farming is submitted to agricultural policies. According to the 2006 Agricultural Census (IBGE, 2006), 84.4% of properties in Brazil are run by families and are responsible for 38% of the Gross Production Value (GPV). Although responsible for an expressive share of national production, family farmers occupy an area of 80.25 million hectares only, or 24.3% of the area occupied by Brazilian agricultural properties.

This reinforces the importance of family farming in Brazil and the need for policies that promote its development and improve the quality of life of rural populations, without discarding the importance of preserving the environment.

Agricultural policies have undergone some progress, mainly as a result of rural workers' struggle. However, if fair and effective agrarian reform is to be conducted, there will still be bureaucratic, legal, economic, political and even constitutional obstacles to be overcome (TEIXEIRA, 2002).

Agrarian reform should not limit itself to giving land to those who lack it, but to also increase the land area of family farmers who own small properties. Due to lack of space to manage the land, they promote agricultural practices that have negative impact on the environment (PADUA, 2004).

Another major problem as alerted by Teixeira (2002) is the lingering reality of slave labour; in addition, there is no expropriation of small or medium-sized properties for the distribution of land. The social function of property is better defined in economic terms than in social and environmental terms, which are treated in a superficial way.

Special attention is needed to small property areas whose agricultural production is family-based and are mostly located in semiarid regions (in addition to the difficulties already encountered by family farming, the climate is also a major opponent).

Since climate is a fundamental factor in agricultural production, developing agriculture with quality foods, resulting in improved health for the population and in the expansion of biodiversity, is an aspect that must be considered. Faced with the rural scenario introduced and with national and local policies developed, it is undeniable that family farming must be considered from a sustainable perspective.

Sustainable development² in agriculture depends largely on the practices adopted by farmers, and especially on the practices used by family farmers, given their importance to national production. High yields and profitability have driven innovation in agriculture over the past 40 or 50 years, but a series of environmentally negative side effects have also ensued (GLIESSMAN, 2000).

According to Gliessman (2000), in the first year or two of transition producers suffer a reduction in income and profit; however, most of those who persist end up having economic and ecological benefits due to the conversion. In this perspective, several factors are driving producers into conversion: increasing energy costs, the low profit development, it is necessary margin of conventional practices, the development of new practices as a viable option, increased environmental awareness and new and more consistent markets cultivated and processed in an alternative way.

² The best known definition of sustainable development is contained in the Brundtland Report, which says that in order to have sustainable to meet the needs of the present generation without compromising the ability of future generations to meet their own needs

In this perspective of sustainability in agriculture, according to Altieri (2012), there are five points that explain the importance of family farming to sustainable development: small-scale production is the key to world food security, because it will have much more impact on the availability of food at the local level; it is more productive, because natural resources are more preserved than with monocultures; diversified farms are models of sustainability; it is a sanctuary of agrobiodiversity, free of Genetically Modified Organisms (GMOs); and small rural properties cool the climate (less emission of greenhouse gases).

In view of the concern about promoting environmentally-concerned agriculture, family farming policies for the semiarid today adopt the principle of coexistence with the semiarid, but it has not always been so. We will deal with this new policy promotion concept in the semiarid later. The truth is that the first family farming policies promoted by the federal government were known as drought fighting policies.

It was in this relationship involving State, society and the economy, so ridden with inequality and disparate political ideologies, that family-based farming was consolidated in semiarid areas, in a state of poverty and in need of funding policies. Major family farming policies implemented between the beginning of the last century and the present day can be seen further on.

Drought cycles in the semiarid and drought fighting policies

According to the UN Development Programme (UNDP)³, millions of Brazilians living in the drought polygon suffer from chronic lack of water. According to the final report of the study conducted by the Interministerial Working Group (IWG) and published by the Ministry of National Integration, the semiarid region comprises 1,133 municipalities in an area totalling 969,589.4 km (BRAZIL, 2005).

From time to time, major droughts in the region exacerbated the difficulties already faced by the population, making it more dependent on State intervention especially during this period, above all on policies

³ By definition, the United Nations Development Programme (UNDP) is the United Nations global development network. UNDP partners with people in all instances of society to help in the construction of nations that can withstand crises, sustaining and leading growth that is capable of improving quality of life for all.

to counteract the harsh conditions imposed by the climate and that would be capable of promoting alternative forms of employment and income to family farming.

During the period extending from 1915 until the beginning of the 2000s, the drought polygon region faced eight very severe periods of drought. Before this period, however, by the end of the nineteenth century, droughts were seen as a major problem by the Brazilian government. Early actions to reduce the impact of dry spells were the construction of the Cedro dam in Ceará, and the Poços dam in Paraiba (VILAR FILHO, 2001).

For Batista Filho (2001 apud CAMPELO; HAMASAKI, 2011), the drought industry needed to be eliminated but this would only be possible if all existing limitations were circumvented, with social transformations and improvements to the quality of life of the population; in addition, agrarian reform was necessary to guarantee that rural producers would receive a higher cut of the income produced in agriculture and livestock farming.

As will be further discussed, what was observed was that public policies followed the drought cycles, initially submitting to the drought-fighting ideology, alluding to the idea of changing the climate (VILAR FILHO, 2001).

For Vilar Filho (2001), 1908 saw the creation of the Inspectorate of Works Against Droughts (IOCS, whose name changed to called IFOCS and, then, DNOCS), the first institution whose purpose was to see to the droughts in Northeast Brazil. During this period, the Northeast suffered the isolated drought of 1915, which became known in Paraiba's Cariri region as the "famine of 15", because it worsened the problems that had settled in 1913 and 1914, when the entire temporary crop was lost due to the excess water that hit the region in that period.

IOCS suffered from money shortages in its 10 years of existence, which brought the agency's plan of action to a halt. This led to the proposal to create a fund that would finance irrigation works in the Northeast (SILVA, 2006).

When it was already under the designation of Federal Inspectorate of Works Against Droughts – IFOCS, title change by Decree no. 13,687, 1919 – droughts scourged the Northeast once more, this time in 1919. The institution, which until then had done nothing, was activated (VILAR FILHO, 2001).

Vilar Filho (2001) also brings attention to the 42/43 drought. It motivated the establishment by DNOCS of a special fund for droughts in 1949, consisting of 3% of the Union's income tax revenue for the completion of construction works in the semiarid. Silva (2006, p. 52) says the following about use of the fund, which now had new priorities, "... one fifth of the money should be allocated to help people affected by droughts (emergency works and support services) and the rest should be loaned to rural producers."

In 1958, the year of the second great drought of the 1950s (the first was in 1952), the Working Group for the Development of the Northeast (GTDN) was created with the responsibility of mapping out reality and proposing public policies (SILVA, 2006). According to Campelo and Hamasaki (2011), DNOCS was the chief government agency carrying out construction works until 1959, mainly for infrastructure. The creation of the Northeast Development Superintendence (Sudene), responsible for regional development and planning, caused strong disagreement with DNOCS in its early days, bringing losses between the institutions and the Northeast. Campelo and Hamasaki (2011, p. 16) also highlight:

There was much criticism of the model since the 1970s due to paternalism and the inadequate choice of clients for whom the irrigated perimeters were intended. However, the scenario created did not emerge in the Department, but in the Executive Group for Irrigation and Agrarian Development (GEIDA) created in 1968 by the Ministry of the Interior, and responsible for the formulation of policies. SUDENE was responsible for supervision and coordination, while SUVALE (today CODEVASF), DNOCS and DNOS were responsible for project execution, operation and maintenance.

During this period, the internationally widespread green revolution⁴ ended up replacing traditional and local forms of agriculture with a technology package. Although it preached an increase in production levels and in income per area unit and capital employed, there was a lot of discussion about the future of Brazilian agriculture given social results and, above all, environmental results (PADUA, 2004).

In 1970, the year of an isolated drought that also became part of the drought cycle, Sudene weakened when it was subordinated to the Ministry of Planning, and no longer made three-year development plans. The PIN/ProTerra was created in this period and exhausted Sudene even more (BATISTA FILHO, 2001 apud CAMPELO; HAMASAKI, 2011).

But before that, in 1964, public policy managers attempted to create a new institutional framework for Brazilian agricultural policy, with the purpose of modernising agriculture. In this perspective, we can highlight the National Rural Credit System (SNCR), which offered farmers accessible and cheap credit lines, and consisted of the main line of credit between the 1970s and the 1980s; the Minimum Price Guarantee Policies (PGPM), which guaranteed a minimum selling price to producers and were executed with the help of the Federal Government Acquisition (AGF) programme and Federal Government Loans (EGF). The first consisted of products purchased by the federal government at a fixed price, and the second was a special commercialisation line of credit to fund stocks of goods (GREMAUD; VASCONCELLOS; TONETO JUNIOR, 2009).

Along the 1970s and 1980s, various government programmes and projects were implemented focusing on family farming and the semiarid environment. In so far as the years progressed, it also changed the goals and characteristics of the programmes and projects. Table 1 introduces 12 programmes and projects that were launched by the federal government in the 1970s and the 1980s.

⁴ In this work, green revolution is understood according to the definition by Campelo and Hamasaki (2011), as consisting of agricultural policies geared to agricultural production growth, using the genetic improvement of seeds, fertilizers, pesticides and mechanisation.

Table 1. Special development programmes in the semiarid region (1970s and 1980s).

Year	Programme/Project	Objective and characteristics
1971	PIN/ProTerra	To promote settlements in the Amazon and the Northeast.
1971	Provale	Incentive to irrigation in the São Francisco River valley.
1974	Polonordeste	Support to integrated development complexes in the Northeast.
1974	Pdan	Polonordeste sister programme to develop agroindustry in the Northeast.
1976	Project Sertanejo	Support to small and medium-size rural producers in the Northeast.
1979	Prohidro	To supply water for irrigated agricultural activities.
1981	Provárzeas	To support basic foods production in floodplains.
1983	Project Northeast	To restructure and integrate development projects in the Northeast.
1983	Papp	To support small-scale rural producers through infrastructure, irrigation, rural credit, marketing, technical assistance and extension, research, and access to land.
1986	Project São Vicente	To offer technical and financial support to small-scale rural producers in the Northeast.
1986	Proine	To promote irrigation in the Northeast.
1988	Project Padre Cicero	To increase the number of water reservoirs in the Northeast backlands, encouraging coexistence with droughts.

Source: Andrade (1984 apud SILVA 2006); Bursztyn (1985 apud SILVA 2006); Carvalho (1988 apud SILVA 2006); Villa (2000 apud SILVA 2006).

According to Campelo and Hamasaki (2011), major drought-fighting policies became exhausted in the late 1970s with the end of the green revolution. Although the accentuated practices of a brutal productive model still exist in agriculture, such as the use of agrochemicals, modified seeds and chemical fertilizers, the green revolution as an ideological paradigm sustained by family farming policies that used to implement these technological packages is almost extinct. From there on, it is

important to take a closer look at the latest policies of coexistence with the semiarid, which accompanied the transition of conventional production methods to agroecology.

In the following lines, we attempt to recover the major factors marking the transformation of family farming while we observe policies of coexistence with the semiarid, analysing the relationship of these policies with the change of old conventional production practices for agroecology.

The transformation of family farming and the policies of coexistence with the semiarid

In the mid-20th century, there was a significant increase in Brazil's urban population, which caused the country to go through a process of "de-ruralisation". In the country's historical context, urban population growth was followed by growth in industrialisation during the same period, which implied a concentrated and uneven agrarian structure (PADUA, 2004).

The transformation of family farming allied with a new rural development perspective took strength from the 1970s. It was in the three decades that preceded the 20th century that changes were perceived in family farming, and consequently, in family farming public policies.

According to Jalfim (2011), the logics of the development recommended by the State based on fighting droughts lasted for hundreds of years. Apart from the mistaken logic about ecology, it brought in its core a perverse form of social and political domination by oligarchies. Yet according to the author (Ibidem, p. 72),

This domination was founded on the socioeconomic dependence of farmer families on the tripod land concentration; precarious access to water, especially in relation to hydraulic solutions, not able to cater for diffuse water demand; and clientelistic public policies, symbolised by the use of water tank trucks.

Agroecology then emerged as a new paradigm in family farming. Although agribusiness was strongly present in family farming, agroecology was posing genuine change to family-based farming, as Padua comments (2004, p. 212),

In order to implement this paradigm that has been called agroecology, family farming is being revalued and recognised by many experts as a privileged space. This bet is conceptual at first. The basic idea is that agroecology cannot be implemented from technological packages but rather requires specific treatment according to each farm.

Regarding this new model, Diniz and Piraux (2011) argue that it was precisely in the 1970s that the large-scale agricultural modernisation movement started, especially directed by the State. This strongly reinforces that the State not only accompanied this transformation – it went far beyond that. It was responsible for strengthening family farming and encouraging rural development.

For Jalfim (2011), a convergence of national initiatives starting in the 1980s, such as the Alternative Technologies Project (PTA), attempted to break away from the drought-fighting model, starting down a long road capable of replacing the old policy with a model that integrated the ecological, technical, cultural and socioeconomic dimensions.

In that light, the Articulation in the Brazilian Semiarid (ASA) developed social technologies⁵ that were simple, cheap and were dominated by farmers. Initially in 2003, ASA deployed the One Million Cisterns Programme (P1MC), whose objective was to benefit approximately five million people in the entire semiarid region with drinking and cooking water from the use of cement plate cisterns. Today, ASA uses seven other social technologies together with Programme One Land and Two Waters (P1+2), developed especially to catch water for food production: *calçadão* slab cisterns, torrent cisterns, underground dams, earthen dams, micro-dams, stone tanks and popular water pumps (ASA, 2013).

With regard to public policies for family farming in the semiarid, Campelo and Hamasaki (2011, p. 3) claim that:

⁵ According to the Network of Social Technologies (RTS) of the Ministry of Science, Technology and Innovation, a social technology is a set of activities related to studies, planning, teaching, research, extension and development of products, reusable techniques or methodologies, consisting of solutions for social development and improvement of living conditions for the population.

[...] production difficulties increase during long drought periods. If family farmers are to be able to produce in this region, it will be necessary to implement encouragement policies, whether on the part of the government or an NGO (Non-Governmental Organisation), i.e., a Permanent Technical Advisory must be implemented with continuous and holistic action, focused on the demands, aims and interests of families. It will also be necessary to support family farming to promote water and food security; to support production and marketing; to provide family farmers with access to local, institutional, fair and organic markets as a means of adding value to their production and increase their income.

This is the perspective in which major current federal public policies in support of family farming stand out, well founded on the ideology of coexistence with the semiarid climate. Initially, we can highlight the Technical Assistance and Rural Extension Policy for Family Farming and Agrarian Reform (Pnater).

Given the particular needs of family farming, Pnater – established by Law no. 12,188 of 11th January 2010 – came to value the logic of social production and reproduction, its dynamics and experiences according to its goals, especially those intrinsically related to a sustainable agriculture model (BRITO, 2011).

According to Brito (2011 apud BRAZIL 2010, p. 23), when considering investments in family farming:

[...] initiatives are best translated into numbers when we see that from 2003 to 2009, investments in Technical Assistance and Rural Extension (ATER) for family farming rose from R\$ 46 million to R\$ 428 million per year, which together with support for agrarian reform settlers adds up to R\$ 626 million just for the 2009/2010 harvest, with a total of 24,000 technicians.

In addition to Pnater, the National Family Farming Strengthening Programme (Pronaf) deserves particular emphasis. The programme offers several lines of credit for family farmers. According to the Department of Family Farming (BRAZIL, 2012):

The National Family Farming Strengthening Programme (Pronaf) funds individual and collective projects that generate income for family farmers

and agrarian reform settlers. The programme has the lowest interest rates among rural funding initiatives, in addition to the lowest rates of delinquency among the country's credit systems.

The financial agents operating Pronaf have gathered to form the National Rural Credit System (SNCR), which, as shown earlier, was the main line of credit in the 1970s and 1980s. The agents are grouped into basic (Banco do Brasil, Banco do Nordeste and Banco da Amazônia) and bound (BNDES, Bancoob, Bansicredi and Febraban members) institutions.

According to Denardi (2001), Pronaf has brought an exclusive public policy for family farming. However, Pronaf is a playing field of two forces. On the one hand, we have the Ministry of Agrarian Development, which sees the programme as an effective rural development policy; on the other, we have the Ministries of Finance and Agriculture, Livestock and Supply, which see Pronaf only as a compensatory social policy.

According to the Institute of Applied Economic Research (IPEA, 2012), much progress has been made in the amount of credit invested by Pronaf, directly benefiting family farming. In 1998/99, the total rural credit amounted to R\$ 1,263,133,634.16, distributed through 174,286 contracts. After 12 years, the amount invested during the 2010/2011 agricultural year was 809.2% higher when compared with the 1998/99 agricultural year, reaching an amount of R\$11,484,067,137,86.

According to the Ministry of Agrarian Development (BRAZIL, 2013) this is a record amount in rural credit. According to Plano Safra submitted by the Ministry of Agrarian Development for the 2012/2013 agricultural year, farmers will have at their disposal R\$ 18 billion in Pronaf defrayal, investment and marketing lines.

As a result, what we see is an increase in access to credit; however, its qualitative reflexes are still very timid. In order to meet this increase and facilitate access to credit, Pronaf works with credits lines divided into categories, as follows:

Table 2. Pronaf credit lines.

Credit Line	Description
Defrayal	Funds for agricultural and animal farming activities and improvement or industrialisation activities, as well as marketing own or third party production by family farmers covered by Pronaf.
Investment	Funds for implementation, improvement or modernisation of production and services infrastructure, be it agricultural or not, in the rural establishment or at nearby community rural areas.
Pronaf Agroindustry	Funds for investments, including infrastructure, for improvement, processing and marketing agricultural or non-agricultural production of forest products and extraction, or of handicraft products, and from rural tourism.
Pronaf Agroecology	Funds for investments in agroecological or organic production systems, including costs to implement and maintain the undertaking.
Pronaf Eco	Funds for investments in techniques to minimise the impact of rural activities on the environment, and to enable farmers to coexist better with the biome where their farm is located.
Pronaf Forest	Funds for investments in agroforestry system projects; ecologically sustainable extraction; forest management plan; recomposition and maintenance of permanent preservation areas; and legal reserve and recovery of degraded areas.
Pronaf Semiarid	Funds for investments in projects for coexistence with the semiarid, focused on the sustainability of agroecosystems, prioritising water infrastructure and the implementation, improvement, recovery or modernisation of all further infrastructure, including that related to agricultural and non-agricultural product and service projects, according to the reality of farming families in the semiarid region.
Pronaf Women	Funds for investments in credit proposals for farming women.
Pronaf Youth	Funds for investments in credit proposals for young farmers.
Pronaf Defrayal and Marketing of Family Agroindustries	For farmers and their cooperatives or associations, to fund defrayal needs for improvement and industrialisation of own and/or third party production.
Pronaf Share	Funds to invest in the full payment of the shares of family farmers affiliated to production cooperatives or for working, defrayal or investment capital.
Rural Microcredit	For lower-income farmers, enables funding of agricultural and non-agricultural activities; the credit may cover any demand that may generate income for the assisted family. Credit for family farmers in Group B and female farmers from production family units in Groups A or A/C.
Pronaf More Food	Funds to invest in production proposals or projects associated with saffron, rice, coffee, rye, beans, cassava, corn, sorghum, wheat, maté, beekeeping, hydroponics, poultry farming, beef farming, dairy farming, goat farming, fruit farming, herb farming, sheep farming, fishing and pig farming.

Source: Family Farming Secretariat (BRAZIL, 2012).

Over the past three decades, there has been sustained growth supported by Pronaf credit lines. This growth was noticed not only by the volume of funds requested, but also by the number of beneficiaries who have had access to credit lines. According to the Family Farming Secretariat, in 1999/2000 Pronaf was covering 3,403 municipalities, whilst in 2007/2008 this number went up to 5,379, a 58% increase in relation to 1999/2000.

In addition to Pnater and Pronaf, another programme that stands out is the Food Acquisition Programme (PAA), another wide family farming policy, whose ideology is based on a strategy of coexistence with the semiarid.

According to the Family Farming Secretariat, the PAA was created in 2003 and its main objective is to help face hunger and poverty in Brazil, and at the same time, strengthen family farming. But that requires that the federal government use mechanisms to promote the direct acquisition of products from family farmers or their organisations, encouraging processes that add value to production.

According to the Ministry of Agrarian Development (BRAZIL, 2010), between 2003 and 2009 the PAA benefited 764 thousand farming families, generating an average annual income of R\$3.9 thousand per family. During this period, PAA purchases totalled R\$ 2.7 billion, with the purchase of 2.5 million tonnes of food and benefits to 7.5 million consumers per year.

The PAA goes much further than simply making it possible to market food. The programme is a market guarantee for family farming, and in this regard, the federal government has two major concerns: tackling the social problem and promoting social inclusion in rural areas, thereby strengthening the main economic activity.

To bridge the gap between production and fighting hunger, the federal government purchases food in the modalities presented in Table 3:

Table 3. PAA Modalities.

Modality	Action
Direct purchase from family farming	Purchases products whose prices have gone low or when it is necessary to meet food needs by populations in conditions of food insecurity.
Supports stock formation by family farming	Makes funds available to family farming to stock products to be marketed later, when there will be better market conditions.
Purchase with simultaneous donation or direct local purchase	Responsible for the donation of products purchased from family farming to persons in food and nutritional insecurity.
PAA Milk	Ensures the free distribution of milk in actions to fight hunger and malnutrition among citizens in socially vulnerable situations or in food and nutritional insecurity. Covers Northeast states.

Source: Ministry of Agrarian Development (BRAZIL, 2010). Modified by the author

The federal government has other family farming programmes, such as the National Biodiesel Programme, which encourages biodiesel producing units. In 2008, the industry bought R\$ 230 million in oilseeds from family farming, increasing to R\$ 600 million in 2009 (BRAZIL, 2010).

Another important programme is Family Farming Insurance (Seaf), which, according to the Ministry of Agrarian Development (BRAZIL, 2010), sustained 500,000 families. Insurance is activated every time more than 30% of crops are lost, or the revenue is 70% lower than expected.

All these programmes by the federal government ratify the strength of family farming and the importance of meeting the demands of these producers. The transformation of agriculture and its modernisation require public policy managers to provide more dynamics to meet different regional and seasonal needs.

Final Remarks

All these policies have followed the transformation of family farming in Brazil. One can see that a strategy is not yet in place to provide a model to solve the family farming issue. What we have is policies that continue

to keep up with the changes and different demands of family farming; in addition, they are in accordance with other social policies, primarily to fight extreme poverty and the dynamics of national economy.

Thus, State participation is essential in the promotion of sustainable development in family farming through policies to support rural populations. It is not possible to think of developing family farming without State intervention, in view of the region's needs and the limits imposed by the climate.

From fighting drought to coexisting with the semiarid, ideologies based on government strategies have changed with time, as they attempt to cover the complexity of the semiarid region, the needs of family farmers and the very bureaucracy of public policies. However, what we see is increasing and sustained development in public policies for family farming.

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References

ALTIERI, M. **Agroecologia: bases científicas para uma agricultura sustentável**. 3. ed. Ver. ampl. São Paulo, Rio de Janeiro: Expressão Popular, AS-PTA, 2012.

ASA – **Articulação no Semiárido Brasileiro**. Tecnologias Sociais. Available at: http://www.asabrasil.org.br/Portal/Informacoes.asp?COD_MENU=1151. Accessed on: 3 June 2013.

BRASIL. Ministério da Integração Nacional. **Relatório final do grupo de trabalho interministerial para delimitação do semi-árido nordestino e do Polígono das Secas**. Brasília: 2005. Available at: http://www.cpatsa.embrapa.br/public_eletronica/downloads/OPB1839.pdf>. Accessed on: 3 June 2013.

Ministerio do Desenvolvimento Agrario. Um novo Brasii rurai .
Brasília, DF: 2010. Available at: http://portal.mda.gov.br/portal/
publicacoes/download_orig_file?pageflip_id=4405346>. Accessed on:
3 June 2013.
Secretaria de Agricultura Familiar. Crédito rural . Available at:
http://www.mda.gov.br/portal/saf/programas/pronaf . Accessed
on: 25 July 2012.
Ministério do Desenvolvimento Agrário. R \$ 22,3 bilhões para
o fortalecimento da agricultura familiar safra 2012/2013. Available at:
http://www.mda.gov.br/plano-safra/xowiki/recursos . Accessed on:
4 June 2013.

BRITO, J. A. G. de. **Agricultura familiar e sustentável**: um estudo de caso da Associação Vanguarda, do Município de Cabo de Santo Agostinho. 2011. Dissertação (Mestrado em Gestão do Desenvolvimento Local Sustentável)— Faculdade de Ciências da Administração de Pernambuco, Universidade de Pernambuco, Recife.

CAMPELO, D. A.; HAMASAKI, C.S. **Políticas públicas e ações sustentáveis no semiárido pernambucano**: fortalecimento da pequena agricultura familiar. Revista da Ciência da Administração, v. 4, p. 1-34, dez. 2011.

DENARDI, R. A. **Agricultura familiar e políticas públicas**: alguns dilemas e desafios para o desenvolvimento rural sustentável. Agroecologia e Desenvolvimento Rural Sustentável, Porto Alegre, v. 2, n. 3, jul./set. 2001.

DINIZ, P. C. O.; PIRAUX, M. **Agroecologia e convivência com semiárido**: breves notas de uma longa trajetória de diálogos e interfaces. In: LIMA, J. R. T. de (Org.). Agroecologia e movimentos sociais. Recife: Editora Bagaço, 2011.

FAO/INCRA. **Novo retrato da agricultura familiar** – O Brasil redescoberto. Brasília: Projeto de Cooperação Técnica, 2000.

GLIESSMAN, S. R. **Agroecologia**: processos ecológicos em agricultura sustentável. Porto Alegre: Ed. Universidade/UFRGS, 2000.

GREMAUD, A. P.; VASCONCELLOS, M. A. S.; TONETO JÚNIOR, R. **Economia brasileira contemporânea**. São Paulo: Atlas, 2009.

IBGE – Instituto Brasileiro de Geografia e Estatística. **Censo agropecuário 2006**. ISSN 0103-6157. Rio de Janeiro: IBGE, 2006.

IPEA – Instituto de Pesquisa Econômica Aplicada. **Políticas sociais: acompanhamento e análise**. 20. ed. Brasília: Ipea, 2012.

JALFIM, F. Notas sobre a caminhada da agroecologia no semiárido pernambucano. In: LIMA, J. R. T. de (Org.). Agroecologia e movimentos sociais. Recife: Editora Bagaço, 2011.

MOURA, A. Contribuições do SERTA para a agroecologia no Estado de **Pernambuco**. In: LIMA, J. R. T. de (Org.). Agroecologia e movimentos sociais. Recife: Editora Bagaço, 2011.

MOURA, S. **A gestão do desenvolvimento local**: estratégias e possibilidades de financiamento. Organizações & Sociedade, Salvador, v. 5, n. 12, maio/ago. 1998.

PÁDUA, J. A. **Agricultura sustentável**. In: CAMARGO, A.; CAPOBIANCO, J. P. R.; OLIVEIRA, J. A. P. de. (Orgs.). Meio ambiente Brasil: avanços e obstáculos pós Rio-92. 2. ed. São Paulo: FGV, Instituto Socioambiental e Estação Liberdade, 2004. p. 200-219. Parte II.

SANTOS, T. dos. **Em busca de uma nova aliança política para o desenvolvimento**. In: MARTINS, P. E. M.; PIERANTI, O. P. (Orgs.). Estado e gestão p**ública:** visões do Brasil contemporâneo. Reimpressão. São Paulo: Editora FGV, 2007.

SILVA, R. M. A. da. **Entre o combate à seca e a convivência com o semiárido**: transições paradigmáticas e sustentabilidade do desenvolvimento. 2006. Tese (Doutorado em Desenvolvimento Sustentável) Centro de Desenvolvimento Sustentável, Universidade de Brasília, Brasília. 298 p.

TEIXEIRA, E. C. **O** papel das políticas públicas no desenvolvimento local e na transformação da realidade. Salvador, Bahia: AATR, 2002.

TOLEDO, E. de la G. **Neoliberalismo e Estado**. In: LAURELL, A. C. (Org.). Estado e políticas sociais no neoliberalismo. Trad. Rodrigo Leon Contrera. 3. ed. São Paulo: Cortez, 2002.

VILAR FILHO, M. D. Secas e Ciclos – Sinopse analítica. In: FILHO, M. B. (Org.). **Viabilização do aemi-árido do Nordeste**. Recife: Imip, 2011. p. 52 - 58.