

SP  
10807

XIV<sup>th</sup> INTERNATIONAL SYMPOSIUM ON  
SUSTAINABLE FARMING SYSTEMS

Colombo, Sri Lanka, 11-16 November, 1996



**FARMER'S ORGANIZATIONS AND ACCESS TO INNOVATIONS:  
PATHWAYS OF SOCIOECONOMIC CHANGE IN MASSAROCA,  
BAHIA STATE, BRAZIL**

**Eric Sabourin, Jean-Philippe Tonneau and Patrick Caron**

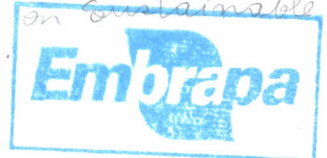
**ABSTRACT**

This paper focuses on the recent development of smallholders' communities in the Massaroca region of Nordeste, Brazil. The socioeconomic impact of extension service interventions and organizational responses of smallholders are discussed. The results of local development projects have highlighted some collective benefits for rural communities, i.e. self-reliance, official representation, and access to equipment; however, they have also revealed an increase in social differentiation amongst farmers, based on rural credit politics and market integration. The main beneficiaries of these projects are leaders of farmers' organizations, through their empowerment, by which they also try to obtain benefits for their parents and friends in an often biased manner. Criticism of this situation and resulting social conflicts have prompted protest reactions within rural communities, especially from women and young people, with the support of extension agents.

**KEY WORDS**

Innovation, farmers' organizations, development pathways, communications networks, reciprocity, Brazil.

SABOURIN, E.; TONNEAU, J.P.; CARON, P. Farmer's organizations and access to innovations: pathways of socioeconomic change in Massaroca, Bahia state, Brazil. [S.l.: P. n.], 1996. 12p. Trabalho apresentado no International Symposium on Sustainable Farming Systems, 14, 1996, Colombo, Sri Lanka.



## INTRODUCTION

Farmers' communities in the small region of Massaroca (Municipality of Juazeiro, Bahia State, Brazil) were marginalized and isolated until the 1980s (see Map 1). The only contacts with other parts of the country occurred through temporary outmigration experiments in the 1960s to southern regions. In the 1970s, the Catholic church organized what it called "basic ecclesiastical communities". As of 1982, and in line with these initial community projects, livestock producers became involved in a social organization and transformation process. They received aid through local development projects and were able to take advantage of the newly-opened market and access to rural credit and innovations. The present paper analyses socioeconomic changes that have taken place as a result of 10 years of research and development support provided to farmers' organizations of the Massaroca region, along with a description of benefits derived by local people.

The first section reviews the history of rural community development in Massaroca and the results of projects that have been conducted. The appropriation of project profits by some coordinators is also highlighted.

The second section aims at explaining observed changes, relative to the original egalitarian ideals, through an analysis of leaders' strategies with respect to power and resource appropriation. Finally, community reactions and regulation mechanisms are presented.

**Figure 1.** The Massaroca-Juazeiro region of Nordeste, Brazil.

## I. AGRARIAN HISTORY OF THE REGION

Based on the development pathway concept, the agrarian history of a small region can be pieced together through an analysis of different successive technical, economic and social changes that occur as rural societies and farming systems evolve (Gamma da Silva *et al.*, 1994).

Several phases, highlighted by transitions and severances, were thus identified in Massaroca (Fig. 2).

### **1.1. From latifundia to dependent family farming (1850-1965)**

Sharing of large landed properties between former tenant farmers, and construction of the railway line and Massaroca station enhanced market access and the development of smallholder farming with low-intensity livestock production in a region where watering places abound (Tonneau, 1994). There was limited investment potential. Farmers tapped the natural resources by allowing their livestock to graze on natural vegetation, called the "caatanga". Family relationships formed the basis of rural society.

### **1.2. Moderization of Nordeste and church support (1966-1980)**

The Salvador-Juazeiro road, which passes through Massaroca (built in the 1950s, paved with asphalt in the 1960s), facilitates communications with the rest of the country. In the 1970s, the creation of basic ecclesiastical communities by a popular church, based on the theological tenet of freedom and egalitarian primitive communist ideals, was the first form of community development and market-economy integration (Tonneau, 1994; Pourcet, 1996). This trend was further promoted by the temporary outmigration of young people to work for sugarcane companies in the southern part of the country (mainly Sao Paulo). The income and savings derived from these activities enabled them to set themselves up when they returned to Massaroca (Caron *et al.*, 1992).

### **1.3. Democratization and state intervention (1981-1993)**

Research and extension institutions became active in Massaroca following democratization of the Brazilian political system and the establishment of specific development projects for the Nordeste region. These institutions extended the church's work by supporting community development and organizing interventions through development projects. These projects improved the situation of all Massaroca community inhabitants (De Choudens, 1992). There was high collective investment in water resources and land development projects, most of which were subsidized (Silva *et al.*, 1994). Communities set up formal associations to secure this funding.

In addition to these collective investments, the projects included provisions for individual farming support (rural credit and technical consultancy). As pointed out by Pourcet (1996), development projects promote profit-sharing amongst farmers as an incentive for them to modify their farming systems and become integrated in the market. "Operational annuities" is the term given by this author to describe external revenues obtained by farmers that are relatively unconnected with their productive activities. In Massaroca, these annuities are derived from land and water management projects, tillage operations (tractor tillage), rural credit, low-cost livestock breeding, fertilizer inputs, seed, and free technical consultancy. This "annuity" upsets the equity balance between farmers. Even when these funds are shared as equally as possible, farmers utilize them in different ways, as their initial situations differ and they do not all have the same apprenticeship

potential or risk management approach.

In addition to modifications with respect to individual behaviours and practices, farmers' ways of utilizing natural resources are changing (Tonneau, 1994; Pourcet, 1996). In Massaroca, the rural credit project mainly helped fund individual investments, and prompted an increase in penning and private appropriation of communal grazing areas. Usage rights for former communal land and plant resources were widely assigned to individuals.

The poorest livestock producers were weakened, with increased social differentiation. Farmers who were able to get aid often invested these funds at the expense of the poorest ones.

There was little success in finding alternatives to penning. Labour-intensive produce was favoured, i.e. milk, fruit and irrigated vegetables. Processing this produce into cheese, jam, etc. was encouraged in order to take full advantage of family labour and obtain a better added value for farm production. It was quite logical to channel farmers and livestock producers towards activities downstream of production in such a high-climatic-risk semiarid region, where farming intensification was already shown to be relatively limited. The market turned out to be a new risk for farmers, and they were unprepared to face it. These innovative activities required a certain level of capitalization, new qualifications and corresponded to limited market segments, which meant that they could only be undertaken a small proportion of the regional farmers.

Technical service agents therefore questioned the validity of their projects. The Committee of Agropastoral Associations of Massaroca, federating nine local associations, was created in 1989. This signaled a need to achieve a certain degree of independence from the usual supervisory institutions, i.e. the church and municipality (Rocha Barros *et al.*, 1996). It also changed the dynamics by eliminating the need for assessments of previous results and reaching beyond the limits of communal/associative strategies based on egalitarian ideology (Tonneau, 1994).

## **I.I. STRATEGIES AND SOCIOECONOMIC DIFFERENTIATION**

How was it possible to switch, within 10 years, from the egalitarian "community" ideal to a system whereby services are provided on the basis of individual resources? Assuming that the associations assisted some members more than others, a partial answer to this question could be obtained through an analysis of members' strategies (Yung & Zaslavsky, 1992).

### **2.1. Strategies, information and self-sufficiency**

The communal associations and Massaroca Committee were created with the aim

of gaining access to innovations and funding.

Rural societies always seek access to information through involvement in external networks. This promotes diversity, exogamy (Levi-Strauss, 1949) and, consequently, wealth and prestige.

This strategy is based on partnerships with information redistribution centres outside of the communities. In Massaroca, such links were established with large property owners, then the church, and now mayors, town councillors, governmental technicians, etc.

Community leaders progressively establish relationships with external forces, the church and local elected politicians in order to comprehend the goals and strategies of these authorities and test the often "give-and-take" rules. These latter are solely based on exchange and competition, without any consideration for redistribution phenomena and farmers' reciprocity (Temple, 1983).

To avoid the overwhelming weight and exclusive domination of these authorities, community leaders gradually began diversifying their partnerships and connections with supervisory institutions in a quest for new sources of aid: first from the territorial governments, then nongovernment organizations (NGOs), and finally through international cooperation agencies.

## ***2.2. Aid utilization and management strategies***

It is essential to secure subsidies, but also to be able to manage them. In this respect, the progress of farmers' organizations differs, and consequently farmers' organization leaders appear.

Reciprocity generalization is a prime requirement for the development of rural societies (Mauss, 1973). Sharing, even unequally, is essential in times of wealth or shortage to enable the involvement of everyone in festivities and celebrations, the assets of the poor. This explains the importance of union and the prestige obtained by farmers' organization leaders when they procure collective equipment or goods, even though sometimes derisory. A 50 m<sup>3</sup> tanker or a black-and-white television on the village square means the whole community will have access to drinking water and the media. Nordeste politicians have fully used and abused this situation.

Community authorities fuel the prestige derived from this redistribution. Clever and prestigious farmers' organization leaders are able to obtain many benefits, e.g. tankers (never maintained), cassava flour mills (even though this crop is not grown), and dams (even if the streams are dried up). There is a deplorable waste of public funds and buying of voters by local elected politicians. Nevertheless, these investments do make some sense, even though they are not ready for immediate or individual appropriation: no farmers of Lagoinha (one community in the region) use the cassava mill. Indeed, there is

a reinterpretation of these innovations or investments through their collective appropriation: first, because they represent assets, providing prestige for the social group; secondly, because they represent official public recognition of the communities, and the existence of a partnership which will enable the organization to negotiate further investments. The prestige of the partnership is reflected on the whole community, not only on the leader.

Once the quest for subsidies and development projects is fulfilled, the leaders begin being strongly pressured by their friends and relatives. How can this leader refuse to send a tanker to his needy friend, or "an agronomic demonstration unit" to his brother, etc.?

Another example highlights the nature and rationale of these choices. Heads of the Massaroca Committee had long refused to approve any irrigation projects, which considerably surprised government agents who were not used to such disinterest. The Massaroca Committee was especially concerned about conserving their communal forest grazinglands and common lands, originally part of the area included in irrigation programmes. The Committee President had a simple explanation: although interested from a farmers' standpoint, and personally convinced that irrigation offered a promising future, he campaigned to refuse this investment project because he did not want to have to take on the responsibility of managing inevitable irrigation-pipe breakages, which he and the communities would be unable to hinder or control.

### **2.3. Leaders' strategies to secure power**

From the outside, the farmers' Association of Massaroca appeared to be a complete success. It gave the communities official recognition, municipal and regional representation, along with social, economic and cultural appreciation and greater self-sufficiency.

There was not any open struggle against the conventional supervisory institutions, large landowners, the church or municipality, which were more or less involved in the same local networks and types of reciprocity, and operated on the basis of the same redistribution logic as rural societies. Progressive liberation from these conventional authorities generally occurred through the establishment of new partnerships and diversification of supervisory institutions and aid sources. In contrast, because of the considerable stakes and the context, leaders of the associations, and especially the of the Committee, often shamelessly dealt with outside partners linked with development projects through competition and bargaining, sometimes using violence against certain scapegoats.

To gain support, heads of the Massaroca Committee were clever to have used the ambiguous "modernity/traditions" slogan, i.e. "farming community/formal association". From the traditional community, with its web of neighbour relationships, individual alliances, political patronage and family systems, there can be access to federal and state political redistributions, e.g. during severe droughts. From legal modern associations,

there can be access to subsidized rural credit, subsidies, NGOs and formal representation through relationships with development agencies (Sabourin *et al.*, 1996).

This, however, is only a short-term strategy. The political and administrative system of Nordeste showed its limits and is changing. Farmers' organizations have to be ready for such changes so as not to be dependent on outmoded strategies. They also run a considerable risk of being alienated because of excessive bargaining and intimate ties with family/community spheres. Community development is a two-edged myth. When applicable to all communities, it can be a vehicle of social progress, growth and human enhancement. However, it is a regressive/recessive factor when limited to family circles, cliques and clans in a few privileged communities (Sabourin *et al.*, 1996).

The organizations' victories and assets with respect to external exchanges are prestigious enough to reflect on the heads of these organizations, thus strengthening their roles as leaders. A Nordeste farmer becomes a leader on the basis of his word, charismatic speeches and vision of the future he puts forward. Massaroca leaders thus do not alter the speech that brought them to power, i.e. the union of farmers and communities. The egalitarian myth is maintained. It is difficult for those who have become the wealthiest over the last 10 years to maintain this ideology. Following the Brazilian miracle of the 1970s, the easily-attained rural credit during the democratization movement in the 1980s, and the NGO support obtained throughout the 1985-90 period, there is now a lack of resources in rural Nordeste and widespread redistribution is therefore no longer possible.

The leaders' speeches have also changed and are now based on investment efficiency, in terms of results and management capacity. This aims at justifying the subsidy and credit selectivity (support only the "good farmers"). Although development agents could be convinced by this argument, it is not at all in line with the communities' aspirations, especially with respect to young people who see a reduction in their capitalization and installation potential, while there is no longer a guarantee of profiting by outmigration to the south.

### **I.I.I. NEW CHALLENGES AND NEGOCIATIONS**

After an initial assessment, the institutions tried to balance the differentiation and adjust the information and innovation appropriation deficit by strengthening training projects for the rural community and support for farmers' organizations. The objective of this recent phase was to create new areas for negotiation (Rocha Barros *et al.*, 1996).

In 1986, at the beginning of the project with the R&D approach, a farmer classification was drawn up, along with an analysis of priority requests on innovations (technical, economic and organizational). Groups of farmers with common interests were thus formed, with the involvement of specialized technicians. This was a good idea that held up over time.



In this new phase, interest groups (which had become commissions) widened their prerogatives and now conduct and manage many activities under the responsibility of the Committee directorate. Five commissions were created, focusing on: rural credit, irrigated areas, equipment, youth and education.

### **3.1. School for women**

The composition and contents of the commissions have changed over the course of time. Young people and women, particularly school teachers, began running the "Education" and "Youth" commissions. The historical Committee directors continued monopolizing and short-circuiting positions on the "Credit" and "Irrigated areas" commissions, but were obliged to accept the involvement of young students and a woman teacher in the "Equipment" commission to take advantage of their accounting skills. This involvement prompted the creation of a woman/youth opposition force, and led to new projects, with a change in focus from production to culture: education, training and organization (Rocha Barros *et al.*, 1996).

The Rural Training Centre of Massaroca was primarily created to provide educational opportunities for youth. This enabled young people to complete their primary schooling within the region (thus at reduced cost), while continuing to live and work on their parents' farms. Vocational training and continuing education projects helped these young people to become qualified in new fields (e.g. agriculture, crafts, services, management), and remain in the region with a new status (leather craftsperson, mechanic, cheesemaker, well-digger, etc.).

Above all, it was women who filled this new space. They immediately asked to take training courses on crafts and decoration (pottery, painting on glass and cloth, cooking, etc.). Although not yet involved in any productive or commercial activities, they have played a crucial role as an opposition force and in organizing women. These "whimsical" courses, as their husbands ironically call them, enabled women to meet in a context that is not within men's control, gave them a new boosted status within the community, with the support of technicians and teachers of the training centre. This is how they obtained power within the Committee's "Education" commission, and gained prestige through their involvement in meetings and trips — some even represented the Committee in Europe. It was also a victory for young women teachers of isolated rural schools, whose importance was newly recognized.

### **3.2. Creation of new activities and youth orientation**

The most recent projects focus on activity diversification and creation of new processing units. For instance, a project to train young people on leather crafts led to the creation of a village production unit (Oliveira *et al.*, 1995). From the beginning of this training programme, which was open to all volunteers, two professional saddlemakers of the community (who were out of work since sales of livestock on the hoof had become

widespread) intended to learn techniques for making new products (soccer balls, purses, wallets, etc.); their objective was to forestall young people in conquering the local market. A specialization was consequently imposed by the training centre, with a sharing of tasks in the leather crafts workshop, as a means to avoid appropriation of all of the innovations and the relatively small local market by these two saddlemakers. This differentiated training embodied a new form of technical complementarity and social integration.

### **3.3. Extension of organization dynamics**

Until now, the Committee directors have been strongly against the integration of associations from neighbouring communities of Juazeiro, and even frowned upon contacts and cooperation with other farmers' federations of the region. After technicians of the region created an Agricultural Planning Unit at Juazeiro, responsible for the management of public funding for development projects, they offered the Committee to set up an office there to represent farmers of Massaroca district. The Committee directors refused to invest in this project, as they selfishly (but realistically) considered that during shortage periods there was no interest in sharing, with other associations of the municipality, the scarce resources that they could get through direct channels they had kept open with local politicians of the Municipality of Juazeiro.

The Committee directors are currently being solicited from all sides to enlarge the federation. Local elected politicians, the church, and technical services would like to cover as many communities as possible through a single institutional representative. In the communities, young people want cooperative exchanges to be developed with neighbouring associations. In crisis and outmigration situations, an increasing number of communities have to be involved in order to get enough people together to form a soccer team, a music club, or organize a tournament or horse race.

Once again, economic arguments are likely to be the most convincing. New approaches to training, project diversification and subsector control will necessitate a strengthened and enlarged system and community information networks. Young leather craftspeople were highly interested in the meetings on leather marketing organized by the Bahia Farmers' Information Centre at Juazeiro. This was also the case for women teachers and the new communal tractor management team.

Real alienation comes by escaping into the imaginary world (Temple & Chabal, 1995). Reciprocity has been alienated through local sequestration by family clans involved in founding the Committee (Temple, 1983). Prestige and redistribution require social and economic growth, generalization of reciprocity through extension of the federation, or simply cooperative relationships with neighbouring communities and associations, and paired organizations of the region (not only with faraway French farmers' organizations). This logic also assumes an enriched dialogue with technicians of development institutions, along with reciprocal apprenticeship on new versions of change processes and civilization values.

## CONCLUSION

The main characteristics of Massarocan development highlight the presence of relatively controlled pathways with respect to domestic and marketing sectors (Boltansky & Thevenot, 1991).

Resources and innovations that resulted after the region was opened up, and derived from local development projects, were mainly used by leaders who passed on these benefits to their families and the community, but in a biased way.

"Collective" gains mainly involved access to the outside world (i.e. innovations, information and markets), and representation and self-sufficiency with respect to political or ideological supervisory authorities.

These changes were shown by loss and destructuring of traditional social protection, only partially compensated by new types of solidarity and mutual benefit. This is one aspect of the social differentiation process that was accelerated within communities when subsidies and rural credit were granted to support farming activities. This transformation of socioeconomic relationships prompted various individual and especially collective reactions, e.g. the redefinition of power structures, the appearance of new statuses, and new rules were even drawn up.

It seems that the dependence incurred by the initial leaders' appropriation of power could be eliminated through widening of the federation to include neighbouring associations within the municipality and region, along with the development of collective economic projects (management of equipment, services and subsectors).

Management apprenticeship by local collectivities and the first steps taken by rural communities towards professional organization highlight the dialectic links that exist between individual projects and those of collective interest. These relationships might be the source of tensions and reactions, but they provide considerable information for collective decision-making and socioeconomic coordination. Research analyses on interpersonal networks (Darre, 1986) and forms of reciprocity provide a means to follow-up changes in these relationships and even to predict shifts in power foci. Studies on regulation modes, types of coordination and agreement revealed individual farm management strategies and collective land and subsector management strategies.

## REFERENCES

- BOLTANSKI, L.; THEVENOT, L. (1991) *De la justification. Les économies de la grandeur*. Paris, France, Gallimard. 485p.
- CARON, P.; PREVOST, F.; GUIMARAES FILHO, C.; TONNEAU, J.P. (1992) *Prendre en compte les stratégies des éleveurs dans l'orientation d'un projet de développement: le cas d'une petite région du sertão brésilien*. In:

- Symposium international sur les systèmes d'élevage. Institut Agronomique Méditerranéen, Saragosse, Spain, 14 p.
- DARRE, J.P. (1986) L'étude des réseaux de dialogue. In: *Agriscopes* 7: 143-158. ESA. Angers, France.
- DE CHOUDENS, N. (1992) Etude de l'impact sur le terrain du projet de Recherche-Développement de Massaroca, Etat de Bahia, Brésil. Mémoire de stage CNEARC/ESAT. Montpellier, France. 70 p.
- GAMA DA SILVA, P.C.; CARON, P.; SABOURIN, E.; HUBERT, B.; CLOUET, Y. (1994) Contribution à la planification du développement sans objectifs final: proposition pour la région Nordeste-Brésil. In: *Symposium Recherches-Système en Agriculture et Développement Rural*. Actes, Montpellier, France. CIRAD, 199-205.
- LEVI-STRAUSS, C. (1949) *Les structures élémentaires de la parenté*, Plon, Paris, France.
- MAUSS, M. (1973) *Sociologie et anthropologie*, Presses Universitaires de France, Paris, France.
- OLIVEIRA, J.de; SAUTIER, D.; ARAUJO, L.; THUILLIER, C.(1995) En amont de la petite entreprise: une expérience d'appui à l'émergence d'un projet économique à Juazeiro-BA. In: *Colloque Petites Entreprises Agro-Alimentaires*, CIRAD-SAR, Montpellier, France.
- POURCET, G. (1996) Institutions et développement rural. In: Réunion publique du Conseil Scientifique du CIRAD "Organisations paysannes et innovation", CIRAD, Montpellier, France. 10p.
- ROCHA BARROS, E. da; SABOURIN, E.; GONÇALVES, P. I.; CARON, P. (1996) Desenvolvimento local e associações de pequenos agricultores: o caso de Massaroca (Juazeiro-BA), CPATSA-EMBRAPA, Petrolina, Brazil, 26p.
- SABOURIN, E.; TONNEAU, J.P.; CARON, P. (1996) Seu Néné, leader paysan à Massaroca (Bahia, Brésil): une trajectoire nordestine. In: *Colloque International APAD, "Le développement négocié: courtiers, savoirs, technologies"*, Université de Hohenhein, Germany, 9p.
- SILVA, P.C.G. da. (1994) Um sistema de financiamento das atividades rurais adaptado as condições da pequena produção na região de Massaroca, Juazeiro/BA. Thèse de master, Universidade Federal da Paraíba, Centro de Humanidades, Campina Grande, Brazil. 260p.
- TEMPLE, D. (1983) *La dialectique du don: essai sur l'économie des communautés indigènes*, Diffusion Inti, Paris, France. 50p.
- TEMPLE, D.; CHABAL, M. (1995) *La réciprocité et la naissance des valeurs humaines*, l'Harmattan, Paris, France.
- TONNEAU, J.P. (1994) *Modernisation des espaces ruraux et paysannerie, le cas du Nordeste du Brésil*. Thèse de doctorat de Géographie, Université de Paris X, Nanterre, France, 368 p.
- YUNG, J.M.; ZASLAVSKI, J.(1992) Pour une prise en compte des stratégies des producteurs. *Collection Documents Systèmes Agraires*. N 18. CIRAD/SAR, Montpellier, France. 72 p.