Title: From Peasants to 'Project Beneficiaries': The Case of the Brazilian Amazon PPG7 Demonstration Projects

Author: Olympio Barbanti

Affiliation/Title/Email:
Olympio Barbanti is an independent researcher affiliated to the Post-graduate Programme in International Relations at the Catholic University of Minas Gerais (PUC Minas), and consultant to the Brazilian Government´s environmental agencies. Email: olympio.barbanti@gmail.com

Postal address: Rua Boquim, 380, Vila Ida, São Paulo, SP, CEP: 05454-001, Brazil

Abstract: From 1992 to 2012, the Brazilian government, together with international development agencies representing the G7, implemented the Pilot Programme to Conserve the Brazilian Rainforests (PPG7). This intended to promote sustainable development in the Amazon forest area, with a key component being community-based agro-ecological and agroforestry production for the market. These projects, called 'demonstration projects', have provided financial credit to peasant-based organizations which some history of political and trade-union activity. However, by making a very selective use of approaches to rural development and overlooking the economic component of development in the agrarian sector, these projects seem to have resulted in a number of negative impacts for peasants and small rural producers that remain unexplored in PPG7 official evaluations.

Keywords: Rural Development, Peasantry, Sustainability, Amazon, Brazil

Introduction

From 1992 to 2012, the Brazilian government together with international development organizations have implemented the Pilot Programme to Conserve the Brazilian Rainforests (PPG7), the largest initiative ever implemented to reduce deforestation rates and promote sustainable development in the country's Amazon forest. One of the key components of the

PPG7, the ‘demonstration projects’, intended to provide support for peasants and small-scale rural producers, given that they were considered key actors in the process.

Most of these rural producers had received incentives during the military dictatorship (1964–85) to move to the Amazon. However, without credit and support for agricultural extension, they set fire on the forest to clean the land. Demonstration projects intended to create alternatives to this pattern of deforestation by introducing agro-ecological and agroforestry systems, which were supposed to achieve sustainability in ecological, economic, social, political, cultural, and ethical terms. Peasants and small-scale rural producers that were organized in associations and co-operatives were mobilized by intermediary NGOs, and became beneficiaries of this rural development project.

This strategy of development is analysed in four sections. The first reviews the literature in rural development, as a way to identify the mixed roots that served as a basis for the formulation and implementation of the Pilot Programme, and largely influenced its outcomes. This programme is presented in the second section, and considered in relation to the context government efforts to develop the Brazilian of Amazon. Subsequently, demonstration projects are critically analysed in the third section, and the effects of transforming peasants into project beneficiaries are scrutinised. The article fourth section argues that both the Brazilian government and the World Bank (the major international organization involved) overestimated the social benefits of the demonstration projects and overlooked economic constraints. The two factors created negative impacts that remain overlooked by official appraisals of the project.

Rural Development Thinking and the Political Background of the Pilot Programme

The theory behind agricultural development in Brazil has been strongly influenced by the modernization approaches of the 1950s (Lewis 1954) and their emphasis on capital-intensive agriculture, whereby small farmers were regarded as poor decision makers who needed outside assistance (Eicher & Staatz 1990). At the same time that modernization was spreading, the agrarian question was boiling. In the Northeast of the country, one of the poorest regions, the Peasant Leagues (*Ligas Camponesas*) were flourishing and the debate on agrarian reform was gaining strong political support. In 1961, President João Goulart (1961–64) attended the First National Congress of Small-Farmers and Rural Workers, and in 1963

agrarian movements created the National Confederation of Workers in Agriculture (CONTAG). But the growing support for agrarian reform was crushed by a coup that installed the military dictatorship.

The military gave strong support to modernization and the green revolution. To bypass the claims of peasants and small-farmers, the dictatorship passed the 'Land Statute' (*Estatuto da Terra*, Law No. 4,504/1964) to control the way in which a meagre agrarian reform would be conducted. During the military regime, a total of 77,465 families benefited from agrarian reform.[1] At the same time, in order to control land conflicts in the South and Southeast of the country, where agriculture was experimenting rapid technification[2], the military promoted a number of public and private 'colonization programmes' (settlements) in the North, a land covered by the Amazon forest.

By the beginning of the 1980s, market liberalisation and debt crisis resulted in structural adjustment policies that recommended a 'conservative modernisation' of the Brazilian countryside – the agribusiness model. In other words, it created the necessary conditions for the capitalisation of large farms with property rights derived from the pattern of land ownership established since the colonial period (Graziano da Silva 1996). In 1985, the last year of military rule, the federal government created the National Plan of Agrarian Reform; at the same time, the landed oligarchy created a lobby group called the Rural Democratic Union (*União Democrática Ruralista*, UDR). The priority of the plan was to improve agricultural staples through small-scale production in areas of the South and Centre-West that already had the necessary infrastructure (Graziano da Silva 1996). This aim faced huge political opposition from landowners, clustered in the UDR. The results of the National Plan of Agrarian Reform were disappointing. Only 6.5 percent of the families initially targeted were given land (Graziano da Silva 1996).

From the mid-1980s onwards, a political shift towards Western-based models of democracy and decentralization was seen as a necessary condition for effective rural development (Johnson 2001). This approach involved improved public accountability, environmental sustainability, and empowerment of the poor and vulnerable groups. In political practice,

[1] By comparison, only in the year 2010, the federal government provided land for 39,500 families, a number well below the best mark, 136,400 families in 2006, during the Lula administration (MDA 2011).
[2] A procces broader than mechanization.

liberal accounts started to 'see the state as part of the problem, not as part of the solution, to the process of development' (Howell & Pearce 2001: 14). The liberal recipe to keep the state accountable came in the form of a new role for civil society (Habermas 1992, Putnam 1993), what Howell & Pearce (2001) called 'the Americanization of the debate: '[a] strong civil society', according to this view, 'fosters democracy, holds the state in check, and, in turn, contributes to development' (Howell & Pearce 2001: 39).

Given that the military repression of the 1980s was particularly strong against rural movements and supporters of agrarian reform, the subsequent loosening of the political grip of the right-wing opened the way to 'democratic decentralization' policies, which, at the local level, translated into 'empowerment' of the rural poor (Johnson 2001). Under the new development paradigm, the rural poor should be able to make themselves heard, reduce their vulnerability, and gain autonomy in economic, political, and social terms.

At the same time, in the international arena, the detrimental environmental effects of capitalist development, which had already been pointed out by *The Limits to Growth* report (Meadows 1971), combined with growing concerns about environmental change to result in the publication of *Our Common Future* (WCED 1987), a report which made strong case for the linkages between environmental degradation and poverty. Taken together, poverty and sustainability generated a new agenda for sustainable rural development at the international level. In fact, rural development and poverty agendas merged, and this in turn influenced the development discourse of Brazilian policy-making in the ensuing years.

Micro-level approaches (Chambers 1983, Sen 1983, Jodha 1988) showed that the analysis of poverty should consider factors such as common property resources, seasonal variations in consumption, and the poor ability to face local elites, among other qualitative dimensions. In addition, it was recognized that agriculture was not the only productive activity in rural areas (Ellis 2000). The realization that the rural poor have a diverse set of activities, led to the search for new development approaches, recognizing that the pursuit of rural strategies should not be concerned only with economic aspects (such as increased productivity), but should also consider the social aspects as ends in themselves, and not as mere instruments of economic growth. In order to reach the poor directly, liberal approaches induced a trend for 'scaling down', which transformed public policies into time-framed projects. Collective forms of

production were identified as the more appropriate social arrangements to minimize the risks of self-help strategies, incorporating Chayanov (1991) in the liberal development discourse.

Chambers' (1983) micro-level analysis focused on key dimensions of the social and economic disadvantages of rural populations, and divided them into five clusters: poverty, physical weakness, isolation, vulnerability, and powerlessness. The latter three dimensions, he argued, capture the notion of poverty as a living experience, and reflect the fact that poor people see their own deprivation in a different manner to that of outsiders. This view of deprivation, according to Chambers, is also connected to other non-economic criteria, such as independence, mobility, security, and self-respect. The new paradigm praised small farmers' knowledge, gave visibility to their identities, and gave incentives for applied research strategies and techniques that could provide quick inputs to development action, such as participatory and rapid rural assessments.

By the end of the 1980s, the sustainable development discourse had gained momentum. As the Cold War came to an end, the United Nations searched for a new role and came to promote a renovated agenda for 'economic development', linked to 'new' themes: environment, gender, social issues, population, and the urban setting. The report on *Our Common Future*, released at this time, supported a top-down and technology-based approach to development, assuming that underdeveloped and economically unstable countries were not able, or did not have the required resources, to protect their environment, even when they could pay the costs of environmental protection (WCED 1987, World Bank 1992). Leach & Mearns (1991) pointed out that the rural poor were particularly affected by environmental degradation, given institutional failures and the lack of appropriate policies in developing countries; therefore, they should receive special attention.

Until the mid 1980s, environment public policies and research agendas were almost entirely dedicated to biological conservation. The growing debate on sustainability introduced the need for a more comprehensive understanding of the links between the natural resources and society. For many developing countries, a detrimental linkage between these two dimensions was taken place. The expansion of capital-intensive farming coerced peasants to move into lands that were not yet into agricultural production: mostly savannahs and tropical forests. This new reality fuelled a new research and policy arena: agroforestry systems.

The mixed use of forest resources and agriculture had been proposed by the Canadian International Development Research Centre (IDRC) in the mid- 1970s, and led to the creation of the International Centre for Research in Agroforestry (ICRAF), in 1978, in Nairobi, Kenia. During the 1980s, agroforestry research was mostly applied to Africa; only in the beginning of the 1991 ICRAF joined the Consultative Group on International Agricultural Research (CGIAR), and started to do research on all continents. CGIAR is an international organization sponsored by the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), the United Nations Development Programme (UNDP) and the World Bank.

These organizations had put forward a critique of the green revolution, from an agricultural-ecological standpoint. As an alternative to traditional agriculture, they introduced the idea of agro-ecological systems. The central proposition was that biodiversity enhances the biological control of pests and can enhance economically feasible, socially fair, and culturally sensible agricultural systems, from micro- peasant-based production to large-scale farm-based agriculture. The economic feasibility of such model, that inherently assumes the need of diversity in agricultural products and other natural resources within the rural property, is calculated against the detrimental consequences of capitalist agriculture based on agrochemicals (Altieri, Anderson & Merrick 1987).

In Brazil, the academic debate on agro-ecology managed to be highly influential on public policies. The Brazilian perspective incorporated micro-level approaches such as those of Chambers (1983), Sen (1983), and Jodha (1988), and proposed a deep-green and socially focused path to agro-ecology. As Caporal & Costabeber (2004: 17, *our translation*) have put it:

> [agro-ecology] always incorporates the idea of social justice and environmental protection, whatsoever the commercial label it produces, or the market niche it occupies, while others propose only an 'ecologized agriculture', oriented exclusively by the market and by the expectation of achieving an economic reward that can be obtained in a historical moment, which does not guarantee its sustainability in the medium and long terms.

Caporal & Costabeber (2003, 2004) stress non-market or non-economic variables of peasant and small-farmers organization of production, claiming that truly sustainable farming should consider six dimensions: social, economic, ecological, political, cultural, and ethical. Departing from a critique of capitalism and capital-intensive farming, the authors state that the economy should be subordinated to nature, and not the opposite (Caporal & Costabeber 2000).

The debate on rural development and agro-ecology was also applied to forested areas, from a different perspective. In 1985, the Food and Agriculture Organisation (FAO) released the Tropical Forestry Action Plan (Rodas 1986), aimed at assisting developing countries to make more 'rational', that is, economically productive and eco-managed use, of forested areas, mainly for timber production. The general language of this document was one of forest development, but it did promote concerns about the social, cultural, and ethical dimensions of deforestation on the livelihoods of local people.

This issue was also captured by other international organisations. The Programme for Industrial Activities of the International Labour Office (ILO) produced a report entitled *Working, Living and Social Conditions in Forestry* (ILO 1985). A few years later the World Bank issued a more comprehensive document, with stronger references to sustainability: *People and Trees: The Role of Social Forestry in Sustainable Development* (World Bank 1989). These documents, nevertheless, were primarily concerned with methods and technologies for reconciling people's needs and capacity for co-operation with mixed use of forest areas for crop and livestock production, focused on market-oriented production.

This debate, fostered by research institutes linked to international organizations was instrumental for the initiatives such as the Pilot Programme to Conserve the Brazilian Rainforests (PPG7). Governments and international organizations that supported sustainable alternatives for the Amazonian development were aware of the linkages between small-scale agriculture and forest fires in the Brazilian forest.

The Pilot Programme to Conserve the Brazilian Rainforests

In order to convince peasants and small-farmers to colonize the Amazon region, the military government promised to give each family a titled plot of about 100 hectares. Those who

moved received plots that were covered by pristine forest. Without alternative financial credit and agricultural extension support from government institutions, these young peasants and small rural producers, with an average age of only 37 (Perz 2002), started to use fire as a practice for 'cleansing' the land covered by luxurious forests. They undertook livestock and basic staples (corn, rice, cassava, and beans) production, and refused to use non-timer forest products they did not know, to avoid risk (Perz 2002). Due to the use of fire, peasants and small farmers were charged by the government as being responsible for destructive patterns of natural resource use (deforestation). This has been described as a process by which the victims were blamed (Wood & Schmink 1978).

Alongside colonization, the military government promoted a number of development programmes for the rural sector which facilitated the implementation of the green revolution and the concentration of land ownership. Among the most important of such programmes were the National Integration Programme (PIN) (1970), the Land Redistribution and Agribusiness Development Programme (PROTERRA) (1971), the Amazon Agricultural and Agro-minerals Poles Programme (POLAMAZÔNIA) (1974), the Programme for the Development of Northeast Integrated Areas (POLONORDESTE) (1974), and the Brazil-Japan Cooperation Programme for the Development of the Savannahs (PRODECER) (1974). Some of these projects had international support from development agencies, such as the World Bank, the Inter-American Development Bank (IDB), and the Japan International Cooperation Agency (JICA).

Scientific evidence of the consequences of environmental destruction fuelled political pressure and NGO lobbying throughout the 1980s. The Brazilian government was then pressured to control the growing rate of deforestation in the Amazon. The political response came in October 1988, when the administration of President Sarney (1985–1990) released the programme called 'Our Nature' (*Nossa Natureza*). This was the country's first comprehensive programme specifically designed to harmonise development with environmental protection (Hagemann 1994). In the course of the programme's implementation, a new environmental agency was created, the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA).

It had become evident that large landowners were instrumentalizing peasants and small-scale farmers to push the agricultural frontier into the forest. Because the land in the Amazon had

no clearly defined property rights, peasants and small farmers burned the pristine forest to the point at which middle-scale cattle-ranching could be introduced. Then they would sell the land and move ahead. New fires would be necessary until pasture for large-scale ranching could be introduced (Ozório de Almeida & Campari 1995).

Between 1988 and 1989, huge forest fires attracted international attention and became a central issue for NGO campaigns. Massive public interest in Europe and in the United States finally reached the top of the political agenda. In July 1990, the heads of the Group of Seven (G7) countries[3] officially manifested their concern over the destruction of the Brazilian forest. During the G7 summit, in Houston, Texas, the German Chancellor Helmut Köhl proposed an official commitment to help Brazil reduce the rate of deforestation in the Amazon. The Brazilian government was then invited to prepare a plan, which would be funded by the G7 members. Concomitantly, the World Bank was given the role of trustee, in order to provide technical input and the co-ordination needed for programme implementation.

Within the Brazilian federal government, the Secretary of the Environment and Legal Amazon (SMA) was put in charge of the design of the programme, which tried to avoid the highly political structure of the already superseded 'Our Nature' programme, and the mistakes of former development programmes that resulted in environmental destruction, such as the POLAMAZÔNIA, in 1974. The new initiative was then called the Pilot Programme to Conserve the Brazilian Rain Forest (PPG7, or Pilot Programme), and was agreed by the donors at a November 1991 meeting in Geneva.

The Pilot Programme was planned as a set of twelve, largely independent projects that could be classified as: (i) strengthening state institutions, (ii) environmental management, (iii) experimentation with and dissemination of new forms of natural resource use and conservation, (iii) 'extractive reserves', (iv) indigenous land demarcation and protection, (v) forest and floodplain resources management, (vi) biodiversity conservation, and (vii) science and technology generation and dissemination.

The PPG7 was implemented by a number of public sector agencies, under the leadership of the institutionally weak Ministry of Environment (MMA), with the participation of some

[3] The G7 includes the United States, Canada, Japan, Germany, France, Italy, and the United Kingdom.

NGOs which, at that time, had a minimum of dialogue with the World Bank. This included some former left-wing organizations and a large majority of development-oriented NGOs that shared the sustainability agenda. Civil society organizations were still emerging in that period, seven years after the end of military rule. Environmental NGOs were weaker then civil rights, urban-based NGOs, mostly because of the military repression on agrarian organizations. Particularly in the under-populated Amazon region, NGOs, association of producers, and co-operatives were rarely found.

A key social movement of that period in the Amazon was the Rubber-Tappers National Council (*Conselho Nacional dos Seringueiros*, CNS), an organization born in October 1985, during the First National Meeting of Rubber Tappers, realized at the University of Brasilia, in the capital city of the federation located in the Centre-West region part of the country. At that time, the CNS was, in fact, restricted to Acre and Amapá states, both in the Amazon region. The rubber-tappers' movement had gained international attention due to the assassination of its leader, Chico Mendes, in 22 December 1988. The CNS was the most legitimate social movement in the Amazon, and supported the PPG7 by helping to create, in 1991, a new organization, called the Amazonian Working Group (*Grupo de Trabalho Amazônico*, GTA). This is an umbrella non-governmental organization whose broad initial aim was defined as that of facilitating the participation of small NGOs, grassroots groups, indigenous groups, and other potential beneficiary organizations in the PPG7 (World Bank 1994). Still running, the GTA today maintains its own agenda.

In 1992, the World Bank established a multilateral financial mechanism called Rain Forest Trust Fund (RFT), with grants from Germany (the largest contributor), Canada, Italy, Netherlands, Japan, United Kingdom, United States, and the European Union. The RTF was matched by other funding, coming from project-by-project bilateral joint financing by some of the Pilot Programme donors (Germany, European Commission, United Kingdom, and United States), plus counterpart funding from the Brazilian government (World Bank 1992).

The objective of the Pilot Programme was formally established in the RTF resolution of the World Bank (1995, *emphasis added*):

> The overall goal of the Pilot Programme is to maximize the *environmental benefits of the tropical forests* of Brazil, consistent with the development goals of Brazil, through the implementation of sustainable development methodology that will contribute to the continued reduction in the rate of deforestation.

Projects funded to meet this objective received grants from the RFT, and from bilateral assistance, with resources provided by Germany, the European Commission, and the United States. The final value of international governments' contribution to the Programme reached approximately USD460 million. The Brazilian government (including federal and state programme participants), and some NGOs also increased their contributions, reaching about US$ 85 million, a value three times larger than the originally expected (World Bank 2009).

The design of the Pilot Programme was meant to provide an answer to the deforestation problem (World Bank 1994a). It was not, strictly speaking, a rural development initiative, although it had to deal with a problem essentially rural-based. As in the development programmes of the 1970s and the 1980s, the target was not an inclusive pattern of development. Over 18 years, between 1994 and 2012, the World Bank approved 28 contracts, while some others received bilateral funding. This series of projects financed a wide range of initiatives, all of them focused on the management of natural resources: timber and non-timber forest products.

Demonstration Projects

A key PPG7 initiative was termed 'Demonstration Projects Type A' (PDA), aiming to support activities that were meant to 'stimulate the development, adaptation or dissemination of environmentally, economically, and socially sustainable systems of natural resource management and conservation by local communities' (World Bank 1994b: 4); in other words, community-based sustainable rural production. The PDA initiative was approved in October 1994, and implemented with RFT resources until 2004. From 2004 until 2012, the initiative received bilateral financial and technical support from German development agencies. The first phase[4] counted with RFT grants amounting USD10.6 million, of which USD2.7 million were cancelled due to the incapacity of the projects to use available financial resources

[4] The World Bank divided the period 1994–2004 into two phases, which are considered here as only one stage.

(World Bank 2011). The second phase received about USd6.1 million, to be used in two kinds of projects, those aiming to 'consolidate' the lessons and positive results from the first phase and those seeking to reduce the use of fire in the preparation of land for cultivation (MMA 2012).

The 'demonstrative' nature was a reference to the expected character of these projects. They were based on the assumption that peasants and small-farmers were critical actors for the PPG7. The idea behind PDA was that community-based projects can control deforestation, be a source of recognition of local traditional forest-related knowledge, and build constituencies for sustainable development of forest resources at the local level. For the government, the PDA was meant to allow civil society organizations, working by themselves, or in association with the government, to develop feasible solutions to conservation and development. Project beneficiaries were to test, apply, develop, and disseminate 'alternative methods of management and conservation of natural resources that are economically, socially and ecologically sustainable' (MMA 1998: 14–15). Over the years, these demonstration projects adopted as a preferred strategy the implementation of agroforestry systems, trying to reconcile agro-ecology with forest-based extractive activities, producing fruits, oils, and fibres.[5] According to Meneses Filho & Almeida (2000), 70 percent of these projects were implementing agroforestry systems. In the large majority of cases, these projects involved some form of beneficiation and commercialization of natural resources, including frozen fruit pulp, soaps, and oils for human (comestible) and industrial use (cosmetics).

Participation of local groups was interpreted as essential for project performance. Both donors and government agencies identified some issues in which NGOs could, in their view, make a contribution, while other issues were considered too technical, or scientific, and therefore unsuitable for a participatory decision-making process (Abers 2001). The PDA was considered 'the home' of civil society in the PPG7. 'In a sense, the project became the flagship of integrating civil society in the Pilot Programme' (World Bank 2004). Only community groups, non-governmental organisations, local governments, small producer associations, and co-operatives could apply for grants (World Bank 2004). The Amazonian Working Group (GTA) would facilitate the participatory process, provide support for

[5] Some projects were implemented in the coastal area of Brazil, with a partially different profile, and are outside the scope of this article.

communities to prepare projects, disseminate findings, and provide support for the PPG7/PDA administration.

The PDA was essentially directed to support projects (90 percent of total PDA cost), but did not accept to pay wages for personnel working in beneficiary NGOs, associations, and co-operatives. From its total funds, the PDA also invested in evaluation and dissemination, and NGO strengthening (five percent of project cost for each). The small grants had a ceiling of USD300,000 to a single beneficiary over the project period, initially expected to be around three years. Initiatives receiving more than USD15,000 in funding were required to contribute with counterpart funds, which could include existing infrastructure, manpower, and vehicles; the average grant was USD125,000, excluding counterpart contributions (World Bank 2000). Grant proposals would vary according to the value requested: from a small-grant of USD 3,000 up to USD20.000.

The number of PDA funded projects is uncertain. Regarding its first phase, there are official references to 147, 224, and 240 projects. The second figure is, probably, closer to the reality, because it is currently quoted on the webpage of the Ministry of the Environment (MMA 2012a). The second phase, supported by funds from the German government, financed 42 projects, but this figure included projects in the Amazon and in the Atlantic Rainforest areas. The lack of precise information has been one of the pitfalls of the PDA since its inception, the second phase in particular lacking critical evaluation. The large majority of supported projects deal with processing and marketing of agroforestry goods.

A Sustainable Account?

There is no agreed framework against which sustainability of projects involving NGOs, associations, and co-operatives of peasants and small-scale rural producers should be judged. However, if sustainability at the local level involves six dimensions – social, economic, ecological, political, cultural, and ethical – sustainable development would be that which respects and enhances all of these.

In the beginning of 1998, the World Bank sponsored the publication of a booklet focusing on the constraints and opportunities for agroforestry systems in the Amazon, suggesting that the PDA should firmly adopt agroforestry, under the argument that it is ‘one of the most

environmentally-friendly ways to develop rural areas of the humid tropics' (Smith *et al*. 1998: 1). The authors added that agroforestry would have the potential to help raise living standards for many rural inhabitants, and 'can be seen as a risk avoidance strategy that diversifies sources of income for farmers' (Smith *et al*. 1998: 4). The authors, however, recognise and briefly analyse the extreme difficulties faced by small producers in terms of market penetration and control; marketing strategies; agricultural and industrial development; community organisation; access to adequate credit and extension services; bureaucratic and political barriers; and security and control over land ownership. Nevertheless, the document espouses agroforestry, mainly the commercial type, as a system that could be applied for the Amazon region as a whole, with environmental, social, and economic benefits.

Curiously, no PPG7 document offers a clear definition of the criteria against which sustainability at the community level should be measured, or, at least, reported with scientific standard. In fact, a great deal of PDA documentation interprets loosely the approach to sustainable rural development presented by Chambers (1983), which holds that empowerment and other non-economic alleged gains impact on monetary and non-monetary forms of income. Caporal & Costabeber (2003, 2004) follow the argument that the socio-ecological aspects should prevail in relation to economic ones.

Along the years of PDA implementation, it seems that the Wold Bank's view of agro-ecological systems opened space for a deep green approach, given that PDA project evaluations carried out by, or for, the federal government focused on other dimensions of the projects, rather than the economic one. Fatheuer (2000), Guimarães (2001), Leroy & Toledo (2002), and World Bank (2004) repeat the same arguments that the PDA projects contributed to (i) strengthen participatory management, (ii) strengthen rural producers' organization, and (iii) strengthen rural producers' capacity to influence public policies. The final evaluation of the PPG7 by the Ministry of the Environment states that 'all projects targeted to communities brought about increase in income; given that quality of life indicators show improvements that allow us to infer the improvement of income' (MMA 2006).

The same kind of generic observation appeared in the PPG7 mid-term review, carried out in 2000 (Indufor Oy & STCP 2000). The report states that the PDA had a 'visionary methodology' because it was based on participatory management. However, participation in development projects is a strategy that has been extensively studied and systematically

applied in community-based and rural development since the early 1970s (Freire 1972, Hardiman & Midgley 1982, World Bank 1989, Oakley 1991, Vivian 1992), and did not configure any 'visionary' approach in 2000. The same kind of argument applies to the World Bank (2004) statement that demonstration projects are intended to provide knowledge in 'uncharted waters', when, as a matter of fact, similar projects had already been implemented in Africa and Asia for decades.

In fact, participation has been token within the Pilot Programme and PDA project documents. As Fatheuer (2000) argues, those who effectively participate are intermediary NGOs. Peasants living in secluded areas of the Amazon just receive communication regarding the structure of the projects, and have little influence in daily management. Pareschi (2002) describes how the 'beneficiaries' of one such project, *Frutos do Cerrado* (Fruits of the Savannah), came to know of the counterpart they were to contribute after the PDA project was signed. Additionally, many associations and co-operatives were created around the Amazon just to obtain PDA funds.

Despite the widely expected and observed failure of community-based income generation projects, no document from the Brazilian government or from multilateral and bilateral organizations has admitted failure in the PDA project. The lack of economic feasibility in extractive (and agroforestry systems) had been pointed out by Homma (1992) at the outset of the Pilot Programme, but his analysis was not taken fully into account. Later, Fatheuer (2000), Meneses Filho & Almeida (2000), and Kornexl (2000) stressed the economic dimension as a deterrent factor to project success, and noted that the number of failed projects was high. One question that remained unanswered in PDA projects, and in the agro-ecological debate as well, is how the peasantry and small producers might overcome poverty without sustained commercialization of production, be it state-sponsored, or not.

The PDA strategy proposed that agroforestry systems should be based on the enrichment[6] of forest resources and the use of already existing agricultural and forest-based products. A more intensive agroforestry, however, is also labour-intensive, as well as gender insensitive, because it burdens women disproportionately. It happens because men will minimize risks by maintaining traditional agricultural practices and other activities that guarantee the

[6] Enrichment is the process of increasing in the number of species in a given area of land.

subsistence of the household; women, by its turn, becomes the responsible for agroforestry production. In fact, men tend to see the work with fruits as a delicate activity that should be performed by women and is not a male activity. So women are disproportionately burdened with agroforestry work, and, in addition, must continue to care for their children and take them along to their places of work so that they are not left alone (Barbanti 1999). As a consequence, peasants were driven to an adventure, because the result of such enrichment was unknown in terms of the production it would result on, and the labour time it would require, burdening especially women and children. Finally it yielded low economic and ecological viability (Meneses Filho & Almeida 2000, Kornexl 2000).

The adventurous character of PDA projects also had a political dimension. Barbanti (1999) analysed *in loco* the *Frutos do Cerrado* project, which the local rural elite considered to be a project associated with the left-wing Workers' Party (PT). This is because the project 'beneficiaries' were activists who for twenty years had waged a political and trade-union struggle against the patron-client relations promoted by the local rural elites. The activists had previously organized the local representation of the Workers' Party and also created the local rural producers' trade union, affiliated to CONTAG, an organization historically associated with left-wing parties, particularly the PT. Therefore, for the elite, project success implied a victory of the rural trade union, and the Workers Party. For the PDA and the World Bank, it just implied 'project' success.

In this case, the transformation of peasants into 'project beneficiaries' set into motion a new dynamic with adverse political consequences. In accordance with PPG7 eligibility criteria, the peasants of the *Frutos do Cerrado* were indeed organized and mobilized.[7] However, once the project began to face harsh economic, technological, social, and cultural difficulties, the association of rural producers was dismantled, and the highly participative political and trade union organizations of the peasants lost their influence. Failure was inevitable, because the project design, made by an intermediary NGO, was completely senseless in economic terms: the peasants were called upon to produce frozen fruit pulp in one of the warmest and economically most isolated parts of Brazil.

[7] The PPG7 criteria required that producers have some experience of associative work and at least one year of legal existence as a co-operative or a producers' association. At that time in the Amazon, those with such background were usually groups organized by the Catholic Church, or local trade unions.

Instead of documenting such scenarios, the monitoring and evaluation reports of PDA-funded projects reinforce the mantra of social, cultural, and ethical sustainability, and highlight some managerial improvements, or punctual economic gains. Evaluations have largely been done in a 'black box' approach: the objective of a given project is analyzed, but not contextualized, or contested, and 'observed outcomes are [understood as being] caused by the programme' (Love 2004: 65). For the World Bank (2004), a great deal of 'evaluations' of Pilot Programme and PDA projects 'are not scientific'. In fact, according to the Brazilian Court of Audit (TCU) (TCU 2009: 2, *our translation*):

> [i]t is interesting to note that, despite the flaws and difficulties that occurred along the PPG7 implementation, the audit noted the positive evaluation that external evaluators gave the Programme's implementation; an evaluation which is presented in official reports, and made public with the intention of keeping conservationists' grants arrangements, even after PPG7 closure.

One example of such 'positive evaluation' is the fact that no single project failure was scrutinized. Additionally, although demonstration projects have added to our knowledge of agroforestry, they cannot influence credit providers (banks and other financial institutions). As agued by Nazaré Souza (2010, recorded interview), former PPG7 national-co-ordinator at the Ministry of the Environment, '[a]fter testing agroforestry systems for fifteen years, PDA projects have no tangible information about the rate of return on investments in the sector, grace period needed, and productivity rates'.

Conclusion

The Pilot Programme and its PDA component ignored an extensive literature on rural development and agrarian change, and made use of a very selective approach to sustainability in its agro-ecology and agroforestry discourse, minimizing the importance of the economic component of rural activities. PPG7 and PDA are two expressions of a developmental intervention that is politically out of context in a highly political development landscape. They also overemphasized social gains, without considering that, without economic feasibility, other dimensions cannot be achieved.

By overstressing generic social, cultural, and ethical aims, PDA evaluations underestimated a number of negative impacts, as well as project failure. In fact, these two dimensions remain absent in official evaluations. Because of the lack of tangible arguments, and a clear theoretical pedigree, demonstration projects are probably better described as a random mix of theoretical inputs, from Marxist to liberal, under the general label of sustainable agroforestry. Chayanov, Chambers, Ellis, and World Bank are presented under the same logic of sustainability. The long-standing detrimental consequences of development programmes directed to capital-intensive agriculture are ignored.

In fact, the sustainability thesis, despite its correctness in principal, seems to be instrumental for those who intend to avoid conflictive social landscapes. Using the discourse of social participation in sustainability, PDA seems to have provided more participatory space to intermediary NGOs than to peasants. Because of the lack of proper evaluations after twenty years of project implementation, the PDA and its agro-ecological/agroforestry experiments continue to be cited as a positive experience, in which some examples of 'success' are highlighted. However, as in the case of the *Frutos do Cerrado* project, peasants with a long history of struggles against encroachment and environmental change lost their influence. No official evaluation brings out this analysis.

By transforming peasants into 'project beneficiaries', the Pilot Programme and its supporters have de-politicized long-standing struggles for agrarian justice. Sustainability, agroforestry, and social justice are not incompatible, and are supported by agrarian movements such as the Via Campesina (2010). However, the instrumental use of peasants as 'project beneficiaries', and the lack of a reality-test, seems to have made much more damage than benefit to agrarian movements.

References

Abers, Rebecca (2001). *Participação da sociedade civil no programa piloto para a proteção de florestas tropicais do brasil*. Brasília: Universidade de Brasília, Centro de Pesquisa de Políticas Públicas.

Altieri, Miguel., Anderson, M.Kat, Merrick, Laura C. (1987). Peasant agriculture and the conservation of crop and wild plant resources. *Conservation Biology*, (1), 49–58.

Barbanti, Olympio (1999). *Urban dimensions in rural livelihoods: implications for grassroots development and sustainability in the Brazilian Amazon*, PhD Thesis, London School of Economics and Political Science.

Bates, Robert H. (1988). Governments and agricultural markets in Africa. In Robert H. Bates (Ed), *Toward a political economy of development: a rational choice perspective*. Berkley, CA, and London: University of California Press.

Bates, Robert H. (1989). *Beyond the miracle of the market: the political economy of agrarian development in Kenya*. Cambridge: Cambridge University Press.

Bates, Robert H. (1990). The political framework for agricultural decisions. In Carl K. Eicher and JohnM. Staatz (Eds), *Agricultural development in the third world*. (pp. 154–58). Baltimore, MD, and London: Johns Hopkins University Press.

Chambers, Robert (1983). *Rural development: putting the last first.* Longman: Essex.

Caporal, Francisco R. & Costabeber, José A. (2000). Agroecologia e desenvolvimento rural sustentável: perspectivas para uma nova extensão rural, *Agroecologia e desenvolvimento rural sustentável*, (1), 16–37.

Caporal, Francisco R. & Costabeber, José A. (2003). Possibilidades e alternativas do desenvolvimento rural sustentável. In Hugo Vela (Ed), *Agricultura familiar e desenvolvimento rural sustentável no Mercosul*. (pp. 157–94). Santa Maria: Editora da UFSM/Pallotti.

Caporal, Francisco R. & Costabeber, José A. (2004). *Agroecologia: alguns conceitos e princípios*. Brasília: MDA/SAF/DATER-IICA.

Chayanov, Alexander (1991[1919]). *The theory of peasant co-operatives*, trans. D. Wedgwood Benn. Columbus: Ohio State University Press.

Eicher, Carl K., & Staatz, John M. (Eds) (1990). *Agricultural development in the third world*. Baltimore, MD, and London: Johns Hopkins University Press.

Ellis, Frank (2000). *Rural livelihoods and diversity in developing countries*. Oxford: Oxford University Press.

Fatheuer, Thomas (2000). Aspectos sociais. In World Bank, *PDA: subsídios para avaliação de cinco anos do programa*. (pp. 19–33). Brasília: World Bank.

Freire, Paulo (1972). *Pedagogy of the oppressed.* London: Sheed and Ward.

Graziano da Silva, José (1996). *A nova dinâmica da agricultura brasileira*. Campinas: Universidade de Campinas.

Guimarães, Alice (2002). *Projetos demonstrativos, PDA: relatório de acompanhamento, AMA*. Brasília: Ministério do Meio Ambiente.

Habermas, Jürgen (1992). *The structural transformation of the public sphere*. Cambridge: Polity Press.

Hagemann, Helmut (1994). *Not out of the woods yet: the scope of the G7 initiative for a Pilot Program for the Conservation of the Brazilian Rain Forests*. Saarbrücken: Verlag für Entwicklungspolitik Breitenbach GmbH.

Homma, Alfredo K.O. (1992). The dynamics of extraction in Amazonia: a historical perspective, *Advances in Economic Botany*, (9), 23–31.

Howell, Jude & Pearce, Jenny (2001). *Civil society and development: a critical exploration*. Boulder: Lynne Rienner.

Indufor OY & STCP Engenharia de Projetos Ltda (2000). *Revisão de Meio Termo do Programa Piloto de Conservação da Floresta Tropical Brasileira*. Curitiba: Indufor OY and STCP.

Jodha, Narpat S. (1988). Poverty debate in India: A minoritary view, *Economic and Political Weekly*, Special Issue, 23(45–47), 2421–25, 2427–28.

Johnson, Craig (2001). Local democracy, democratic decentralisation and rural development: theories, challenges and options for policy. *Development Policy Review*, 19(4), 521–32.

Kornexl, Werner (2000). Aspectos econômicos. In *World Bank PDA: subsídios para avaliação de cinco anos do programa*. (pp. 70–93). Brasília: World Bank.

Leach, Melissa & Mearns, Robin (1991). *Poverty and environment in developing countries: an overview study*, report to the Economic and Social Research Council (Society and Politics Group and Global Environmental Change Initiative Programme) and the Overseas Development Administration (DFID). Brighton: IDS

Leroy, Jean Pierre & Toledo, G.T. (2001). *Programa Piloto de Proteção às Florestas Tropicais do Brasil, experiências PDA nº 1: projeto Frutos do Cerrado, novo rumo para o desenvolvimento regional*. Brasília: Ministério do Meio Ambiente.

Lewis, W. Arthur (1954). Economic development with unlimited supplies of labour, *Manchester School of Economics and Social Studies*, 22(2), 139–91.

Love, Arnold (2004). Implementation evaluation. In Joseph S. Wholey, Harry P. Hatry & Kathryn E. Newcomer (Eds), *Handbook of practical program evaluation*. (pp. 63–97). San Fancisco, CA: Jossey-Bass.

Hardiman, Margaret G.W. & Midgley, James (1982). *The social dimension of development: social policy and planning in the third world*. New York, NY: John Wiley and Sons Limited.

Meadows, Donella H. (1972). *The limits to growth*. New York, NY: Universe Books.

Meneses Filho, Luis & Almeida, Debora (2000). Aspectos sociais. In World Bank, *PDA: subsídios para avaliação de cinco anos do programa*. (pp. 34–54). Brasília: World Bank.

MDA [Ministry of Agrarian Development] (2011). Família assentada da reforma agrária, www.mds.gov.br/cgsgrupos_populacionais/textos/assentada_da_reforma_agraria.pdf, accessed 18 October 2012.

MMA [Ministry of the Environment] (1998). *Pilot Programme to conserve the Brazilian rain forests*. Brasília: Ministry of the Environment, Water Resources and the Legal Amazon and the World Bank.

MMA [Ministry of the Environment] (2006). Consolidated review of the *Pilot Programme to Conserve the Brazilian Rain Forests.* Brasília: Ministry of the Environment.

MMa [Ministry of the Environment] (2012). *Subprograma projetos demonstrativos (PDA): Amazônia*, www.mma.gov.br/apoio-a-projetos/sociobiodiversidade/item/824-amaz%C3%B4nia, accessed 23 October 2012.

MMA [Ministry of the Environment] (2012a). Online tables of PDA supported projects, http://www.mma.gov.br/estruturas/pda/_arquivos/Estrutura%20-%20Institucional%20-%20Tabela%20de%20Projetos%20PDA%20Fase%20I.html and http://www.mma.gov.br/estruturas/pda/_arquivos/Estrutura%20-%20Institucional%20-%20Tabela%20de%20Projetos%20PDA%20-%202010.htm, accessed 23 October 2012.

Mueller, Charles C. (1991). Dinâmica, condicionantes e impactos socioambientais da evolução da fronteira agrícola no Brasil, *ISPN Working Paper No. 7*. Brasília: ISPN.

Oakley, Peter (1991). *Projects with people: the practice of participation in rural development.* Geneva: World Employment Programme, International Labour Office.

Ozorio de Almeida, Anna Luiza & Campari, Joao S. (1995). *Sustainable settlement in the Brazilian Amazon*. Oxford: Oxford University Press.

Pareschi, Ana Carolina Cambeses (2002). *Desenvolvimento sustentável e pequenos projetos: entre o projetismo, a ideologia e as dinâmicas sociais*. PhD Thesis, *Universidade de Brasília*.

Perz, Stephen G. (2002). The changing social contexts of deforestation in the Brazilian Amazon, *Social Science Quaterly*, 83(1), 35–52.

Putnam, Robert (1993). *Making democracy work: civic traditions in modern Italy*. Princeton: Princeton University Press.

Rodas, M. A. Flores (1986). *Tropical forestry action plan*. Lanham: Bernan Associates.

Schultz, Theodore William (1964). *Transforming traditional agriculture*. New Haven, CT: Yale University Press.

Sen, Amartya K. (1983). *Poverty and famines: an essay on entitlement and deprivation.* Oxford: Oxford University Press.

Smith, Nigel, Dubois, Jean, Current, Dean, Lutz, Ernst, & Clement, Charles (1998). *Agroforestry experiences in the Brazilian Amazon: constraints and opportunities.* Brasília: The Pilot Programme to Conserve the Brazilian Rain Forest.

Stewart, Frances (1985). *Planning to meet basic needs*. London: MacMillan.

Souza, Nazaré (2010) Recorded interview, 9 April 2010, Brasília.

Timmer, C.Peter, Falcon, Walter P., & Pearson, Scott R. (1983). *Food policy analysis*. Baltimore, MD: Hohns Hopkins University Press.

TCU (2009). "Proposta de Deliberação - TC 015.053/2009-4". *Mimeo*. Brasília: Brazilian Court of Audit, 30 September 2009.

Via Campesina (2010). Sustainable peasant and family farm agriculture can feed the world, http://viacampesina.org/downloads/pdf/en/paper6-EN-FINAL.pdf, accessed 26 October 2012.

Vivian, Jessica M. (1992). Foundations for sustainable development: participation, empowerment and local resource management. In Dharam Ghai & Jessica M. Vivian (Eds), *Grassroots environmental action: people's participation in sustainable development*. (pp. 50–77). London: Routledge.

WCED [World Commission on the Environment and Development] (1987). *Our common future*. Oxford: Oxford University Press.

Wood, Charles H., & Schmink, Marianne (1978). Blaming the victim: Small farmer production in an Amazon colonization project. In Emilio Moran (Ed), *Changing agricultural systems in Latin America*. Williamsburg, VA: College of William and Mary.

World Bank (1989). *People and trees: the role of social forestry in sustainable development*. Washington, DC: World Bank EDI Seminar Series.

World Bank (1992). *Resolution IBRD No. 92: establishment of the Rain Forest Trust Fund (RFT)*. Washington, DC: World Bank.

World Bank (1994a). *Pilot programme to conserve the Brazilian rain forest*, memorandum and recommendation of the Director of the Latin America and the Caribbean Department 1 to the Regional Vice President on a proposed grant from the Rain Forest Trust Fund in an amount equivalent to USD 3 million to the Bank of Brazil for

demonstration projects, draft report No. 12602-BR, 26 July. Washington, DC: World Bank.

World Bank (1994b). *Project description: Brazil Pilot Program to Conserve the Brazilian Rain Forest, February 1994*. Washington, DC: World Bank.

World Bank (1995). Implementation begins on pilot program to conserve Brazilian rain forest: four projects signed, *Environment Bulletin*, 7(2).

World Bank (1995). *Rain forest grant trust agreement TF21953BR*. Washington, DC: World Bank.

World Bank (2000). *PDA: subsídios para avaliação de cinco anos do programa*. Brasília: World Bank.

World Bank (2004). *Implementation completion report, ICR-PDA*. Brasília: World Bank.

World Bank (2009). *Financial report: fiscal years 2008 and 2009*. Brasília: World Bank Brazil Rain Forest Unit.

World Bank (2011). Rain forest unit monitoring table, mimeo, Brasília.