



Santarem, Brazil (Re)Introducing the commons: Implementation of Agro-Extractive Settlements in the Lower Amazon Floodplain¹

Name of the policy: Agro-Extractive Settlement Project (Projeto de Assentamento Agroextrativista, PAE)

Start date: 2005

Completion date: Ongoing

CONTEXT

GOVERNMENTAL CONTEXT

City context

The municipality of Santarem, founded in 1640, is the major urban center of the Lower Amazon meso-region, which covers 722.358 km² and includes 25 municipalities. With an area of 22,887 km², Santarém occupies a strategic local at the confluence of the Tapajós and Amazon Rivers.

¹ The **Inclusive Cities Observatory** is a space for analysis and reflection on local social inclusion policies. It contains over sixty case studies on innovative policies for community development, access to basic services, gender equality, environmental protection and the eradication of poverty, among others. The initiative has been developed with the scientific support of Prof. Yves Cabannes from the University College of London (15 case studies) and a team of researchers from the Centre for Social Studies (CES) at the University of Coimbra, which has worked under the supervision of Prof. Boaventura de Sousa Santos (50 study cases). This Observatory aims to identify and investigate successful experiences that might inspire other cities to design and implement their own social inclusion policies.

The **Inclusive Cities Observatory** has been created by the Committee on Social Inclusion, Participatory Democracy and Human Rights of UCLG. United Cities and Local Governments (UCLG) is the global platform that represents and defends the interests of local governments before the international community and works to give cities more political influence on global governance. The **Committee on Social Inclusion, Participatory Democracy and Human Rights** aims to contribute to building a common voice for the cities of UCLG in the areas of social inclusion, participatory democracy and human rights. It also aims to guide local governments in designing these policies and to that end, fosters political debates, the exchange of experiences and peer learning among cities around the world.

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The municipality's estimated population in 2010 was 294,774 inhabitants of which about 73% were classified as urban (Prefecture of Santarém website). In recent years, Santarém has experienced an annual population growth rate of 4.75%.

Santarém lies at the crossroads of two major developing transportation axes of the Amazon basin: the Amazon River, running West-East, and the still largely unpaved BR-163 highway that runs North-South connecting Santarém to the city of Cuiabá in the heart of the grain-producing region of western Brazil. The Br-163 highway also crosses the Transamazon highway network that parallels the Amazon River to the South. A 900 km stretch of the BR-163 highway in the state of Pará is now being paved to provide access to the international port at Santarém for Mato Grosso grain and timber from the forests along the highway. In 2003, Cargil constructed a port facility in Santarém with capacity to store 60,000 tons of grain.

The GDP of Santarém is based on commercial activities (77%), followed by industrial production (14%) and agro-pastoral activities (9%). Santarém is the second most important region in the state for agropastoral products, including fish, cattle, and crops. Family farming is responsible for providing fresh food to local market, such as fruits, vegetables, grains, and root crops. Santarém is also an important fish market with 5.5 tons landed in 2008, making it the third most important fishing port in the state (Prefecture of Santarém website). Soybean farming in Santarém expanded rapidly in the early 2000s, but has since stagnated due to a lack of lands with legal title and conflicts with grassroots movements.

Despite a history in which smallholders (small landholders) and traditional people have had limited political power, Santarém has a long history of grassroots organization and resistance dating back to the Cabanagem Rebellion in the 1830s (Harris 2010). Santarém was a major focal area of resistance to the military dictatorship in the 1970s and 1980s and opposition to the expansion of frontier ranchers and commercial loggers and fishers in the late 1980s and 1990s. Beginning in the 1960s, Catholic Church programs inspired by Liberation Theology invested heavily in the organization of rural communities and the education and training of local leaders. The grassroots organizations and leadership developed through this process played a central role in the resistance movements of smallholders and traditional peoples in the 1980s and 1990s. Even after the Church began dismantling these programs in the 1990s, these leaders and organizations now allied with NGOs, continued to play a major role in Amazonian social movements.

Governmental decentralization context

Until the 1990s, conservation policies in Brazil were fragmented and disconnected from territorial and agrarian policies. Natural ecosystems were mostly managed through conservation units by the state with no legal rights for local residents. At the same time, agrarian development policies emphasized large-scale projects (e.g., agribusiness and infrastructure) in highly productive and spatially connected areas while small farmers benefited from the establishment of agrarian reform settlements in marginal areas. This model led to several social impacts. First, traditional populations were socially excluded from policy schemes as they lacked formal rights to live in protected areas and their production systems were not suited to the mainstream territorial and agrarian policies. Second, the lack of institutional coordination between different state agencies led to political divergences due to conflicting goals. Third, the





blueprint model and lack of participation of users in the policy design and implementation led to unequal distribution of benefits and environmental costs across social groups.

The democratic transition initiated in the 1980s opened new political spaces for environmental citizenship and institutionalization of decentralized processes (Hochstetler & Keck 2007). The Constitution of 1988 recognized traditional populations with special rights to their lands and natural resources; in 2000, the National System for Protected Areas was approved in which 'traditional populations' were formally defined as 'groups who self-recognize as culturally differentiated and hold their own social organization, territorial and natural resource use as a way to reproduce their cultural, social, religious, ancestral, and economic conditions, using knowledge, innovation, and practices generated and transmitted through traditional means'. Another advance was the decentralization of many environmental regulations from federal to state and municipal levels. This shift facilitated the development of co-management policies for fisheries by enabling regional superintendents to formalize local fishing rules into administrative decrees ('Portarias'). Likewise, the national agrarian reform agency (INCRA) also gave regional Superintendencies increased autonomy in defining and implementing regional settlement policy. Responsibility for environmental licensing of new settlements was also transferred from IBAMA (federal) to state environmental agencies. The 2006 Public Forests Legislation transferred to state environmental agencies the responsibility for evaluating and monitoring forest management plans. The success of these measures has been mixed, largely due to the limited human and financial resources of state and municipal governments and often to greater political interference. In some cases, however, decentralization has facilitated more participatory approaches to environmental management. While not without problems, this has been the case with floodplain fisheries and, more recently, settlement policies.

The new environmental/territorial governance recently created and implemented for the Amazon floodplain combines national state property rights to wetlands with decentralized exclusive use and management rights to local communities. This structure is based on partnerships between the state and non-state actors and the integration of traditional practices in a broader institutional framework (Pinedo-Vasquez et al. 2011). The PAE settlement model is the latest phase in the development of co-management institutional and policy frameworks for floodplain fisheries and other resources. INCRA is the governmental agency in charge of the creation and implementation process of the PAEs, described below in detail.

The co-management policy is a federal policy for fisheries, which has been most fully implemented in the Amazon region and especially in the Lower Amazon. The main institutions supporting the development of the co-management system have been federal institutions, IBAMA, the Public Ministry, and now INCRA. Their policies have been applied at the regional level within various Amazonian states. State government involvement in development and implementation of co-management policies has varied.

Institutional level of policy development: Region – Lower Amazon, including five municipalities; National; and Intermunicipal (multiple communities)



SOCIAL CONTEXT

The two main social groups on the floodplain are smallholders, most of whom are clustered in communities, and larger landholders who occupy much of the surrounding floodplain. Floodplain smallholders are part of the larger social category of Amazonian peasants combining indigenous, African, and European descents (Adams et al. 2009). Locally called *varjeiros*, the population is organized in communities located along the high levees of the main riverbank or islands (Castro 2009). A typical floodplain community is composed of 30 to 100 households, descendents of a few family groups. A few collective buildings can be found in the centre of the community, such as churches, a school, a health centre, and a community centre. The communities are organized in associations or leadership groups, and social activities include soccer teams, mothers' club, and catechist groups, giving a sense of local identity to their residents. There may also be chapters of the Fishers' and/or Rural Workers' Unions. The economic repertoire of community residents includes fishing, agriculture, small stock, cattle ranching, and wage-based sources (odd jobs, regular salaries, and social benefits), combined in different proportions across families and communities. Each activity has a distinct pattern throughout the year, involves different members of the household, and fulfills a specific purpose in the household economy. Fishing is the main commercial activity, whereas agriculture and small stock are largely subsistence-oriented. The average herd size is 20 animals and cattle serve mainly as a means of savings and for capital accumulation (McGrath et. al. 2007), while wage-based income offers additional financial support for small expenses and investments in cattle, boats, and house construction.

Large landholdings cover approximately 70% of the lowlands and their owners engage almost exclusively in cattle and/or water buffalo ranching (McGrath et al. 1999). Of about 3000 landholdings in one floodplain area, 70% were below a hundred hectares and only 2% above 500 ha. Large landholders include both members of the traditional elite who have owned their ranches for one or more generations and outsiders who have recently purchased their ranches. These larger landholders are often either members of the traditional regional elite or liberal professionals in the urban centres nearby (e.g., owners of commercial establishments, doctors, and lawyers). Especially in the latter case they rarely visit their properties, and their interaction with the neighboring community is limited to the employment of a few cowboys. Some live on their ranches and are more closely involved in local community life.

Although the floodplain is formally state property, a complex informal land tenure system is in place that combines collective, private, and open access rights across space and time. Levees are considered private property and lateral boundaries are often fenced. Grasslands inland from levees are often treated as a commons for grazing cattle, however, individual land owners may fence all or part of their grasslands. Lakes are considered a commons open to all community members. Boundaries between large and small landholdings are often permeable as a result of seasonal variations in river level. Lakes cover most of the floodplain during high water and retract as water levels fall, exposing the natural grasslands used for cattle ranching by small and large landholders (McGrath et. al. 2007).



COMPREHENSIVE NARRATIVE

Description of the policy

The Extractive Settlement Project was created in 1989 by the National Institute for Agrarian Reform (INCRA). Designed for rubber tapper groups living in upland forests, the settlement sought to combine rural development with conservation and social inclusion. The model was revised in 1996 and renamed the Agro-extractive Settlement Project (PAE), in recognition of the important role that agricultural activities play in the household economy. Unlike conventional INCRA settlements where colonists receive titles to individual lots, PAE residents are granted collective use rights to PAE territory and are entitled to a small private lot for residence and farming activities.

Background / Origins

The creation of PAEs in the Lower Amazon is part of a broader floodplain settlement policy that began in the Amazon-Tocantins estuary region. It represents the final stage of a process of local and regional organization for sustainable management that began in the 1980s (Benatti 2005, McGrath et al. 1993). In response to the expansion of commercial fishing in the 1970s and 1980s, communities throughout the Amazon floodplain mobilized to prevent outside commercial fishers from entering community lakes. Supported by Church-related organizations and other grassroots leaders, communities developed collective agreements to regulate floodplain lake fisheries (McGrath et al. 1994). In the 1990s, several regional projects involving NGOs, government agencies, and international donors developed with the objective of integrating these informal community fishing agreements into a formal institutional structure for co-management. In collaboration with these initiatives, IBAMA (the agency responsible for fisheries management) developed criteria and procedures for legal recognition of community agreements. Regional fisheries councils were created, composed of representatives of all communities sharing a given lake system, to develop fishing agreements, request legal recognition of the agreement, and organize their implementation. Community environmental agents were also trained to monitor and enforce these agreements in collaboration with IBAMA and their communities. By 2001, seven Regional Lake Fisheries Districts had been created including some 140 communities and 35-40,000 people in the municipality of Santarém.

In a parallel process, communities, NGOs, and the Public Ministry developed another collective agreement system, the Term of Adjustment of Conduct (TAC), for regulating cattle grazing on floodplain grasslands. Finally, in 2005, after five years of research and discussion led by Provarzea-IBAMA (PPG-7), INCRA began implementation of a new settlement and land tenure system based on the Agro-extractive Settlement Project model or PAE (McGrath et al. 2008). The Public Ministry required that INCRA incorporate the preexisting co-management agreements for fisheries and cattle grazing into the PAE Utilization Plans, thereby ensuring a unified policy and institutional framework for floodplain settlement and resource management.

Policy objectives

The PAE policy was organized to achieve four objectives:

1. *Social Justice*: Inclusion of the traditional population in territorial governance and in the elaboration of the management plan through active participation and local knowledge;





2. *Land Tenure*: Granting collective land use rights to local residents through formal concessions (usually 10 years, renewable) between the PAE association and INCRA;
3. *Natural Resource Management*: Concession contract is pending on approval of a Utilization Plan by INCRA and the state environmental agency SEMA; and
4. *Agro-extractive Development*: Provision of basic collective and household infrastructure, small financial grants, credit lines, and technical assistance for PAE residents who are considered to be agrarian reform clients.

Chronological development and implementation of the practice

The creation and implementation of PAEs took place through several steps involving government and non-government organizations, and local user groups:

Request of Creation: The request for creation of a PAE should be initiated by local residents and submitted to INCRA. In the present case, the formal request was issued by the Fishers' Unions serving as the organization representing all floodplain communities. INCRA played a pro-active role by inducing the Fishers' Unions to request the creation of PAEs along the whole Lower Amazon with minimal consultation with local residents. During their visits to communities, INCRA field staff induced floodplain communities to accept the proposal by promising access to agrarian reform credits.

Family Registration and Land Demarcation: Following the formal requests, between July and December 2006, INCRA field staff registered families and demarcated 41 PAEs in eight Lower Amazonian municipalities. The process was carried out through community meetings and mapping of PAE territories in collaboration with selected local residents. In this process, the INCRA recognized three categories of local users: 1) traditional residents eligible for the full benefits of the PAEs; 2) traditional residents employed by the state such as teachers, health agents, and retirees, who were not eligible for agrarian reform benefits (e.g., small grants, credit lines, and technical assistance); and 3) larger scale cattle ranchers who do not fit the profile of the agrarian reform clients.

Creation of the PAE Association: In each PAE, an association was established composed of heads of all households considered to be agrarian reform clients that would be responsible for negotiations with INCRA during the implementation process. The association will be granted collective use rights within the PAE and will become the governing institution responsible for monitoring and enforcing the Utilization Plan (UP). In Santarém, where a regional co-management structure had already been developed, regional fisheries council associations took over the role of PAE governance. In other municipalities, these associations were created between 2006 and 2008 since many PAE communities had no prior tradition of intercommunity organization.

Elaboration of the Management Plan: Two non-governmental organizations contracted by INCRA, IPAM and EMATER, were responsible for producing two documents required for the environmental licensing of a PAE: Utilization Plans (UP) and Settlement Development Plans (PDA). Both documents were to be developed through a participatory process including community meetings, participatory mapping sessions, and participatory needs assessments. The UP incorporated the preexisting co-management agreements and includes rules for land





and resource use and social conduct. The PDA includes the subprojects involved in developing the settlement, including infrastructure, social services, governance structure, resource management, productive activities, environmental restoration, training programs, and funding sources. By late 2010, the NGO IPAM (Instituto de Pesquisa Ambiental da Amazônia) had completed the 15 UPs and PDAs in its contract.

Evaluation of the Management Plan: INCRA has submitted the UP, PDA, and supporting documentation for each PAE to SEMA to complete the environmental licensing process. While the UPs and various components of the PDAs have been reviewed by SEMA specialists, the completed documentation is still under evaluation.

Concession: Upon approval of the UPs and PDAs, the PAE associations will be granted renewable collective concessions for use and management of PAE territories and will be responsible for ensuring user compliance with the Utilization Plan.

Agents involved

There are several institutional agents involved in this process. The Secretary of National Patrimony (SPU) is the agency responsible for the administration of the floodplain of major rivers. Due to the lack of organizational capacity for implementing a large-scale land tenure policy, a contract for technical cooperation was signed in 2006 between the SPU and INCRA. In this agreement the SPU passed responsibility for creating and implementing the PAE settlement policy to INCRA. In addition, an oversight committee was created consisting of the SPU, INCRA, IBAMA, and the Public Ministry. The Public Ministry was instrumental in forging this partnership and ensuring that preexisting co-management agreements were incorporated into the PAE Utilization Plans.

The two main grassroots organizations involved were the Fishers' and Rural Worker's Unions of the eight Lower Amazonian municipalities. The former joined INCRA in the process by initiating the request for the creation of PAEs along the Lower Amazon floodplain. The latter Union assisted floodplain communities in their negotiations with INCRA.

The NGO IPAM played a key role throughout the process. IPAM researchers carried out previous work on traditional land tenure and state initiatives to recognize floodplain property rights, and accompanied the earlier stalled regularization process initiated by the SPU. In 2008, INCRA contracted IPAM to prepare UP and PDA for 15 PAEs. In addition, IPAM agreed to train INCRA field staff and state rural extension service agents (EMATER) in floodplain ecology and resource management. Finally, IPAM worked with PAE and municipal leadership to integrate PAEs into municipal co-management arrangements.

The PAE association is the main governance institution of the PAE. With the exception of the four Santarém PAEs, these associations were created in response to the creation of the PAE itself and participating communities had little or no prior experience in intercommunity organization. The leadership and members of these associations are gradually coming to understand their rights and responsibilities in the governance of the new PAE territories and are learning how to navigate the INCRA bureaucracy and those of other government agencies.





Beneficiaries

The 15 PAEs implemented in the Lower Amazon encompass an area of approximately 248,000 ha covering five municipalities, including around 100 communities and more than 22,560 people. Each PAE is composed of floodplain communities (between 1 and 14 communities) and an unknown number of as yet unexpropriated cattle ranches. Three main groups are affected by the creation of PAEs:

- 1) Floodplain smallholders who are residents of PAEs benefit from the possibility of exclusive use rights to PAE territories, active participation in the formulation and implementation of the management plan, more effective local governance, provision of community-based infrastructure (e.g., energy, clean water, sewage system), and financial/technical support for the development of productive activities.
- 2) Cattle ranchers are negatively affected by the PAEs, as the new policy automatically turns their informal landholdings into part of the formal collectively managed area. Their use and access to these areas will depend on collective decisions made by the PAE Council and supported by INCRA.
- 3) Urban and rural fishers may have their access to floodplain lakes barred by PAE residents. This will depend on whether or not the PAE association decides to simply exclude outsiders or makes other arrangements to allow outsiders to fish in their lakes.

Participation processes implemented

The PAE has several participatory elements in its design. First, the request for the creation of a PAE must be initiated by local users. While in this case INCRA initiated the process, communities had been pressuring for many years for a resolution to their ambiguous land tenure status. Second, the demarcation of a PAE is carried out in collaboration with local residents, who provide information on how informal property rights are delimited. Third, the UPs and PDAs are prepared by an outside institution in collaboration with PAE residents. The participatory methodology developed by IPAM for formulating the management plan ensured the inclusion of local fishing and cattle agreements. Finally, the PAE association is both the recipient of the land use concession and the institution responsible for managing the PAE.

Despite the mechanisms available for participation, actual levels of participation vary due to the significant differences in the organizational capacity of PAE associations. In addition, structural problems such as distance from meeting places, lack of financial support, and technocratic language impede the active participation of local residents in formal meetings. Finally, the timeline set by INCRA for the implementation process is often incompatible with the time needed for local mobilization and information assimilation. On the other hand, residents are anxious to complete requirements such as the UP and PDA so they become eligible for government benefits and credit programs.

Institutionalization processes

Although the PAE is not a new territorial model, its implementation on the floodplain is a pioneering experience that has involved agreements between several federal and state government agencies.





The PAE involves four key institutional elements:

- 1) The PAE association council is responsible for administering the PAE, which includes responsibility for the concession contract and implementation of the Utilization and Development plans.
- 2) The concession contract defines the terms for the transfer of use rights to the association and residents.
- 3) The Utilization Plan is the main instrument for formalizing the community-based management system. It sets out the rules for the main economic activities practiced in the PAE and procedures for monitoring and enforcement.
- 4) The Settlement Development Plan lays out the strategy for the sustainable development of the PAE, including mechanisms for monitoring and evaluating implementation of the Plan.

Financing

The process of creating the PAE (including much of the PAE infrastructure), credit programs and long term technical assistance to PAE residents, and the preparation of PUs and PDAs are largely funded by INCRA. In addition to INCRA's various credit programs, PAE residents have access to subsidized credit from other government sources for family agriculture (e.g., PRONAF credit lines). Although the exact figures are not available, in 2003 the average estimated cost of an INCRA settlement was US\$11,500.00 (Graziano 2003)

Key results and achievements

The implementation of PAEs in the Lower Amazonian floodplain represents an institutional innovation with the potential to deepen the participation of community residents in the management of local resources. In principle, the PAE is a major achievement in the empowerment of local communities through transfer of formal use rights. Resident participation ensures the inclusion of local knowledge in the management plan, and their direct involvement in the monitoring and enforcement of local rules.

With the creation of the PAEs and concession of use rights, PAE communities gain control of the territory that provides most of the resources on which their livelihoods depend. It also gives them potential control over how access to resources is allocated and how they are exploited. Finally, it gives the association the right to charge user fees and to organize the marketing of local products. The concession of use rights to the PAE territory empowers the local association in its dealings with neighboring ranchers who have traditionally dominated local social relations.

The implementation of the PAEs, however, should not be seen as the final stage in a linear process. While the creation of PAEs gives PAE residents and their association authority and responsibility, the PAE association must learn how to transform this legal potential into practical reality. The land use regulations provided by the PAE territorial model also give residents access to financial and technical support. In this respect, conservation goals have been linked with the generation of economic alternatives. Finally, PAEs have provided local residents with linkages to a broad network of institutions, including key state and non-state organizations, opening opportunities for the development of a nested regional governance system.



Main obstacles

Formalization of informal management agreements and institutions through the creation of floodplain PAEs is not sufficient to ensure the long-term environmental and social sustainability of this settlement system, as the dismal performance of INCRA settlements in upland areas makes clear. Three main obstacles must be addressed to ensure the long-term sustainability of most floodplain PAEs.

First, most floodplain PAEs have been created with little regard for their organizational capacity. While organizations like EMATER are supposed to provide technical assistance in building organizational capacity, in practice they do not have the skills to contribute significantly in this area. Consequently, the performance of PAEs is likely to vary considerably unless INCRA invests significant resources in this area.

Second, INCRA's programs are strongly influenced by national politics, which may affect the implementation process. Driven by political pressure, INCRA created 41 PAEs covering approximately 750,000 ha in eight municipalities in the Lower Amazon within a six-month period, raising suspicion and confusion among community residents. Due to unrelated institutional irregularities, the process was interrupted for two years. Resumed in 2008, many financial, bureaucratic, and political hurdles have had to be overcome and there is always the possibility that national priorities will change, reducing the resources available for implementing PAEs.

Third, the social inclusion of local communities is happening at the expense of two other stakeholder groups – ranchers and outside fishers. Ranchers remain part of the local elite with significant influence over communities and over local and state politics. If INCRA seeks to enforce PAE regulations and remove ranchers, conflicts between communities and ranchers could escalate. Thus far it seems that INCRA and communities are opting for a strategy of peaceful coexistence. Conflicts with outside fishers could also escalate if communities seek to enforce rules giving them exclusive access to lake fisheries. However, there are ways of incorporating at least some fishers into PAE fisheries through user fees and/or participation in monitoring activities.

Overall, the PAE is an institutional innovation that combines scientific, technocratic, and traditional knowledge; brings potentially conflicting actors into collaboration; and integrates multiple goals such as conservation, rural development, and social justice. Nevertheless, the different perceptions, motivations, and objectives of the three stakeholder groups limit effective participation. The rushed implementation process and boilerplate approach to creating the PAEs are major threats to the bottom-up process needed to ensure social inclusion, sustainability, and equitable rural development.

Replicability or adaptation of policy elsewhere

The PAE is a flexible territorial model easily adapted to different socio-environmental conditions. Its design and the participatory approach help to ensure a negotiated process that can reconcile different interests and objectives. Therefore, as a territorial model, the PAE has the basic elements to ensure replicability and adaptability to other floodplain areas. In fact, INCRA plans to create additional PAEs throughout the settled areas of the Amazon floodplain.

However, as described in the previous section, major gaps between design and implementation can easily derail the process. Even the most basic principle that PAEs are created in response to the written request of local communities is easily violated, creating confusion and distrust right from the beginning of the process. The community social organization, relations with other local actors, motivations for the PAE, and the ecological features of the system must be carefully assessed before a PAE is created. A truly participatory process is unlikely to occur unless there is sufficient social capital to ensure a gradual increase in the quality of participation as the PAE is implemented.

This brief assessment points to three recommendations. First, INCRA must develop the capacity to work with floodplain communities. As their first experience in the floodplain, the creation and implementation of the PAEs was marked by procedures based on an upland, colonist agricultural model, inappropriate for floodplain conditions. A floodplain-oriented team is needed at INCRA that is able to consider legal, technical, social, economic, and environmental issues in the design and implementation of PAEs. Secondly, the socio-environmental reality of the Amazonian floodplain is quite variable with regard to the history of human occupation, social organization, economic activity, and environmental risk. In order to avoid boilerplate procedures, a more careful assessment process is needed to identify suitable areas. Finally, the inclusion of communities should not take place at the expense of other stakeholder groups. While the creation of space for marginalized groups such as *varjeiros* is important, the simple exclusion of the local elite will increase the polarization between local stakeholder groups, exacerbate conflicts, and could derail the entire process.

SUMMARY

The Agro-Extractive Settlement Project (PAE) is an agrarian reform territorial policy, granting exclusive collective use rights to traditional populations. Formerly created for upland forest communities (in 1996), the PAE in the Lower Amazon is the first experience of the national agrarian reform agency (INCRA) with floodplain communities. Forty-one PAEs were created between December 2005 and July 2006, and the implementation of 15 PAEs initiated in 2008 in collaboration with IPAM, a local NGO, is currently in progress.

The PAEs goals include land security for floodplain communities, conservation of the floodplain resources, and development of sustainable production systems. The floodplain residents are the beneficiaries of the PAEs through being granted exclusive use rights to local resources, inclusion of their local ruling system in the management plan, and financial and technical support for their production system. Local residents employed by the state, however, are not eligible for the financial benefits.

The PAE has several participatory elements in its design. Request for the creation of a PAE must be initiated by local residents, and the demarcation of physical boundaries, the management plan, and monitoring system are formulated in collaboration with local residents. However, active participation is limited by the poor organizational capacity of the communities and the governmental agencies, time and financial constraints, centralized bureaucratic procedures, local politics stemming from limited information flow, and accentuated power relations.

The PAE is an innovative institutional arrangement which demanded the collaboration of three national agencies. Through a technical cooperation contract, the Secretary of National Patrimony (SPU) in charge of the governance of national wetlands transfers power to the national agency for agrarian reform (INCRA) to be in charge of the creation and implementation of the PAEs, and to the national environmental agency (IBAMA) to be in charge of the environmental monitoring in the PAEs. The PAE Council, the Utilization and Development Plans, and the concession contract are the three governance pillars of the PAE where local residents are directly involved.

The process of creating the PAE (including much of the PAE infrastructure), credit programs and long term technical assistance for PAE residents, and preparation of PUs and PDAs are largely funded by INCRA. Although exact figures are not available, in 2003 the estimated cost for an INCRA settlement was US\$11,500.00.

PAE is an institutional innovation that enables a combination of scientific, technocratic, and traditional knowledge; brings potentially conflicting actors into collaboration; and combines multiple goals including conservation, rural development, and social justice. Nevertheless, different perceptions, motivations, and goals of different stakeholders limit effective participation and violate some of the criteria for the implementation of the PAEs. The rushed implementation process and blueprint approach to create PAEs along the whole region are major threats for the bottom-up process needed in order to ensure social inclusion, sustainability, and proper rural development.

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INCRA, Ministry of Agricultural Development: <http://www.incra.gov.br/portal/>

IPAM – Amazon Environmental Research Institute: <http://www.ipam.org.br/>

Acknowledgements / Credits

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