

The agricultural policy in Brazil

A long-term outlook

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Introduction

In 1860 – 150 years ago – Imperial Decree no. 1,067 created the Secretariat for Agricultural Affairs, Commerce and Public Works (the Secretariat for the sake of brevity), the organization that was the embryo of the entity that after being given different names was finally called the Ministry of Agriculture (MUELLER, 1988b). There are two facts that stand out regarding this event: the first is that in the scenario of primary export economy it took almost until the late 19th century before an organization dedicated to Brazil's dominant sector was created; the second is that when it actually happened, Agriculture had to share the space with Commerce and Public Works. Furthermore, it is worthy of notice that when the Secretariat was created, Brazil was at the early stages of the first coffee exporting boom, but the prosperity ensuing from that practice depended very little on the Secretariat and its successors. According to (DELFIM NETTO, 1979), the expansion of coffee plantations in the interior of São Paulo during the second half of the 19th century and the early 20th century took great advance from public power actions, such as immigration schemes and subsidies to invest on railways and ports. And starting in 1906, coffee plantations were backed by the public sector to hold prices whenever there was a super-production and a strong pressure to bring down

the prices abroad. However, the Secretariat and the succeeding organization did not play an important role in creating and executing the coffee policy. Decisions were made at the higher levels of the Imperial administration, and later from the administrations during the First Republic.² They were made by organizations from the central and provincial (state) governments that were part of the government's economic area. This segment ruled over public budgets, currency and credit, as well as the exchange rate and commercial policy, for which it had the necessary resources and instruments in place to meet the demands of the coffee producers.

In 1906, during the republican period, the Secretariat became the Ministry of Agriculture, Industry and Commerce, although it still shared space with other sectors. The Ministry of Agriculture, formally in command of the entity called the agriculture public sector was only created in 1930s and reformed in 1934 (MUELLER, 1988b). At the same time, centralism that prevailed after the Revolution of 1930s caused the decline of the influence of the states on the agriculture public sector. Since then, and after undergoing a series of changes both of name and attributions, the Ministry remained formally in the command of the Brazilian agricultural public sector.

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² During the I Republic, the coffee policy often involved both the government of the state of São Paulo and the federal government.

What is the role of the agriculture public sector? In broad general terms, there are two distinct areas in which it should perform:

- Technical area (normalizing vegetal and animal production; development, research and extension actions, as well as actions in the defense of agriculture).
- Formulating and carrying out macro-sectorial actions and policies for agriculture and obtaining resources and managing stimulus and incentives relevant to agriculture.

In Brazil, the participation of the agriculture public sector in both fields has been quite varied since 1860. In the early years when the agriculture public sector was being implemented, its field of action was not limited to the aspects under area I; being in the command of area II tended to remain – if not legally, at least de facto – within the scope of the government's economic area, with the reduce participation of the agriculture public sector (MUELLER, 1984, 1988b).

Agriculture economists tend to see that evolution as spurious, resulting from the poor assistance given to agriculture and as a consequence of the lack of enough resources to better equip the agriculture public sector. One such example is the assessment of Brazilian agricultural policy carried out by Gordon Smith (SMITH, 1968). He focused in the two decades that followed the end of World War II – a period of intense urban-industrial expansion – and was surprised with the lack of strategy for Brazil's agricultural development; he identified incipient agriculture credit and minimum price policies, both of which were granted to influent agriculture segments with great distortion in their allocation and distribution. Smith justified this state of affairs to the lack of training of technicians from the agriculture public sector. This factor would have hindered the sector from creating consistent agriculture policies supported by guidance provided for economic theory and other fields of science.

For critics like Smith, criteria for reforming Brazilian agricultural policy should include aspects of the social wellness paradigm, whereby the formulation of efficient policies – for any are – consists in choosing from the alternatives at hand the one that fosters the greatest social wellness. Policy issues should be addressed as if it were possible to build in a dispassionate and objective manner, a solution of maximum social wellness. Those issues acknowledge that in real life a given policy issue tends to involve demands and pressures posed by stakeholders, but they are deemed spurious given they are conducive to the implementation of policies that only improve the wellness of a small number of individuals, and more often than not, reduce the wellness of a great part of society. These critics believe that the ideal situation would entail the waiver of public policies. They are only justified because markets not always operate under ideal terms; there are externalities, uncertainties and distortions that need to be eliminated or reduced. That is the real purpose of public policies, but they should be formulated based on criteria for the social wellness theory.

Heady (1962) gives a significant example of that approach. This author – who is an expert in the field of agricultural policy – identified that there are powerful stakeholders in every country that force the adoption of measures that will benefit them, and that they do not take into account the ensuing negative impacts. However, in his opinion,

[...] the different values and objectives in place [...] do not hinder the development of policies that are consistent with the optimization of a social wellness function (HEADY, 1962, p. 308-309).

Thus, the wellness theory provides a scientific criterion,

[...] a set of concepts that enable the recommendation and assessment of policies within a society-based or comprehensive community context (HEADY, 1962, p. 308-309).

The agricultural policy should be carried out based on that criterion; otherwise it is faulty and must be modified.

Gordon Smith would agree with this outlook. In his opinion, the situation of Brazil at the time of his assessment was becoming more serious due to that lack of technical base for the agriculture public sector. Hence, government's economic area – better structured in technical terms – had to command the aforementioned field of operation II of the agricultural policy. However, given that he was focusing especially in urban-industrial development strategies, he only addressed the agricultural policy occasionally and superficially. Hence the errors and insufficiencies that he observed.

However, it should be noted that after the above-mentioned study carried out by Gordon Smith was published, technical training for the agriculture public sector underwent significant improvement. There were a series of reforms, new organizations were created, and the sector started to hire highly trained technicians and to encourage members of their technical teams to take post-graduate courses in reputable universities. Hence, the sector was prepared to operate in both fields of the agricultural policy; however, the scenario above did not change dramatically. There were some advancement, for sure, particularly in the research and technological development area for agriculture; from the early 1970s there was installed technical competence to guide the two most important quantitative policies: the credit policy and the minimum price policy. When the National System for Agricultural Credit (SNCA) was created the field of scope of the credit policy increased significantly; the same thing happened with the minimum price policy after the comprehensive reform of the Production Funding Commission (CFP) (COELHO, 2001; WEDEKIN, 2005). However, in the light of the actual participation of the agriculture public sector, particularly in relation to the implementation of parameters for those policies, it is noted that it did not perform as expected given the advancement of technicians from the agriculture public sector. The interference of the economic area remained significant and often dominated the process (MUELLER, 1988b).

Some important concepts

To give more substance to the discussion, we will explain some of the above-mentioned concepts and include additional ones. We have already drafted the criticism to the limitations of the convention public policy theory, but we have yet to provide an alternative approach. To that end, we have taken into account the creation of agricultural policies that combine two basic dimensions: the dimension of rationality emphasized by the economic theory, and the fundamental dimension of power that is considered spurious by the theory. The latter is associated to the performance of important agents that are interested in the decision-making aspects of public policy. Hence, public policies fundamentally ensue from the inter-relationship between the coalition in power – the government – and influent social segments with interest in certain policy issues, usually organized as sectorial policy networks.

As a rule, coalition in power (government) has two core objectives: to realize a certain outlook of a good society and to maintain or expand its control over power. On the other hand, influent social segments with which the coalition interacts also has its own concept of a good society – that may or may not coincide with the coalition's concepts – and that are reflected on their demand for policies (MUELLER, 1982). Both the coalition in power and influent agents have economic, political and social resources. The economic theory for public policy emphasizes economic resources and ignores the other two resource categories that are fundamental for the creation and implementation of policies: the political and social resources. These include authority, influence, status, prestige, coercion (or the power to suspend coercion), information, violence (or the ability of suspending violence), legitimacy, recruitment and support. In the assessment of how public policies can be created and modified in societies somewhat complex, these resources play an important role in the policy formulation process, and as such should not be ignored.

The coalition in power uses its resources to reach two basic objectives, and with this purpose in mind it deems it is important to be able to rely on resources controlled by important agents or sectors. These, in turn, are interested in accessing resources from the coalition in power. Thus, the creation of policies can be considered the result of a process whereby economic, political and social resources are exchanged with the coalition in power and sectors of influence. Via this exchange, both the coalition and the sectors of influence aim at gaining advantages. The latter hopes to increase their wellness, and the coalition in power wants to further the realization of their outlook of a good society, maintaining or expanding their control over power.

At this point, it is pertinent to consider the creation of public policies as a dialectic process (MARSH; SMITH, 2000). Some segments – usually coalition in power – start the proposal for a policy, but sectors of influence may have their own vision that is different. In that they have the power to change it, they endeavor to improve the proposal or even to repel it; and if improvement conditions are in place, they try to draft a new proposal. Sometimes there are deadlocks that can persist for a certain period of time. In these cases, the dialectic cycle is obstructed.

Another important concept is the network of policies – entities that can influence the creation of policies (MARSH, 1998). A network of policies is not a public sector organization or a thematic gathering of public agencies. These thematic agencies exist and can be outstanding in a network of policies, but private agents – sectors of influence – also participate and quite often in a decisive manner. Usually, the latter have well-defined viewpoints in terms of proposals and the need for policies, and have resources in place that can influence the creation of policies.

Networks of policies are usually not formal organization, although some organizations

of this type can be identified with the network and even participate in its command. They take advantage of public sector organizations – regardless of their formal area – that are capable of meeting their needs. For example, if an organization is not labeled as agricultural but meets the requirements of the network of agricultural policies more efficiently than agencies under that label; this does not prevent it from participating in the network. There are different categories of networks of policies; some are flexible and tend to adapt to the changes of the political environment. However, some barely change – they are the networks of strict policies. A characteristic of this type of network is the strict control of its policy area, which is maintained under most circumstances.

As shown above, sometimes dialectic cycles are obstructed. This is frequently perceived as the result of lack of political goodwill or of poor management skills from the public sector; however, what usually happens is that a given network of policies (usually a strict network) is capable of preventing the dialectic cycle from being completed. Furthermore, in terms of certain public policies, there could be a clash of two powerful networks of policies that have different outlooks, causing a paralyzing effect. Paralysis is not always the result of a clash, as one of the networks of policies may win the fight; however, in some cases the battling forces are so strong that the outcome is the obstruction of the cycle.³

Furthermore, the assessment of the creation and implementation of agricultural policies in Brazil during certain periods requires that public sector agents be taken into account, which operated as the links between State organizations that are responsible for putting some policies into action, and sectors of influence interested in certain decisions. They are generally techno-bureaucrats that can operate in transmitting the demands of the sectors of influence

³ Two recent examples: the clash between the environmentalist network and the agricultural network about the control of authorizing transgenic products, won by the latter (MUELLER, 2009); and the clash between the environmentalist network and the agricultural network about the proposal for amendments or adaptations of the Forest Code, yet to be solved but that has elevated potential construction.

at levels of command within the scope of the coalition in power. These liaison agents tend to become important in the creation of policies within authoritarian societies. In these, the mechanisms to transmit demands do not operate in a transparent manner, and the networks of policies with interest in certain actions exert pressure, usually concealed, and involve linkers with the purpose of obtaining favorable policy decisions.

A panoramic outlook of the agricultural policy evolution over the last 150 years

From 1860 to the end of World War II

Based on the aforementioned elements, it is easy to clarify the apparent paradox of the paltry performance of the Secretariat for Agricultural Affairs, Commerce and Public Works that was created in 1860, in an imminently agricultural country. To begin with, one should have in mind that extreme centralism and the absence of a strategic vision of the Imperial regime, what explains the small emphasis placed on agriculture. However, we learned that the government provided fundamental support to important segments of the primary-exporting economy, notably coffee in the Southeast region and sugar in the Northeast. This support resulted in the operation of specific networks of policies effort both areas. The performance of the network of coffee policies is told with abundant details by Delfim Netto (1979); fundamental policies for the sector, of incentives to railways construction, and with the last throes of slavery, the encouragement of immigration, emanated from the high levels of Imperial administration and had little to do with the Secretariat. A similar situation occurred with policies that supported the sugarcane-based economy.⁴

The proclamation of Republic in 1889 and the strong decentralization introduced by the First Republic caused those policy networks

to involve Provincial governments to meet their needs. In the early 20th century, a reform extinguished the Secretariat and created the Ministry of Agriculture, Industry and Commerce that was maintained until 1930s. The institutional changes introduced by the First Republic weakened central government, which ended up taking on a minor role, at least concerning the execution of policies of interest to coffee oligarchies. The network of coffee policies – then comprising segments from farming, commerce, product financing and organizations of the government of São Paulo, was trained to perform efficiently, including to obtain external funding and the successful creation of complex schemes to hold the price of coffee. At that time São Paulo operated as a quasi-independent unit; central government acted only as a funding player. And for this policy, the Ministry was irrelevant.

It should be noted that the coffee network was able to value the technical actions of the aforementioned Area I. However, when it identified the agroecological specificities and the inadequate equipping of the federal agriculture public sector, it then demanded and supported the initiatives of the government of São Paulo for this area. As a result, technical and scientific organizations were set up, such as the Agronomy Institute of Campinas and the Biology Institute, both of which were very important for the technological development not only of the coffee sector but also of other agriculture segments of São Paulo (PASTORE et al., 1976).

With the Revolution of 1930, which concluded the First Republic, Provinces that had an exaggerated autonomy were once again subjugated to central government. As a consequence, the scope of influence of the networks of sugar and coffee policies became weaker. In relation to the coffee network, since the maintenance of the product's price was deemed fundamental to prevent the significant reduction of the source of the country's hard currencies, central government gave emphasis to an extremely ag-

⁴ See Delfim Netto (1979), and Mueller (1983) (chapters II and III) for the network of coffee policies; and Szmrecsanyi (1979) for the sugar network.

gressive coffee policy that entailed purchasing great amounts of coffee surplus and even burning some 70 million bags of coffee during the 1930s. It was fundamental to obtain hard currencies for the policy that gave priority to paying the foreign debt until 1937, and this was the objective that charted the coffee policy. However, if the policy helped the sectors of influence of the coffee network to dodge bankruptcy, the relative loss of power after the Revolution led them to bear the burden of a large part of the costs. Prices were maintained, but the policy shifted its focus and decreased its domain over the coffee network (DELFIN NETTO, 1979; MUELLER, 1983).

The network of sugar policies also had to be aligned to policy changes after the Revolution of 1930. However, given the important role played by the sugar economy in some parts of the Northeast and the scenario where demand for sugarcane suffered a great fall due to the Great Depression of the 1930s, government put in place a scheme to support and intervene that culminated with the creation of the Sugar and Alcohol Institute (IAA), which was an organization fully dedicated to control the sugar network, an activity that lasted for many decades (SZMRECSANYI, 1979).

A new network of product policies was created in the 1930s – the cotton network. The development of varieties of cotton aligned to the agroecological conditions of São Paulo, the gradual clearance of land that used to be taken by coffee plantations from the mid-1930s and the support given by federal government – via external negotiations – gave rise to foreign markets, which added to the expansion of the domestic market fostered by the growing textile industry. Thus, there was a great increase of cotton production and the creation of a network of policies for that product in the Union of Cotton Farmers of São Paulo that became the channel for the demands made to the cotton sector (MUELLER, 1988b).

And what about the other segments of agriculture? From 1930 to 1945, the production

of crops for the domestic market had a good performance. That resulted in substituting food imports facilitated by the approval of production resources that used to be allocated to export crops and stimulated by a captive domestic market, consequence of the decreasing importing capacity of that time. It had little to do with the performance of the agriculture public sector (MUELLER, 1983). Actually, despite the reform of the early 1930s that dismembered the “agriculture” segment of the do Ministry of Agriculture, Industry and Commerce to create a Ministry of Agriculture, the aforementioned measures called for product policies originated from the government’s economic area, where the Ministry of Finance had a strong participation. Because of the weakening of the agriculture public sector, the first agriculture minister Juarez Távora – one of the “lieutenants” that led the Revolution of 1930 – soon stepped down from the position (MUELLER, 1988b).

With the coup that created the New State dictatorship and then with World War II (1939–1945), where Brazil also joined, the first steps were taken to adopt an autarchic development model based on the import substitution industrialization. This changed central government’s perception of the roles of agriculture and especially of the implications of the crisis in supplying, which led to the creation of the embryo of an agricultural credit policy, together with the Agricultural and Industrial Credit Portfolio of Banco do Brasil; and with the creation of the Commission for Production Funding, a more formal and effective embryo also came to be – the minimum process policy (MUELLER, 1984). However, these instruments were not put in place by the initiative of the agriculture public sector, but rather by segments of the government’s economic area and the military command that were concerned about the possible deleterious effects of poor agriculture performance caused by WWII restrictions. In relation to the networks of product policies during that period, they remained active and outside the scope of influence of the agriculture public sector. It should be noted the pressure posed by the coffee network to ensure

that negotiations would reach a better price for coffee in the United States, which was regulated as part of the war effort (ABREU, 1990).

Overview of the evolution of agriculture since the end of World War II (1945)

It is possible to establish, in general terms, the three most important stages of development for agriculture in that period (MUELLER, C.; MUELLER, B., 2006).

- From 1945 until the early 1970s: the phase of horizontal expansion that was a continuation of the evolution that had already been registered for Brazil during a significant period of time. During this period, the coalition in power prioritized development based on industrialization by substituting imports, which led to the high discrimination against agriculture (BACHA, 1975; BAER, 2002). Despite that fact, the agricultural sector had a reasonable performance, both in terms of generating income and production for the domestic market. That was possible thanks to the continuous incorporation of agricultural land (MUELLER, 1992) and the planting of coffee crops in the north of Paraná; the latter yielded as by-products the expansion of low-cost food supply. However, outside of São Paulo, Brazilian agriculture continued to show very low productivity indicators and with no trend to change (PATRICK, 1975).
- From the late 1960s until the mid-1990s: the phase of conservative modernization: a period of high modernization of the agricultural sector, but that was not preceded by effective actions to reduce the differences in access to land.⁵ The main focus was still put on

urban-industrial development, but it was obvious that the horizontal expansion model was dwindling and that the lack of a minimally structured horizontal expansion model would lead to supply crisis and lower generation of income from agricultural exports. In sum, the strategy adopted was supported mainly on qualitative policies, mainly subsidized agricultural credit – where in 1965 the National System for Rural Credit (SNCR) was implemented – and the policy for minimum prices, reinforced by technical equipping of CFP; both policies demanded heavy allocation of public resources (GOLDIN; REZENDE, 1993). However, for the long-term, technological development was furthered for agriculture via the creation of the Brazilian Agricultural Research Corporation (Embrapa), where incentives were put in place for agribusiness development. However, the modernizing strategy had a strongly interventionist stand in agriculture-relevant markets, with price control, market intervention (domestic and foreign) and exchange rates (DIAS; AMARAL, 2000). The development strategy employed by the military government using these incentives and via interventionism was to guarantee that agriculture performed in a manner that would lead to attaining the good society vision of the military regime (of “Brazil as a great country”).

When the military regime ended, the agricultural strategy remained overall the same, but its goal was then to prevent agriculture from hindering the administration of the foreign debt. Another cause of concern was that insufficient agricultural supplying would lead to a possible higher inflationary pressure. This mindset prevailed in the

⁵ It should be noted that in the early days of the military phase, the Statute of the Land was approved, which was an instrument that held the potential to cause significant changes in how land was distributed in Brazil. But soon, powerful stakeholders exerted their influence to the point that even the Idea of doing the land reform was shunned.

agricultural policy, bringing in its wake strong execution inconsistencies.

- From the mid-1990s until the first half of the new millennium: the phase when economy was open to foreign markets and the end of the interventionist mindset. In this phase, substantial adjustments were made to the agricultural policy, where less quantitative mechanisms were used, as they had proven themselves over time to be cumbersome and inefficient, and where there was a considerable reduction of interventions in agriculture-related markets (DIAS; AMARAL, 2000; REZENDE, 2003). The alignment took place gradually, with tentative and errors; at first it was turbulent, but different factors that took place at the turn of the millennium led Brazilian agriculture to a 5-year period of great expansion and modernization. Agricultural technological development and the consolidation of a modern agroindustrial segment were key-factors for the growing participation of Brazilian exports. It should be noted that the performance of agriculture occurred almost despite the lack of official support and incentives, as the State lost its capacity to intervene. In the period, the sector went as far as replacing resources from National Treasury with resources from other sources. Furthermore, some reforms gave rise to less cumbersome and more efficient mechanisms that provided official trading support.

The great expansion of the agricultural frontier in the Cerrado region was an important event during that phase, which was based on a highly technical and productive modern agriculture. Compared to the process frontier opening of previous times, skipping phases was a significant step (MUELLER; MARTHA JÚNIOR, 2008). Evolution had started in the previous

phase (REZENDE, 2003), but gained momentum in this last one.

The assessment in broad lines of the creation process of agriculture policies for these three phases is presented below.

The creation of agricultural policies in the horizontal expansion phase

In his comprehensive assessment of the evolution of Brazilian agriculture in the early 1970s and of policies adopted after World War II, William Nicholls (NICHOLLS, 1970) identified the sector's quite satisfactory performance within an environment where there was virtually no official support; the only exception he found were investments made to roads that were conducive to the strong expansion of the agricultural frontier. He was surprised that development strategists of that time did not use a bit of the creativity and effort they had been devoting to the industrialization strategy to build a more active and efficient agriculture public sector. Because he was an expert on Brazilian agriculture, Nicholls was convinced of the response potential for the sector to a minimally focused support framework. As it was, agricultural production would continue to grow as frontiers expanded, but productivity would be low.

This occurred in part because there was not an influent network of agriculture policies in place, without which the agriculture public sector was restricted to the mediocre execution of a few technical tasks. By the end of the period, a reform was enacted to provide the sector with the right conditions to improve its performance in yielding a better and adequate food supply and in the land reform program. The embryos of the current National Food Supply Company (Conab) and the National Institute for Colonization and Land Reform (Incra)⁶ were set up, but that took place on the dawn of the military coup of 1964.

Despite the lacking strategy and comprehensive network of agricultural policies in that period, networks of product policies remained

⁶ See Mueller (1988b, p. 261-2). At that time, land reform actions were under the Ministry of Agriculture, where only a few results were observed.

active. The coffee network was able to set up the Brazilian Coffee Institute (IBC) that replaced the National Department of Coffee (DNC), shut down after the Getúlio Vargas dictatorship (DELFIN NETTO, 1979). The new organization was empowered to support coffee prices. However, the Institute had to balance meeting the needs of the coffee sector and the core objective of the government area that was in charge of the development strategy; it also backed the generation of income from hard currency in Brazil, which still depended to a great extent on coffee export. In truth, the coffee policy in the end was subordinated to the requirements of the economic area (BACHA, 1975), and the agricultural public sector had little influence over the policy for that product. A similar situation occurred with the sugar policy and the Sugar and Alcohol Institute (IAA), with the difference that it had almost total subordination to the Northeast sugar policies network. (SZMRECSANYI, 1979). The network of cotton policies continued to operate with a measure of influence over the minimum price policies and the cotton acquisition policy (OLIVEIRA; ALBUQUERQUE, 1977).

CFP, which carried out the minimum price policy, was part of the organizational chart of the Ministry of Agriculture, but resources allocated to that policy were controlled by the economic area; something similar occurred with the agricultural credit policy, executed by the Agricultural and Industrial Credit Portfolio (Crai) of Banco do Brasil. During the period, the agriculture public sector had a lukewarm performance.

The creation of agricultural policies in the conservative modernization phase

In that period, on the one hand the influence of the networks of products had a relative decline, and on the other, the emergency and strengthening of a comprehensive network of policies aimed at the part of agriculture undergoing fast modernization within the context of operating agroindustrial complexes. The comprehensive network tended to concentrate on two aspects: on actions to obtain income for

agricultural segments, pressed for favorable agriculture credit conditions and the minimum price policy; and trying to obtain some sort of protection against negative impacts on the sector of policies adopted to face the turbulent macroeconomic environment of that period. However, the interests of the economic area in relation to agriculture did not always coincide with the interests of important organizations from the agriculture public sector. The economic area was focused on urban-industrial modernization and on macroeconomic imbalances of that period, and the roles allocated to agriculture were of ensuring the domestic supply of food and agricultural inputs, and to help generating hard currency to attenuate the imbalances of the external sector. And that would have to be reached – in theory, but not always de facto – without high public spending, as the monetary imbalance caused by high public deficits was getting worse. Provided agriculture had good performance, the economic area tended to ignore the sector, but when that did not happen, aspects of the agricultural policy would become the object of their interests.

It should be noted that during that period, the minimum price policy stood out. Re-equipping CFP in the 1970s based on technical criterion enabled that organization to propose consistent parameters and to identify the need of resources for that policy. However, moved by objectives that more often than not were immediate, the economic area that guided important segments associated to minimum price policy decision-making, notably the National Monetary Council (CMN) would frequently go against CFP recommendations (MUELLER, 1988a). Interventions of that nature made by the economic area were clearly a source of concern among agricultural policy managers, but they did not effectively command important instruments for their policy area. Rezende (2003) analyses with great propriety the state of aberration reached by the minimum price policy, which led to the establishment of huge and very costly public stocks of the product, part of which would go bad or were deviated for other purposes. His study also shows the role of the network of agriculture policies in the stage of evolution. By the

end of the period it was clear that the minimum price policy needed to be reformed, but that only happened in the next phase.

The agricultural credit policy was considered fundamental for the comprehensive network of agricultural policies. However, given that in the 1980s SNCR's performance was a growing factor that fostered the uncontrolled monetary policy, the economic area then started to limit the allocation of resources to rural credit – especially during times of accelerated inflation; but in other occasions, the threat of non-supply would lead the economic area to give in to the pressures of the comprehensive network, thus increasing resource availability for rural credit (DA MATA, 1982; GOLDIN; REZENDE, 1993). However, mechanisms that generated subsidies for the official agriculture credit were gradually deactivated. By the end of the period, it was obvious that the policy needed to undergo a reform; the heavy indebtedness of the sector was also causing much concern; during the period of accelerated inflation, that debit was diluted, but that came to a halt with after the Real Plan. The high rate of non-payments gave rise in 1995 to the first major recent negotiation of the debt incurred by the agricultural sector. (PARENTE et al., 1996).

We would like to point out the role of the liaison agents in the creation of the agricultural policies in the second phase. In the 1970s and in the early 1980s, while dictatorship was in full force, the creation of agricultural policies in Brazil involved the liaison agents, especially those from the government's economic area, which controlled important instruments to execute the agricultural policies. We saw that the allocation of resources and even the establishment of parameters for the agricultural credit policy and for minimum prices took place within the scope of the economic area, which made the comprehensive network of agricultural policies to turn increasingly toward the latter. Hence, the role of the liaison agents became more important; no matter how strong was the interest and collaboration of the agriculture public sector (the Ministry of Agriculture, Livestock and Food

Supply and governmental companies and autarchies that gave support to agriculture) to influential groups interested in certain aspects of the agriculture public sector, that would not guarantee that their demand for policies would be met. Under these situations, the liaison agents would be called in to report to the economic area the demands made by the agricultural sector. All that transpired during the military regime; the authoritarian nature of the coalition in power hindered the reporting that in democratic societies is made via regular mechanisms. However, it should be noted that the magnitude of the external crisis and uncontrolled inflation helped part of the mechanisms created in the dictatorship period, even after 1984.

In relation to the federal agriculture public sector, the modernizing mindset of that phase involved reforms made to Ministry of Agriculture and organization of the sector controlled by it, as well as the creation of new organizations. The most important initiative was for sure the creation of the Brazilian Agricultural Research Corporation (Embrapa) system for agricultural research that was granted adequate resources to operate. The aforementioned reform of CFP also took place, and Banco do Brasil, the main organization for granting rural credit, took on an outstanding role in the building of the comprehensive network of agricultural policies, although formally it was a function of the economic area (MUELLER, 2009). Many states followed suit. However, as already observed, these reforms and changes did not empower the agriculture public sector to take on the full command of the creation and implementation process of agricultural policies.

Agricultural policies in the period started in 1994: phase of opening of the economy to foreign trade and the reversal of interventionism from the previous strategy for agriculture

The reversal of the interventionist nature of agricultural policy started in the early 1990s

when Brazilian economy was opened to foreign markets, and became stronger with the stabilization provided by the Real Plan. The opening meant that Brazilian agriculture as part of agroindustrial complexes had more chances to export, but also had to face the competition of imported products. However, the risk of diminishing of internal crops did call any longer for the maintenance of high public stocks; furthermore, stabilization also exposed the high costs of policies, such as credit and minimum price policies from the previous period. That led to the creation of policies more aligned to the sector's modernization stage.

Despite the influence of the comprehensive network, less interventionist policies were created, but that still allocated fewer resources to the sector's influent segments. In spite of that, there was a considerable growth in production and productivity of the modernizing segments of agriculture; there was also a major growth of exports from those segments and agroindustries they were part of. The fruit yielded by the research system and the dissemination of agricultural technologies, commanded by Embrapa, which were decisive to overcome in 1995 the constraints created by the strongly indebted agricultural sector by providing a long-term negotiation of debts. Hence, there was fertile soil for the boost in investments and the expansion of agricultural production. As presented by Dias and Amaral (2000), the reduction of favors and subsidies was greatly compensated by the elimination of distorted interventions in markets relevant to agriculture in the previous period.

Measures to reduce the number or size of organizations of the agriculture public sector continued during the third phase, which started after the enactment of the Constitution of 1988; the decisive part played by Embrapa was never questioned, but this organization has been fighting to obtain minimally adequate funding. On the other hand, the two lines of traditional quantitative policies – of minimum prices and

agricultural credit – underwent major changes. It is a complex subject and for that reason will only be addressed in passing. Changes made to the policy to guarantee minimum prices in the 1990s focused on ensuring some manner of support to different agricultural segments, and to reduce the accumulation of large stocks by the government. That was reached via the Product Distribution and Selling Option Contract for Agricultural Products programs. These programs involve subsidies, but the requirements and expenses are below those involved when Conab buys products, and in creating large stocks as in the past (DEL BEL FILHO; BACHA, 2005). The comprehensive network of agricultural policies seems to be well adapted to the new model.

The credit policy underwent major changes and has been suffering great pressure posed by the comprehensive network. It is no doubt the biggest problem area of the agricultural policy. Agriculture credit policy, which used to be entitled to abundant public resources, started to change in 1986⁷ when it was terminated under the Cruzado Plan, the Transaction Account, used by the Central Bank of Brazil to provide financial resources to Banco do Brasil for development operations – including agricultural credit. Later, the Constitution of 1988 established that resources for SNCR should be set up by National Congress in the Federal Budget. Hence, for a given year, allocation for the official agriculture credit program had as of then to be included in the budget for that year, voted for in the previous year. That made the program considerably rigid and resulted in the focusing mainly on support programs for small farmers, such as the National Program for Strengthening Familial Agriculture (Pronaf). Hence, to a large extent, National Treasury was no longer a source of important resources for agricultural credit. However, other alternative sources for agricultural credit: requirement resources on bank deposits; the Assistance Fund for the Workers (FAT) transferred via the Brazilian Development Bank (BNDES); the Northeast, North and Central-West Consti-

⁷ The evolution of the last two decades of the agriculture credit policy was quite complex. Our outline of this evolution is mainly based on Rezende (2003) and Rezende and Kreter (2006; 2007; 2008).

tutional Funds; the savings accounts of official banks; the international loans. The result was a quick expansion of long-term borrowing, often with highly subsidized interest rates, especially for the acquisition of machinery and equipment.

In terms of agricultural credit, the comprehensive network of agricultural policies made two important victories: firstly, considerable performance flexibility, which enabled bypassing the strictness imposed by restrictive norms; and secondly, the networks strong ability to obtain results via their pressures, not only to expand credit in the phases where agribusiness is prosperous, but by renegotiating debts in a time of indebtedness crisis within the agricultural sector.

Private agents and networks of agricultural policies

In the third phase, the expansion, modernization and diversification of agriculture and the consolidation of agroindustrial complexes generated the robust increase in the number and scope of associations, representative of the sector's segments. It is a known fact that different production organizations are part of a certain agroindustrial complex, where only a part is associated directly to agricultural production. Companies that provide inputs and services to the agricultural sector, companies that carry out the conversion of their products, and companies that participate in different transport and product commercialization stages are also part of the operation. And nearly every component of a given agroindustrial complex belongs to specific associations, where they participate in the networks of policies that perform by demanding policies of their specific interest, or of interest of the agriculture public sector, with sectorial representation agencies, e.g. the National Agriculture Confederation (CNA), and less formal organizations, e.g. the Rural Representatives in Congress, comprise nowadays the comprehensive network of agricultural policies. In other words, the comprehensive network operates in parallel with networks of thematic or sub-sectorial policies (MUELLER, 2009). This is currently a quite sophis-

ticated framework that is being managed since the early 1990s.

The operation of the comprehensive network of agricultural policies can be illustrated by recent events. Summing up, when Lula stepped into office in 2003, there was no rupture in the development of the third-phase of agriculture. Contrary to the expectations that he would put into place harsh measure for the sector, President Lula appointed Roberto Rodrigues for the Ministry of Agriculture – highly identified with agribusiness. Despite being a staunch defender of the interests of modern agriculture, and agribusiness, Rodrigues also gave an important contribution to the strengthening of the networks of sub-sectorial policies by creating a series of Sectorial Chambers coordinated by the Ministry of Agriculture; each Chamber sees to the interests of a specific sub-sectorial network (MUELLER, 2009), and also gives support to the comprehensive network of agricultural policies. The latter was strongly mobilized during the end of Rodrigues' term.

In that sense, it is worthy of notice that for most part of his term ended in 2006), the comprehensive network of agricultural policies was not strongly activated. Actually, the boom of agribusiness prosperity of 1999–2004 generated certain complacency. The agriculture public sector did not have to participate more intensely in the purchasing of surplus and the funding of the significant expansion of agricultural production demanded relatively few resources from the National Treasure. Further to the aforementioned mechanisms, funding provided by inputs suppliers increased via the anticipated purchasing by trading, and via instruments such as the Rural Product Bill (CPR) (REZENDE; KRETER, 2007, 2008). The sector had high profits and it seemed to be free of problems with the heavy debt rollover of the agricultural sector; it seemed that the risk of non-payment had disappeared. In 2005, however, there was an abrupt wakeup call; in that year the combined impact of draught and surges of pest and fungi infestations, with declining external commodity prices

where the effects were amplified by the valuing of the real. Commercial agriculture entered a crisis, and the threat of indebtedness once again ran rampant not only in the sector, but also in the components of the agribusiness it had been funding. And under the command of Minister Rodrigues, the comprehensive network of agricultural policies began to exert strong pressure for the approval of relief packages for the new indebtedness crisis. At the end of the Palocci era, there was a strong dispute between the agriculture public sector and the government's economic area; when the Minister of Finance stepped down and with the direct involvement of President Lula the problem was circumvented, and one of the results was the record harvest of 2006–2007. However, as pointed out by Rezende and Kreter (2007), measures adopted merely pushed to the future the problem of huge indebtedness of the agricultural sector. Furthermore, the non-bank funding for commercial agriculture was never re-implemented in a significant manner, generated by the crisis, which increased the pressure posed on the comprehensive network of agricultural policies due to the stronger participation of the public sector to fund the sector.

And are there clashes between the networks of policies?

The above presented discussion could give the impression that in the rural milieu, networks of agricultural policies operate free of opposition, but that is far from being true. There are yet two other policy networks that have been affecting the performance, as well as the potential to expand commercial agriculture, and both are strict networks of environmental policies. Our intention here is not to delve into the operation of those networks, but rather to point out that in the creation of policies that affect the rural sector their actions and demands cannot be ignored.⁸

The creation of the network of agrarian policies started with the implementation of a public agricultural sector, made feasible in 1980 when the military regime ended. Organizations that had the attribution of dealing with agrarian issues at first operated within the scope of the Ministry of Agriculture, but during the Sarney administration they were allocated to form the Department of Agrarian Reform. The agricultural public sector continued to go through changes and to be given new attribution, culminating in the Ministry of Agrarian Development (MDA) of today. Despite the reformist theory soon after the end of the military regime, the sector remained almost dormant until 1995, when land redistribution actions began to gain force, at the same time as the movement of the landless intensified its actions and mobilized the agricultural public sector to reach their policy goals. Presently, the network of agrarian policies is comprised by MDA and Incra (the executive arm of the Ministry) on the one hand, and by organizations for the landless and their allies (such as Pastoral Land) and different non-governmental agricultural organizations on the other. In the administrations of Fernando Henrique Cardoso and Lula, this network of policies became tougher and has taken an aggressive stand in the fight for more land and resources for support and settlement actions. This caused the substantive increase of budget allocations for these policy areas.

The network of environmental policies started to gain ground in the 1980s, and since the very beginning made advancements with provisions to defend the environment in the Constitution of 1988; it inherited the Forest Code but also the passing of an anti-environmental crime law. The environmental public sector was implemented with the creation of the Ministry of the Environment (MMA) and its executive organizations – the Brazilian Institute of Environment and Renewable Natural Resources (Ibama) and the Chico Mendes Institute for Biodiversity Conservation (ICMBio) – and involves

⁸ The following outline of both networks is based on Mueller (2009, p. 141-144).

similar state organizations. The sector has been leading the network of environmental policies; a number of non-governmental organizations also participate, some of which significantly influence. Together, they set up a network of strict environmental policies that are becoming notable for obstructing or delaying even projects and enterprises that are priority for the current coalition in power.

The fight between the comprehensive network of agricultural policies and both policy networks is evident. There are also notorious cases of clashes between networks that caused impasse situations: the fight between the comprehensive network and the agrarian network over changing productivity rates for land reform expropriation; and the clash between the comprehensive network and the network of environmental policies over legal reserve issues and the reform of the Forest Code.

Conclusions

This work started under a mistaken outlook, frequently found in assessments about the evolution of Brazilian agriculture and policies for the sector that are exclusively supported by the dimension of rationality. By ignoring the dimension of power, it is implicitly or explicitly believed that economists should focus only on the first dimension, where political science and other fields of science should address the analysis of the aspects of the dimension of power. The problem is that both dimensions cannot be separated, and to forcibly do so could lead to mistaken conclusions. One such example is in the comprehensive study of recent agricultural and agrarian policies by Chaddad et al. (2006). In this study, the authors identified a significant reduction since 1985 of budget resources in actual terms, allocated to both policy areas, but a strong reduction of federal resources for agricultural policies, where there are significant increases of resources earmarked for agrarian policies. Based on rational considerations, the authors propose that both policy areas should be combined under a single public rural sector.

And based on the intuition that the social rate of return of traditional agricultural policies (such as research, extension, animal and plant defense) is considerably greater than action policies (many considered as virtual waste of resources) in the area of agrarian policies, they propose joining the agricultural public sector and the agrarian public sector at the federal level to create a sole area of policies for the rural milieu. Furthermore, they recommend the implementation of an allocation criterion for federal resources for both areas, which should be the social marginal return tax for each policy action. Hence, policies with higher return tax should be granted more resources and policies with reduced marginal return tax, less resources. This way, the redistribution of resources would be supported by an efficiency criterion where society would reap the benefits.

This is a typical example of a recommendation supported exclusively on the dimension of rationality, but with slim chances of being adopted at the present moment in Brazil. Should it be attempted, the network of strict agrarian policies would have a decisive mobilization to prevent its implementation. If the coalition in power – current or in command after the 2010 election – should attempt to adopt this recommendation, it would not only fail but would probably pay a high political price for doing so.

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