Annex C

BRIEFING PAPER - FINAL DRAFT

POLICIES AND INSTITUTIONS FOR SUSTAINABLE LAND MANAGEMENT IN AMAZONIA – AN ASSESSMENT OF PRONAF AND ENVIRONMENTAL CRIMES LEGISLATION IN PARA STATE

1. Overview

Interventions by government, international donors and NGOs have apparently failed to stem increasing poverty and environmental destruction at the forest frontier. Previous studies have often indicated that there are few links between agrarian and environmental policies and that they often work in conflict and exacerbate social and environmental problems. However recent policy initiatives have attempted overcome this and have not yet been evaluated. This research examines the development, implementation and impacts of recent agrarian and environmental policy in Amazonia. In doing this is seeks to address some key questions:

Why is there so little integration of agrarian and environmental policies? Where are the spaces for opening up the policy debate and the policy process to wider participation, including civil society actors?

The paper provides a briefing on the findings to inform and engage in discussions with key policy actors in order to identify opportunities for further integration and inclusion in policy processes. The paper has been prepared using secondary data sources from collaborating scientists and institutions, and from interviews with key informants and through a series of workshops in different sites in eastern Amazonia. The sites are Maraba, Altamira and Conceição do Araguaia in Para state.

2. The policies and policy instruments

2.1 PRONAF: The National Programme for Family Agriculture

Created in 1996, this is currently the most important government agrarian programme. It represents the first set of measures directed specifically to family agriculture. The key policy instrument is credit for agricultural production, infrastructure and training. PRONAF incorporates existing mechanisms for implementation of agrarian policy (including credit such as FNO-special and PROCERA), but places them under a unified programme that involves the participation of the government at federal, state and municipal level in partnership with civil society.

In Marabá these funds reached more than 6 000 families (from population of 20 000), and around R\$175 million were invested between 1992 and 2000. In Altamira, around 3500 families (population 15000) have benefited.

Credit is released to farmers organised in associations. In all three regions farmers with larger farms and settled for longer periods were the first to receive credit and it has proved difficult for poorer farmers, and impossible for landless, to access these funds. Farmers have to adopt technical packages and technical assistance indicated by the bank. Although the intention of these instruments was to contribute towards diversification with perennial crops, most of the resources have been invested in cattle and ranching by farmers.

2.2 Forestry code and Environmental Crimes Law

The Brazilian forestry code and the environmental crimes law form the legal framework regulating land use. The State of Pará does not have its own forest legislation and the state environmental agency applies the norms of the Brazilian Forestry Code. However, the state environmental body (SECTAM) is not active in the interior of the state. Thus the performance of the federal agency IBAMA is more important. In recent years the government has increasingly attempted to control land use with the following measures.

 Reduction of the right to the deforestation. The President of the Republic, using Provisional Measures diminished the right to deforestation in Amazonia from 50% of a given property to only 20% so that land holders are legally obliged to maintain 80% forest cover on their land.

- The state approved the law of environmental crimes in 1998. This law establishes serious penalties for illegal deforestation and transport of forest products (wood, coal) without authorization.
- Systematic strategies for surveillance and monitoring. Since 1996 the federal government has undertaken annual monitoring, which has involved increasing the presence of inspectors in the region at least during the dry season. Between 1994 and 1997, the federal government almost quadrupled the budget for monitoring of the natural resources in Amazonia (R\$ 0.5 million to R\$1,8 million). The number of fines imposed for all environmental crimes in the same period in Amazonia doubled (5200 to 11000) although monitoring campaigns have focused mainly on large properties (or more than 3000 ha).

The organisations responsible for monitoring, particularly IBAMA, have little power to act. Although monitoring has increased, there is evidence that it has been ineffective. In Altamira IBAMA officers carry out inspections on less than 1% of farms where farmers have requested deforestation authorizations. In the whole of the state of Pará there are only 67 inspectors, where the minimum number required for implementation of monitoring would be in the region of 1500 Given this scarcity of staff there is little effective control of forest fires or deforestation made by farmers.

2.3 Summary

There is a large discrepancy in investments and effort in implementing these policies. For example, R\$ 1.8 million have been spent on environmental control in the whole of Amazonia, while more than R\$ 175 million were invested in agriculture only in Marabá region alone.

3. The policy process

3.1 Policy actors

Table 1 summarises the actors involved in the policy process and identifies their main interests and strategies. It identifies twelve groups of key actors that include land managers, politicians and policy makers, interest groups who influence policy processes and those who inform policy. They employ different strategies to further their interests in the two policies.

Actors	Main interests in agrarian policies	Main interests in environmental policies	Main strategies		
Colonist farmers Land tenure and title access to credit and services, diversificat production		Technical and economic alternatives to agriculture and forest conservation. Freedom to deforest or burn without legal restrictions	Join farmers' organisations.		
Large land holders Maintenance of large areas and access to credit and subsides		Freedom to deforest or burn without legal restrictions	Pressure on and contact with local and regional politicians		
Loggers Expansion of the frontier to continue timber		Freedom to exploit forest resources without restrictions or legal requirements	Pressure on and contact with local and regional politicians		
Local politicians (mayors, city council representatives)	vors, city council and access to services, conservat		Pressure on and contact with local and regional politicians. Contacts with government bodies (INCRA, Ministries) Support the creation of new associations.		
Regional-national politicians (members of the house of representatives, senators)	Increase infrastructure and access to services, increase agricultural production	Bancada ruralista support large holders interests and seek reduction in legal restrictions for use of natural resources. Left wing and environmentalists (smaller group) increase monitoring and control on the use of natural resources, incentives to producers, support creation of protected areas.	Propose and support laws and measures in congress and the executive to support their interests. Collaboration with sectors of the civil society which they have affinity. Mobilisation of the media		
Farmers' organisations e.g FETAGRI, MST	Land tenure and title, access to credit and services, diversification of production	Technical and economic alternatives to agriculture and forest conservation. Control of use of resources, mainly by large land holders	Interaction with local, regional and municipal NGOs. Organisation of occupations. Pressure on government bodies		
Rural/sustainable development NGOs e.g. FASE, CPT	elopment NGOs access to credit and alte		Implementation of sustainable development projects. Support and links with farmers' organisations. Contacts with government bodies		
Regional and national environmentalist NGOs e.g. WWF Brasil, ISA, Vitoria Amazonia	Land tenure and titling, clearly delimiting areas for agriculture and forest preservation	Increase and more intense application of forestry legislation, support the creation of protected areas, projects supporting flora and fauna conservation, creation of ' green ' incentives for the agricultural producers	Pressure on government and national politicians. Links with national and international environmentalists. Campaigns and mobilization of the media around environment issues. Support to conservation projects.		
MEAD- INCRA	Land tenure regularization, decrease number of conflicts and occupations, consolidation of settlement areas	Until recently no major concerns. Recent interest in minimizing the impacts of agrarian reform on the environment through the creation of new models of settlement.	Negotiation with social movements, support planned or current policies in governments or regional-national politicians		
MMA- IBAMA	No direct concern	To implement the legislation on use of the natural resources.			
State banks e.g. BASA, Banco do Brasil To finance agricultural production, able to generate profit so that farmers do not become defaulters		none	Seek guarantees and adoption of banking strategies that minimize losses on loans.		
Academics e.g. UNICAMP, USP, UnB Support social justice aims of NGO movements		Support conservation aims of environmental NGOs	Links with social movements and NGOs. Undertake studies that can influence the state apparatus in the adoption of some policies.		

Table 1: Actors, interests and strategies in policy processes

3.2 PRONAF

The government concern with family farming and with land reform is primarily the result of demands from civil society, notably farmers' movements and the MST. We can identify two important factors which influenced the development of PRONAF. First, key academics from the USP and University of Pernambuco worked closely with Ministries of Agriculture and MEAD-INCRA (Novo Mundo Rural) and with farmers' organisations at the national level (CONTAG and MST) to develop the pilot PRONAF programme in north-east Brazil. Secondly, farmers' movements in at the national and regional level determined the focus on credit and the shape of the FNO –special. The farmers' organisations at national and at state level influenced the adaptation of the credit programme.

Thus we find that PRONAF and FNO credit are result of linkages between different segments of society at a time when the role of family agriculture was acknowledged as critical for reducing inequalities within rural and urban regions in Brazil. The policy framework however, is mainly a result of contact between bureaucrats in Brasilia and academics then their adaptation influenced by farmers' organisations.

The amount of funds to reach a given state is decided in Brasilia and is the result of bureaucratic decisions taken with little participation of state or local politicians. Once amounts are decided all the actors at the local-regional level participate in decision making on how resources will be applied within the policy framework. Farmers' organisations decided which settlements were targeted and within settlements local associations decide who will receive funds. However the municipal councils created to manage PRONAF have not been effective and most of the negotiations between INCRA and the Banks are result of land occupations. Even farmers who have received credit have little knowledge about the wider agrarian policy itself partly because the policy instruments – credit, technical assistance – change in terms of their mode of implementation on an almost yearly basis.

3.3 Forestry Code and Environmental Crimes Law

The environmental legislation is the result of the struggle between government officers within the Ministry of the Environment, environmental NGOs and members of the Congress. The Brazilian Government and NGOs are significantly influenced by the international pressures to reduce deforestation and influential NGOs such as WWF, Greenpeace and Friends of the Earth which have Brazilian offices and links with local NGOs. They have developed effective global networks for example the international diffusion of emails messages when there were proposals to change the forest code.

Farmers and resource users, apart from large landholders who are in direct contact with members of the Congress, have little opportunity to participate in policy making and policy implementation. At regional and local level farmers are aware of the new limits for deforestation and the need for licences for fires. They are not aware of other limitations and are not interested in promoting changes to the legislation, despite not agreeing with sanctions and limitations. There are no local mechanisms to foster the participation and the discussion of policy or legislation or for example to denounce environmental crimes at the regional or local level. Municipal authorities are not concerned with monitoring natural resources or any type of zoning, although some exceptions are found in Altamira.

Figure 1 summarises the influence of these different actors on policy processes for agrarian and environmental policies.

High High Colonist farmers Large landholders Loggers **Environmental crimes law PRONAF** Local politicians Regional-national politicians Farmers' organisations NGOs rural development **Environmental NGOs MEAD-INCRA** MMA- IBAMA State Banks Academics

Figure 1: Influence of different actors on policy process

3.4 Horizontal and vertical links between policy actors and processes

There is little contact between with farmers' organisations – unions and regional FETAGRI – and their representatives in Brasilia in CONTAG (Altamira being an exception). CONTAG participates in negotiations with the federal government with little or no consultation with people in Pará. Left wing politicians from Pará have good contact with CONTAG in Brasilia and support their action. This does not happen with the MST, whose policy is well integrated and discussed at all levels

In environmental policies, CONTAG and MST support signing petitions or attending some official meetings when environmental NGOs invite them to these events. However, they are never at the forefront of these discussions. They do not inform their partners in Para of these activities or at least do not do so systematically.

Government officers in Pará do not have influence on policy making in Brasilia. They receive orders and documents from Brasilia and are rarely consulted in any other way. They receive training and are assisted by consultants and officers from Brasilia on how to carry out tasks related to new policies. This applies to both agrarian and environmental organisations.

At the national level there has not been any kind of integration between agrarian and environmental policies. Recently the Ministry of Agrarian Environment has articulated concern, following environmentalists' complaints about the number of new settlements in Amazonia, and issued a decree prohibiting new settlements on forested areas, but this has not been implemented. There is also an internal policy to push for the creation of Agro-extractivist settlements instead of traditional settlements but this is not accepted by local people, nor is it well received by regional INCRA offices.

Very recently (2001) the BASA has created rules that credit will not be used to clear forested areas, but how this will be monitored is not yet clear. PRONAF in Brasilia has an officer dealing

with environmental issues within the Programme, but generally there is little emphasis on natural resource conservation.

Farmers' organisations, with support of regional NGOs, have proposed a new type of credit (PROAMBIENTE) to support projects with a conservation component such as forest extraction or agroforestry. This credit would have a longer repayment period and part of the debt would be not paid by the farmer but would be assumed by an Environmental Services Fund (although where these funds come from is not clear in their proposal). This proposal has been discussed by leaders and NGOs workers in contact with BASA but there has been little discussion with local associations or grassroots farmers.

4 Changes associated with policy implementation

It is difficult to identify direct cause and effect relationships between changes in land management and livelihoods and the implementation of policy instruments. Research has analysed changes through reviewing secondary data and has used interviews and workshops to explore the possible linkages between the specific instruments and observed changes. However other factors also influence land managers' decisions so although the policies may make a significant contribution to change, they are seldom the sole factor driving change.

4.1 Changes in farming systems

The credit programmes associated with PRONAF appear to have increased the speed of change in farming systems, leading to a rise in cattle production and area pasture area. Although part of the credit was directed to perennial crops, problems in implementation have lead to failure of many projects. Even in Altamira, were farming systems already had an important perennial crops component (cacao, coffee, pepper), credit appears to have induced farmers to invest in animals and infrastructure for ranching (Table 2).

Table 2: Number of farmers with cattle and pasture before and after access to FNO credit in two localities in Altamira¹

	Number with	Number with	Number with	Number with
	pasture before	pasture after	cattle before	cattle after
	access to FNO	access to FNO	access to FNO	access to FNO
	credit	credit	credit	credit
Medicilândia	11	29	7	31
Pacajá	16	30	5	26

4.2 Economic impacts

Most interviewees have a positive view of the economic impacts of credit on farmers. Farmers who have received credit have more resources to invest in production and overall their capital more than doubled in comparison to farmers who have no access to credit (Table 3). Some land reform credit, such as that for housing, directly contributes to the improvement of living standards. Furthermore, the volume of resources injected locally has boosted local commerce, and new roads help to link farmers to the markets

¹ Peixoto, L. and Sablayrolles, P. 2001. 'Crédito Rural para a Agricultura Familiar: o caso do FNO Especial-PRORURAL na Transmazônica' *IV Reunião da Sociedade Brasileira de Sistemas de Produção*. Belém: SBSP- NEAF-UFPa.

Table 3: Access to credit and average capital assets increase for farmers in two settlements in Conceição do Araguaia²

Settleme nt	Years of settlement	PROCER	A credit	Other credit		Initial capital (R\$)	% increase in capital assets
		Average amount (R\$)	% farmers receiving	Average amount (R\$)	% farmers receiving		
Pecosa	7	0	0	0	0	813700	138
Joncon	9	3550	95.5	1200	13.6	1012436	211

Capital refers to household assets including land.

4.3 Environmental impacts

The lack of control of deforestation and fires, coupled with investment in livestock and agricultural production has resulted in more deforestation. This is clear when comparing areas receiving and not receiving credit (Table 4). Even farmers who were already specialized in perennial crops in Altamira have cleared new areas, as they have more money to invest and there were few incentives to keep forest.

Table 4: Comparison of land use for two settlement areas in Conceição do Araguaia³:

	% cover (average per farm)					Annual	
	Pasture		Fallow		Forest		deforestation
	before	after	before	after	before	after	%
Pecosa – without credit	11.5	42.3	21.4	12.0	66.9	37.8	1.64
Joncon – with credit	10.4	41.9	8.8	8.1	80.7	39.5	2.57

4.4 Migration

Interviewees believe that the credit has contributed to the sedentarisation of the farmers who have received it. This is because it increased their income, in the case of land-reform credit, it has improved their quality of life (houses, infrastructure, easier access to services) and in addition farmers cannot obtain more credit if they move to a new area. However in some instances this has led to land re-concentration, as the new better-off farmers have bought remaining forested land from poorer farmers not receiving credit. Thus credit induces social differentiation although this is not found in areas where credit is more evenly and widely distributed, such as in the MST settlements.

4.5 Institutions

As credit is not released to individual farmers, legal associations are necessary to intermediate and regulate access to funds, there has been a boom of new associations in all the regions (Figure2). Some of these associations were linked to farmers' unions, while others have been created by local politicians. The unions have transformed their internal organisation to accommodate the requirements and a Central Association has been created by groups not linked to the unions to co-ordinate their action. While most of the associations are interested mainly in credit, some of them are supporting local demands for improvement of services or implementing rural development projects with NGOs or government support.

³ Medonça, 1997

² Mendonça, M.V. 1997. 'Estudo sócio-econômico de Sistemas Agroflorestais na região de Conceição do Araguaia' *ESALQ-Departamento de Economia e Sociologia Rural*. Piracicaba - SP: USP.

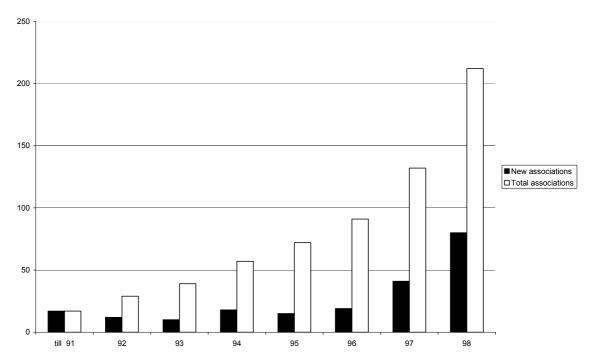


Figure 2: Number of associations in South-eastern Pará 1991-1998

Summary

The data indicate and all interviewees agreed that agrarian policies are working against environmental conservation, albeit in indirect ways. However, there have been some positive economic and social impacts on farmers who have access to credit and other services within the land reform programme. But as access is not widespread in all localities or to all the farmers within the same locality, this is speeding a process of social and economic differentiation. While those farmers who have benefited have incentives to stay on their plots, poorer farmers may move to towns or to new frontier areas. Figure 3 illustrates the linkages between the observed changes and the policies.

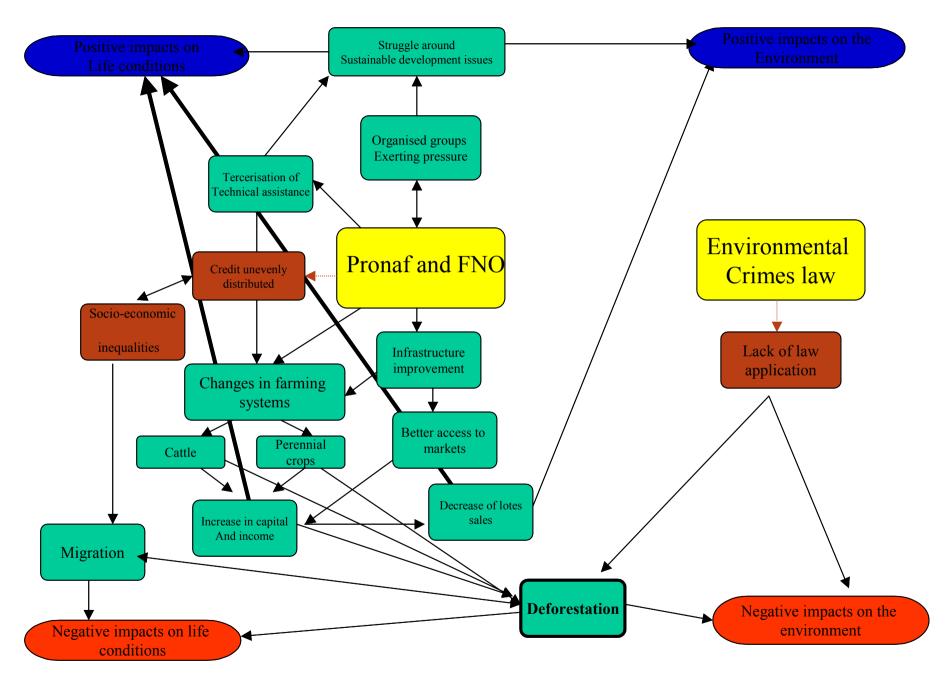


Figure3: Implementation and changes associated with the policies