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PROPERTY RIGHTS AND ECOLOGICAL CONSERVATION: THE CASE OF STATE FARM DIVESTITURE IN THE CHOKWE IRRIGATION SCHEME

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All views, interpretations, recommendations, and conclusions expressed in this publication are those of the author and not necessarily those of the supporting or cooperating organizations.

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LAND TENURE SECURITY AND ECOLOGICAL CONSERVATION

Natural resource management, and thus ecological conservation, are directly related to a farmer's sense of land tenure security. Where land rights are perceived as clear, secure, and defensible, rights-holders will be more likely to use the resource in ways that ensure its long-term sustainability, and to invest in its long-term productivity. The users will do this because they are more certain that they will realize a return to their investment. Where land rights are seen as ambiguous, weak, or insecure, the rights-holders will be more likely to use the resource in ways that ensure short-term gain, but which, unfortunately, will result in resource degradation. Farmers who plant trees on their land present an example of this principle at work. Landholders who feel they have secure land tenure rights, which will continue uninterrupted, will be more likely to plant trees on their land than farmers who are not sure if they will maintain control over the land from one year to the next.

Tenure security is a critical issue in natural resource management, but it is not the only factor. Tenure security must be accompanied by other socioeconomic reforms that provide incentives, such as access to markets and credit.

The purpose of this paper is to discuss the linkages between, on one hand, land tenure security and, on the other hand, ecological preservation and agricultural productivity. Material for this discussion is drawn from a recent study of the Chokwe irrigation scheme, where serious ecological degradation is occurring. This degradation is being exacerbated, in part, by land tenure insecurity in the area.

I. AGRICULTURAL PRODUCTIVITY AND STATE FARM DIVESTITURE

As part of the economic recovery program, the Government of Mozambique has decided to close many of the State Agricultural Enterprises, sell their resources and divest

their lands. The smallholder and larger commercial sectors have been identified as possible recipients of (use rights to) some of these lands.[1]

The Ministry of Agriculture (MOA) in conjunction with the Land Tenure Center (LTC), University of Wisconsin-Madison, recently completed a study of the organizational, technical, and socio-legal problems associated with the divestiture of use-rights to state farm lands in the Chokwe irrigation scheme, Gaza Province. In the course of this study, it became apparent that the area is suffering from serious ecological degradation, and that this condition is a result of both natural and man-made problems.

The Chokwe study focused on processes of land use distribution, types of land rights distributed, land and water disputes, and the role of national, local, and customary authorities in the distribution process. In addition, the study included an engineering appraisal of the irrigation scheme. The scheme's fitness will have a direct impact upon the distribution process.[2] The entire study was funded by the United States Agency for International Development (USAID) in Maputo.

II. RESEARCH OBJECTIVES

The MOA/LTC research program identified three State Farms in the irrigated scheme for study: Massavasse, Conhane, and Chilembene. The team visited these farms on four occasions from February to April 1992. In May 1992, the resident research team was joined by two consultants (a sociologist and an irrigation engineer). The team moved to Chokwe for five days where it conducted interviews with local officials, farmers, displaced people, and other individuals. In this second round of field visits the irrigation engineer was able to discuss the system with SIREMO (*Sistema de Regadio Eduardo Mondlane*) and other officials, and carry out a rapid appraisal of the most important elements of the irrigation system.

In both field phases, the research sought to elicit information on the following:

a) the mechanics of the land distribution process in each area;
b) what types of land rights were granted;
c) what types of land conflicts have emerged as a result of the distribution process and other socioeconomic factors; and

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1. In some cases the state has opted to retain rights, in other cases the state has permitted divestiture to joint venture companies with the state holding a share of the enterprise, and in still other cases the rights to land have been sold off to large private (often foreign) commercial enterprises.

2. For a summary of this appraisal see Tanner et al. (1992).

d) the role, if any, of local community or customary leaders in both distribution and conflict resolution processes.

III. HISTORICAL OVERVIEW OF THE CHOKWE IRRIGATION SCHEME

Chokwe is one of the few irrigation schemes which produces food crops. The history of land occupation in Chokwe is complex and contentious. It consists of a long-term process in which local people have experienced one round of land dispossession and re-possession at the hands of the Portuguese, and a second round of dispossession and repossession at the hands of the FRELIMO government. Many local people are now seeing an opportunity to repossess their lands, although their success in this is problematic.

When the scheme (*Colonato*) began operation in 1954, local inhabitants were mostly displaced by incoming Portuguese settlers. The local population was thus forced to move off the land, with a few receiving some compensation for their loss. A small number of Mozambicans were allowed into the scheme with the same rights as the settlers, and many others were allowed into the scheme with inferior rights to the Portuguese settlers.

After independence, many local people felt they had won the right to reoccupy the land in the scheme. Reoccupation came to an abrupt halt in 1977, when the government, responding to a flood in the Limpopo River Valley, forcibly moved people into existing villages on higher ground. However, this opportunity was used by the state to take over the irrigation scheme and collectivize agriculture. The "abandoned area" was consolidated under the control of one single state enterprise, CAIL (*Complexo Agro-Industrial do Vale do Limpopo*). The land rights of local farmers who had maintained rights in the area during the colonial period, or those who had been allowed into the scheme as full or limited users, were withdrawn by the state. They were forced to either work as wage-laborers on the state enterprise lands or leave the area.

The combination of an unmotivated work force, poor management, and a lack of technical skills and resources led to serious financial problems and a collapse of production by the early 1980s. As a result, in 1983/84 CAIL was divided into 10 new state enterprises. These farms took control of approximately 1,500 hectares each. Use-rights to the remaining area, some 10,000 hectares, were distributed to the smallholders and larger commercial farmers.

After an initial surge in production, the new state farms again began a steady decline into indebtedness and low production levels. As state farm land went out of production through the mid-1980s, rights to use these areas were distributed to other smallholders and commercial farmers. Whether these were permanent rights or otherwise still requires clarification.

By early 1991, four state farms were technically bankrupt and were recommended for liquidation. This led to a new and larger wave of state farm divestiture, with land use rights being allocated to smallholders and larger commercial farmers. Guidelines for giving out such use-rights were drawn up by central government (that is, the Ministry of Agriculture), and formally issued by the provincial governor in August 1991. By late 1991, it was clear that the remaining state farm units were also in trouble, and bank credits were suspended to all but the Chilembene state farm.[3] The government ordered the distribution of use rights for large areas of state farm land to smallholders and larger commercial farmers.

This most recent distribution took place in November 1991, after the planting season started, and was not subject to previous formal directives. In some areas divestiture has been completed, while in others the state farms maintain control over substantial areas in the hope that new funding will appear and they will be able to remain in production as state enterprises. The future of land already allocated, and of the remaining state farm lands, is unclear.

IV. Divestiture of State Farm Land in Chokwe

Throughout the several stages of divestiture, two separate distribution processes emerged. In one category those classified as "privates" negotiated directly with the director of the state farm, or in the case of large commercial enterprises, such as LOMACO, SEMOC (Parastatal seed company), and JFS, negotiated directly with the central government. In the other category those classified as "family sector" farmers were required to participate in a selection process organized by a commission composed of the state farm director,d members of the executive council, and SIREMO.

"Capacity to farm" became the de facto criterion to determine eligibility to receive land in the private sector. Capacity to farm correlated with wealth, status, and/or political or family connections. It did not necessarily correlate with those best equipped to farm or those most likely to invest in their holdings. Many of those who received land in the private sector were ex-Mozambican farmers who worked in the irrigation scheme "under contract." These were ex-*colonos*, who had participated in the scheme during the days of the *Colonato*. In addition, it appears that some of the best land—classified as private sector land—went to those organizing the distribution process.

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3. Between April 1992 and October 1992, Chilembene, Massavasse, and Conhane had organized new land distributions. Massavasse had recovered all of the land previously distributed and redivested it. Many people who had formerly held land were forced to move or lost parts of their holdings. In Conhane and Chilembene, the farms reduced the holdings of those who had previously received land and distributed new lands to larger holders. In each case state farm directors said that the minimum holding had been increased to 1 hectare.

The directive from the provincial government for the November 1991 distribution of land provided only one guideline—that land should be allocated through a raffle process. In reality, however, the process was quite different. As stated, "private farmers" negotiated directly with the state farm directors. Only in the case of Conhane was a lottery devised for the "family sector," and this resulted in a sufficient number of problems to cause it to be reorganized twice. In the cases of Chilembene and Massavasse, commissions formed by the executive councils, SIREMO, and the state farm director drew up lists and allocated land directly to those they thought should receive it. Recipients included smallholders living in the region, workers from the state farms, and, in some cases, ex-*colonos* and "private sector farmers."

The land rights that have been distributed are not uniform and, in most cases, remain unclear. Those receiving land distributed in 1983/1984, in both the "private" and "family" sectors, believe that they have permanent rights. This seems to be supported by local officials. Almost none of these individuals have any type of documentation supporting their rights to land, although many (including those in the later distributions) have water contracts from SIREMO, which denote location of farm. Theoretically these could be used to support claims. Those in the family sector receiving land in the 1991/92 distributions have much weaker land rights. Although many of these also have SIREMO contracts, the directors of the state farms clearly stated that these distributions were temporary, and in two cases the directors stated that when the state farm receives new capital from the central government, it will recover its lands and resume operations.[4]

In all cases there is a wide gap between expectations and intentions. This gap, exacerbated by talk of resumed operations of the state farms or the granting of land to demobilized troops, has resulted in insecurity of land tenure rights. This insecurity is leading to underinvestment, land and water conflicts, and ecological degradation. The types of conflicts identified in the area include the following: (1) disputes over land (area, access, and rights); (2) disputes over water (access and quantity); (3) disputes over boundaries and illegal occupation; and (4) other disputes generated by broken contracts, indebtedness, and insufficient and insecure grazing areas for cattle.

Ecological damage in the scheme is particularly severe. Land concentration, land fragmentation, improper management of cattle, and poor management or lack of maintenance of the irrigation scheme (particularly of the drainage canals) are all contributing to ecological degradation. Waterlogging and salinity of soils are major problems in the scheme and, if not addressed immediately, will lead to disastrous consequences. When possible, farmers re-use water resources by pumping water up from the drainage canals, increasing the salinity of their soils. This most likely will lead to rapid degradation and eventually result in sterile land. Another environmental concern relates to the widespread deforestation that has taken place

4. By October 1992, all farms in Chokwe were bankrupt, were no longer receiving financing, and were "closed." The farms of Mapapa, Conhane, Massavasse, Hokwe, Chilembene, and Nwachicoluane had divested all of their lands.

in the Limpopo Valley. It is argued that this is contributing to the current drought in the area. Many of these problems are a direct result of the way land has been distributed and the types of use rights that have been granted in the scheme.

SIREMO is incapable of maintaining the irrigation scheme; it lacks the resources, manpower, and technical capacity necessary for this task. SIREMO is also unable to rehabilitate the scheme. Rehabilitation will be dependent on external assistance. But once rehabilitation is undertaken the scheme must be maintained. The only feasible option is to encourage and invest in the development of water users associations—giving the local users responsibility for management and maintenance of the scheme below the level of the main irrigation canals.

The degradation of the scheme will continue unless the technical constraints are addressed. Even with technical adjustments, the long-term viability of the scheme will be in jeopardy unless several social and legal issues are addressed at the same time. The most important social issue that must be considered is security of land tenure. Farmers have insecure land rights. Many farmers have been granted land use rights for only a short period of time (in the case of Massavasse for seven months, which have since expired). The status of the state farms is unclear; will they resume operations and recover their lands? Will smallholders lose their land in another distribution to larger commercial farmers, displaced people and/or demobilized troops? So long as all farmers have insecure tenure rights, it will be impossible to expect them to significantly contribute to the maintenance of the irrigation system, to invest in their lands, and to produce for the market.

V. RECOMMENDATIONS

The following technical and social recommendations, based upon the research conducted in Chokwe, have been presented to the government. These recommendations should not be considered as exhaustive and should be seen as a point of departure for discussion.

TECHNICAL RECOMMENDATIONS

1. The irrigation scheme is well designed and constructed, still has significant productive capacity and warrants limited rehabilitation. Priorities are: (a) remove sediment and weeds from primary/secondary canals; (b) make drainage system operational; and (c) repair control sluices at main and secondary canal diversions.

2. Rehabilitation must be combined with the establishment of long-term institutional capacity (for maintenance) at both central and local community levels.

3. Given soil quality (heavy clay soils) and topography (flat surface), irrigation needs to be carefully managed to avoid further loss of lands to salinity.

4. Ground water levels have risen significantly; soil salinity must be investigated and recommendations made for improved drainage.

5. Massive deforestation has occurred, contributing to declining rainfall. Reforestation/tree planting initiative is required.

6. Decentralize management of and access to irrigation water.

SOCIAL RECOMMENDATIONS

7. Government must, as soon as possible, clarify the status of land rights already distributed, that is, permanent or temporary, and the nature of the rights allocated.

8. Government must clarify the future of the state farms. Are they being divested or revitalized?

9. Determine how best to establish a national body, with local representation, to fulfill three functions:

   a) define how and by whom future land allocation should be conducted;
   b) determine land policy and future legislation;
   c) collaborate with and advise juridical system on land conflict resolution.

10. Replace "private/family" sector distinction with broader classification based on farm size and management type to reduce unwarranted bias toward current "private sector" when targeting assistance.

11. Investigate how best to encourage irrigation users associations to collaborate with SIREMO, and determine their respective roles and responsibilities vis-à-vis the irrigation system.

12. Assess the danger of land fragmentation and the risk of creating large numbers of nonviable small production units.

13. Consider the development of some form of marketable land use rights. Investment in, and ecological protection of, the area may be highly dependent on full and secure use rights. Current legislation presents

no major obstacles to the most important tasks of clarifying the nature of rights being granted and giving local farmers more secure rights over the land they have received. It does, however, present obstacles to farmers receiving long-term, permanent, secure land rights, and consequently will need to be reviewed.

VI. SECURITY OF TENURE, AGRICULTURAL PRODUCTION, AND NATURAL RESOURCE MANAGEMENT: MODEL FOR CONSIDERATION

A clear land policy is needed, which includes allocation procedures (criteria and mechanisms, as well as who does what) and establishes a legitimate and authoritative point of reference in the case of disputes.

It is essential to move from governance by officially appointed local administrators to popularly elected or selected representatives who can oversee or help carry out land rights distributions to, and negotiate land rights acquisitions by, smallholders and larger commercial farmers. It also essential to create a board of locally elected or selected representatives who can act as arbitrators in land conflicts. This board should serve as an intermediary between whatever local "traditional" dispute mechanisms exist and the formal judicial system.

These points all support the need for a new national land body to coordinate and direct land allocation, land acquisition, and land use questions. Such an "Authority" would have to fulfill three main functions:

a) define allocation and acquisition procedures and planning objectives;
b) make policy and draft legislation for National Assembly approval; and
c) facilitate land conflict resolution.

A tentative proposal for an "Authority" is shown in the following figure. This proposal is presented only for consideration and debate, and should not be seen as a concrete recommendation. This proposal is based upon the study of Chokwe as well as three other studies in Nhamatanda (Sofala Province), Vanduzi (Manica Province), and Montepuez (Cabo Delgado Province).

The national commission is the executive side of the policy committee. It would oversee the implementation of guidelines for land allocation and acquisition processes, including who should handle them and how they are organized. Actual allocation and acquisition of land rights would then take place at just two levels—national and local—with no direct role for either the district or the province.

TENTATIVE PROPOSAL FOR NEW ENTITY FOR LAND ISSUES

NATIONAL LAND AUTHORITY

	ALLOCATION PROCESS	POLICY & LEGAL REVIEW	CONFLICT RESOLUTION
CENTRAL LEVEL	NATIONAL COMMISSION Handles large areas Zoning	POLICY COMMITTEE Drafts policy and legislation (To go to Assembly)	SUPREME COURT Separate Land Division
PROVINCE LEVEL			PROVINCIAL COURT Separate Land Section
DISTRICT LEVEL			DISTRICT COURT With Land Lawyer
LOCAL LEVEL	LOCAL–LEVEL COMMISSION Only body directly allocating land up to certain size; negotiates terms for area above this size		LOCAL LEVEL 'COURT' Chosen by local people: either customary leaders or other elected 'judges' (advised only, by District land lawyer) Not same as Commission

The population at the locality level should be given the opportunity to determine the complexion and size of the local-level land board, which will act upon land allocation, acquisition, and dispute issues. Any individual, including "former" traditional authorities" in the geographical area of the locality should be permitted to participate in this process and serve as representatives in these institutions.

The form of the democratic process for nomination and election of officials should be left to the local population to determine, keeping in mind that the accountability of authority is as essential to democracy as the manner in which they are selected. Only the local population will be capable of ensuring this.

The land commission at the central level would process requests for large areas (such as for LOMACO) and oversee the process of zoning the country into reserves, agricultural land, forest, and so on. Local-level land boards would handle all allocations below this size, as well as being charged with responsibility in the negotiation of terms for the land concessions in excess of this determined level. In this way, the legitimacy of land allocations, acquisitions, and use is secured at the local level in accordance with popular recognition of the benefits provided by the presence of large commercial farmers within their area. Such advantages may include development of local infrastructure, access to markets and transport, access to credits and other inputs, and increased employment opportunities.

The policy committee would prepare material in support of new land use policy and prepare guidelines for the functioning of both land boards and the land tribunals. Their recommendations would then have to be approved by the Legislative Assembly (perhaps with ratification by provincial assemblies) to give them full legal legitimacy.

The national authority would not replace existing courts and tribunals, but would work with them to set up land sections at national and provincial court level and appoint appropriately qualified lawyers to work at the District level. At the local level, judicial boards should be created in the same way that the land boards are created. These judicial boards have responsibility for land conflicts only, and there would be a clear line of referral from locality level upward, ending with the Supreme Court where necessary. Local-level legitimacy is again assured by having local-level conflict resolution bodies chosen by, and accountable to, the population itself. Again, the form of the democratic process should be determined by the local people.

In the early post-war scenario, determining how land is allocated and acquired, and which structures can carry out these tasks, will be a critical element in national and local economic planning. As a land market develops, this will change, as buyers and sellers themselves determine how land is allocated.

Vesting authority in locally determined structures is essential to the enhancement of political legitimacy and, consequently, the creation of a more profound sense of security of land tenure. The development of institutions with greater local legitimacy will, through improving security of tenure, contribute to the resolution of ecological problems, giving rise

to investment in landholdings and, subsequently, to higher and more sustainable agricultural productivity on the lands in question.

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