# Transformations occurred in family agriculture in a region affected by dam: a case study in the *Submedio Sao Francisco*, in the Northeast of Brazil

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#### Abstract

The Dam of *Sobradinho* provoked a significant transformation in the way of life and the appropriation and management of space on the Sao Francisco River's edge, mainly referring to the huge projects of irrigation implanted in its Valley, whose waters "combined with flat and viable ground for irrigated agriculture and adapted technology, allowed the accomplishment of this mutation process of the northeastern regional space". When both regional landscape and ecological systems were modified, there were also changes in the daily lives of family farmers who inhabited the margins of the valley, as well as their practices of cultivation, which were extremely simple, as they utilized very rustic tools. It also altered substantially their way of life, their peasant life, demanding a new social engineering in order to re-learn and to re-invent, in the adversity of the new spaces, a specific style of living the *campesinidade* that reveals an ethic, the expression of a moral order. The objective of this paper is to analyze the transformations that are occurring in family agriculture in the Submedio Sao Francisco (SMSF) where the evolution of the family agriculture has served a striking example of the implantation of irrigation projects that deeply modified the systems of production in this region. This transformation happened in a process of strong State intervention, through public policies with the objective to place the region on the platform of transnational "development". The work is based on an in-progress research in the region of Juazeiro, Bahia, in the Northeast of Brazil.

#### Introduction

When the debate over family agriculture seemed to be over, having been debated mainly in the decade of 1980 over theory and conceptual issues, and the practical question of whether or not the peasantry would survive with the advance of capitalism in the rural areas, it reappeared in the present day, in other reality. It reappeared in the reality of the neo-liberal economic model which denies participation of the State in the economy as planned economy, as Blum (2001) has remarked, influencing innumerable units of family production, especially in the countries in the southern hemisphere, such as Brazil.

In the Northeast of Brazil, family agriculture subsists by breaking into forcing itself within the ecological, economic, social and political limits of the prevailing model. Tonneau *et al* 

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(cited by Caron and Sabourin, 2001), demonstrates its importance not only as social, but also economic, because it provides produce for both internal consumption and foreign markets, as well creating income (Caron and Sabourin, 2001).

Family agriculture has always had a strong presence in the production of food in Brazil, lending support for the "urban industrial exportation" by the production of basic foodstuffs at low cost while at the same time providing a readily available source of manpower. This function was maintained for years. Meanwhile, family agriculture adapted to new markets and new conditions of work thanks to its own "non-capitalist," peasantry characteristics (UFCG-UFPE-Cirad, 2003). But for this evolution, family agriculture necessarily adopts new characteristics, leaving behind a specific way of life. It starts to adapt itself to the new model of production and gradually loses its identity once "fundamental characteristics begin to degrade in a process of 'cultural erosion' that will be become irreversible", as explained by Mussoi (2002: 26).

The old dilemma of family agriculture appears yet again today: to transform without losing its capacity to adapt, which is, essentially, its potential of resistance and resilience<sup>3</sup>. Historically, family agriculture has managed to maintain itself in specific ways of production, either aiming for family reproduction (*family model*), the survival of the family (*subsistence model*), or for the attainment of a maximum profit (*model of agricultural enterprise*). These ways of production are the "ideal types" of family farms identified in the model of analysis of Lamarche (cited by Mussai, 2002).

The present paper proposes to support this discussion by analyzing the specific situation of the *Submedio Sao Francisco*<sup>4</sup> (*SMSF*) where the evolution of family agriculture served as a striking example of the implantation of irrigation projects that deeply modified the systems of production in this region. This transformation happened in a process of strong State intervention, through public policies with the objective to place the region on the platform of transnational "development".

The implementation of these policies was part of a national ambition to provoke the "modernization of agriculture". This occurred at the end of the 1960s, and it would come to modify the technical base of regional agriculture, practically developed exclusively by family farmers, who had started to incorporate a new technique. This new, redesigned technological pattern for the *Submedio Sao Francisco* provoked a true reordering of the agricultural space.

The public policies implemented in the region had induced more growth than development, considering the former as quantitative expansion of the economy, and the latter, as positive qualitative change that involves distribution of income and social advances (Bartholo Jr. and Bursztin, 2001).

<sup>&</sup>lt;sup>3</sup> The term resilience used here, mentions the capacity that the family farms have to resist environmental and socio-economic crises and produce forms or strategies of reproduction of agricultural exploration.

<sup>&</sup>lt;sup>4</sup> Until the 1940s, the *Submedio Sao Francisco* was only a part the Brazilian Northeast. It appears as a separate region of planning beginning in the 1940s, with a process of planned public intervention for the region aiming at the implantation of large hydroelectric projects and irrigation.

What happened is what we can call paradoxical development, for it generated some striking dichotomies such as: irrigated area/dry land; family farms/ business farms; cattle growers/cattle barons; the locals/outsiders; traditional farmers/ modern farmers; to name a few.

Why did this happen? How can it be unsuccessful if the actors of the *SMSF* are expressing themselves more with each passing day? The debate is sharp and contradictory. Our hypothesis is that there was an over-valuation of economic logic, with short-range concern for profit and a reckless negligence for the socio-cultural and institutional dimension. The perspective was for the participation in the international financial system more than the valorization<sup>5</sup> of the local/regional environment (Bartholo JR and Bursztin, 2001). There was an intensive exploitation of natural resources that was a detriment to socially sustainable development or eco-development<sup>6</sup>. This translated into a series of transformations in the systems of production and social relationships, mainly in the cultural values of the local population.

To demonstrate our hypothesis, the document presents, first, the evolution of agriculture in the SMSF (a retrospective history of the agriculture in the region). Then, it characterizes the function and the place of family agriculture in these evolutions, examining the transformations and the opportunities created by these changes, with the intention of understanding the process that the family farms had taken on or experimented with in the last 30 years.

As a conclusion, the paper puts forth some considerations about the scenario of evolutions of agriculture in the region.

# 2. Trajectory of the Agriculture in the *Submedio Sao Francisco (SMSF)*

# 2.1. Origen

The occupation of the *SMSF*, as well as the whole of the river's edge, dates back to the 16<sup>th</sup> and 17<sup>th</sup> centuries, the time of explorers and flag bearers in the gold conquest and the enslavement of Indians. This form of appropriation of these lands is associated with the policy of land ownership in colonial Brazil called *sesmarias*, or extremely large grants of land.

Agriculturally, the *SMSF* is distinguished by  $caatinga^7$  and agricultural space on the margins of the river. In these two spaces, until the construction of the Dam of *Sobradinho*,

<sup>&</sup>lt;sup>5</sup> The concept of "valuation" used here differs from "valuing" for the search of profit, but the valuation of the natural, cultural patrimony... (Weber, 2000).

<sup>&</sup>lt;sup>6</sup> The idea of eco development it support in the concept improved for Sachs (1986) that it creates a picture of strategies based on three pillars: economic efficiency, social justice and ecological prudence.

<sup>&</sup>lt;sup>7</sup> *Caatinga* is an entirely Brazilian eco-system rich in diversity in both animal and vegetable species. It is characterized by the existence of many types of small and medium-sized *xerofila*, vegetation with thorns and rich in variety (Tonneau, 1994).

the family farmers predominated. They were dedicated to the production of subsistence<sup>8</sup> (extractives, agriculture and cattle), using methods said to be traditional, but which mobilized a strong *ecological knowledge*<sup>9</sup>, an economy based on the bonds of solidarity (Barros and Tonneau, 2004). Taking care of the flocks of cattle and the corrals the cowhands practiced agriculture on small lands received from the owners of the ranch. The family farmers that occupied these small areas was practiced on the margins of the river and its tributaries, in the wetter and more favorable places, such as in dry lagoons or in the foot hills. Their aim was to supply the families. The principle crops were corn, beans, watermelon, and manioc. The traditional fishery in the river and lagoons was an activity complementary to agriculture. The fruits of these activities were consumed and distributed according the basic principles of reciprocity. The agriculture was characterized by autonomy (especially of the inputs) with a strong emphasis on auto-consumption.

With the decline of cattle growing in the region in the beginning of 20<sup>th</sup> century, other strategies for production were implanted by the ranchers to maintain their patrimony<sup>10</sup> they were now claiming, as well as to maintain the local economy. It was at this time that many farmers also turned to raising crops such as cotton, castor, and sugar cane. They installed mills, machinery, and stills for processing sugar cane and mills for the processing of manioc, which family agriculture cultivated.

#### 2.2. The Intervention of the State

From the 1950s on, the governmental authorities finally discovered the economic potential of the region, and started to invest, in a more permanent way, in the economic infrastructure of the region and in public projects of irrigation. The basic infrastructure was extended significantly, especially in the sectors of transportation, communication, and energy. Among the events the marking the beginning of the State actions in the region, was the creation of the Hidroelectric Company of the Sao Francisco (*CHESF*) in 1945.

As part of the promotion of regional development in the end of the 1960s, the federal government invested in special programs for the development of the Northeast. Using resources from the World Bank, it created such programs as the Program of Development

<sup>&</sup>lt;sup>8</sup>Agriculture of subsistence translated here means the types of traditional peasantry agriculture, that to Wanderley (1999: 24) "express the capacity to provide subsistence for the family group on two complementary levels: immediate subsistence, that is, the attendance to the necessities of the domestic group, and the reproduction of the family for subsequent generations. The joining these two objectives reveals its basic characteristics: the specificity of its system of production and the centrality of the constitution of family patrimony.

<sup>&</sup>lt;sup>9</sup>Berkes et al. (1995) it appraises the traditional ecological knowledge as a cumulative body of knowledge and beliefs, passed through the generations for cultural transmission, concerning the relations of livings creatures (including the human beings) between them and their environment.

<sup>&</sup>lt;sup>10</sup>The use of the term patrimony is based on the conception of patrimony as the set of the material and immaterial elements that concur for the maintenance and the development of the identity and the autonomy of its bearer, through the adaptation in a half evaluative. This conception of patrimony accents the material and immaterial elements involved, as well as the relations that bind them to the bearer. Thus, patrimony in itself does not exist exactly, without patrimonial relation to a bearer who invests as such (De Montgolfier, 2002).

of Integrated Areas Northeast (*Polonordeste*) in 1974 and the Program of Support for the Development of the Northeast Semi-Arid Region (*Projeto Sertanejo*) in 1976.

In this same decade, the State initiated the construction of the Dam of *Sobradinho*. It was part of the large hidroelectric projects of which Binational *Itaipu*, *Balbina*, *Sobradinho* and *Itaparica* could be taken as examples (Santos, 2001). Thus, the common resources or natural resources and, more specifically, the water resources, were consolidated as factors of production and development of great importance in the region.

To explore the resources of the *Sao Francisco* river, commissions and supervisions had been created, which, over the years, were substituted by other state institutions, culminating in the creation of the Company of Development of the Valley of the Sao Francisco in 1974 (Codevasf). The public company was initially tied to the Ministry of the Interior. Today it is linked to the Ministry of National Integration<sup>11</sup>.

The creation of Codevasf marked the beginning of a phase of governmental action in the valley, the priority being the development of agriculture through the rational use of the resources of water and land, along with the implantation of agro-industrial and farming districts. Therefore, irrigation was placed as the central activity of this public institution, taking advantage of the semi-arid, tropical clime and its more than 3000 hectares of irrigated areas.

The priority of Codevasf focused on the irrigation projects. Initially the crops produced in the projects had a short harvesting cycle (onions, cantaloupes, tomatoes, watermelon, beans...) that took care of the local and regional demand for consumption as well as the agro-industries, (the example being the tomatoes for the *Cica Norte*). This agriculture was mainly practiced by the segment of small producers, called "*colonos*".

# 2.3. The Boom of Enterprise Agriculture

The decade of 1990 was marked by new investments in the production of fruits, carried out by large companies already installed and others newly arrived to the region. It had changed into a pole of developement of irrigated horticulture. These investments were linked to the large Brazilian enterprise groups or multinationals, which, other than production, launched a process of transformation. Such was the case of the installation of some vineyards with the focus on producing younger and aromatic wines that today are exported to Germany, Denmark, the United States of America, England, and Japan (Valexport, 2004).

The *Petrolina-PE/Juazeiro-BA* pole region is today producing more of the high-quality varieties of mango demanded by the international market (Mann, 2002). According to the information given by Valexport, in 2003 the region provided 95% of the grapes and 90% of the mangoes exported by Brazil. This makes Brazil the 9<sup>th</sup> largest producer of fresh fruit in

<sup>&</sup>lt;sup>11</sup> In the year of 2000, *Codevasf* also started to act in the Valley of the Parnaiba, in the States of *Piaui* and *Maranhão*, coming to be called the Company of Development of the Valleys of the Sao Francisco and the *Parnaiba* (*Codevasf*, 2001).

the world, the largest exporter of mangoes to Europe, and the second largest exporter of mangoes to the United States (Bloch, 1996; Siqueira, 2003). Approximately 800,000 tons of fruits are produced annually in the region, according to Valexport (Association of the Exporting Producers of Horticultures and Derivatives of the Valley of the San Francisco, 2003).

The expansion of the irrigated horticulture brings to the region a constant process of mutation. Today, each irrigated hectare generates three jobs. It generates 300,000 jobs directly and 500,000 indirectly. Already, there is 128,500m<sup>2</sup> of Pecking Houses<sup>12</sup> installed with an investment of 48.5 million dollars. There is a total of 46 Pecking Houses. Twenty-one of them have refrigeration installations with an average capacity of production per Pecking House of 100 tons per day for mango and 20 tons per day for grapes, according to a report by Valexport in 2003.

Silva (2002) remarks that the organization of the fruiticulture complex in the region coincided with a period of retraction of the State in the arena of political decisions directed towards agriculture. The vacuum left by the absence of State action left space for the creation of a new arena of regulation of the complex run by large companies, whose arrangements are made by Valexport<sup>13</sup>.

## 3. The Role of the Family Agriculture in the SMSF

The family agriculture in the region of the study, even while going through a productive and diffucult processs of re-structuring/structuring, mananged to break into this new scenario.

On side of the Valexport, they outlined new methods of organization of small and mediumsized producers, such as the Association of the Producers of the Valley (*Aprovale*). They developed other strategies together with the large producers and exporters. They sought a better insertion into the demanding market of quality fruit. These methods and strategies of the associations of producers were put into action by creating measures of standardization, quality control, brand making, the forming of a pool of exports, to name a few.

An example of the adaptation of family agriculture in this new scenario is its presence in the Producer's Market, built in the urban zone of *Juazeiro-BA*. It occupies the rank of sixth place in Brazil and first in the North and Northeast, an outstanding place in the productive chain. Installed in 1986, it has a structure of 1,050 fixed stalls and space for 305 trucks daily. The estimated average monthly commercialization is 70,000 tons of fruits and vegetables. It functions daily from 5 A.M. to 6 P.M., with an average monthly circulation

<sup>&</sup>lt;sup>12</sup> It's a structure for the selection, treatment and packing of products, with certification of USDA-Department of Agriculture of the United States, licensing them to be exporters of mango to the American market.

<sup>&</sup>lt;sup>13</sup> The role excercised by Valexport as an organization and locus of the representation of the business interests has been a great spokesman and coordinator for the productive chain of horticulture in the region, especially those linked to the external market, establishing for itself the position within this association what Soto Baquera and Graziano da Silva (cited by Silva 2002) consider as being a form of sectorial governance with public offices, by delegation of the State.

of 6,000 people on the peak days of Wednesday and Sunday, and 3,500 people during the other days of the week (Barbosa, 2003 and 2004).

The Producer's Market of Juazeiro is a space where the processes of the agricultural changes in the region can be observed, especially in the exchange of merchandise. They are filled with "*sociabilidades*" that have been developed in the daily life by the actors who participate in it (society, government, organizations, women, men, children), whether in formal or informal activities, from the gleaners of the leftover products (garbage) to the agents of the commercial network. It is a place of social bonds (Barbosa, 2004). The Producer's Market translates into what Granovetter (1985) defends: that the social networks are and always have been structures of economic relations. For Granovetter, "these social networks, formed by concrete personal relationships, have an important role in the construction of mutual relations and relations of confidence, indispensable ties for the functioning of the economic system" (cited by Andion, 2004: 06), since the actors also are moved by social objectives such as recognition, sociability, and power.

The example of the Producer's Market demonstrates how the irrigated perimeters are sources of potential opportunities for family agriculture. But it also demonstrates how the model of State intervention (and, in a more general way, the logic of the conceptions of development) impede the work of adaptation of family agriculture; to re-learn and re-invent, in the new space that is the irrigated perimeters, a specific style of living the *campesinidade*, that to Woortmann (1990) reveals an ethic, the expression of the moral order.

On one side, the irrigated perimeters provoke the movement of the local and global markets. These markets are the destination of the products of the small producers, the medium-sized entrepreneurs, and the large companies, although in a process of unfair competition. On the other side, being placed under an imposed model of production, family agriculture is losing its identity, is continuing to acculturate, and is losing its capacity for adaptation. Although considered as more just socially, by assuring a better distribution of income, family agriculture has not had a position defined in this new territory, and unfortunately, never had (Tonneau *et al.*, 2001).

# 3.2. Evolutions techniques and crises

The same phenomenon can be found when looking at technical evolutions.

To achieve the objectives of efficiency, effectiveness and competitiveness necessary for a production aimed at the domestic market (national) and the external one (international); to transform the region into a pole of production, transformation, commercialization, and services (Silva *et al*, as cited by Barbosa, 2003), a new model must be imposed-"modernized" agriculture. This is characterized by the transforming investment in the perimeters, by the specialization of production (abandonment of the cattle), by the uses of the inputs, and the high level of capital. These transformations had been implemented by *Codevasf* through the framework of credit, technical assistance, and the promotion of modern techniques.

The strong State intervention, acting through *Codevasf*, at a certain moment, had its golden phase, mainly for the facilitation of credit to the cooperatives created for the stimulation of production and commercialization. Implanted without participative strategic planning, the cooperatives had exerted important together with family an role agriculture. However, due to inadequate management, they now find themselves debilitated, discredited by the partners (family farmers), and without credibility for financial agents. Its collective indebtedness has turned the farmers into defaulters and has disqualified them from benefiting from financings that have more reasonable interest rates.

An illustrative example of this situation is of a producer that took a loan from the Northeast Bank, through the FNE - Northeast Investment Fund for the acquisition of 05 heads of cattle and the implantation of 3 hectares of mango. He contracted a debt of around U\$ 4,000 in 1994. Ten years later (2004), the debt is around U\$ 34,000. This is the real situation of the vast majority of the small farms: how to pay the debts? The cattle do not exist anymore. The mango orchard is there, and the production too, but there has been over-production and a lack of a viable scale of production in the region. The consequence is a saturated market, low prices, and a lack of buyers. Association of the small farms with the entrepreneurs becomes unviable. First, because the product quality of family agriculture still finds itself outside the standard desired for exportation. And second, because the large producers sell their produce first, the produce of the small farms will sell only if the demand is greater than the supply. What to do? Renegotiation of the debt has been the argument, but until when will the situation be sustainable?

In the trend towards acculturation to make themselves competitive, family agriculture has become quite vulnerable with respect to their model of production: attainment of a maximum profit, that is, *model of agricultural enterprise*.

The four perimeters in operation in Juazeiro-BA, with respect to family agriculture, find themselves in a phase that we could translate as the *crisis of the predominant logics of organization of the contemporary social systems* (Vieira, 2003), for they find themselves at socio-economic, cultural, and environmental impasses.

In fact, there is difficulty dealing with risks and successive crises. There has been agricultural crisis with the eradication of 50 hectares of guava because of disease (nematode) in 2001. Economic crisis came in 2001 with low prices for coconut, causing farmers to throw away their harvest. There was economic crisis again in 2003 when the price of mango fell down disastrously from a high of U\$ 0.50 per kilo to less than U\$ 0.07 per kilo and did not have buyer. The market of these products is also sophisticated and vulnerable. It is necessary to form great networks of commercialization to compete both internally and externally. The small farms have many difficulties penetrating this network because they are dependent on the middlemen that dictate the prices according to the supply of the products.

There has even been climatic crisis. In 2004, Codevasf collected data on the effect of rains that had fallen in the region in the months of January and February on the irrigated crops planted in the Perimeters of Irrigation (*Mandacaru, Maniçoba, Curaçá and Tourão*), located in Juazeiro-BA and *Pedra Branca, Rodelas* and *Gloria*, pertaining to the *Itaparica* 

System, also coordinated by Codevasf/6<sup>a</sup>SR. They estimate that the financial damages for the short cycle crops (beans, tomatoes, chili, cantaloupe and onions, to name a few), were 100% of the planted area, which could be translated as approximately U\$ 1,000,000. In respect to the permanent cultures, mainly mango and grapes, the chief products of the Valley, the reduction in production was estimated to be between 15% and 40%, for the whole year. In this case, the economic losses (current and future), must be of the order of U\$ 10,000,000. In this sum are included the actual damages to the harvests of guava and account for papaya, banana, and passion fruit which are also cultivated by family farmers.

This reflected directly on the volume of business in the Producer's Market of *Juazeiro*, which suffered a decrease of 80% just in the month of January. This decrease was also due to the fact that the heavy rains made the region inaccessibility to buyers of other states (Codevasf, 2004).

The situation today is so grave that it may be questioned if family agriculture will continue to be inserted into the productive dynamics of the valley. How? In what conditions and what circumstances? The usual solutions such as more credit and pardoning of debts won't be enough, mainly because of the lack of money. It is necessary to understand the deeper reasons of these crises. Our hypothesis is that these diverse crises are the expression of one single crisis, a crisis of the un-adaptability of the project.

Even if the efforts of the State were always to be considered, in terms of volume, as insufficient; even if the conceptual conditions (the technology transfer) and the administration of intervention was less than satisfactory, a hypothesis becomes ever more clear that the "modernized" project had not been adapted to the reality of family agriculture. It sought to transform the farmer into producer, without assisting these farmers in their capacity to look for a form of coexistence in this new space. Both institutional arrangements and models of interaction of the administration and management of the natural resources, nor the attempt at social re-engineering had been in sufficient harmony with the local reality (Barros and Tonneau, 2004).

For example, there was not specific reflection on the comparative advantages between family and enterprise agriculture to think of a more efficient complement. In fact, the project was not sufficiently thought about in terms of valuing the qualities of family agriculture: diversification, management of the natural resources, etc. Family agriculture was considered as a form of subordinate production to enterprise agriculture. The products, the techniques, the institutional arrangements, the commercialization forms, had been those that the large companies needed.

This lack of definition of the place that family agriculture might occupy or must occupy, means that its actors (the small producers), the majority in the perimeters, find themselves in a process of failure and even impoverishment, in view of the numerous vulnerabilities that they encounter (dispossessed, technically unqualified, loss of family man power, climatic risks, etc.).

It is interesting that this problem of "project" reappears in this period of crisis. Owing to the problems of indebtedness, one of the central topics is the reform of the water tax. In a

workshop organized in October of 2003, the participants remarked that the water tax was just one facet of the problems fundamentally linked to the conditions of production. If the producers do not pay for the water, it is because they do not earn enough and this brings up the following issues:

- Investment and the problem of deficient draining;
- The production and the lack of management of the farmers;
- The commercialization

The crisis in the mango market, linked to over-production, certainly colored the debates during the seminar.

#### 4. Conclusion

Family agriculture in the irrigated perimeters is in crisis. Indebtedness, the attack of plagues, low quality of life, the selling of land, and the abandonment of rural life... these are the main signs of this crisis. Approximately 95% of the 596 family farms in the four perimeters are eligible for the benefits of the program PRONOF (National Program for Strengthening Family Agriculture) which uses the criteria of income, use of manpower, and extra-agricultural income. This demonstrates the urgency of a different project for family farms.

The modernization project was not able to transform these farmers into producers. Neither the European model of rural producers, nor the North American model of farmers, excluding a few rare exceptions, worked. The settlement project failed. The agrarian reform in the irrigated perimeters now has as many difficulties establishing itself as do the dispossessed.

Why? For many, the "support of the State and of *Codevasf*" is insufficient. In fact, the support for agriculture has never been sufficient. How it justification the policies of agricultural subsidies in North America or Europe? Credit, technical assistance, and agricultural subsidies are rare today. It had existed in the past, but with little success.

The main reason would be another? What if the problems were born of an inadequate project for the reality of family agriculture and its necessities?

Within this perspective, it would be necessary to think about the needs of family agriculture and agriculture in general. Of course, family agriculture should also produce products for export. But what competitiveness do the family farms have if they are up against the large producers?

In the face of social and environmental challenges that the *SMSF* must confront, would it not be possible to recognize more functions and tasks for family agriculture? To be able to contribute to the nourishment and security of the producer's families, as well as to the dispossessed population; to generate occupations and not just jobs; to make the impact of agriculture less harmful to the environment; would not this be the way?

It is a paradigm shift with respect to the model where competitive agriculture produces other social and environmental projects in charge of correcting negative "externalities" (social and environmental). It would be to think of development in a more integrated way, and not divided by sectors. Could it be considered, a "new" and more traditional agriculture, in the sense of maintaining a tight relationship between the social and the environmental?

To think and to argue for a new project for family agriculture is to raise technical, economic, and institutional questions. But also, and in more crucial way for sociology, it brings up the problem of the identity of family agriculture and of family farmers. After all, in this world of constant change, what are they? Are farmers, producers, colonists, irrigators? In a workshop, carried out in October of 2003, when asked to identify themselves, they could not come up with an answer.

The crisis of a productive project for family agriculture is concomitant with a crisis of identity for family farmers. The building of a renewed project for family agriculture in the irrigated perimeters must begin with an establishment of a project improving the quality of life and of society, with a *camponesa* identity, and of an agro-ecological family agriculture, in the sense of sustainability.

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