POWER STRUCTURES AND EXCHANGE BETWEEN GOVERNMENT AGENCIES IN THE EXPANSION OF THE AGRICULTURAL SECTOR

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This paper proposes a model of social and economic power to analyze the interaction between the various agencies responsible for programs of colonization and rural extension in Pará, the easternmost state of the Brazilian Amazon. The interaction between these agencies and the populations with which they work is also analyzed. It is argued that these programs will fail without the emergence of strong groups of small farmers on the agricultural frontier. Yet, the organization of the agencies responsible for rural development in Pará is creating conditions which make the formation of such groups highly unlikely.

The professed aim of these programs is to encourage the successful settlement of small-holding farmers in frontier areas¹ and to integrate both new and established settlements into a market economy. To achieve this aim these agencies must overcome two major tendencies in small-scale agriculture in Pará. The first, "caboclization,"² is a regression to subsistence activities, following the collapse of market economies based on vegetable extraction or after the failure of government-sponsored agricultural colonies. The second, is the expulsion of small farmers by larger enterprises.³ This paper explains how these tendencies and the shortcomings of government attempts to counteract them result from the structure of power relations within and between government agencies, frontier settlements, and the dominant political and economic systems in the area.

Caboclization occurs in areas of extremely low population and economic density. The *caboclo* economy applies labor-intensive and land-extensive technologies to cultivation and extraction. Long chains of intermediaries known as *aviadores* monopolize market connections.⁴ The *aviador* appropriates an exceptionally high proportion of surplus production, usually maintaining dominance through the continual indebtedness of the producers. The *caboclo*'s dependence allows the *aviador* to establish the trade value of the merchandise he delivers and of the

produce which he later receives in return. Little or no money changes hands.

Aviamento involves the commerce of small quantities across great distances in conditions of considerable uncertainty. Although both the trade relations of aviamento and the form of capital accumulation to which it leads are primitive, it is intimately related to regional and local systems of power and privilege; and local vested interests are strong enough to resist challenges to it.

The precariousness of his operation protects the aviador's monopoly. The low economic density of the caboclo system of production cannot attract the competition necessary for the caboclo to demand more favorable terms of exchange. The caboclo's lack of power in his exchange relations allows the aviador to appropriate all surplus production. As the caboclo cannot accumulate any capital, his dependency in the exchange relation perpetuates itself.

Caboclization occurs in economically stagnant areas. Expulsion is more frequent on the relatively dynamic fronts where government initiatives such as new roads, fiscal incentives for large-scale ranching, or land-clearing by small-farming settlers have increased the value of land and attracted capital. Expulsion results from the advance of capitalism, supported by national and regional development policies; thus it is a far more serious threat than the *aviamento* system.

Legislation nominally protects occupants of untitled land which they effectively cultivate. But many means can be used to force the settler from land he has cleared and cultivated: overlapping concessions by state and federal governments, titles granted prior to occupation or effective surveying, false titles, or government sales made after and despite effective occupation. Because of the confusion about titles, judicial processes may abet both land seizure and land speculation. Political pressures or special interests may prevent effective legal protection of settlers even in cases of violent expulsion.⁵

The violent expulsion of settlers from land is much less likely to occur in an area of directed colonization, in part because of government presence. The same economic pressures which lead to violent conflict over land through appreciation of land value may also work to remove the original settlers from an area where they are legally protected. As commercial systems emerge around new production systems in an area, new types of commercial agriculture become viable. These usually require some level of capital and/or access to credit. To the settler

without these assets, the value of the land he has cleared, even without title, may be much higher if he sells than if he continues to cultivate without capital. Even if a settler obtains credit, its indirect costs may be much higher than its value. Whether he sells to a larger enterprise or to another, more highly-capitalized settler who can profit from the work of clearing which has already been done, the personal result is the same; the original settler either leaves the area or hires out to work for someone else.

Caboclization and expulsion reflect problems in power relations which impede the extension of commercial agriculture through small farming. Both the *caboclo* and the undercapitalized settler lack the productive resources which would provide the power necessary to establish favorable exchange relations. Therefore, neither can accumulate the further resources necessary to oppose the power of the *aviador* or of the land-absorbing large enterprise.

THE PROBLEM OF POWER

The goal of populating the agricultural frontier with small-holding farms and integrating their owners effectively into the market economy directly opposes vested local interests and the national tendency toward large, highly capitalized enterprise. Success thus depends on the exercise of power by the national government and on the generation of local or community power. These two types of power interact and are finally mutually dependent. The first cannot be effective without the emergence of the second, and the second cannot emerge without the support and protection of the first. In the absence of a single theory which includes both of these power types, the analysis proposed here requires the integration of two different theories of power, one hierarchical and the other based on exchange.

Adams (1970) conceptualizes hierarchical power following earlier works of Steward (1967) and Wolf (1967). He proposes a model of power "derivation," which creates what he terms "power domains" across different "levels of articulation." These levels of articulation basically follow social and politico-administrative hierarchical distinctions. This model comprehends the exercise of power in situations in which structure and organization are central, but it neglects the formation of group-based *local* power. Exchange theory, as developed by Blau (1964) to explain the generation and differentiation of power in and between groups, provides important concepts for the analysis of the formation of community power bases; but it does not take adequate

account of structural determinants. The integration of these two conceptions introduces propositions which are not encountered in either alone but which are necessary to understand the interaction between bureaucratic and community processes. It is upon such interaction that the extension of the agricultural frontier through small-holding farmers depends.

Adams conceives of power in a social relationship as "control that one party holds over the environment of another party" (Adams, 1970:117). Control over the environment is seen as a "differential effectiveness in the competition for scarce goods." Thus, "A power domain exists when one party has greater control over the environment of the first" (Adams, 1970:119). Power domains exist within and across levels of articulation. However, Adams' argument focuses on relations between levels of articulation; this is because power is derived by parties at one level from parties at higher levels, and because the organization created by parties at one level structures the environment within which parties at lower levels must act.

Adams' model does not deal with the processes which shape the organizational response to structure at each level. He notes that higher-level organization structures the environment by creating the parameters within which successful organization can occur and by favoring certain groups or individuals. He does not take into account the fact that particular organizational forms reflect but are not directly determined by imposed structure. They depend instead on alliances and factions and on cooperation and conflict which are worked out in interactions between groups and individuals.

In this respect, Blau's notions are useful. Starting with examples of dyadic interaction, he explains power as the cumulative and finally institutionalized result of unbalanced exchange relationships. One party concedes deference to another to obtain a needed good or service in the absence of something of equivalent value to offer in exchange.

In progressing from dyadic interaction to group relations, Blau describes leadership as a series of individual exchange relationships permuted into group relationships wherein the leader's power depends on his capacity to maintain and strengthen the group. When the leader can satisfy group expectations, legitimacy and consensus are maintained. But the leader thus comes to depend upon the power of the group itself. Although Blau focuses on the development of power differentials within groups, his model of exchange can also be applied to the development of power based on external relations of authority and deference. Just as the leader's own position within the group depends on successful mainte-

nance of exchange relations, so does the group's position within a wider social context. The leader's position within the group finally depends on his ability to secure favorable exchange relations outside the group.

Blau's model is based on classical economics, and depends heavily on the myth of perfect competition. Hence in its pure form this model is inadequate for the analysis of power relations which involve structural considerations, i.e., to most power relations in real life. In order to explain how structure establishes the parameters of organization at each level of articulation and how it determines a power-based distribution of resources, Blau's model must be combined with a hierarchical model of power.

Higher-level organization affects both the indirect structuring of the environment and the direct favoring of certain groups and individuals within it through the distribution of power; but the bargaining process and the intra- and inter-group relations which result from it constitute the actual organization at each level of articulation. Particular exchange forms and the groupings which they create (and by which they are maintained) modify the initial, structurally determined or derived distribution of resources. This modification may increase or reduce the power of the initially favored parties. Cases of peasant revolt, unionization of laborers, general movements of protest and movements of regional secession or independence indicate that group-based organization affect power at a power level of articulation. This brings about changes in a group's own environment and in that of higher levels of articulation.

An adequate model integrating both horizontal and vertical aspects of power relations would include the following propositions:

- 1. The structure of the environment at any level of articulation is determined by organization at higher levels; particular positions of authority or power are conceded and reinforced by power at higher levels.
- 2. The structure of the environment thus determined at each level favors certain individuals or groups by giving them control over goods, services, or other resources which can be used in exchange or as negative sanctions with third parties.
- 3. Factions, alliances, conflicts, and cooperation form on the basis of the exchange of these goods and services. This leads to group formation, alignments, and divisions between groups which either enhance or diminish the (structurally determined or derived) power at a given level of articulation.
- 4. While the formation of such groups is highly influenced by structural elements, and while these elements create the parameters within which group formation occurs, the existence and strength of actual groups depends on the success or failure of the exchange relations established within and between them.

5. If sufficiently strong groups are formed, the organization of power relations within one or between various levels may achieve change in organization and structure at higher levels. Exchange relationships may flow across levels of articulation and create mutual dependencies. Even in an unbalanced power relationship, the less powerful may influence the behavior of the more powerful.

This model indicates that the successful extension of the commercial agricultural front through small-holding farming depends on: (1) the creation, across descending levels of articulation, of organizations and structures conducive to permanent settlement, ownership, and capital accumulation by settlers; and (2) the formation of groups of settlers and other local actors sufficiently powerful to defend their own claim to land and to insure favorable terms of exchange for their products.

The formation of strong groups, especially their effective internal organization, occurs only if there are goods and services of sufficient value to be exchanged within the group. A group formed to achieve certain goals will be unable to survive unless these goals are to some degree realized. The group itself will be able to achieve these goals only in exchange relations with other groups. To the extent that these exchanges are successful, the group will be strengthened both internally and externally. Once significant exchange relations are established between groups, the mutual dependencies created may lead to coordinated action both toward common interests and against common threats. Such networks of exchange relations are crucial to the formation of communities capable of joint action and effective defense through the mobilization of internal relations and through relations with agents external to the community but dependent on it.

EXCHANGE-BASED POWER AND COMMUNITY

Caboclization and expulsion both result from the small farmer's marginal postion in dominant economic and political systems. Government agencies oriented to expanding the commercial agricultural frontier through small-holding farms confront contradictions which limit their willingness or ability to assume the high costs of direct intervention. The high level of surplus appropriation in the *aviamento* system sustains powerful interests capable of subverting rural development programs at the local level. Much more significantly, official national and regional development models stress highly capitalized, large-scale industrial and agricultural enterprise. Because rural development programs for small farmers counter both local vested interests and the mainstream of na-

tional development policy, they cannot depend on the political commitment necessary for large budgets or long-term planning. Any successful program of rural extension in Pará must therefore aim to create conditions for self-sustained development as quickly as possible. These conditions depend on the generation of community-based power, which in turn can only occur when a community has achieved sufficient economic density for the formation of groups through profitable exchange relations. Once such groups are formed, they themselves contribute to the further increase of economic density.⁸

Economic density is related directly to value of production per unit area, the geographic size of the community, and inversely, to its economic distance from markets or cost of commercialization. Density conditions the extent and depth of both internal and external exchange networks. As economic density increases, strengthened external exchange networks reduce economic distance from markets, thus reducing the proportion of surplus appropriated outside the community and increasing capital accumulation and production within it. In the case of Pará's agricultural frontier, economically dense communities would impede the expulsion of settlers. The existence of exchange networks beyond the community would involve other, possibly stronger, economic and political interests. Banks, export firms, retailing companies, or particular government agencies would oppose significant changes in established systems of production if these changes were to damage fruitful exchange relations. In an economically integrated community, the capacity of members to exploit profitably their own land is likely to keep pace with the land's value. Both the increased value of the land's production and the involvement of other interested groups would raise the cost of land absorption.

Changes in economic density and the formation of effective communities cannot emerge spontaneously; they would have to be fostered by government action. Policies oriented toward this aim would have to provide or stimulate the conditions necessary for self-sustained growth. As integration of small farmers into a market economy requires production increases (sustained by exchange rates sufficiently favorable to permit capital accumulation) it can only occur through simultaneous and coordinated growth in the various factors essential to production and commercialization: adequate technology and manpower, access to credit, existence of markets, and infrastructure for communication, storage, and transport. These factors comprise cycles of "cumulative causation." While increases in any single factor may be used to

strengthen others, their interdependence also causes lags and bottlenecks for all.¹⁰

Because new bottlenecks constantly appear as production increases, their elimination as a prior condition for development is too costly to be carried out. Rather, the development of sufficient production to allow competitive exchange relations must accompany and support the progressive elimination of bottlenecks as expansion of productive and commercial activities makes their solution important and profitable. This expansion depends on the accumulation of capital through fruitful exchange relations which is possible only with the necessary infrastructure connecting the producers to competitive markets. It can be achieved only when producers in an area create a commercializable surplus great enough to attract competitive buyers and to provide a strong base for creating the conditions necessary for their continued development.

Effective articulation with markets depends on groups. The necessary investments in infrastructure exceed the productive capacities of individual small farmers. As individuals, they cannot produce enough to attract competitive buyers. Both infrastructure and favorable exchange rates depend, therefore, on demands made from a position of relative strength which the farmer can only achieve collectively. Continued agricultural development requires the formation of groups, but effective group formation can occur only when the group's potential members control resources of value to non-members and to each other.

Blau indicates that groups form and maintain themselves as their members concede obedience to the group in exchange for the satisfaction of certain needs or desires. Groups can only function effectively, therefore, if they have, through their members' own collective resources, sufficient power to achieve their goals. Effective groups of small farmers can emerge, only when members are producing enough surplus to enable the group to provide them significant services (e.g., infrastructure or higher prices). A community must achieve adequate economic density to enable the formation of groups strong enough to sustain or increase further growth.

Groups become stronger, internally as they satisfy members' needs and expectations, and externally as the goods or services which they can offer in exchange with other groups increase in value. A group's bargaining position, or external power, depends on its internal power, or ability to mobilize resources through its members' compliance. Thus, the integration of small farmers into a market economy depends on effective groups which are also crucial as power bases. But, unless the

various factors supporting trade and production already exist to some utilizable degree, groups cannot be formed.

Government intervention aimed at sustaining small farmers on the agricultural frontier must create conditions conducive to the formation of groups which can demand, both of government agencies and of multiple buyers, the favorable terms of trade which are necessary to sustain development. Effective group formation and increased production must develop together to provide the community power on which satisfactory exchange relations would rest.¹¹

GOVERNMENT AGENCIES AND THE EXERCISE OF HIERARCHICAL POWER

The predominant government models of development emphasize large-scale capital-intensive enterprise. Only two years after the initiation of the colonization programs along the Transamazon Highway, the central government abandoned its former goal of occupying the Amazon with small farmers. Instead it emphasized the importance of subsidizing large-scale ranching and mining projects to solve its balance-of-payment problems. These projects tend to exploit or to expel the politically and economically marginal small farmer. At best the projects virtually monopolize the bureaucratic and financial resources available for development.¹²

Constraints on government agencies impede the creation of social conditions conducive to the formation of viable small farming communities. Bureaucracies depend on higher authority not only for the definition of their programs and procedures but also for their very existence. Programs of colonization and rural extension in Pará are generally administered by relatively minor units within larger organizations or by agencies which are themselves subordinate to and dependent on these larger organizations for authority and for funding. The subordinate position of the rural development programs reflects both their divergence from the central thrust of Brazilian development planning (with its emphasis on the concentration of income and the means of production) and the marginal and subordinate position of their clientele, the small farmers.

Because of this basic dependency, rural development programs lack the power to achieve their stated goals and can function only through the kind of bargaining which Blau's model of exchange outlines. The bargaining process increases costs for these programs, and the concessions which it entails impede or deflect them from their original purposes. Division of responsibility for rural development between a number of agencies aggravates the problems caused by dependency and the need to bargain. The position of each agency in the bargaining process reflects its own interests in terms of the mandate imposed by the source or sources of its derived power. Comparison of these agencies' organization and activities shows some of the ways in which power relations structure the environment within which the small farmer on the agricultural frontier must operate. This comparison also shows how the structure thus created impedes the formation of local-group power based on significant exchange relations.

The agencies involved in colonization and rural extension have specific and limited mandates:

- INCRA (Instituto Nacional de Colonização e Reforma Agrária) is the normative agency for surveying and titling land, for the registration and supervision of all agricultural cooperatives, and for all federal projects of colonization.
- EMATER (Empresa de Assistência Técnica e Extensão Rural) is the state agency of a national public company, EMABRATER; its projects in Pará include a program of technical assistance to low-income farmers, orientation and managerial assistance, agricultural cooperatives, and the preparation of projects for loan proposals.
- SAGRI, the State's Secretaria de Agricultura, is involved in extension work and in colonization of state lands.
- CIBRAZEM (Companhia Brasileira de Armazenagem), a public company subordinate to the Ministry of Agriculture (MA), maintains a network of warehouses in areas where those provided by private enterprise are insufficient.
- CFP (Comissão de Financiamento de Produção), an autarquia under the MA, determines the minimum prices to be paid for particular crops and controls the funding for this program.
- The Banco do Brasil administers the minimum price policy payments for the CFP and provides loans to small farmers in the official colonization areas (and near some of the larger urban centers through special agreements with EMATER); rural development programs absorb a very small proportion of its resources.
- The BNCC (Banco Nacional de Crédito Cooperativo) makes loans to cooperative societies both for their own use and for secondary loans to members.
- BASA (Banco da Amazônia, S.A.) mounted a program to promote agricultural cooperatives, which it discontinued after heavy losses; since then, its involvement with rural development programs has been minimal.
- SUDAM (Superintendencia do Desenvolvimento da Amazônia), the major planning, coordinating, and executing agency for the Amazon, provides limited resources for some of these programs and is funded in turn by a variety of other federal projects; is principally concerned with large industrial, mining, and agricultural enterprises.

All of these agencies function through power derived—both as authority and as funding—from different sources and at different levels of articulation. In no way are they accountable to a single central planning

authority. In fact, the proliferation of *convenios* (funding contracts) often leads to a situation in which an agency is accountable to several different sources. INCRA, an *autarquia* under the Ministry of Agriculture, enjoys semiautonomy, has its own resources, and has power to make decisions. In contrast, EMATER, as a "public company in private law" (Pará, 1976), receives practically all of its funding already tied to particular projects, either in grants from the MA or through *convenios* with the SUDAM or other public organizations. It also receives revenue from planning work done on commission for banks and private enterprises. SAGRI receives funding from the State government but is also dependent on *convenios* with INCRA and with the SUDAM. The differences between INCRA and EMATER illustrate in several ways how the derivation of power structures organization at lower levels.

INCRA derives power directly from the federal level, both as budget and in its legally established patrimonial power over federal lands. Though subordinate to the Ministry of Agriculture, its direct control over federal land, and its receipt of the monies from land tax and land sales, give it considerable autonomy. It is able to use its derived power in exchange relations with powerful economic groups interested in acquiring land. INCRA'S benefits from these exchanges far outweigh whatever might be gained from well-executed rural development programs whose clients have few resources with which to bargain.

EMATER, in contrast, derives very little direct power from either the federal or the state level; it has no autonomous control of resources. While, in comparison to INCRA, a much greater share of its efforts are dedicated to rural extension for small farmers, its derived power is insufficient to its own assigned tasks. In order to function at all, EMA-TER is forced to operate through a series of exchange relations and constant bargaining with agencies not primarily concerned with rural development: e.g., the Banco do Brasil, the SUDAM, INCRA, and large-scale agricultural enterprises. Its dependence on these agencies and enterprises forces it to shape its programs to their special requirements. A portion of its own resources must be used to encourage further exchange relations. Even in its rural extension programs oriented to the small farmer, EMATER's exchange relations lead it to comply with the interests of other sectors. As small farmers do not have sufficient resources to bargain with EMATER, they have the least influence on its behavior. EMATER must negotiate services which its derived power enables it to offer in exchange for resources it does not control.

Though INCRA has much greater autonomy and far more resources than EMATER, its support of small farmers is conditioned by its responsibility to powerful sectors of the economy. As the normative agency for federal lands, it is involved in the numerous disputes and problems over titles and boundaries associated with large agricultural enterprises which are being implanted throughout the Amazon. Its main commitment to the problems of small-farming communities comes from its responsibility for the colonization projects along the Transamazonic Highway. Yet even there, only the first ten kilometers back from the highway are reserved for small farming; the next 90 kilometers are to contain large (3,000 to 15,000 hectares) fazendas. As central government commitment to the occupation of the Amazon through large, subsidized ranching projects has increased, INCRA has tended progressively to concentrate its efforts on the surveying and sale of these fazendas. This trend generates both capital and political good will from powerful classes rather than from small farmers.

INCRA assumed vast responsibilities in the colonization of the Transamazon. It planned to coordinate all aspects of social and economic life, from the original selection of *colonos* to the measurement and distribution of lots, building of houses, and planning of communities. Conflicting claims on its own resources have led INCRA to abandon most of these tasks.

INCRA planned to provide physical and institutional infrastructure for small-farming communities, extension services for the settlers and cooperatives for the commercialization of crops. None of these efforts has been systematically carried out. Technical assistance is spotty and appears to consist of irregular visits to farmers. The cooperatives started by INCRA were left to their own devices. The elected leaders took it upon themselves to tend to the legal problems of registration. Lacking an orientation toward the actual management of a cooperative, none of them has commercialized any produce at all. Instead they have incurred considerable debt and have generated conflict over misappropriation of funds.

INCRA disguises its failure to carry out many of its assistance programs by applying legalistic definitions to the social and economic problems in its jurisdiction. Rarely exercising that part of its mandate concerned with agrarian reform, it has concentrated on the legal aspects of land titles. Even in this it moves ponderously. Titles, or at least cartas de ocupação, are essential for the individual farmer seeking bank credit. INCRA requires a series of documents in order to start the procedures for

titling land. Many settlers do not have these documents and there is no adequate procedure for obtaining them in the colonization areas. Frequent and often futile trips to administrative centers for title searches have cost settlers time and money. Even after the documents are arranged, the wait for a final solution is long and uncertain.

A similar legalistic approach characterizes INCRA'S treatment of cooperatives. It has acted as if proper registration and a set of statutes coherent with existing legislation were sufficient to give life to a cooperative. While INCRA has provided basic structures necessary for the arrival of settlers, and has attempted to block sale or accumulation of lots by legal measures, its own administrative procedures and delays have created a series of bottlenecks for the development of commercial agriculture. Since the problems of colonization are not central to INCRA's politically defined tasks, it has tended to reduce or prematurely end programs before they could become self-sustaining. This legalistic approach to the problems of settlement functions partly to resolve the multiple claims on its own resources. Despite its relative autonomy, INCRA's derived power is limited by conflicting demands. Since the colonists have less power to pursue their own demands, they are increasingly ignored.

EMATER's mandate is simpler than INCRA's but is restricted by its almost total dependence on other agencies. Its work is frequently interrupted by delays in the funding arrangements established through convenios. Even on the Transamazon, where it is concentrating its efforts, less than a third of the settlers are included in its programs.

The SUDAM, EMATER's major regionally based source of funding, is primarily involved in programs for urbanization, industrialization, and large scale agriculture. Its support of small-scale farming is so tenuous that EMATER can maintain its programs only through collaboration with and submission to other agencies. EMATER is thus relegated to serving as intermediary between the farmer and more autonomous, stronger agencies. Its major efforts in extension are devoted to preparing and accompanying loan requests for the *Banco do Brasil*, basically acting as the bank's technical assessor. It is constrained to concentrate on rural credit, for an important part of its extension budget comes from a 2 percent commission which it receives from the bank on each approved loan project. This commission creates a tendency to favor large loans and thus concentrate on larger and more prosperous enterprises. EMATER's submission to the bank's procedural requirements, which demand numerous difficult-to-obtain documents and various trips

to urban centers, often costs the small farmers who do receive EMA-TER's assistance more than the interest charges. This reduces, or, in the case of relatively small loans, reverses any benefit the credit might have brought.

EMATER's program to establish cooperatives depends not only on collaboration with banks, but also on the good graces and support of INCRA. It is currently in the position of submitting requests to INCRA for loans, concession of land and technical assistance.

In order to obtain authorization to resume activities, EMATER must deal with BASA to renegotiate the old debts of cooperatives which were originally founded by BASA. The need to utilize existing structures, which creates EMATER's dependence on INCRA and BASA, is itself a necessary consequence of the limited budget which EMATER receives for its cooperative program. Once the cooperatives are functioning EMATER serves as intermediary between them and the BNCC in order to obtain credit.

EMATER's extension work is also limtied by CIBRAZEM's location and operation of its warehouses. Compliance with the Banco do Brasil's requirements depend on the farmer's receiving the guaranteed minimum price for his produce. Yet, the CFP pays only minimum prices where there is an authorized warehouse. Although it is a public company under the Ministry of Agriculture, CIBRAZEM supports itself with storage revenue and is loath to install facilities without assurance of sufficient return. Insufficiency of storage space and slow handling have caused major bottlenecks in the colonization areas. Many farmers have lost part of their crops or have had to pay extra charges for time spent waiting in line to unload. Many farmers, pressed for cash to pay debts, are obliged to sell to private buyers for much less than the minimum prices. EMA-TER's dependence on other agencies means that it has no resource base of its own with which to obtain compliance from CIBRAZEM. With no effective pressure on it, CIBRAZEM has been slow in rectifying the problems it creates for the small farmer.

These problems are aggravated by the CFP's policy of giving the farmer the option to seek another buyer who offers a price higher than the established minimum during six months after CIBRAZEM has received his produce. Warehouse turnover is seriously reduced by this practice, which is essentially meaningless when minimum prices in the area are maintained above market prices.

It must be emphasized that there are large areas of Pará which are not included at all in the programs described here. EMATER attempts to

distribute its programs widely, but its very dependence on other agencies limits effective action to the areas where these agencies already operate. The organization of these agencies and their own dependence on economic return for their activities lead them to concentrate their resources in certain areas. Because of the low economic density of the agricultural frontier, the small farmer cannot demand or attract those government services necessary for his integration into the market economy; nor can he influence the efficiency with which these services are provided.

Even where there is a relative concentration of government programs to assist the small farmer, mechanisms used are inadequate and cumbersome. Precisely because these programs depend on power derived from a diversity of sources, in some cases sources whose major concerns are directed to other sectors of the economy, there are serious contradictions. The limitations on the power derived by the most active agencies reduce their programs to efforts at mediation between other agencies such as banks or storage companies which directly control crucial resources. The organization which results from this type of exchange at regional and state levels reflects differentials of power between various political and economic sectors at the national level. The agencies which serve nationally dominant interests by promoting highly capitalized agricultural and industrial activities derive much more power than agencies oriented to small-scale, labor-intensive production. The submission of the latter agencies to the former leads to the fragmentation of programs and to inefficient implementation on the agricultural frontier.

CONCLUSION

The dilemma which makes effective rural development programs dependent on the formation of strong groups with local power bases also prevents the responsible agencies from fostering them. Strong local groups are essential because the government's commitment to rural development is compromised by its dedication to capital intensive economic growth. Government support for small farmers is therefore limited and discontinuous. Its dedication to large scale enterprise creates a structure within which the rural development agencies cannot raise economic density to the levels necessary for effective group formation. The subordination of the agencies primarily responsible for rural extension to organizations and interests which depend on and respond to other sectors and the requirement for short-term returns on investments lead to

a fragmentation of activities and a lack of effective planning or coordination. The small farmer suffers the effects of this fragmentation in the high cost of his participation in rural development programs. These costs greatly reduce his chances of increasing production and accumulating significant amounts of capital. The possibility of forming community power bases to achieve self-sustained development remains correspondingly remote.

EMATER's dependence on the Banco do Brasil leads to its focus on credit projects. But to be eligible for credit the small farmer must have at least a carta de ocupação or a title from INCRA. To get these documents he must have others from a series of other institutions certifying his social and political identity. Each of these documents requires expenses in time and travel, and some understanding of how to get them. The small farmer must either comply with all of these requirements or be excluded from EMATER's extension programs. Even after he has completed all of the necessary forms, however, he may wait indefinitely for final title from INCRA. During this period he can receive only operating credit for short-term crops, for investment credit is available only to those who possess definite title. Permanent crops, such as pepper and cocoa, are immensely more profitable than annual crops such as rice and beans. Thus, the farmer who must work only with operating credit is limited to crops whose return often does not compensate for the costs of complying with the requirements of INCRA, the Banco do Brasil, and EMATER. The long and expensive trips to the EMATER offices to apply for the loan and to the bank to withdraw cash at various stages of the growing and harvesting cycle absorb a high proportion of the value of the credit.

The time and money lost through extra transport charges and spoilage due to CIBRAZEM's delays in receiving produce further reduce whatever profit the farmer may realize. The solution proposed for this problem, the establishment of cooperatives, is mired in jurisdictional disputes between EMATER, BASA, INCRA, and the BNCC. The functionaries of EMATER who work with cooperatives have so far spent much more time and resources negotiating with other agencies than they have in the actual organization of cooperatives.¹³

Only those few farmers who have succeeded in satisfying the multiple requirements of the different agencies have managed to accumulate capital; but because of their small number they are still subject to the exploitative aspects of commercialization. The success of isolated farmers cannot elevate economic density to the levels necessary for a

community to sustain its own development. Yet, the total impact of the various rural development programs has been to favor some farmers, better adapted to agency requirements, over the rest.

Relations between government agencies and their effect on small farmers represent some ways in which productive and commercial systems on the frontier reflect the derivation and exercise of power at a series of higher levels. These conditions create a structure within which the individual farmer must operate. While providing an impetus to expand production, the structure is slow in resolving bottlenecks which inhibit the farmer from deriving the necessary benefits from his own labor. These bottlenecks cause loss to the farmer and allow excessive appropriation of surplus and eventual loss of land. At the same time, the organization which results from the fragmented and unbalanced relations between government agencies promotes a dependence of the individual farmer on a series of different field agents, thus limiting the possibility of autonomous local organization.

Because the derivation of power by the agencies responsible for the maintenance and support of the small farmer on the commercial agricultural frontier is so problematic, neither sufficient value nor a structure conducive to the types of exchange relations supportive of viable communities is produced. This reduces the effects of government programs which require effective groups to promote the process of development. In the long run, the structure created at the local level through derivation and exchange relations between government agencies at the national, regional, and state levels, actually diminishes the power of these agencies to achieve their stated aims. Given the general planning orientation of the Brazilian model of development, agencies and programs aimed at rural development remain as marginal as the small farmers whose interests they are supposed to serve.

NOTES

An earlier version of this paper, "Relations between Government Agencies and their Effects on the Expansion of the Agricultural Frontier in Pará," was presented to the International Conference of Latin Americanist Geographers in Paipa, Colombia in August, 1977. Such advances as may have been made in this paper owe much to comments and suggestions by Luís Aragón, Roberto Santos, Marianne Schmink, Pedro Demo, and Alejandro Portes. Many of its remaining flaws are due to my not having been able to respond fully to their criticisms. The paper is based on research supported by the Universidade Federal do Pará and by the Núcleo de Altos Estudos Amazônicos in 1977 and 1978, with data from documents, field observation, and interviews with farmers and government agents.

- 1. Frontier in this paper refers to commercial agricultural frontiers, i.e., to areas which are in the process of being included in an agricultural market economy. While these areas are most often frontiers in the sense of expanding settlement, they may include areas of transition from subsistence to commercial agriculture.
- 2. From caboclo, in the Amazon a jungle-dweller dependent on slash and burn subsistence agriculture and/or vegetable and animal extraction.
- 3. Analysis of the rubber boom and its effects on the rural population in Pará can be found in Cardoso and Muller (1977) and Ianni (1977). Histories of the rise and fall of various agricultural colonization projects include Muniz (1916), Cruz (1958), NAEA-FIPAM (1975), Tavares (1975), and Anderson (1977). Velho (1972, 1976), Martins (1975), and Cardoso and Muller (1977) analyze the expulsion of peasants by larger capitalist enterprises. Schmink (1977) presents examples of government acquiescense in this process, and Santos (1977) of the judicial procedures involved.
- 4. Santos (1968) analyzes the economic relations of aviamento. Both Tupiassu and Santos (1967) explain some of its sociological implications.
- 5. The Estatuto da Terra of 1964 and other land laws, though formally protecting settlers, are in many cases effective only if the settler has regularized his claim prior to other claims on the land. As these recourses are costly and little known, few settlers are likely to use them. For texts and analysis of land laws see Campanhold (1971) and Sodero (1968).
- 6. In a later book, Adams (1975) does mention "the fact that a successful concentration of the independent powers held by those at the bottom would probably constitute an effort on their part to move up to the next level and confront their erstwhile superordinate" (70n.). Neither in this idea, nor in his consideration of different modes of "coordination" at "levels of integration" (217-287), does Adams supersede his extremely vertical approach to consider how horizontal relations can create or generate social power.
- 7. See Brazil's second National Development Plan (Brazil, 1974), which explains the "Brazilian model of industrial capitalism," and the second Plan for the Development of the Amazon (Brasil, 1975), which justifies the emphasis on medium and large scale agricultural enterprise as the most profitable way to occupy the Amazon.
- 8. The economic density (ED) of a community can be expressed as the value of production (P), per unit area (A), multiplied by the geographical extent (E) of the community, divided by the economic distance (D) to markets, or costs to the community of commercializing its product. Thus:

$$ED = \frac{P/A \times E}{D}$$

- 9. See Myrdal (1944: 75-78). Myrdal has since used this idea to analyze the economic underdevelopment of entire nations, but in the context of the present paper it is worth noting that it was first applied to the situation of an underprivileged minority within a wider society.
- 10. See Uchendu (1967) on the combination of incentives and the elimination of bottlenecks as a strategy for increasing small-farming production.
- 11. Durkheim (1964) maintains that national integration is possible only through the existence of a series of intermediating groups between the individual and the wider society. While he was writing before exchange theory was developed, he clearly relates the interdependence created by exchange to the individual within complex (organic) societies.

Concepts of national integration, mediating groups, and community are clearly utopian in a situation more adequately described in terms of dual societies, internal colonization, class domination, or oligarchization. The notion of government intervention to strengthen groups of small farmers as unrealistic. Landsberger (1968), Stavenhagen (1964), Fals Broda (1970, 1971), Cotler (1972), Huizer (1969), and others have explained how different Latin American governments and

dominant classes serve their own interests by impeding, rather than promoting, effective and autonomous peasant organization. Schmink (1977) documents cases of INCRA's retaliations against settler groups which protested violations of their land rights within Pará's agricultural frontier. Utopian concepts are directly relevant to this paper, however. Analysis of the viability, impact, and probable future of these programs requires understanding of why these concepts are utopian.

It should also be noted that in many African countries, rural development projects rely on strategies which emphasize collectivization, cooperativization or the formation of community enterprise. See especially Apthorpe (1968, 1970), Arrighi and Saul (1968), Bunker (1977), Brett (1970), Brokensha and Erasmus (1969), Cliffe (1970), Hyden (1969, 1970), Leys (1967, 1971), Saul (1969), and Young (1971). Uchendu (1967) describes development programs whose strategy would closely approximate that of increasing economic density to promote self-sustained development.

- 12. See Schmink (1977) and Bunker (1977, 1978) for background on government decisions to curtail colonization programs and the effect of these decisions on rural development programs.
- 13. In fact, one of EMATER's major difficulties in strengthening the cooperative in the Altamira colonization project on the Tranzamazon is that INCRA established two cooperatives with overlapping jurisdictions. It then asked EMATER to work with the weaker one while it continued to support the stronger (but less inclusive) one. As of this writing, the resulting conflicts, which involve the BNCC, BASA, and the *Banco do Brasil*, have still not been resolved.

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