

DRAFT - NOT FOR CIRCULATION OR CITATION

Shifting Agriculture, Land Grabbing, and Peasant Organization
on Brazil's Northeast Frontier:
Colone's Alto Turi Project and the Baixada Ocidental in the State of Maranhão

Judith Tandler
November 1980

For the Department of Latin America and Caribbean Projects of the World Bank

Measures, Monetary Units and Acronymns

- 1 linha = 0.33 hectares
 1 alqueire = 30 kilograms
 1 U.S. Dollar = 61 Brazilian Cruzeiros

Colone - Companhia de Colonização do Nordeste (Northeast Colonization Company), created in 1972, is a mixed public enterprise, whose majority stockholder is the Northeast regional development agency, SUDENE; the state of Maranhão is the next largest stockholder (40%), whose equity consists of one million hectares of state land donated to Colone; the Bank of the Northeast Brazil (BNB) is a minor stockholder. Colone is funded by a US\$6.7 million loan of the World Bank, made in 1972, and the US\$36.7 million counterpart of the Bank loan provided by the federal government through the POLONORDESTE program.

Preface

This paper is based on two weeks of interviewing in the proposed project area in the month of October 1980--one week in the Baixada Ocidental Maranhense, and one week in the Alto Turi area of Colone; almost two more weeks were spent in the state capital, São Luis, meeting with state-government and other persons knowledgeable about the project area, and writing the report.

The object of the interviewing was to gain an understanding of how existing community organizations might participate in the design and execution of the proposed project, and what lessons about such participation had been learned from the Bank-financed Alto Turi project of Colone. A companion objective was to understand the relationship between land tenure and the farming practices of small farmers, and to suggest how existing social organization in the Baixada might be used to help improve the land tenure situation in a way that would diminish markedly the insecurity over land and the evictions experienced by small farmers over the past many years.

Table of Contents

Measures, acronyms and monetary units, and preface	i
I - Land Problems and Farming Practices	1
Enclosure and Its Impact	3
Land use vs. ownership	10
Flight from development	11
Land security and farming practices	13
Labor constraints, credit and virgin forest	15
Enclosure and environmental degradation	17
Migration	19
Communal pastures and the fishing-cropping economy of the Campos	20
The Rights of Use: Stability in Shifting Agriculture	25
Beans and natural de-stumping	28
The "quintal" and modern agriculture	30
Land ownership, productivity and credit	34
A possible use-right model	37
Organizing to Secure the Land	41
The justness of the law and the action of the Church	42
The threat of violence	44
Local elites and outside intruders	47
Communication and public monitoring	51
The lessons of Colone's community organizing in Area III	54
Occupying the project area	54
Dependence on the community	58
Forced devolution of power	60
Roads and land-grabbing	64
II - Community Organization and Project Execution	66
Nearby development projects and community action	70
The diseconomies of social scale	73
What Colone could not do	75
Regressive and exclusive financing: construction vs. operation	79
Political support from without	81
Violence: the unfulfilled threat	84
Community preferences and project impact: agriculture vs. social services	86

I - Land Problems and Farming Practices

Most of the lands worked by peasant farmers in the Baixada fall into three categories: (1) state lands on which no rent is paid; (2) lands held by private persons, with or without clear title, for which rent is charged; and (3) some scattered cases of medium-size properties (about 100 hectares) acquired legally through INCRA in specific demarcation action some years ago (e.g., Rio de Laje and Bela Vista, near the Pinheiro-Viana county border). The state land company, COMARCO, has also sold large blocks of state land over the past several years to agro-industrial groups (the COMARCO area borders COLONE's northeast frontier, falling mainly in the municípios of Turiaçu and Santa Helena). Finally, there are pockets of church-owned land in the municípios of Bequimão and Alcantara, which peasant farmers have worked for many decades; in the past, they paid a "voluntary" rent to the Church ("jôia"), and are now charged a nominal rent to cover the Church's land taxes (about Cr\$200 a year per family, regardless of the size of the cropped area).

Peasant land-use patterns in the Baixada and the COLONE area are remarkably uniform, despite the variation in tenancy patterns and other socio-economic conditions: land is cleared and farmed for one year, and then left to regenerate during a period of from three to eight years; permanent cropping and use of mechanical or animal traction are nowhere to be found, not even on large farms (except for the COMARCO

area).¹ Exceptions to this pattern are the separate bean plots of peasant farmers, which are cultivated permanently, and the fenced-in plots adjacent to houses (the "quintal"), where a variety of permanent and annual crops are farmed without fallow. (These exceptions are discussed further below.)

Over the past several years, much of the state land in the Baixada has been sold or claimed informally or illegally by large squatters or land-grabbers. This process has not yet touched one major area of state lands: the natural pastures ("campos") formed by inundation of lowlands during the winter months (January to June). Strong traditions of common use rights for pasturing and fishing have kept these lands free so far from the sales, land-grabbing and enclosure that are taking place on the higher lands. Enclosure, nevertheless, is now starting to impinge on these lands as well, as discussed further below.

¹In the COMARCO projects, the cropping system used by tenants is the same with the significant variation that landowners rely on the peasant's annual land clearing as a device for permanent clearing of land for subsequent use as pasture or mechanized cropping. In these latter cases, rent is not charged, though the peasant is often required to leave the area planted in pasture; this latter task is said to take about three person-days of hard labor per linha, amounting to about Cr\$450-Cr\$600 at the current agricultural wage of Cr\$150-200 per day. This cost is almost the same as the standard rental charge of 60 kg (2 alqueires) of unmilled rice per linha, which is equivalent to about Cr\$700 at current rice prices of Cr\$350 per alqueire.

Enclosure and Its Impact

Over the past ten years, the Baixada has undergone a rapid transformation from a system of use rights to one of property rights. Peasant farmers, the principal beneficiaries of the use-right system, have been the victims of this transformation, which has not included them and has usually resulted in their expulsion from the claimed lands. Lands formerly belonging to the state and considered freely available for swidden cropping have been increasingly taken over by private claimants, and fenced in to protect that claim. Much of the private appropriation of land by large operators has been based on the claiming of squatter's rights, which are strongly protected in Brazilian land legislation. Many believe that the legal requirements for verifying whether large claimants actually have earned squatters' rights have not been observed; in most cases, it is felt, those who have acquired rights to land under these procedures have done so at the cost of the "true" squatters--i.e., peasant families who were actually working the land. The transfer of state land to private hands in the Baixada, then, has resulted in a rapidly increasing scarcity of land for peasants to work, as well as outright expulsion of entire peasant communities from areas they had occupied for many years. Several factors have contributed to this increased pace of enclosure and eviction.

Ironically, the very efforts of the state to make state lands available for sale to individual farmers, and to recognize the squatters' rights of those who have been working the land, have left peasants worse off than they were before under the loosely defined use-right system. Though the first step of the process of alienation ("ação discriminatória") is considered to facilitate the granting or sale of lands to the peasants who work them, most peasants and peasant organizations see the initiation of an "ação discriminatória" as their undoing--as the cause for their losing land rather than gaining it. On paper, that is, the "ação discriminatória" seems to protect the use rights of existing land occupants by requiring a published announcement of intention by the state or the private claimant to take over a particular piece of land; the announcement asks that any persons now working that piece of land and wishing to remain there step forward. Most peasant occupants are not able to take advantage of these public announcements made under the "discriminatória" procedure. Though the announcements are published in newspapers in the state capital, these newspapers are nowhere available in the Baixada. (The law also requires that the announcement be posted in public places in the area where the land is located, but this requirement is rarely observed.) The process of claiming squatters' rights, moreover, requires expenditures for legal assistance and travel that are far beyond the reach of most peasant farmers. The "discriminatória" process, in sum,

gets used against peasants to facilitate the acquisition of the land they work by others, even though the process on paper appears to be working in their interest. Though heralded as the instrument for helping peasant farmers to obtain the land they work, the "discriminatória" can therefore not be counted on in the proposed project unless substantial structural changes are made in the way the process gets carried out.

A second reason for the enclosure phenomenon of the last decade in the Baixada, and the exclusion of peasant farmers from it, has been the issuance by the state governor of "permissions" ("anuências") to claimants of medium and large tracts of land. These permissions, the issuance of which was suspended this year, granted use rights to medium and large operators with no verification as to whether the lands chosen were already being worked by those who had acquired squatters' rights; an example of the casual nature of the "permissions" process is the 80 such permissions that were granted to individuals for land occupation in areas already owned by the public colonization company, Colone, of which the state is a major stockholder. The permissions, granted for an indefinite period of time, allow claimants to qualify for future claims to the land under squatters' rights provisions of the law. Many of the permissions have resulted in forced eviction of peasants from lands they have worked for years.

A third reason for the enclosure transformation in the Baixada has been the federal government's 1970s policy of promoting

agricultural development by channeling large amounts of subsidized credit for agricultural and livestock investments through the banking system. Negative real interest rates resulting from inflation have made long-term credit even more attractive than short-term credit because inflation diminishes the real value of amortization and interest payments more over longer periods. Extensive livestock farming thus became particularly attractive--as opposed to investment in cropping--since investment costs in livestock are high in relation to annual operating costs, for which real credit subsidies were less. The annual operating costs of agriculture are considerably higher than for livestock, mainly because of the higher labor inputs in agriculture. Thus the credit subsidy amounted to much less of an incentive to invest in agriculture than in livestock.

Livestock was not a new activity in the Baixada. To the contrary, it was a traditional activity, made particularly appealing by the large expanses of natural pasture ("campos") regenerated automatically each year during the months of winter inundation. Under this traditional system, the livestock are grazed unfenced while the cropping areas are fenced (with wood) to keep cattle and smaller livestock out. There was no interest, under this system, in using fencing to keep cattle in. The credit boom of the 1970s, however, contributed toward radically changing the purpose and significance of fencing. Fencing was encouraged by banks supplying

the new subsidized credit, not so much because it represented a more intensive and "modern" production system which kept cattle in, but because of the bank manager's concern for having a secure guarantee for his loans. Fencing, that is, would help establish the client's claim over the land--in an environment of confusion over land ownership where peasant farmers might successfully claim squatters' rights at any moment. The fence, of course, would also keep off would-be users of the land in the future. Bank managers thus encouraged the new livestock investors to "clean" ("limpar") their newly mortgaged lands of tenant farmers; "clean" property would earn a better credit rating, and higher amounts of credit. Because the fence was a major investment item, moreover, it constituted a desirable addition to any investment credit by bank managers anxious to "sell" the new and large amounts of subsidized credit.

The barbed-wire fence, finally, has come to be accepted in the adjudication of land claims as the sine qua non of proof of squatters' rights; as one evicted peasant said, "the fence is the Law" ("a cerca é federal"). Even if a land claimant had no livestock to fence in, then, he would find it prudent to build a fence as his first step, preferably in a conspicuous place like the roadside. Thus it is that the barbed-wire fence, and the process of putting it in, has taken on great symbolism in the struggles over land. When threatened with being "fenced out" of the land they have been working,

militant peasant groups have moved first to cut the wires of the intruder's fence. This act, in contrast to the long, draw-out procedures of legal recourse, instantly disestablishes the claim of squatter's rights to be made by the fencing intruder. The legal process of challenging the fencer's right to the land, in contrast, is normally subject to such delay that the fence, by then in place for some time, readily establishes the squatters's rights of the intruder. (The problem of the fence as a fait accompli in the struggle over land prompted even Colone, at one point, to use its bulldozer to destroy a fence being put up by a large intruder on its lands.)

Credit expansion has also contributed to the enclosure phenomenon and its bypassing of legal procedures because of the requirement that applicants for investment credit obtain a land document. Bank managers have not required land title but, rather, only proof of registration at the local notary office. This has made it possible for land claimants to gain a negotiable instrument of land purchase without going through the more rigorous process of titling, requiring the advertising for alternative claimants and the involvement of state-level authorities. The land-registration document, though not as secure as a title, constitutes some proof of a history of possession of the land for the future, at the point when title is sought or challenged by others.

The Federal Government's current anti-inflationary squeeze on investment credit--along with the growing disenchantment of policymakers with the results of subsidized agricultural credit--may bring some respite to the enclosure process in the Baixada or at least a slowing down. Many large propertyowners have been accustomed to refinancing their investment debts when they fall due, thereby reducing the real burden of repayment even further. The new credit squeeze has undercut this system, and bank managers are finding themselves with many livestock clients who, faced with the impossibility of refinancing, are unable to pay up. Thus the lack of easy credit for fencing and the resulting financial straits of landowners suggest that some landowners might be less resistant to giving up at least some of their land in return for compensation than they might have been when investment credit was easy. This means that rapid action on the land component of the proposed project may give better results now than subsequently, when it is likely that political pressures to alleviate the credit squeeze will become overwhelming.

The impact of the enclosure transformation on peasant farmers has taken several forms, all of which are highly relevant to the possibilities for carrying out a rural development project in the Baixada. The majority of peasant farmers interviewed expressed great concern about the growing difficulty of finding land to rent or

unclaimed state land to farm. For many peasants, this concern was overwhelming, making almost academic any discussion about possible new crops or forms of technical assistance. Because of the strong tradition of use rather than ownership rights in Maranhão, moreover, most farmers had never thought about owning land. They just wanted to be assured of access--either for free or for rent. This is in sharp contrast to the traditional Northeast, where most peasant farmers express a keen desire to own their piece of land. Baixada farmers, when pressed, would agree that owning a piece of land would be "nice;" but they could not conceive of that possibility ever arising, or of their having the capital to make it a reality. Many farmers did respond enthusiastically, however, to the idea of long-term stable rental contracts, perhaps with purchase options.

Land use vs. ownership

The desire for land use, as opposed to ownership, is a result of a long tradition of stable systems of land use among Baixada and other communities in Maranhão. In areas where state or church lands are still available and enclosure is not taking place, there is a remarkable lack of conflict over land use both within and between communities. Communities also have strong traditions of communal work on projects--mainly, schools, chapels, feeder roads and soccer fields. They often share work on each other's plots ("troca de dia"), particularly for land-clearing tasks; plots are sometimes laid out so

as to facilitate communal burning and/or common fences. (Note that these communal traditions involve communal working and laying out of individual parcels but not communal production.) Some community members were even found to "share" repayment of bank credit; when one member's loan fell due, all would chip in to repay and the same would occur for the subsequent members of the repayment group.

The land-use and other community traditions of Maranhão contribute to the stability and conflict-free character of the land-use allocation process in areas where land has no owner. That these traditions work smoothly also explains why land ownership as opposed to access for use is not of great concern to peasants in face of increasing land enclosure. Finally, the land-use traditions suggest that the vesting of land-use rights in the community, rather than the individual, might be a successful model of land access under the proposed project. This suggestion, and other aspects of the use model of relevance to the proposed project, are discussed in a separate section below.

Flight from development

Another result of the enclosure phenomenon is that peasants see "development" as "bad"--as something that brings trouble for them, as something they want to flee from. A new road, they say, will only bring in banks and then the land-grabbers ("grileiros"). A development project, they say, will spell our doom--our loss of

independence, the arrival of a boss where before there was none. Many tell of how they have spent their lives "fleeing from cattle"--that is, from the expulsion and land shortages that accompany the introduction of livestock and fencing to a region. Because development projects are associated with government institutions--land-adjudication agencies, extension services, government-sponsored credit programs, peasants in the Baixada have come to consider government just as much a threat to their access to land as the land-grabbers. This forced flight of peasants from "development" has obviously perverse results: it increases their costs of production and leads to a deterioration of the physical quality of their life, by putting them further away from adequate transport, education and health services. The flight from development, as discussed below, also contributes to an accelerated rate of destruction of virgin forest.

One reason that peasant farmers fear the landlords and the rental arrangements that come with "development" is that they often introduce severe constraints on farming practices. As in many other parts of Northeast Brazil, the landowner who rents out part of his land often insists on releasing his cattle into the cropped area after the rice harvest in June. This prevents the planting of manioc, a basic ingredient of peasant diets in the region; manioc has a twelve-to-eighteen month cycle, in contrast to the six-month cycle of rice, thus requiring an eighteen-month rental cycle rather than the nine months

allowed for clearing and planting of rice. In addition to manioc, farmers customarily plant other crops important for home consumption and income--crops that yield considerably beyond the month of June. Some Colone settlers were planting tomatoes for the first time because, in the areas from which they had emigrated, they had had to give up their previous land to the landlord's cattle in June. The use of rental agreements for conversion of cleared land to permanent pasture, then, limits considerably the period during which peasant farmers can harvest their crops and, hence, the range of crops they can plant.

Land security and farming practices

The small share of Baixada farmers who had secure title to their land used farming practices, surprisingly enough, that were almost no different from those without such security. Even in the Colone area--where peasants had their own plots, and where some were receiving short-term crop credit for their annual crops and investment credit and technical assistance for pepper cultivation and cattle raising--farming practices for the annual crops (rice, beans, manioc) varied little from those of the Baixada, except for regional variations found across all landholding classes. Differences in land security and lot size seemed to be reflected only in increased wealth or income related to livestock ownership and larger cropped areas, though even this difference did not always prevail.

Similarly, bank credit seemed to result only in a larger cropped area and not in changes in inputs or practices. Farmers with credit, in the Colone area as well as the Baixada, usually reported that they increased their cropping area 50% to 100% the first time they received credit, but did not change their farming practices or use of purchased inputs. (Pesticide was sometimes an exception; Colone farmers seemed to report more pesticide use, for rice, than Baixada farmers.)

The similarity of traditional cropping practices between farmers with and without secure land access suggests that existing agricultural practices and productivity cannot be explained by insecurity over land. Or, at the least, other constraining factors are more dominant in impeding the adoption of such practices. These other factors are economic and institutional: (1) the adoption of other crops and cropping practices will not yield more net income than current practices, given existing prices, access to inputs, and risk levels; and (2) many farmers did not know of the possibilities of other cropping practices, e.g. mechanization by animal traction or certain agricultural implements like the "matraca," a planting device used in some other parts of the Northeast. They felt that the financial and institutional access requirements of such practices put them way beyond their reach.

Labor constraints, credit, and virgin forest

When talking about constraints on increased agricultural production, peasants consistently emphasized labor constraints, rather than availability of other inputs or services. Labor demands for weeding were seen as the most binding constraint on desired increases in cropping area; the main purpose of bank credit was seen as making it possible to hire more labor. Indeed, farmers cited the labor constraint at weeding time as one reason for preferring virgin forest over secondary growth; though virgin forest required much more work than secondary growth at clearing time, it nevertheless required no weeding--in contrast to the two or three weedings required for areas cleared of secondary growth. Short-term crop credit, moreover, does not cover clearing costs and usually is released by banks too late in the crop-cycle to meet even the land-preparation costs it is meant to cover. (Land clearing activities start in September; January, when planting commences, was the most common month for release of the first credit installment, both by the Bank of Brazil and the Colone cooperative, Comalta.) Even when short-term credit is disbursed late, then, it makes the clearing of secondary growth more economic than that of virgin forest. That is, the increased weeding costs of secondary growth can be met with the credit--in contrast to the increased clearing required with virgin forest, the costs of which cannot be met with credit.

Many peasant farmers reported that corn and rice yields in areas of secondary growth were higher than for virgin forest--and that manioc yielded better in forest than secondary growth.¹ Increased corn and rice yields with secondary growth, it was said, resulted simply from there being more cropping area available per unit of land prepared, because of the absence of the large fallen logs that cover a cropping area after burning of the virgin forest. Given this difference and an adequate fallow between the first and second cropping, most farmers did not seem to think that yields after the second burning were less than after the first. Another advantage cited by peasants for farming on secondary growth was that it was more suitable than virgin forest for the extraction of wood for charcoal and fencing. The alleged preference of peasants for virgin forest, then, may also be a result of a capital constraint at weeding time. With credit, farmers appreciate the fact that financing for weeding costs on areas cleared of secondary growth relieves them of arduous task of clearing the primary forest.

The labor constraint on increasing the size of the cropped areas also helps to explain a phenomenon considered problematic by Colone: the fact that (1) most colonists have two or three additional

¹One farmer reported 1,350 kg. of rice per hectare after burning virgin forest and 1,800 kg. after burning sufficiently old secondary growth; the same farmer reported manioc yields of 4,050 kg. per hectare after virgin forest and 2,700 kg. after secondary growth.

families living and farming on their plots--usually friends and relatives without land to whom rent is often not charged but by whom labor services are provided at certain times; and (2) colonists commonly rent out part of their plots, typically for two alqueires (60 kg.) of rice per linha. The labor constraint would seem to be the most obvious explanation of this phenomenon, since the practice is obviously not costless to the settler; it uses up primary forest at a faster rate than normal, and shortens the fallow period on secondary growth. (Colone perceives the phenomenon as a problem because the lot size was conceived as the minimum necessary for a self-sufficient single-family farm.)

Enclosure and environmental degradation

The indirect impact of enclosure on the rate of forest destruction deserves special attention. Degradation of natural resources through forest destruction is usually attributed to traditional patterns of slash-and-burn agriculture, as practiced by "semi-nomadic" peasants alleged to be constantly in search of virgin forest to burn. (The term "semi-nomadic" appears in much of Colone's evaluation documents.) Though it is true that the availability of nearby virgin forest represents a great attraction to peasant cultivators, it is also true that there are many stable slash-and-burn communities in the Baixada, which have long since exhausted their virgin forest, and continue to use the traditional system on the

remaining secondary growth, with long fallow periods of from three to eight years. Land enclosure and the threat of it, then, constitutes a serious "push" factor toward migration in search of virgin forest, which is usually far from roads, banks and land-grabbers. A project that brought security to peasants about their land-use rights would therefore make a substantial contribution to environmental preservation, even if slash-and-burn agriculture continued to be practiced.

The Alto Turi project of Colone provides some examples of the changes in peasant attitudes that security over land can bring about. Though there are many farmers in the Colone area who still prefer to be at the advancing edge of the virgin forest rather than cultivating a permanent lot with secondary growth, the majority seem to have distinctly opposite attitudes to those described above: rather than fleeing from the roadside, they flock to it--in this case, the paved federal highway, BR316. They prefer to be close to the road for the obvious reasons that take precedence when insecurity over land does not frighten them away--mainly, the possibility of education and health facilities for their children, and lower transport costs for their agricultural production. Thus, Colone settlers with permanent lots far from the road are clamoring for the construction of feeder roads, rather than dreading them as in areas of land insecurity. Even for those who give up the security of their

permanent lots in the Colone area in search of virgin forest, a commonly-heard explanation is that they lack "faith" in Colone; they do not really see their use rights as secure, that is, a not surprising attitude given that Colone has still not granted title to most of its settlers and that the area has had increasing problems with land-grabbers.

The concentration of attention on slash-and-burn agriculture as an explanation for environmental degradation, in sum, has overshadowed the role played in this problem by enclosure and insecurity about access to land.

Migration

The "push" effect of land enclosure and insecurity can be seen in the high rates of migration from east to west in Maranhão. Farmers interviewed in the Colone area, with or without lots, were remarkably consistent in citing enclosure and expulsion as a reason for migrating to the area. Many even said that they were forced to come despite the fact that their previous homeplace was better--more babaçu, more fish, better land.

Of Colone lotholders, the largest single block (25%) is from the Baixada. Though net migration figures were not available for the Baixada as compared to other areas, Baixada families consistently reported the migration of youths to other areas because of land problems--either to the urban areas of São Luís, Rio or

São Paulo, or under contract-labor arrangements for several weeks or months at a time to the Jari project in the Amazon. These migration stories suggest that enclosure was forcing peasant farmers to leave the Baixada and that the availability of land for small farmers in the Colone area constituted a certain incentive to migrate. (Most Baixaderos interviewed in the Colone area, however, were from the areas adjacent to Colone--i.e., the western portions of the Baixada; in the eastern and more densely populated parts of the Baixada, communities reported no cases of migrants to the Colone area, and most families interviewed had not even heard of the project.)

Communal pastures and the fishing-cropping economy of the "campos"

One of the most serious impacts of the livestock-credit boom of the 1970s in the Baixada involves the natural pastures ("campos") in the eastern half of that region. The "campos," as noted above, have long been respected by small and large farmers alike as belonging to no one, and they have remained almost completely unfenced throughout the enclosure transformation. The campos play a major role in the peasant economy of the Baixada; during the dry season, they offer a wealth of free pasture and fish to peasant farmers. The dry-season fishing activity is complementary to the agricultural activity of the wet season; the fish provide an important supplement to diet and income during a time of year when there is no

cropping activity that can do the same. (Farmers interviewed during the fishing season on the campos of Matinha were earning about Cr\$300 a day from fish, double the prevailing agricultural wage.)

The fishing-cropping economy of the Baixada covers a wide swath of peasant families, not just those living at the edge of the campos. Those living at a greater distance, on the dry lands, move to the edge of the campos at the end of the harvest season, constructing a temporary dwelling ("rancho") on the land that will be inundated in winter. Those who live close enough to the edge of the campos to fish there without moving, construct a temporary shelter at the beginning of the cropping season if their cropping area is distant from the campos. Some farmers, finally, work plots close enough to the edge of the campos that they can farm and fish without moving. The readiness of the Baixada families to dislocate themselves annually to pursue fishing and farming activities sequentially is indicative of the importance of both activities to their income. It is in this area, within reach of both the campos and the cropping areas, that population densities are highest.

Though the commons tradition of the campos has survived the pressures for enclosure so far, it is clear that enclosure is now starting to spread there. Landowners with dry lands bordering the campos are now starting to fence in small pieces of the campos adjacent to their dry lands; several such enclosures were observed

in Matinha and Viana (cattle are pastured in the winter on the dry lands). This trend clearly has ominous implications for the peasant fishing and grazing economy. Since the ownership of the campos is undisputably public, these enclosures have not been based on ownership or squatters' claims to the land; they represent simple defiance, unchallenged by the authorities, of land-use rights and traditions.

A more immediate threat to the fishing-grazing economy of the campos, also assisted by the credit-livestock boom of the 1970s, has been the large-scale introduction of buffalo into several of the campos areas. Buffalo were first brought into the Baixada from the Ilha de Marajó during the 1950s and were considered a great innovation, because they are better suited than cattle to the wet campos environment. Whereas cattle were complementary with the fishing economy, however, the buffalo are having a destructive effect on it. The buffalo are considerably larger animals than cattle and like to wallow in the shallow campos water; this results in the degeneration of some of the pasture area into permanent mudflats and the muddying of waters to the point that fish and the algae they feed on cannot survive. It is also said that the buffalo eat the plant matter that fish feed on, that they destroy the small waterholes where caught fish are held, that their urine is toxic to the fish, and that they have lice that carry diseases to the fish. Buffalo are

also said to invade the fenced crop parcels on the lands adjacent to the campos; cattle, in contrast, are said to always "respect" the fences. Finally, the buffalo are said to be easily angered and violent, sometimes invading the peasant huts at the edge of the campos and injuring children. Whatever the accuracy of the complaints, the buffalo have created a serious social and economic problem in the campos. One of the areas of greatest social tension and militant peasant leadership is the area of Brito in the municipio of Turiaçu, where some invading buffalo were killed by peasants, and where ranchers are threatening to take reprisals.

Any project for poor farmers in the Baixada cannot afford to ignore the twin problems of the imminent enclosure of the campos and the buffalo. The availability of secure land in more distant places in the west of the Baixada will not solve the problem of the significant income supplement provided by fishing; nor does it seem likely, from interviews with fishing-cropping peasants of the campos, that they would give up their campos existence in exchange for a secure but exclusively dry-land existence further away. The Colone experience shows that secure land ownership may not lead to income increases for many peasants for a considerable time. Land security, then, cannot be considered as capable of providing an income substitute for the fishing-grazing activities of the summer months in the campos.

The campos seem to be the only area in the Baixada where communal activity is still possible, since enclosure has not yet transformed the area. A move by the state government to protect certain areas of the campos for the fishing-grazing-cropping economy, then, might turn out to be politically easier than freeing up the dry areas, so much of which have already been claimed or enclosed. Preserving the communality of at least part of the campos would also prevent the destruction of one of the major comparative advantages of the Baixada economy--fish production. Finally, the concept of designating certain areas for buffalo grazing, and prohibiting the buffalo from others, is not a novel one. Because of the problems created by buffalo raising in the densely populated area of Brito in Turiaçu, the mayor has already issued a regulation (in May of this year) designating certain other campos areas outside Brito, with low population densities, for buffalo grazing.

The Rights of Use: Stability in Shifting Agriculture

The tradition of use rights over land rather than individual ownership appears to be an important binding factor in Baixada communities, as well as a part of the community tradition of migrants to the Alto Turi area. In settings where no one owns land, that is, communities have developed a system for deciding who works what parcel of land in any particular year. The farming system dictates that a farmer can stay on one plot for only a year since a second year of cropping would involve decreased yields and excessive demands for weeding. This means that each new cropping year requires a harmonious reallocation of plots between members of a community.

In the Baixada areas where enclosure and private ownership have not yet taken over (state or church lands), the land-use allocation process works so smoothly that one tends not to notice that it is even there; there are few disputes to observe and there seems to be no centralized allocation authority at work. When asked how the process works and what happens when two farmers want to stake out a plot in the same area, community members respond that this rarely happens because of an iron respect for the role of first come, first served. If an area is marked with a stake to which are fastened a few live branches, it is considered taken. The smooth operation of this rule implies a strong sense of community and of the value of land as residing in its use and not its ownership. The

concept of a plot of land belonging to one person and not to another is quite alien to this particular sense of community identification and solidarity. There are a few exceptions to this rule, discussed further below.

It is important to understand the positive role that the concept of use rights (as opposed to ownership) plays in community organization, because this pattern of land use is often portrayed in a negative light. Development technicians tend to characterize peasants who farm this way as nomadic and backward, unable to appreciate the value of having their own permanent plot of land and therefore unable to stay in one place--as practicing a predatory agriculture that destroys the environment, and as uninterested in improving their productivity. The alleged "nomadism" of these farmers, for example, has been considered by Colone to be an important cause of the sale of lots by settlers, the renting out of lots to other settlers, and the welcoming by settlers of whole families of relatives and friends to come live and work on their lots. Colone views these events negatively because they violate the agro-economic model underlying the project, according to which 50 hectares were deemed necessary for one family to support itself (e.g., 34 hectares of pasture, 1/2 hectare of high-value permanent crop (pepper), and the rest for traditional cropping, regeneration of secondary growth, and forest reserve).

The "disrespect" of Colone settlers for the economic model, and the "lack of appreciation" for finally having acquired a plot of land of their own to hold forever, can also be seen as the adaptation by settlers of an alien model to something that more closely resembles the way of farming and relating to others to which they are accustomed. This explains why the prohibitions or exhortations of Colone not to engage in these adaptive practices have been of little avail.

How might one take advantage of the use-rights system, and how might one try to make it functional rather than dysfunctional to project execution? In contrast to the more migratory nature of farming in the Colone region, where there are still large areas of virgin forest, the same farming patterns and crops in the Baixada go hand in hand with a remarkably stable settlement pattern. The traditional peasant cropping system, then, does not necessarily involve nomadic agriculture and successive waves of forest destruction. Why the difference?

In the Baixada, only the cropped parcel and not the peasant "shift" from year to year, within a larger area farmed by the community; in most of these stable Baixada communities, virgin forest has been unavailable for many years. If people migrated out of the community, it was because they could not find land to rent,

or because state lands were taken over and fenced by private persons, not because they had run out of virgin forest. In contrast to the Alto Turi region, then, the stability of the "shifting" agriculture system of the Baixada suggests that more can be done to improve this agriculture without introducing private ownership than one might, at first blush, think.

Beans and natural de-stumping

Some aspects of traditional farming practices in the Baixada suggest that secure access to land, without private ownership, might be sufficient to bring about improvements in agricultural productivity. For example, there are two aspects of the peasant cropping system in the Baixada that are quite permanent and "modern" in the sense of approximating the kind of cropping system sought after in agricultural development projects--namely the "quintal" and the planting of beans. As in some other parts of Maranhão and the Northeast, Baixada farmers plant beans in the same place year in and year out--separate from the rice plot--because, as the farmers say, the beans replenish the fertility of the soil. Sometimes, this bean plot ("feijoal" or "lastro") is also interplanted with manioc, in which case no beans are planted in the second year. After the manioc of the "feijoal" is harvested in the second year, secondary growth is cleared by burning, and beans are planted once again. By the third or fourth year, the "feijoal" is free of stumps which have by that time rotted away.

De-stumping is usually held to be a "prerequisite" of modern agricultural practices. De-stumping is a costly investment, whether done mechanically or by hand, and frequently represents a large share of the investment credit to be financed by agricultural development projects. According to the traditional methods of the bean parcel, however, de-stumping is achieved without the necessity of any investment. (This method is also used in the quintal.) Letting the stumps self-destruct, rather than planning for their more rapid destruction with heavy investment, can therefore have important implications for the impact of a rural development project.

Credit and the lack of it has long constituted a major constraint on the ability of rural projects to reach a significant number of small farmers. Many poor farmers simply cannot tolerate the degree of indebtedness necessary for such investments; and formal credit institutions have found it costly and difficult to meet more than a small percentage of the demands of small farmers for such credit. The Colone project is no exception; after six years of project execution, in which improvements in productivity were contingent on large amounts of investment credit--and after considerable technical assistance in the setting up of a cooperative credit mechanism--only a few of the 7,000 settlers in the area have access to investment credit; even they are not able to

obtain the credit until well after land preparation costs have been incurred. The traditional system of letting de-stumping take care of itself, then, opens up the possibility for broadening considerably the impact of the proposed project. The permanent bean patch and the costless de-stumping of traditional farming, in sum, suggest that Baixada farmers can respond to opportunities without much prodding and without recourse to large investment credits.

The "quintal" and modern agriculture

The "quintal" comes close to the image of modern agriculture sought after in rural development projects. Strangely enough, it has been largely neglected as a focus of agricultural extension efforts and has received almost no attention in agricultural development planning; if referred to at all, it is inaccurately portrayed as a kind of plaything of the woman of the house, not representing the kind of serious agriculture or income opportunities found in the field crops. Even the translation of the word "quintal"--"orchard" or "backyard garden"--does not convey the fact that the quintal contains a complete variety of crops, not just fruit trees or vegetable-garden varieties, as well as plantings of the very beans and corn that are grown in the field crops as well. The quintal is a more serious and costly undertaking, moreover, than its portrayal as a leisure-time hobby conveys. In the Baixada, at least, significant work is invested by all members of the peasant

household in establishing the quintal. Many of the quintals observed in the Baixada were of significant size--some being one or more hectares; investment in the quintal will usually be greater than in the field crops. Perennials are planted, the land is completely cleared and stumps left to rot, and fencing is put in place that has a longer service life than the fence surrounding the field parcel, which lasts not much longer than a year. The production of quintals represents a serious source of income to producer households in the Baixada as well as contributing significantly to agricultural output. A large part of the fruit consumed in São Luís comes from the quintals of the Baixada.

Input use is also more intensive and "modern" in the quintal than in the field crops. Organic fertilizer is collected from one's own animals or from the animals of neighbors or "patrões," usually free of charge. This fertilizer, interestingly, is also applied to the quintal plantings of the same bean and corn varieties that are planted without fertilizer in the field crops; farmers with quintals were perfectly aware of the differences in yields between the fertilized beans and corn of the quintal and the unfertilized field production.

Peasant farmers show a more experimental approach to planting practices in the quintal than they do in the field crops. Seeds are traded with neighbors, and the proximity of the quintal to

the house, in contrast to the dispersed and distant field plots, makes it possible for people to have frequent looks at the successful experiments of their neighbors. Quintal owners do a lot of proud showing of interesting results to neighbors.

Another important aspect of quintal agriculture is the significance for input cost and use of its proximity to the house. In both the Baixada and Alto Turi areas, most peasant farmers travel long distances on foot or by animal to reach their field crops; in many cases distances are so great that farmers stay at the site of their field crop for several days at a time during peak periods of cropping activity. This practice is just as prevalent in Colone's Area III as it is in the Baixada, mainly because of the lack of feeder roads to settler plots.¹ The typically long distances to the field plots, and the impossibility of cheap animal or motorized transport, mean that the transport of fertilizer, pesticide and other inputs is extremely costly, often making such input use unviable.

Most models of the costs of and returns to switching from traditional to "modern" agriculture do not take these input-transport costs into account, and do not consider the sheer impossibility in

¹Though feeder roads are to be built by the proposed project, many settlers have already purchased houses in the communities along the paved highway. Many of these settlers express doubts about moving to their plots even when the roads are in place; they plan to continue "commuting" to their plots because of the easy accessibility of educational and health facilities in the highway communities.

many cases of transporting the inputs. This limits adoption of the "modern" model to those with field plots close to sources of input supply or highways--usually the better-off farmers. The easy accessibility of the quintal and the distance of the field parcel, then, provides one more reason as to why the quintal is in some ways a better focus than field crops for attempts to increase agricultural productivity and income. Needless to say, concentration on the quintal runs the risk of assisting mainly better-off farmers--since they are more able to gain possession of large house lots. Small quintals, nevertheless, are not uncommon in households of all incomes, because they are also an integral part of the swine-and-poultry system characteristic of both rich and poor households.

One last point can be made about the relevance of the quintal to the agricultural models of the proposed project. The quintal is almost the only area of peasant agricultural production in the Baixada where the concept of ownership and permanent use prevails, in contrast to the lack of interest in or traditions of ownership for the field-cropped area. This aspect of the quintal results, no doubt, from the qualities of ownership and permanence that inhere in the house to which the quintal is attached.¹ The

¹The house and the quintal are not always in the same place. In some parts of the Baixada, the quintal is at some distance from the house and is called "sitio." Even when the sitio is on state land, the permanent right of its user to that particular piece of land is recognized by other farmers in the area.

quintal, in sum, comes closest to the concepts of private property, ownership and permanence that are considered prerequisites of transformations to "modern" and more productive agriculture.

Land ownership, productivity and credit

Turning once again to the question of raising productivity in field-crop production, it would seem that agricultural planners have made things more difficult than necessary by assuming that private ownership is a prerequisite to increased productivity. Many Baixada farmers expressed keen interest in learning about and gaining access to new inputs and practices--agricultural implements like the matraca (a hand-operated planting device), mechanized plowing, pesticides and herbicides--but they did not see land ownership as a prerequisite for using such techniques. They considered the techniques as being perfectly compatible with stable rental or other land-use arrangements.

In the planning of agricultural projects, it is usually assumed that improvement in agricultural productivity will require large doses of investment credit and, concomitantly, that access to credit requires individual land ownership. This supposition is not necessarily true. Because of the prevalence of use rather than ownership rights in Maranhão--in contrast to the states of the eastern Northeast--banks in the state have long been accustomed to granting short-term and sometimes long-term credit to nonowners on the basis

of "permissions" from landowners or the state; or, in the common case of unclaimed ownership, credit is granted solely on the basis of the opinions of two references ("informantes") about the reliability of the applicant and his permanence in the area. Though these credit contracts usually involve only short-term crop credit, or investments secured with cattle or property improvements, the new "postos avançados" of the Bank of Brazil in the Baixada and the Colone area are granting limited investment credits without requiring land-related guarantees for the purchase of agricultural implements, animals, etc. It would seem that ownership, then, is not as serious a constraint on credit access as has been thought, at least in Maranhão.

The second inaccuracy of the assumption that ownership is necessary for investment credit is the further assumption that increases in productivity can only be brought about through large applications of capital to activities with long-term yields--namely, perennial crops and livestock, as opposed to annual crops. The pepper-livestock model of the Colone project is an example. Correspondingly, less attention has been paid to productivity-increasing possibilities of the traditional annual crops--rice, beans, corn and manioc--as well as of the variety of other foods that are interplanted with them. Thus Colone settlers who have had the full benefits of technical assistance and investment credit for

some time are using the same practices and getting the same yields in their field crops as settlers who have had no credit access and have never seen an extension agent.

The neglect of opportunities for increasing the productivity of annual crops already cultivated by peasant farmers results, partly, from the association of these crops in people's minds with backwardness and poverty, with "subsistence" instead of market-oriented production. In Maranhão, one often hears agricultural planners say that they do not want to invest large amounts of resources "just so peasants can do the same old things they've been doing for centuries!"¹ When technicians say that they don't want to support "the same old thing," of course, they are referring to practices and not necessarily to crops. But the contempt for the practices gets transferred to the crops, and opportunities for improving the productivity of annual crops through research and extension are often passed over for the more "modern" and "development-inducing" investments in permanent crops.

The main drawback of the traditional view of annual crops is that annual crops offer opportunities for productivity improvements that are not dependent on access to large amounts of investment credit,

¹This view is ironic, given the mounting policy concern in Brazil today over lagging production of foodgrains--and given the fact that over the last several years, western Maranhão has evolved into a major center of rice production for Northeast Brazil and, to a lesser extent, for the lower-class urban market of Rio de Janeiro; this production is based almost exclusively on peasant cultivation techniques.

or on individual income levels that allow farmers to wait several years until income starts to accrue. Recent research on peasant-farming systems, such as that sponsored by CIAT in Colombia and the Rockefeller Foundation in Guatemala, has shown that there are myriad changes that can be made in peasant farming techniques that will increase income and productivity without dependence on the heavy capital investments and the intolerably long payout periods characteristic of the agricultural models of the Colone and other agricultural development projects. If this type of research were carried out under the proposed project, and these types of improvements promoted, then the investment and credit exigencies of current models would no longer constitute the severe bottleneck on project impact that they have in the past.

Freeing productivity improvements from dependence on investment credit would also be compatible with a land-use system that did not require private ownership. To consider land ownership as the prerequisite for an agricultural development project for poor farmers, in sum, is to create unnecessary obstacles to achieving a broad impact on agricultural production and productivity, as well as on the incomes of the rural poor.

A possible use-right model

Lands owned by the church in the county of Bequimão (Terras de Santana) offer a possible model for a use-right or rental

plan involving lands where communities are already engaged in field cropping. Church-owned lands in this area have a long tradition of communal use. In the past, peasant users paid a voluntary contribution to the church ("jôia"); today, the church charges a low annual "rent" to cover its land-tax payments (rent is Cr\$200 a year per family, representing a fraction of the rents charged in the area, typically two alqueires of rice per linha, equivalent at current rice prices to roughly Cr\$700 per linha). On the Santana lands, the community elects one to three persons ("encarregados") to be in charge of collection of the land tax and, significantly, enforcement of the law against destroying babaçu, cutting babaçu for palmito and general vigilance against arsonists and land-grabbers.

Protection of babaçu is important since it accounts for a good part of the income earned by the poorest rural families.¹ Though babaçu is considered to be one of the great natural resources of Maranhão, it is systematically destroyed by peasants and livestock ranchers in many areas; its shade stunts the growth of agricultural crops, and its weed-like growth chokes the development of pasture. Peasants of the Santana lands were adjusting to the new enforcement of babaçu destruction by trimming some of the broadest

¹The church took action in this area after it was fined, as the law prescribes, when some of the occupants of its land were apprehended destroying babaçu.

leaves, so as to reduce the amount of shade cast on the field crops. Since poor families consistently reported babaçu as an important source of their income--and since families often characterized life as better or worse in a certain area according to whether or not babaçu was available--it would seem that some form of babaçu protection under the proposed project would be desirable.

The "encarregados" of the Santana communities do not necessarily represent vigorous or democratically chosen community leadership; their selection seemed to be heavily influenced by the Church. At the same time, the stagnant quality of the Santana and other Baixada communities seems to reflect the general stagnation of the region and the lack of development projects there. Whatever the explanation, it is significant that the residents of the Santana lands are not at all concerned about problems of land access, and do not seem to have even thought about the possibility of land ownership. (The Church is currently trying to obtain financing from MISEOR in Germany for a project that would transfer the title of its lands to the communities.)

Community-based rental arrangements, in sum, might be a less cumbersome way of approaching the land-transfer problem in the Baixada for the proposed project--at least as an interim measure. This strategy would facilitate the rapid transfer of land to clear state authority, and the immediate cultivation of that land by its

current occupants, without going through the time-consuming process of settler selection and of demarcation of individual plots. This consideration is particularly important, given the difficulties of preventing land-grabbers from moving into unoccupied areas--difficulties acutely experienced by Colone, despite its clear title to the land and its power as a government enterprise. Allocating use rights along community-based lines would also made good use of the existing potential for community organization, and would help relieve project administration of much of the burdens of directed settlement, as occurred in Area III of Colone. A community-based rental arrangement, finally, would avoid two of the major problems experienced in settlement projects: (1) abandonment by settlers of their lots, often resulting in sale to large land-buyers; and (2) "minifundization" of plots resulting from inheritance customs.

Organizing to Secure the Land

Episodes of organized peasant resistance in the Baixada to eviction and land appropriation are few, but are increasing. These cases, along with the experience with peasant organizing for land protection in Colone's Area III, suggest that (1) unless such organization occurs, the land component of the proposed project may well be used against peasant farmers rather than in their favor; and (2) a significant part of the administrative burden of a land component can be taken off the shoulders of project-executing agencies by delegating some parts of this task to peasant organizations, as Colone did in Area III.

The cases of significant or successful peasant resistance to land usurpation in the Baixada and in Colone's Area III exhibit some general characteristics which are relevant to the design of the proposed project's land component and to the objective of decentralizing certain execution and evaluation tasks to the community level. The first element of success in organizing and resisting was the fact that land-grabbing actions have been looked upon as illegal according to existing law. They are considered illegal not only by the victims of this process, but by other segments of society as well--local elites, the Church, sympathetic lawyers, technocrats. The adequacy of the law for protecting peasant rights, then, has not been in question; the problem was conceived, rather, as

one of persons acting outside the law or institutions not properly executing an otherwise adequate set of laws. In contrast to other parts of the Northeast, then, the struggle of peasant groups has been couched more in terms of opposition to an unjust execution of the law or to the complete disregard for it, rather than in terms of an unjust distribution of wealth and power. The former appeal, of course, has garnered more support from non-victim bystanders than would have the latter. It was on this basis that considerable support from establishment institutions could be brought to bear on the side of the peasants--from the Church, from the rural syndicates and, in the Alto Turi area, from Colone.

The justness of the law and the action of the Church

Defining the land problem as one of just execution of the law facilitated the support of many bishops and parish priests who in other times and other places represented "apolitical" or stabilizing forces in the communities where they worked. Priests felt perfectly comfortable in their new role as defenders of peasant rights because of the compatibility of their position with religious doctrine regarding justice; it was not unusual, for example, for a priest to be heard chastising a local land-grabber with a chain of quotations from the New Testament. The land-grabber was a sinner, according to the priest's invective, a pariah in the eyes of the Church.

This portrayal fit smoothly into the longstanding Catholic traditions of the area rather than representing a radical break from them.

That the land problem was caused by persons acting outside the law or by the institutions responsible for its execution--rather than by the law itself--has been a constant theme of the Church approach to community organizing and consciousness-raising ("conscientização"). Peasants will not be able to count on obtaining support and resources from government institutions, they are told again and again by the Church; they will never be able to improve their lives by appealing to government agencies, technocrats, mayors, or other politicians for support and resources. Improvement will come, according to this catechism, from the community's building of its own strength as a group, of becoming aware of what it wants to do and figuring out how it might be done without outside support. Any eventual relationship with outside institutions, according to this view, will be one of demands and pressures, not of supplication. The consciousness-raising activities of the Church regarding the law and government institutions, in sum, are distinctly different from the approaches of extension agencies or of Colone in Areas I and II, where the project agency takes the role of the new and enlightened patron, arbitrarily defining what peasants need and doing things for them. That much of the successful peasant organizing and community activity in Colone's Area III had the Church behind it, as well as

in the Baixada, suggests that the more independent evolution of community development that has been occurring under Church tutelage in Maranhão may yield stronger results than the "enlightened patron" approach used in many of the Northeast rural development projects.

The threat of violence

Another important element of peasant organization in Maranhão, and successful resolution of land problems, has been the show of force and the tacit threat of violence--in Colone's Area III, as well as in the Baixada. Land-grabbers were held at bay, or defeated through appeals to the executive, judicial or security systems only when peasants had already engaged in demonstrations of group force or violence; they cut the wires of a fence in construction, they surrounded a topographer in the process of demarcation and tried to convince him to leave, to work for them instead, or to understand that the work he was doing was not legal; if unsuccessful, they took away his equipment. (In the Colone area, where peasant groups could count on the support of Colone, they were careful to hand over the topographer's confiscated equipment to the local police.)

Just as important as the threat of violence in peasant resistance to violation of their use rights was the strong constraint by peasant leaders against using violence, at least not before all

other attempts at persuasion had been tried. Care was taken, for example, not to take arms to the first encounter with the topographer in the field, or even to appear in large numbers; the second confrontation might involve large numbers, but no farming implements or arms; the third might include the axe and sickle, but no firearms; the fourth might include firearms, but a prohibition against their use.

When these confrontations were successful, it was because they allowed an immediate and peaceful resolution of the problem at the local level. In contrast to appeal procedures made through the judidical system or state authorities--complicated, faraway, costly, time-consuming, and of unpredictable outcome--local resolution put more control over the outcome into the hands of the aggrieved groups. Perhaps more important, a complete unfolding of the problem at the local level drew the immediate attention and often the support of local elites and institutions. Whereas a local land conflict might have little reverberation in state or central-government politics, the communities where such conflicts took place were profoundly disrupted. (The pivotal role of local elites in solving peasant land problems will be discussed in a separate subsection below.) The possibility of playing out the conflict at the local level, then, served to bring various forces to bear in favor of resolution on the side of the peasants.

It is important to note that the local confrontations by peasant groups with land-grabbers and their agents usually avoided violence, even though the threat of violence might be implicit. The taking away of the topographer's instruments and the cutting of barbed wire fences did not involve abuse to human beings; it was part of a strategy of conveying to the intruder that he would be unwelcome in the community, and that life would be difficult for him. Clearly, of course, these acts sometimes led to violence--usually turned against the peasants themselves--when the intruder returned with his gunmen and the state took no restraining action. But increasingly as often, the intruder has been simply scared away--especially, as in the Colone area, when he could not count on the explicit or tacit backing of the state apparatus for taking justice into his own hands. The sequence of successful action in these cases, in sum, was first a move by the community acting on its own, followed by state support or neutrality.

The Colone experience in Area III shows, then, that some of the burden of protecting peasant farmers can be taken off the hands of the state and left to be resolved locally and peacefully--as long as at least one powerful state institution will be supportive or, at least, neutral. These successful sequences of peasant action are largely unchronicled--mainly because of the attention drawn to those cases that could not be resolved locally and where violence or aggressive state action ensued.

Local elites and outside intruders

Another significant element of successful community-level action was that the land-grabber was viewed by the community as an outsider, an intruder, a trouble-maker. This portrayal of the land-grabber in local eyes was crucial to the adherence of local elites to the peasant cause on the land question--shopkeepers, mill-owners, pharmacists, teachers, priests. On other questions, these elites would be more likely to stand in opposition to peasants--questions such as prices paid for agricultural produce, interest charged for credit, or prices charged for staples and drugs.

Many community leaders and other prominent community members in Maranhão also farm small- and medium-sized areas, producing the same crops and using the same production techniques as poorer peasants; though some have their own properties, many must rent or use state lands, regardless of their better income level. Many of these farmer-elites, then, are just as vulnerable to the land-grabbing phenomenon as the poorer peasants. In addition, many shopkeepers and merchants in the small communities of the Baixada and Alto Turi started their lives as peasants living solely from crop production. They therefore have greater class and cultural affinities with the peasants than with the land-grabbers, their lawyers and their topographers. Indeed, the land-grabbers and their contingents often treat these local leaders exactly as they do the poorer peasants

of the community--condescendingly and contemptuously. One community leader, a well-off farmer, cattle-trader, and swine-raiser told of a confrontation with a land-grabber who had driven from his place of residence in São Luís to the community after his topographer's equipment had been taken. The community leader moved to shake the hand of the visitor in his car but the latter did not reciprocate. "I know you don't want to shake my hand," the leader said, "because you people think the hand of a peasant stinks. But I'm extending my hand to you anyway."

That land-grabbing in Maranhão often throws the middle peasants and local elites on the side of the poorer peasants is quite different from the eastern Northeast, where the "exploiter" on land matters is often not an outsider to the community. Indeed he is usually a large landholder, an entrenched leader of the community itself. Thus the somewhat unusual support provided by community-level elites to peasants on land issues in Maranhão must be seen as a valuable resource for a project attempting to protect peasant use rights to land.

The role of the Church in supporting the peasant side of the land controversy has also been significant in bringing around local elites to the side of the peasant on the land issue. Publicity on the Church's recent activities in support of peasants in the Brazilian countryside has tended to focus on the repudiation that

some priests have received from landed and other power groups, and their rejection as being "subversive" and "radical." The action-oriented priest in Maranhão, however, is usually looked at by the community as an established and respected member of the community elite. His role as social actor is not divorced from his more traditional role as the community's religious figure; it is through the latter role that he commands respect and deference from the local elites, and continues to maintain it. Though some elite members might not particularly like his strong stance on peasant organizing, they in most cases view him as a respected and long-standing authority in the community, and not as a "radical" outsider. Because the priest is acting as a prominent member of the local elite, in sum, his support of peasant organizing has served as a model for other elite members to follow or, at least, to tolerate.

That community elites may side with poorer peasants on the land issue does not mean, of course, that they will side with the poorest or act in the interests of the community at large on other matters. For example, the evolution of community organizations in Colone's Area III from land matters to other activities of community interest like health and education reflects a graduate falling away of concern for poorer groups and a tendency toward community action benefiting elite groups. This subject is discussed further in the section on community organization below.

The potential for support of poorer peasants on land matters by middle peasants and community elites merits attention because these groups are often on the opposite side of the issues, and play quite different roles in rural projects that do not involve land distribution. Projects distributing subsidized agricultural credit and technical assistance, as the proposed project also plans to do, often end up benefiting only the middle farmers and community elites, rarely reaching the poor majority. The distinctly different nature of the two kinds of projects--land vs. agricultural services--partly explains these opposite results. More important, the land problem in Maranhão is such that if one solves it for the middle groups, it gets automatically solved at the same time for the lower ones. With agricultural assistance, in contrast, there is a limited supply of goods and services to go around, and those with greater resources and power get them first. A land-distribution project, therefore, offers a rare opportunity to tap community-level support for the redistributive objectives of the project.

Though the land-grabber may be an outsider to the community and hence vulnerable to its repudiation, he is more often than not a well-connected insider at the level of county, state or central-

government politics.¹ This makes it more difficult to induce supportive action by state institutions on the side of the peasant regarding land questions. State-level actions in support of land programs, in other words, will not always be able to be counted on during the execution of a land-distribution project like the proposed one. State institutions will in certain ways not be able to substitute for organization and support for land actions that occurs at the community level. Though the point is obvious from the above analysis, it can be easily overlooked in the design of such a project, where power and responsibility tend to be placed at the point where state agencies have their offices.

Communication and public monitoring

A final significant element in the success of peasant resistance to the usurpation of their land-use rights has been communications. The Church and the rural syndicates have placed great importance on making public, through radios and newspapers, occurrences of injustice and resistance in the countryside. Just as important, they have played an intermediary role in reporting these cases to authorities at the state level. Colone has followed the latter tactic, though it has shied away from publicizing its problems with land-grabbers in the press. This reporting and

¹The most current example of this kind of problem is the conflicts now occurring in Colone's territory, resulting from the support by the regional judge and police, as well as the state secretary of the interior, of land-grabbers in that area--despite the fact that Colone has clear title to the land and is a public enterprise in which the state itself is a major shareholder. This particular problem, it should be noted, is not only a function of the political power of certain land-grabbers at state and county levels; in addition, the state has been uncomfortable with the power and independence enjoyed by Colone as a recipient of large amounts of funding from authorities outside its control--i.e., the World Bank and the Federal Government.

publicizing role is of great significance because, in part, of the great difficulty of communication in the proposed project area. Newspapers and magazines are nowhere available in the Baixada and Alto Turi area and telephone communication is almost non-existent. Traveling by road to the state capital is costly and time consuming, because of the lack of all-weather roads and the numerous river crossings. Almost all the county seats of the Colone area, moreover, are reachable only by plane, a result of their long and thin rectangular layout back from the ocean coast, dating from colonial times when development proceeded from the coast inward along the riverways.

The extreme difficulty of communications in the proposed project area has three implications for land problems. First, it is very difficult for peasant groups or leaders to travel to county seats or the state capital to make their problems known and to process complaints. Second, incidents of invasion and resistance in one community remain almost unknown to other communities, thus preventing supportive action by other communities, or learning by example.¹ Finally, many incidents of peasant abuse never even reach

¹When a community leader and several farmers were arrested in Colone's Area III at the behest of a land-grabber, the event was communicated to neighboring community leaders only because Colone sent a representative to all of the communities to inform them and arrange a meeting. (All ten communities are along a paved federal highway.) The result of the meeting was a decision to take supportive action; the leaders went together to São Luís the next day in order to make known their dissatisfaction about a series of adverse police and judicial actions, of which this particular arrest was only one.

the ears of state authorities, simply because of their lack of presence at the scene of these incidents. Upon hearing of such problems, state authorities who are otherwise sympathetic or at least neutral on the land-grabber/peasant issue, will feel compelled to take some action. Publicity in the state and national press about land disputes and evictions of peasants has often been crucial in eliciting proper state action, partly because the publicity brings to the attention of federal authorities the remissiveness of the state in dealing with these problems.

For all these reasons, the small mimeographed newspapers put out at the local level by parish priests and rural syndicates have played an important role in turning private, unseen acts into public ones subject to public condemnation. Acts that will be tolerated by state authorities when unpublicized often cannot bear the burden of publicity, and force state action. The proposed project would therefore do well to encourage these forms of communication and intermediation in order to make sure that the land component is executed in the interests of the landless. One way to enlist this kind of support would be for the project to distribute to rural syndicates and parish priests a description of project objectives and of procedures by which land can be obtained under the project. This would guarantee the circulation of this information through parish and syndicate bulletins, and hence some public

monitoring of the land redistribution process. Support to the syndicates and the Church for legal assistance would be another way to make sure that supportive intermediation takes place.

The lessons of Colone's community organizing in Area III

All the elements of successful community organization around land matters and resistance to pressures from land-grabbers were at work in Colone's Area III. There were four additional factors, peculiar to the Area-III experience, that are of considerable relevance to the proposed project.

Occupying the project area. In their struggles for land, the communities of Area III could count on the support of a powerful government institution physically located in the area--i.e., Colone. Though Colone is a development agency, entrusted only with the power to carry out a development project in the area, the relative absence of executive, judicial and security institutions in the area made it easy for Colone, in the course of getting its project executed, to step into these other areas and fill the vacuum of power. Thus Colone came to be characterized by its critics as a power unto itself, a government in its own territory.

The growth of Colone's power in its territory and the vacuum of power resulting from the absence of other state institutions were self-reinforcing. The stronger Colone got, the more other state

agencies seemed to turn their attentions elsewhere, where they would not have to share power. The state highway department directed its maintenance activities to other parts of the state, forcing Colone to maintain its own roads; Colone was more responsive to settler requests for schools and teachers than was the state education department, thus overshadowing county and state education efforts; the Colone health efforts were more vigorous and appreciated than those of the state.

The power of Colone, based on the budgetary resources it commanded from outside the state and its control over the dispensing of goods and services, also spread to the area of the law. When settler communities could not resolve a dispute among them, they would take it to Colone rather than, as is the usual custom, to the local sheriff. Indeed, most of the sheriffs in the Colone area could be counted on until recently to decide problems with land-grabbers in favor of peasant settlers--an unusual situation in Maranhão. Colone's "pact" with the local law enforcement agents was not simply a result of the agency's power in the area; in addition, Colone has gone out of its way to cooperate with the local police and politicians in small ways in order to win their allegiance, or at least neutrality, on disputes with land-grabbers in the area. (The pact has broken down in the last months, because of a wooing away of local police and judiciary by land-grabbers with political connections at state levels.)

Colone not only has power over other institutions and other matters beyond the pale of its purely development activities in the area. It also has great power over its settlers--based on the access it provides them to land, credit, health and education services. (Of the 7,012 farmers settled on Colone lots, only 865 have obtained clear title--and this only in late 1980; the rest are dependent on Colone's disposition to give title.) The power of Colone over its settlers accounts to some extent for the willingness of local politicians to look the other way when Colone throws its weight on the side of the settlers in disputes with land-grabbers. The politicians know that if they support the "wrong" side, Colone has the power to turn the settlers against them.

Colone, in sum, has become a state within a state. This accounts for its success in winning the political struggles necessary to provide land to truly landless farmers in an area coveted by larger and more powerful operators--and its success in not having the police and judicial system undo this work. That Colone has had the power to do this, and has not hesitated to use it, is the cause of one of its failings as well as of its success: namely, the excessively paternalistic relationship that it has with its settlers in Areas I and II, and the highly directed approach it takes to their production activities. It is probably difficult for an institution to gain the power Colone has held over the judicial and security environment of its

territory without at the same time wielding this power excessively with respect to its settlers. The lesson to be learned from this experience for the proposed project is that the presence of a strong and sympathetic government authority in the project area itself, with some control over the judicial and security system, was crucial to the success of community activities in Area III in defense of their lands against the incursion of land-grabbers. That kind of presence, including a strong physical "occupation" of the project area, may be necessary to ensure the adequate execution of the land component of the proposed project.

The physical presence of Colone right in the area of the land disputes was important for other reasons. It meant that disputes could be solved at a lower level, before they escalated into violence or long drawn-out judicial procedures. It also meant that Colone was physically accessible immediately upon the outbreak of land problems, an important factor in situations where fences and other structures can be put in place overnight, legitimating illegal claims to land. Finally, the presence of Colone in the project area gave it the opportunity to build relationships with local politicians and to do small favors for them, thus building up their support, or their willingness to look the other way, in the case of struggles with land-grabbers or the state.

Dependence on the community. A second element of the success of Area-III farmers in organizing their communities and defending themselves against land-grabbers was that these independent community activities were very much in Colone's self-interest. As a new agency locked in a constant struggle for power with the state government, Colone desperately needed to establish its legitimacy and control over its largely unoccupied territory. The less settled the territory remained, the more subject it was to depredations by land-grabbers, tacitly supported at times by one or another state authority. Vigilance over the area was almost impossible, given its wide expanse and the fact that much of it has no road access beyond the paved federal highway that cuts through its length in a northwest direction. The more settlers there were, then, the less unoccupied land there would be for land-grabbers. The more settler organization there was, the more one could count on the settlers themselves to defend the unoccupied areas adjacent to them against land-grabbers.

Settler organization, and the devolving of power to such organizations to allocate land at a more rapid pace, represented a way of decentralizing the vigilance function to a level at which it was more feasible and, at the same time, of little cost to Colone. That Colone encouraged community organization and management of lot allocation, then, was very much a function of its need to get the land occupied and protected as rapidly as possible. If the land-grabbers

were successful, Colone management would have been deemed a failure. This lesson needs to be kept in mind in the designing of the proposed project for the Baixada; the usual pattern of design of such projects is to farm out the various project components to their proper functional places--credit to the banks, technical assistance to the extension agency, health to the health department, and education to the education secretariat. The land component, in turn, gets farmed out to yet another agency, which deals only with the land task and thus has control over one of many small pieces of the project. (Land titling components, moreover, usually account for only a small share of the project budget.) This typical organizational design for integrated rural development projects carries the danger that there will not be a critical mass of bureaucratic self-interest and power brought to bear on the land question.

If the single-agency, Colone-type approach is not used in the proposed Baixada project, one might want to alternatively give considerable responsibility over the land issue to one of the more powerful of the bureaucratic actors in the project, or the agency that will receive a large share of project funds. In the Bank's rural development projects, highway and irrigation agencies usually fit that description. Whatever the agency choice that is made, the land component will be more successful the greater the power and self-interest that the executing agency has.

Forced devolution of power. A third element of the success of community organization in Colone's Area III relates to the "forced" devolution of power by Colone to the community organizations for lot allocation, and the possibility of transferring the financial burden of land allocation from Colone to the settler. Area III was not included in the project for which Colone had obtained World-Bank and central-government financing, the sole sources of Colone funding. The area was considered available for future expansion, to be financed under a subsequent project. It was only because of the unpredicted arrival of many landless migrants to the area of expansion, in response to the news that "the government was giving land to poor people"--and because of the increased momentum of land-grabber activity--that Colone was forced to do something in Area III earlier than it had planned, in order to protect the area from being preempted by land-grabbers and spontaneous settlers. Since Colone was without funds for Area III and was also being pressured by groups of new settlers to allocate land there, it was forced to opt for a makeshift, more rustic approach to allocation in order to get something done rapidly. Thus it allowed the community itself to handle the allocation process--both the allocation of plots and the contracting of topographers to do preliminary demarcations.¹

¹These preliminary demarcations are called "delimitação," as opposed to "demarcação," the more complete and definitive step. The process of delimitation was simply one of marking the two front corners of a lot; settlers were then instructed on how to mark out the rest of the lot themselves. The demarcation of the back end of the lot was left for the time when Colone would obtain subsequent project funds.

Colone initially supplied its own topographers to the community organizations and the settler was expected to provide the manual labor for the delimitation, usually amounting to three or four full days of work. As soon as this mechanism was hit upon, demand for lots and delimitation services grew at such a rapid pace that Colone was no longer able to pay for the topographers. At this point, Colone handed over to the community the responsibility for contracting the topographer; settlers were charged approximately Cr\$500 (1980), which they were allowed to contribute in labor if they did not have the cash (roughly equivalent to 2 1/2 days work at current agricultural wages). As a result of this makeshift approach, Colone was able to provide additional lots to a larger number of families than it had settled under the Bank project, and in considerably less time. In Area III, 4,421 families were settled by late 1980 over a four-year period--as opposed to 3,900 families in Areas I and II under the World-Bank project over an eight-year period. Appraisal estimates for families to be settled were 5,200 in Areas I and II, as opposed to the 3,900 actually settled; no settlement was projected for Area III, as opposed to the 4,421 families actually settled.

Clearly, the process of lot allocation by the communities was not always ideal, with lots being given out in some cases on the basis of political favoritism or religious belief. One community leader, a protestant pastor, was denounced for selling a number of

lots to members of his flock; another community leader accepted money for delimitation for several settlers and pocketed the money; yet another leader, a local politician, used the lot-allocation power to reward faithful supporters. Given the potential for abuse of such a system, it is surprising that these problem cases were the exception rather than the rule.

Colone's forced devolution of power to the communities for land allocation offers five lessons to the designers of the proposed project. (1) Rapid allocation of the land and assignment of lots is important not only so as to realize the economic and social benefits of settlement as soon as possible, but also to pre-empt occupation of the land by land-grabbers. (2) The land-allocation mechanism can be considerably more rustic and less costly than it is usually designed; much of the financial burden of the provisional demarcation will be willingly assumed by the settler, thus removing the financial constraint from a rapid allocation of lots, and allowing the settling of more farmers than would otherwise be possible out of a given level of agency funds. (3) There is considerable social cohesion at the community level, which helps to insure that land will be distributed more fairly than it might if land allocation processes were decentralized to the larger, more politicized level of the county seat.

A fourth lesson of Colone's devolution of power to the communities to allocate land was that land acquisition became a

rallying point around which communities organized. Once communities got together around the land-allocation process--a fairly simple task to start out with--they started to take responsibility for other activities, mainly the more complex areas of health and education. They were vigorous both in raising funds from their members and finding their own solutions to problems, and in pressuring Colone to extend services to them. Out of this pressure, together with Colone's shortage of funds for Area III, grew other innovative, makeshift and more rapidly executable approaches to supplying services in these areas. Community control over the land-allocation process, in sum, turned out to be a manageable first step on the way to vigorous community action in more complex areas.

Finally, starting community organization with the land-allocation task gave community leaders the chance to exert their power in an area in which their interests and those of the poorer peasants converged; in other areas like marketing, credit or storage, services to the poorest farmers might have been seen as working against the economic interests of the local elites. Success in community organization around the land issue, then, should be viewed with caution in attempting to apply such organization to the undertaking of other activities. (This point is discussed further in the following section.)

Roads and land-grabbing. A final point should be made about the success of the community-based land-allocation process in Area III. Much to the displeasure of the new settlers and Colone, Area-III lands (and a large part of Area II) were allocated to settlers before feeder roads were built--simply because the financial and executive burden of building the roads could not be as easily transferred to the settlers as the land-allocation process could.¹ Many lots were therefore at considerable distances from the communities, which were situated along the paved highway where most of the settlers lived while waiting to receive their plots. Clearly, the lack of feeder roads created serious transport and "commuting" problems both for those who lived on their lots and for those who lived at the edge of the highway, many of whom had to commute on foot to their lots. Costs for transporting crop production from the lots to the highway amounted to one half the value of the crop. The lack of road access to the lots also made access to health and education services difficult.

¹As discussed elsewhere, there was also considerable settler mobilization and financing for manual construction of provisional roads, a process that could be facilitated and improved upon if Colone were to assist settlers in carrying out labor-intensive roadbuilding that would result in all-weather roads. The Bank has sponsored extensive research on such roadbuilding techniques, and has several pilot projects in operation in the field.

The current agricultural wage in the Colone area is about US\$4.10 a day, in the range where labor-based construction methods are less costly, in financial as well as economic terms, than the equipment-based techniques used in the first World-Bank project and planned for the second.

Though creating serious problems, the roads-last sequence of development may have been significant in keeping the problem of land-grabbing from assuming even greater proportions. Since the task of land allocation is much less consuming than that of roadbuilding, technically and financially, there would seem to be considerable reason to phase the land allocation-roadbuilding process the way it is occurring in Area III. This sequence of events, moreover, can make the roadbuilding process less costly in that it elicits strong settler interest in contributing to road construction and in making it happen. Since roadbuilding represents one of the most important costs of a settlement project, this approach to the task--along with an improved labor-based roadbuilding technique--could result in a significantly greater number of roads built for any given cost.

II - Community Organization and Project Execution

Community organization and participation in project execution was remarkable in Colone's Area III, which was considered an area for future expansion and not included in the World-Bank project. Just as remarkable was the almost complete absence of community organization in Areas I and II, the area proper of the Colone project. When Colone delegated some of its land-allocation power to the community organizations of Area III, moreover, they succeeded in demarcating and distributing lots at a much faster pace than Colone itself had been able to do--thereby exceeding the project's objectives for land settlement by 35%--7,012 families settled vs. 5,200 projected. The lessons learned from this unexpected evolution of community organizations and their involvement in project execution can be put to good use in the proposed project.

The vigor of the communities in Area III contrasts sharply not only with Areas I and II, but with the communities of the Baixada, which has received little of the state's investment projects and service programs. This marked difference between community vigor in the Baixada and Colone's Area III should not be taken as reflecting pessimistically on the applicability of the Area-III findings to the Baixada. Though commentators on the Baixada often contrast the vitality of community organization in Area III to the

"stagnation" of the Baixada, this difference may be more a comment on the catalytic force on community organization in Area III of a large development project in the area--than on basic differences in social endowments between the two areas. The fact that community organization was just as lacklustre in Areas I and II of Alto Turi as in the Baixada also suggests that the vigor of the Area-III experience was not attributable to something distinctive about the economics and demography of Colone's Alto Turi. The differences between community organization in Area III and Areas I-II, moreover, have themselves been attributed to the differing nature of Colone's involvement in the two areas: in Areas I and II, Colone supplied everything to the settlers; because of a lack of funds for Area III, settlers had to make their own efforts, raise their own funds, and pressure Colone aggressively if they were to get any of the services that Area I-II settlers were able to obtain so effortlessly. This outcome again suggests that it was the catalytic presence of a development project adjacent to the Area-III communities--and relating to them in a particular way--that explains some of the differences between the vigor of Area-III and Baixada communities.

There are some important differences between the Baixada and Alto Turi areas. Mainly, communal pastures and the combination of farming with fishing in the Baixada social economy distinguish that area from the Alto Turi, as well as the greater occurrence of babaçu.

In addition, there is a striking difference between the two areas with respect to in-migration. Whereas the Alto Turi area is populated almost completely by recent migrants (40% from Maranhão and 60% from other Northeast states, mainly Piauí and Ceará), there are remarkably few migrant families in the Baixada; most Baixada families interviewed had lived in the same county, if not community, for generations. Without further study, it is difficult to know whether this difference in migrant population has had an effect on the forms and degree of community organization.

Despite the differences between Alto Turi and the Baixada, the similarities between the two areas seem more relevant to the question of how to build community organization and participation into the proposed Baixada project. The largest single group of Maranhense settlers in the Colone area are from the Baixada, representing 25% of total settlers. The Baixadero contingent in Colone has not shown any less propensity to organize than the others. In addition, community-organization and consciousness-raising activities of the Church have been more prevalent in the Alto Turi area in recent years than in the Baixada, partly because of a supportive bishop in Alto Turi; the bishopric is headquartered in Zé Doca, the town where Colone also has its headquarters. As discussed further below, the role of Church-based community activities in Area III was an important component of the ability of those communities to organize themselves.

The suggestion that the active presence of the Church in Area III and its absence in the Baixada (with a few isolated exceptions) made a significant difference in community development gains credence from the fact that community organization and rural labor syndicates flourished in the southern part of the Baixada from 1972 to 1975, under the aegis of a highly action-oriented bishop in Viana. With the advent of a considerably less reformist bishop in 1975, and the resulting expulsion of many action-oriented parish priests for being "radical," this vigor in community organization was lost. Indeed, the adverse reaction to the new Viana bishop on the part of socially-oriented priests in those Colone areas belonging to the Viana bishopric was very strong. Unable to succeed in ousting the new bishop, these parishes instead obtained authority to break off from the Viana bishopric and form a new one, with headquarters in Zê Doca.

Some of the basic forms of community action underlying organization in Colone's Area III were found to also be present in the Baixada area. The tradition of use rights over land rather than ownership, as discussed above, is an important binding element in Baixada communities--and is an important element of the community history of migrants to Alto Turi. Baixada communities are stable, families have lived and worked together in the same area for many years, and allocation of areas for individual cropping works smoothly.

Most Baixada communities have engaged in at least four communal projects at one time or another in their history: the building of a chapel, a school, a soccer field, and a road or repair of it after the rainy season. Community members also trade labor for certain cropping activities--for burning, clearing and, to a lesser extent, weeding. Women who break babaçu, a common income-earning activity in the Baixada, engage in the same system of day-trading; a group of women will work one day "for free" for one of the group, who will keep that day's proceeds; the same will occur the next day, and the next woman will keep the proceeds. Finally, Baixada communities often "tax" themselves to carry out community construction projects. Not only do community members contribute labor in such projects, but the better-off of the community may buy and contribute supplies. When sufficient voluntary labor is not forthcoming, the merchants of a community will often themselves pay for hired labor.

Nearby development projects and community action

The busy presence of Colone in Areas I and II of Alto Turi--allocating lands, building schools, health posts and roads--made inhabitants of Area III feel that the possibility of land, schools, health care and roads were almost within reach. They knew that the land they were occupying belonged to Colone, and that Colone would one day expand into that area, thus threatening their use rights to the land. Many had migrated to the area in the first place because

they had heard that Colone was "giving land to poor people." As the years wore on and a second project did not materialize, the migrants formed communities and started to pressure Colone for land; Colone explained to them that it still had no funding for Area III, though it some day would have. The communities, in response, tried to come up with part of the resources themselves. They would return once again to Colone, recounting what they had done so far and asking for just a little help from Colone--an extra teacher for the school they had built, for example, in addition to the "lay" teacher they had raised money to pay for. Colone ended up responding as best as it could to these requests and pressures, spending a little thinner its project monies for Areas I and II.

What mobilized community organization and financing in Area III, then, was (1) the expectation that Colone would soon bring land allocation, roads, schools and health posts to that area and, at the same time, (2) the non-fulfillment of that expectation. The fact that the Colone administration was so present in the area, that other farmers in neighboring areas were already receiving all these services, and that Colone was perceived as a sympathetic institution, all contributed to the raising of expectations and of feelings that the pressuring of Colone might bring some results. This contrasts starkly with the deep pessimism about government projects that one finds in the Baixada, and the assumption that they will benefit only rich people.

The most salient case of community action resulting from raised and then, dashed, expectations, related to feeder roads. Community leaders, when allocating land, seemed to have given settlers the impression that Colone would be immediately constructing feeder roads--even though financing for a second project had not been secured and feeder roads already budgeted for Area II had still not been built. When road construction turned out to be nowhere in sight, and harvest time came and passed, settler interest in securing feeder roads grew to almost obsessive proportions. Roads came to be ranked as top priority along with schools and health. Some communities distant from the road built their own roads by hand, using a combination of voluntary labor and hired labor paid for by merchants and better-off community members.¹ The keen interest of Colone settlers in obtaining roads contrasted sharply with the lack of concern about roads by peasants in the Baixada--or, at least, a considerably lower priority attributed to them than to education and health. (This lesser interest in roads may also reflect the greater importance of fluvial transportation in parts of the Baixada.)

¹There were only six or seven cases of such hand-build roads in Area III, partly because there are very few communities away from the paved highway in the newly settled area. The self-built roads usually led to communities that existed previous to Colone.

The physical presence of Colone, in sum, had a considerable impact on the raising of expectations, and the initiation of community organization and funding efforts in Area III. The Colone headquarters in Zé Doca were readily accessible by paved highway and abundant private transport; this put Colone only two hours away from the furthest point in Area III, and much more accessible than almost all the county seats in the area. (The paved road cuts laterally across the southern parts of the long narrow counties that have their capital on the coast and extend inland to the south.) The Area-III communities had never organized with the view of getting assistance from the county seats, which normally are the principal source of assistance for roads, road maintenance, and schools.

The diseconomies of social scale

The smallness of the Alto Turi communities also contributed to the success of community organization and action in Area III. When most communities organized to raise funds, allocate land and appeal to Colone for services, they were relatively small entities--20, 30, or 50 families. As in the Baixada, ties of kinship and friendship were strong at this level, despite the fact that most communities were composed of recent migrants; settlers consistently reported that they migrated to places where their friends and relatives were. Organization at the level of the small community, as

noted above, also made it possible to characterize the land-grabber as an outsider, an external threat to the community. This characterization played a special role in galvanizing community action. Tales told by community leaders of how a topographer was scared off, or the fences of a land-grabber cut, have become part of community lore; they are brought out again and again for visitors, and told with great bravado.

The very success of the communities in organizing the land-allocation process has started to erode the smallness and cohesion that underlay that success. The delay in constructing feeder roads into the newly settled areas, the attraction of yet more migrants to communities along the paved highway, and the rapidity with which the larger communities have allocated lots, have all caused the communities to grow from several houses to hundreds of houses in the space of four or five years. Because their lot-allocation authority extended longitudinally out from either side of the road, the communities had authority over several hundred lots (the largest community, Maranhãozinho, has parcelled out 2,000 lots). As the communities grow, they tend to lose some of the very features that made them successful. Their leaders tend to lose control, more formal and non-democratic methods of community control take over and, as discussed below, community actions start to benefit mainly the better off and their financing takes on a regressive character.

Colone may do better to divide up its delegation of land-allocation authority into smaller units, and to decentralize it into the areas distant from the road. Many communities of small squatters already exist in these areas, especially near the Rio Turiaçu which, though distant from road transport, is navigable for all but one or two months of the year. Many of these communities are fearful and suspicious of Colone, and hostile to the leadership of the highway communities. The plethora of these small communities in Colone's hinterland represents a potential problem as Colone increases its land-allocation process under the proposed project.¹

What Colone could not do

Another ingredient of the success of the Area-III communities in organizing and getting Colone to respond to them was that they could do things that Colone could not. The communities could help the project to do more and to look better than it would have without them. They could elicit financing from their members through traditional systems of solicited contributions for community projects. Colone, of course, could not engage in "tax collection" and

¹When the subject of Colone comes up in conversation in one of the oldest of these hinterland communities, known for its lack of enthusiasm for becoming part of the Colone family, community members are said to respond, "Colone? What disease is that?!" ("Que doença é essa?!").

did not want to impose "charges" as a condition for providing project services. When the financing and administrative burdens were taken out of its hands, however, it was easy for a sympathetic Colone management to stretch its project resources to provide the missing funds or services necessary to complete the community efforts. Colone's receptiveness to these community efforts operated in effect as a kind of matching-fund mechanism; the communities knew or expected that if they did a good part of the work and fund-raising, there was a reasonable probability that Colone would come up with the rest.

The expectation of the highway communities that Colone would in some way match their efforts resulted in a broadening of project impact beyond what would have occurred if Colone had simply met the goals of the World-Bank project: the 3,900 farmers settled in Area I and II represented a per-settler cost of US\$11,300, and a project-execution period that was almost twice that expected. With the addition of the 4,421 new settlers in Area III--outside the project area and above and beyond projections for the number of beneficiaries--per-settler costs were almost halved to US\$6,200.¹

¹Colone expects the number of families settled in Areas I and II to reach 5,200 (the appraisal estimate) by early 1981; this would lower per-settler costs to US\$8,300, excluding Area III, and US\$4,510 including Area III.

These cost figures are based simply on a comparison of total project cost (US\$43.4 million) to the number of settler families. They are also very rough. Colone investments and services in Area III were considerably less than in Areas I and II. Even within the project area, moreover, many settlers in Area II were as minimally serviced as those outside the project area. Their situation was closer to Area-III inhabitants than to their colleagues with road access in Area I and other parts of Area II.

Without this transformation in project execution, the high unit cost of the Alto Turi project would have put the Colone model out of question for further financing, or for replication elsewhere. The exact nature of the transformation brought by community organization and financing needs should be well understood, so an attempt can be made to replicate it in the proposed project.

There is a natural tendency among Colone managers and project designers to look at existing Area-III mechanisms as makeshift and imperfect. With the advent of a large, new project with financing from the Bank and POLONORDESTE, the temptation is strong to "do it right." In commenting on the success of the community mechanism of lot allocation, for example, some Colone staff say that with adequate future funding, Colone will not have to "impose" the makeshift lot-allocation mechanism on the settlers, or "unjustly" charge them for demarcation; in commenting on community contributions to school construction and teachers' salaries, some Colone staff say that the state had the duty to supply educational services to the rural poor, and that communities should not be required to put up part of the cost. Though these arguments are valid as normative statements, the practical implication of following them--e.g., of doing land-allocation and education the "right" way--means that considerably less people will receive lots and education than might otherwise be

the case, because of cost constraints. Doing things the right way, then, can lead to another "wrong": the expenditure of a large amount of resources to benefit a relatively small proportion of the rural poor. Any decisions by designers of the proposed project to have Colone or other agencies take over more of the functions now being carried out by the Area-III communities, then, should be carefully scrutinized for their impact on costs per beneficiary and, hence, on the number of people that can be reached with the project.

Giving in to the temptation to "do things right," finally, would also reduce the total resources available for the project, to the extent that communities will sense that they can get what they need from the project agencies without raising their own resources--or, if the project agency does not deliver, that there is no way a resource-raising effort on their part would help. Yet it was the availability of these additional "private-sector" financial and organizing resources to Colone's Area-III activities that was crucial to the extension of project benefits to a greater number of beneficiaries than was expected. There was no way Colone could itself have raised this additional capital from the private sector. In the proposed project, an attempt should be made to build in the effect that Colone's presence and actions had in eliciting community resources and mobilization. A simple matching-fund mechanism would serve this purpose.

Regressive and exclusive financing: construction vs. operation. There will be some cases where it will make sense for Colone to take over from the communities--or provide more financing and services--after the community has taken the first step. Certain stages of activities are more amenable to community execution and financing than others; one such distinction is that between construction and operation. Community organization of a task often works better with construction than with ongoing operations--simply because the organizational and fund-raising demands of a construction task are easier to meet than those of an activity requiring ongoing raising of funds and administrative inputs. School construction and health-post construction, for example, are more successfully delegated to communities than the ongoing financing of these facilities.

Another reason that construction activities are better suited to community participation than operation is that whereas the voluntary financing mechanism of the community tends to be proportional and even progressive during the construction stage, the financing tends to become regressive and exclusive of the poorer members of the community during the operation stage. Better-off community members, that is, often contribute more than proportionally to the construction of a school, a road, or a church, because of their social responsibilities as community leaders, because of the status and power rewards accruing from conspicuous contribution, and because

the community projects thus financed are expected to improve the businesses of the contributors. (Community leaders are usually local merchants.)

During the operation phase of education, health and other service projects, the community usually copes with the lack of outside financial support by imposing a flat fee on users and, sometimes, an annual membership fee. Though this type of charging makes perfect sense, given the unavailability of outside funding, it requires a proportionally greater share of the user's income, the poorer he is, and often simply excludes use of the service at all by poor people--especially when annual membership charges and capital contributions are required. Communities were charging a monthly fee per child (about Cr\$50) for students attending the community-built school, for example, in order to pay the teacher's salary.¹ In Maranhãozinho, the community built a small clinic to be used by a private doctor who moved to the community to start his practice; the doctor was charging patients Cr\$500 a visit (the doctor is a good friend of the community leader, who is a pharmacist). Though the community already had a clinic staffed by the FSESP, they felt its services were inadequate, mainly because a doctor was available only one day out of every one or two weeks. The community's further plans for improvements in health care had even more restrictive implications for use by the poor than the Cr\$500-fee charged by the private doctor;

¹The regressivity tendency in community financing of school operational costs gives an added dimension to the argument cited above that communities have the "right" to educational facilities financed by the state, and should not be asked to contribute to teachers' salaries. Community financing of education in the operational phase may be undesirable, that is, simply because of its regressive and exclusionary effects.

they planned to set up a pre-paid health plan with the private doctor, available only to members of a cooperative they intended to form. A capital contribution of at least Cr\$1,000 was to be required of the cooperative members, plus a monthly fee of Cr\$20 or Cr\$30. Though such a plan might eventually lead to health benefits for non-members, the immediate impact of such a financing mechanism was to exclude those who had least access to health care.

Community-financed roads are not subject to the problem of increasing regressivity of financing and exclusion of poor users simply because, unlike education and health services, they are public goods: (1) "consumption" by one user does not decrease the amount available for consumption by another user; and (2) it is not possible or customary to withhold use of the facility from those who do not pay, as one can do with schools and health services. Two other types of community-built projects share this same built-in protection against regressive financing tendencies and exclusion of the poor in the operational stage: churches and soccer fields.

Political support from without. The communities provided something else crucial to project execution that Colone could in no way have done itself. Namely, the leadership that developed in the Area-III communities came to be an important source of political support for Colone in its struggle to establish its power vis-a-vis the state

government, and to obtain support of the state security and judicial apparatus for expelling land-grabbers from Colone lands. Resistance of the Area-III communities and their leaders to the current wave of land-grabber depredations, which have been supported by the regional judge and sheriff, has been crucial in forcing the state and the federal government to bring their power to bear on the problem, and not on the side of the land-grabbers. That strong community leadership and mobilization potential had developed in Area III, in sum, increased considerably the political costs to the state and the federal government of doing nothing about the land-grabber problem. There was no way Colone on its own could have imposed this political cost on the state.

Colone's problems in achieving state support of its right to its own lands seems a rather bizarre phenomenon--i.e., that the state would not enforce the legal title of Colone, a public enterprise in which the state is a 40% stockholder, to a large tract of land. Though this particular form of the problem may be unusual, the difficulty of project-executing agencies in gaining power vis-a-vis other state institutions is characteristic of most rural development projects, particularly when agencies are redirecting their services from better-off to poorer members of the population. In addition, Colone's peculiar problems with the state over the defense of its territory do not appear as bizarre as they first do

after one looks at various events in the project's early history. On several occasions, that is, SUDENE and the World Bank largely bypassed the state government in setting up the project, defeating the state's attempts to gain more control over Colone and the project. Though the maneuvers of SUDENE and the Bank may have helped to create the proper environment for Colone to grow into the strong and effective agency that it is today, they also contributed to setting up the state as an inevitable adversary. In areas where Colone could carry out what the state was supposed to do and did not--road maintenance, education, etc.--the disinterest of the state was not all that harmful and, indeed, may have cleared the way for more effective action by Colone in these areas than might have been forthcoming from the state agencies. But there was no way that Colone could substitute for the judicial and police authority of the state in enforcing its ownership of the land against land-grabbers. This is where the independent political strength of the community leaders, and the spectre of their resistance, played a crucial role.

In thinking about the proposed project, then, it would be a mistake to assume that the land-grabber problem in the Colone area, and the state's tacit support of the land-grabbers, was an event peculiar to Colone history. The proposed project in the Baixada, after all, will be doing even more radical things with respect to land than throwing land-grabbers out of areas to which

the state has clear title, as does Colone in its project area. One cannot assume that the influence of land-grabbers on the state will wither away when Colone's particular problem is resolved. The lessons of Colone's land problem for the proposed project, then, are twofold. (1) Independent community organization and leadership will provide important political allies for the project in an environment where political opposition will be strong; and (2) a more workable compromise may have to be sought between creating a protected organizational environment for the Baixada project and, at the same time, giving the state enough of a stake in the project so it will come forth with the vigorous political support that will be necessary time and again during project execution.

Violence: the unfulfilled threat. The Area-III communities not only supplied Colone with political support that it could never have mobilized on its own. The communities also had at their command an instrument of power that Colone itself could never have resorted to: the threat of violence. The threat of violence, either tacit or explicit, has been an important trump card in Colone's current attempts to draw the attention of the state and the central government from its indirect support of the land-grabbers. Crucial to the effectiveness of the threat of violence has been Colone's position that it held no control over the organized communities, and therefore could not guarantee that violence would not erupt "spontaneously" if the land-grabber problem were not solved.

Just as Colone could not threaten violence the way the communities could, it could also not deal with land-grabbers by acting outside the law the way the communities were doing--i.e., by cutting barbed-wire fences, surrounding intruders with large peasant groups, relieving the topographer of his equipment. As discussed above, these extra-legal actions were on many occasions crucial to the peaceful resolution of conflicts on the side of the law. The ability of the communities to amass large groups of peasants at a moment's notice while, at the same time, maintaining a disciplined control over impulses in favor of physical and armed confrontations, is a remarkable theme in the stories of victorious struggles against land-grabbers.¹

The peaceful settlement of problems outside the law and the threat of violence, in sum, will probably continue to be necessary to the resolution of land problems under the proposed project.

¹One community leader told of how he had on one occasion advised community members to appear in force early the next morning so as to travel to an area in the community's hinterland where a topographer was demarcating land for an intruder. The leader warned the peasants that they were not to come armed. The next morning, however, the peasants showed up armed; when the leader asked why they had not heeded his warning, they said that the pharmacist, the protestant pastor, and some leading merchants (the more conservative members of the community) had told them that if they went to confront the topographer they would risk losing their lives because, the community notables had said, the land-grabber had sent an army of gunmen to the site. Instead of reacting to these warnings by not going to the site, the settlers acted upon this "information" differently than was intended by its purveyors--i.e., they decided that the best response was not to stay home but to go to the site armed to meet the land-grabber's gunmen. The community leader convinced the settlers that the news of armed gunmen was untrue, led them to the site unarmed, tried to talk the topographer into leaving and, when he refused, peacefully took away his equipment.

Conversely, these manifestations of peasant strength are bound to go along with genuine development of community organization on the part of project beneficiaries. As in the case of Colone, the agencies executing the proposed project will in no way be able to provide these crucial elements of project success themselves.

Community preferences and project impact: agriculture vs. social services. The final contribution of the communities to the Colone project was their imposition in Colone's Area III of a set of preferences that was different from what the designers of the Colone project thought was most important or most urgent. As originally conceived, the centerpiece of Colone's project was the agricultural production model--credit for short-term and investment costs (creation of a cooperative), technical assistance to farmers to adopt new production activities (pepper and livestock), assistance in purchasing and processing of rice (by the cooperative) and provision of "modern" inputs (pepper grafts, livestock). Yet the major concerns of peasants in the area--settlers, those waiting for lots, and small squatters--related to gaining land, schools and health service; roads were also of priority to those who thought they would be put in earlier. Though inhabitants of the Colone area were also interested in credit, inputs, marketing services and technical assistance, these interests definitely fell into a category of secondary priority.

Communities pressured Colone most in the area of land, education, health and, to a lesser extent, roads. It is not that they were not interested in agricultural assistance; rather, they wanted the other problems to be resolved first, and all their energies went in that direction. Community organization, then, resulted in a certain imposition by the target group of its preference patterns on the project. It is a tribute to Colone that it allowed its mix of activities and priorities to be modified in this way--that it allowed project beneficiaries to veto the project design, or at least parts of it, and to impose their own. Despite the agricultural-production model of the Colone project, finally, it was precisely in these areas of social services that the project ended up having its broadest impact in terms of the number of beneficiaries reached.

The lessons to be learned for the proposed project from Colone's experience with community preferences are threefold.

(1) If community organization and participation in project design and execution are to occur, this will sometimes result in community decisions that will be against the wishes and the wisdom of project managers, as well as the models of project design. Project design and management should be able to adapt to these decisions, as Colone did in Area III; if this is not possible, then communities will have little faith in the value of their organizing to do some of the tasks and the financing on their own.

(2) The areas in which Colone outdid itself in terms of impact--particularly in education and health--were not those which it was set up to specialize in. Indeed, these services were to be supplied, according to project design, by other state agencies. Colone moved into these areas, as in the case of road maintenance, only because the level of activity expected from the other agencies did not materialize. Colone, in short, did better at tasks that it was not set up to do than the state agencies specialized in those tasks. The difference was not one of professional competence, but of self-interest: Colone had much more at stake than the state agencies in winning over the inhabitants of its area by providing them with what they wanted.¹ This means that, under the proposed project, a functional division of project components among agencies along task-specific lines may not be the best way to assure successful project execution. There may be more reason to count on a task getting done if it is placed within an agency that, though not specialized in the task, has a strong stake in that task getting done--as opposed to an agency whose only reason to execute a task is that it falls within its technical domain and that it has agreed to participate.

¹One of the most important benefits brought to non-settlers living in the Colone area was the hospital in Zé Doca; all non-settlers interviewed in Colone territory reported being attended to at the hospital on an equal basis with settlers (a Colone policy).

(3) The final lesson to be learned from the more dramatic achievements of Colone in social services as opposed to agriculture is that the former achievements may be easier to bring about than the latter--or, at the least, that work in the social-service area is more likely to reach a significant proportion of the population than work on agricultural production. In view of Colone's performance in land settlement, education and health, the progress of the project in the areas of credit, marketing and increased agricultural productivity is disappointing, especially in light of the more central position of these activities in the conception of the project. Eight years after project approval, for example, the Colone-created credit institution (the cooperative) still serves only approximately 15% of the colonists, and is still not able to get credit to farmers until several weeks after they have their greatest expenditures--i.e., clearing and land-preparation. The cooperative, like many other such entities, is still not able to meet the prices paid to farmers for their rice by private intermediaries. While Colone inhabitants express approval of Colone's work in the area of land, education and health, they have nothing but disapproval for the cooperative that was meant to dispense credit and marketing services. (Settlers usually had praise for the quality of technical assistance when they received it, but only a small percentage of settlers had had any contact with it.)

Clearly, there are differences between the characteristics of social and agricultural services that account for this different performance record. The institutional and agro-economic model underlying the agricultural component of the Colone project, moreover, tended to exacerbate these differences, and diminish even further the project's potential for agricultural impact.¹ But the project's ability to have a greater impact in the social and land-allocation area, and the coincidence of these activities with beneficiary preferences, should be kept in mind during the designing of the proposed project. This does not necessarily mean that agriculture should take a second place to the higher-impact activities. It means, rather, that the institutional and agronomic models of the proposed Colone and Baixada projects--which are not unrepresentative of the models underlying most of the Bank's rural projects in the Northeast--should be evaluated in terms of how the agricultural components might be altered so that a greater impact or "spread" could be achieved.

¹Time does not allow for a discussion of these problems and of how they might be diminished.