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THE WORLD BANK'S EXPERIENCE
WITH RURAL LAND TITLING

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PREFACE

This paper has been prepared by Daniel Wachter, who was with the Policy and Research Division of the Environment Department on secondment from the University of Zurich, and John English, Principal Economist in the Policy and Research Division. The authors would like to thank Ernst Lutz, Raymond Noronha and Adelaida Schwab for their helpful comments and reviews of earlier drafts of this paper, and also the staff of the Internal Documents Unit for their help in locating the documentation on which the paper was largely based.

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Because of the informality, and in order to present the results of research with the least possible delay, the typescript has not been prepared in accord with the procedures appropriate to formal printed texts, and the World Bank accepts no responsibility for errors.

ABSTRACT

In recent discussions of the problems of environmental degradation emphasis has often been given to the importance of clear rights to own and use environmental resources as a means of ensuring that users bear the costs of their actions with the expectation that this will encourage them to prevent degradation of the resource. In the context of land degradation this has been reflected in the interest in clarifying rights to land, usually through expanded programs of land titling and regularizing.

The objective of the study reported here was to review the experience of land titling efforts in Bank funded agricultural and rural development projects. All of those projects which, in their summary documentation, indicated that some element of land titling was pursued, were identified. Land settlement projects which were confined to a limited area, and those projects for which no evaluation study was available, were eliminated and a final sample of 12 operations was obtained.

A review of the evaluations of these operations indicated that, in virtually all of them, major problems had arisen in the land titling element, which seriously hampered their performance, and substantial cost overruns occurred. These problems cannot be neatly compartmentalized, but may be grouped into a number of somewhat overlapping categories:

- (a) an overall lack of political support:
- (b) conflicting bureaucratic priorities and/or infighting;
- (c) lack of institutional capacity or an unwillingness to commit adequate resources; and
- (d) underestimation in the preparation phase of the complexity and/or cost of the tasks to be carried out, or other design weaknesses.

The results of this limited review suggest that, before land titling is made a centerpiece of efforts to address land degradation problems, a more detailed review of previous experience in this field would be advisable.

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THE WORLD BANK'S EXPERIENCE WITH RURAL LAND TITLING

1. INTRODUCTION

1.1 The two broad strands in the literature on the links between land tenure and land degradation are (1) inequality in land ownership or farm size (agrarian structure) and, (2) tenure insecurity (Eckholm 1979, 28-30; and Atwood 1990, 660). The agrarian structure approach is concerned with problems such as the concentration of the best land in the hands of powerful landowners, thus pushing poorer farmers onto small marginal plots, and/or with differences in the size of holdings, which affect land use, cropping systems, and environmental degradation. The tenure insecurity approach on the other hand looks at the influence of tenure security on the incentives to use land in a sustainable manner or the willingness to invest in land conservation.

1.2 Tenure insecurity and land titling have long been a concern in connection with the agrarian or land reform debate. In recent years, there has been a revival of interest in these issues from the perspective of achieving environmental objectives. In general it has been noted that market prices do not reflect environmental costs and benefits accurately when, as is often true, the rights of ownership and use of environmental resources such as clean air and water or fisheries are not clearly specified. For example because the rights to own air quality cannot be easily specified, the adverse health impact on nearby residents of industrial emissions are not communicated through prices, and it has been suggested that this problem might be dealt with by clarifying the rights to own and use these resources, and enforcing these with the authority of the state or the community. For the same reason environmental and property rights economists have recommended the establishment or strengthening of exclusive property rights over land, hoping that this will give resource users an incentive to take care of their land resources and use them in a socially optimal way.

1.3 These issues have been explored in detail in Wachter's (1992) more detailed conceptual paper "Land Titling for Land Conservation in Developing Countries?", which discusses the overall rationale for, and usefulness of, land titling. This paper has a more modest, and at the same time more practical, objective. In this paper, we are concerned with land titling experiences of the World Bank. While it has not been a major objective of its agricultural development strategy, the Bank has had some involvement in land titling in agricultural development projects. The purpose of this paper is to review this experience. Specifically, we will discuss problems and issues related to the implementation of land titling components in Bank supported projects. It will be apparent from this experience that there are some intrinsic problems which indicate that land titling is not as

easy and straight forward a solution to resource management problems as has often been implied.

1.4 Bank land titling activities have usually been just a component in multi-component projects. Only one project (Thailand Land Titling Project) was purely concerned with this problem. Moreover, land titling does not always consist solely of the registration of informal land rights. Often it is accompanied by some kind of redefinition or regularization of land rights.

2. THE RATIONALE FOR LAND TITLING

2.1 Before discussing specific projects, let us briefly summarize the rationale for land titling. There are in particular three reasons why individuals might wish to obtain a title denoting clear rights to use or dispose of land:

- increased security of tenure in the narrow sense;
- increased supply of and demand for credit as the basis for investment in resource conservation or enhancement; and
- fostering commercial land markets.

A. Security of Tenure.

2.2 The first and probably most fundamental objective of land titling, increasing the security of tenure, is related to the hypothesis that registered or titled land rights are more secure than unregistered ones. Promoters of land titling argue that titled land rights are more secure in case of conflicts, because the state, being a respected authority, will guarantee the right of ownership and the rule of law. A good example for the equation of tenure security with legal title is given by Feder et al. (1988, 28): "Security of ownership is defined ... as the possession of legal rights of ownership, certified by an appropriate state-issued document." Promoters of land titling argue that, through increased tenure security, legal titles will lead to more sustainable and long-term land use practices, and in particular that owners with secure title will be more willing to make investments in the land resource which will promote sustainable use, e.g., planting trees, and land improvements.

B. Credit.

2.3 Many farmers do not have capital available for such investments, but must borrow. Lack of clear, legal title prevents the mortgaging of land, and a legal title may provide easier access to credit from lenders who do not have personal or detailed information on the borrower. "In the informal credit market, collateral is less significant. The lenders usually base their

decisions on personal familiarity with the borrower, and they can enforce repayment through social pressures and other means which are not available to formal lenders. Thus, farmers without secure ownership face fewer disadvantages in the informal credit market than in the formal credit market. Informal credit is typically much more expensive than formal credit, however, and is confined for the most part to relatively small short-term loans" (Feder et al. 1988, 6). Besides the hoped-for increase in credit supply, legal titles are also thought to increase the farmers' demand for credit (Roth and Barrows 1988, 6-8). Through the supposed increase of tenure security it is thought, that the farmers' demand for credit will also increase. Certainty over tenure security increases landholders' expectations of receiving the full benefits of an investment over the whole time period, increases their incentives to invest and thus also their demand for credit.

C. Land Markets.

2.4 Land market restrictions may have the following effects on land use practices (Johnson 1972, 266). First, the greater and more effective the restrictions, the lower the value of land will be, other things being equal, because the range of viable uses which the owner can pursue is reduced. If land were a tradable asset, there would be an incentive for land conservation, because land could be sold or rented out, so that the previous landholder could realize the capital or rental value of the conservation activities undertaken, assuming that they have increased the potential income stream to be derived from the land. Secondly, the greater and more effective the restrictions on the sale of land, the less the worth of land as collateral since, in case of failure, the lender could not easily sell the land and recover the lost credit. Thus, credit will probably be more expensive with restricted land markets, and investment in farm productivity as well as land conservation will be reduced.

2.5 It is widely accepted (Stringer 1989, 18-24, Feder and Feeny 1991, 140), that legal land titles are an essential prerequisite for the working of commercial land markets. This is not to say that land sales do not occur in the absence of titles. There is plenty of evidence of widespread trading in rights over land in such conditions. However, there are risks of disputes over what has actually been traded and the rights of the seller to actually enter into the transaction. It is argued that, without legal titles, potential buyers of a piece of land could not be certain whether they bought land from the real owners, and they may have subsequently to incur high costs in order to get full and unambiguous information. Therefore, it is hypothesized that legal land titles reduce information costs and uncertainty about land rights and, thus, facilitate land transactions.

3. BANK SUPPORT OF TITLING INITIATIVES.

3.1 The data upon which this review has been based were primarily obtained from a search of project documentation. The Internal Documents Unit undertook a sweep of project data files to find all of those agricultural/rural projects which, in their title or summary/key words, indicated that some element of provision of land titling was pursued under the project (i.e., land titles, land titling, land tenure and settlement). Within this group, the review was confined to those projects for which some form of formal review had been carried out so that some judgement had been made on whether project objectives had been met. The latter was primarily in the form of a Project Completion Report (PCR), Project Performance Audit Report (PPAR) or an Impact Evaluation Report (IER). The listing, therefore, excluded those projects still under implementation.¹ For the purposes of this review we also excluded settlement projects (primarily in Indonesia and Malaysia). While these involved some provision of title to the settlers, this was not actually to be granted until development loans were paid off and even then, in most cases, some restrictions remained. For example, under oil palm schemes in Malaysia land was to be issued in blocks to groups of smallholders under a group title with limitations on their right of sale. Furthermore, these projects made no provision for titling outside of the relatively limited areas of the schemes.

3.2 A final sample of twelve projects was obtained and is summarized in Table 1. The earliest of the projects was approved in 1971 and the others through the period to 1984. The smallness of the sample may be surprising, given the active Bank agricultural lending program during this period. There have been other projects which have been implemented in parallel with governmental land titling programs. However, it was decided to restrict this desk study to those operations which, in their summary documentation indicated that titling was a project objective. To have attempted to have included others would have entailed a great deal of review of project documentation, and would have created problems as to where to draw the line on inclusion. Furthermore, even in those projects in which titling was stated as an objective, as will be seen, the project reviews provided very little data on the titling activity. Thus, in projects where it was not even considered worthy of mention in the summary, PCR and audit references are likely to be even more limited. Discussions with Bank staff have not indicated that, in the aggregate, performance of these other projects has been different from the sample discussed in this paper.

¹Two of the projects were approaching completion; Philippines - Central Visayas Regional Development Project and; Thailand - Land Titling Project, but each was the subject of extensive analysis, the former in the Environment and Natural Resources Management Study, and the latter by Feder et al. (1988).

Table 1: Basic Information About Reviewed World Bank Projects With Rural Land Titling Components

Project	Date of Approval	Date of Closure	Type and Date of Evaluation Report	Actual Project Cost US\$ 000 (k for Land Tenure)	Types of Land Tenure Activities	Remarks
Bolivia - Third Livestock Project	1971	1980	PPAR 1982	15.9	Titling of campesino holdings	Agricultural bank dropped title requirement for lending after severe implementation problems with the titling program and changed to chattel mortgage.
Brazil - Ceara Rural Development Project	1977	1985	PPAR 1989	29.4 (n.a.)	Regularization of rental contracts Purchase of land for titling/redistribution to smallholders	
Brazil - Paraiba Rural Development Project	1978	1986	PPAR 1989	24.7 (6.0)	Discrimination of public and private lands Percentage of land for titling/redistribution to smallholders	
Brazil - Pernambuco Rural Development Project	1979	1986	PPAR 1989	103.1 (3.7)	Purchase of land for titling/redistribution to smallholders	
Brazil - Northwest Region Agricultural Development and Environmental Protection Project	1981	1990	PCR 1991	132.2 (6.5)	Land tenure regularization Demarcation of land holdings Mapping Titling of land holdings	Another land tenure activity was the demarcation of Amerindian reserves.
Brazil - Piaui Rural Development Project	1981	1986	PCR 1990	36.3 (25.3)	Land Tenure Regularization Purchase of Land for Titling/Redistribution to smallholders Assistance to newly created State Land Institute	

Colombia - Cordoba II Agricultural Developmental Project	1975	1983	PPAR 1987	38.0 (n.a.)	Purchase of land for titling/ redistribution to smallholders	Land tenure component could not be executed due to political opposition.
India - Orissa Agricultural Development Project	1977	1984	PPAR 15.6	39.0 (26.6)	Land surveys Improvement of land records	
Malawi - Shira Valley Agricultural Development Project	1973	1978	PPAR 1979 IER 1983	13.0 (n.a.)*	Land Registration issuance of titles to project farmers	Land titling component not executed.
Philippines - Central Visayas Regional Development Project	1983	1992	Philippines - Environment and Natural Resource Management Study (World Bank (1989))	44.4 (n.a.) (Appraisal Estimate)	Issuance of individual and group use certificates on public lands	Project still in operation; evaluation data not yet available.
Thailand - Land Titling Project	1984	1991	Feder et al. (1988)	76 (100) (Appraisal Estimate)	Cadastral Survey Issuance of Titles to squatters on public lands Institutional development (Department of Lands)	
Thailand - Northern Agricultural Development Project	1979	1988	PCR 1991	45.7 (n.a.)	Land Classification according to capability Issuance of Titles and use Certificates on Land Suitable for Agriculture	

n.a. - cost data of land tenures component not available.

* Government commitment to undertake titling, but not costed as component of project.

3.3 In only one of the projects reviewed, i.e., Thailand Land Titling, was the titling effort itself the primary object of the project. In all other cases it was an adjunct to the principal objective, usually increased production, in a project with multiple components. This is reflected in the small share of the actual project expenditures allocated to the titling/tenure effort. The Agricultural Development Project, and in only one of the others did it exceed 10%. In six of the projects, expenditures on titling were not separately estimated and in two of these the titling effort was a government commitment rather than a specific component of the project.

3.4 In attempting to assess the performance and the impact of land titling activities, one is confronted with the fact that the project performance audit, completion, and even impact evaluation reports generally gave little attention to land tenure and land titling issues in multi-component projects such as these agricultural or rural development projects. Because of the small share of expenditures and the nature of the activities involved it should not be surprising that in a majority of the projects the post project assessments did not provide any quantitative data on which the performance of the project in titling can be assessed (see Table 2). The information in the reports generally does not go beyond relatively sketchy and anecdotal data, and that has severely limited the extent of the present study.

3.5 In those projects which included some quantitative targets for tenure related activity in the project appraisal (all in fact in Brazil), those targets were missed by wide margins (except for the area 'discriminated' in the Northwest project). Most objectives were less than 50% achieved. Where expenditure on tenure related activity could be identified, cost overruns for the tenure component were considerably larger than for the project as a whole. (Where the project was stopped short and total expenditure was below the appraisal estimate, a larger proportion of planned expenditure for land tenure had actually been made than for the project as a whole). This indicates that, for this activity, the costs and complexity had been severely underestimated at appraisal.

3.6 Overall, therefore, this is a rather dismal picture. The balance of this report looks at the evidence available to attempt to assess the reasons for this relatively poor performance and draw operational lessons from this experience.

4. LESSONS FROM PROJECT REVIEW

4.1 It is clear from the above that of all the discussed land titling projects or project components, very few can be considered successful. Besides the Thailand Land Titling Project, the Brazil Agricultural Development and Environmental Protection Project and the Piaui Rural Development Project may be considered partly Table

Table 2: Performance of World Bank Titling Project Components

Project	Achievement of Land Tenure Targets: Actual/Appraisal (%)	Costs: Actual/Appraisal (%)	Remarks
Bolivia - Third Livestock Project	-	-	No quantitative data available; qualitative information indicates failure.
Brazil - Ceara Rural Development Project	Usucapaio (land distribution to tenants after 5 years of occupancy) 33 Land purchased and distributed 49	-	No precise target for title issuance was given, but very few titles (36) were actually issued.
Brazil - Paraiba Rural Development Project	Land discriminated 55 Land demarcated 49 Land purchased 36 Titles issued after discrimination 47 Titles issued after purchase 14	Titling and distribution 436 Total project (47)	
Brazil - Peruamguco Rural Development Project	-	-	No quantitative data available; qualitative information indicates severe implementation problems and insufficient performance.
Brazil - Northwest Region Agricultural Development and Environmental Protection Project	Discriminated area 123 Titles issued 50	Land tenure regularization 1300 Total project (95)	
Brazil - Piaui Rural Development Project	Land purchased and allocated 70 Land discriminated 43	All land-related activities 55 Total project (43)	Funds were not fully disbursed due to delays in implementation and the Bank's decision not to extend the closing date. No data available for title target achievement.
Colombia - Cordoba II Agricultural Development Project	-	-	Land tenure component could not be executed.
India - Orissa Agricultural Development Project	-	Land survey and records 189 Total project (94)	No precise targets available.
Malawi - Shire Valley Agricultural Development Project	-	-	Land tenure component could not be executed due to bureaucratic problems.
Philippines - Central visayas Regional Development Project	-	-	Project still in operation; quantitative evaluation data not yet available.
Thailand - Land Titling Project	-	-	Data not yet available.
Thailand - Northern Agricultural Development Project	-	-	No quantitative data available. Issuance of land use permits did not materialize due to disagreements among agencies on responsibilities and procedures which were never resolved.

successful, while in all the other projects, various problems seriously hampered project performance. These problems cannot be neatly compartmentalized, but may be grouped into a number of somewhat overlapping categories:

- (a) an overall lack of political support;
- (b) conflicting bureaucratic priorities and/or infighting;
- (c) lack of institutional capacity or an unwillingness to commit adequate resources; and
- (d) underestimation of the complexity and/or cost of the tasks to be carried out or other design weaknesses.

A. Political Support.

4.2 It is commonly assumed that land titling, with its major focus on registration and certification of land rights rather than on redefinition of rights, is not confronted with the numerous political problems that land reforms used to encounter, such as obstructionism by those who stand to lose from redefinition of land rights. Yet simple registration of existing informal rights is the exception rather than the rule, because land titling does not take place in a land rights vacuum, and because existing land rights arrangements are often considered to be so deficient to require improvements (redistribution, regularization).

4.3 Among the land titling projects reviewed, all those in Latin America, except that in Bolivia, tried to redistribute or regularize land rights; that is to change the preexisting rights in one way or another. Some of the other projects, which were not effectively implemented due to other, for example bureaucratic reasons, might also have been affected by such political problems.

4.4 For example, involvement in land rights leads to the problem of the transaction costs that arise from the change from one property rights arrangement to another. These transaction costs may be very high, since changes in land rights in developing countries, where economies are largely agrarian, are an immensely political matter. The successful Thailand Land Titling Project may have been rather exceptional in that it involved the simple registration of existing recognized rights in an area without land disputes.

4.5 Particularly when a program involves some redistribution of rights over land, political opposition is likely to be significant unless compensation to those relinquishing rights is considerable, which may in itself undermine the feasibility of the program. For example, the Colombia - Cordoba II Agricultural

Development Project (1975 - 1984) was designed to promote integrated and balanced development in the Department of Cordoba by completing the land development and agrarian reform begun by INCORA (Colombian Institute for Agrarian Reform). The project included drainage works, land levelling to allow a shift from livestock to crop agriculture, and provision of basic social services with the objective of settling 1,000 landless families through land reclamation and compulsory purchase of land from large landowners.

4.6 The latter agrarian reform component was a failure. Only two farms were purchased by INCORA during project implementation, amounting to 200.7 ha and benefitting only 19 families. The component as such was doomed to failure from the outset, the record of previous project experience already suggesting that the agrarian reform policy lacked significant political support and would be difficult to implement (World Bank 1988, 6-7). Beginning in the early 1970s, political opposition to INCORA's land expropriations increased, and budgetary support to INCORA for land purchases became minimal.

4.7 Conversely the relative success of the land tenure component of the Piaui Rural Development Project in Brazil was considered to be due to a combination of consistent political support and auspicious economic circumstances, factors which were presumably not unrelated. This project was the eighth in a series of ten Bank-financed integrated rural development projects in the Northeast of Brazil approved between 1976 and 1983. It was the first to have land tenure as its central focus. This fact in itself presumably implies a consistent level of political support. In addition to increasing agricultural production and improving incomes and living standards, the project sought to develop simple, technically sound, and cost-effective methodologies for land redistribution and regularization.

4.8 As far as land tenure is concerned, the intervention was not simply a registration of former informal, untitled land rights, but involved redistribution of land from large landholders. The land activities included (a) acquisition, allotment and redistribution of about 200,000 ha to about 5,000 landless farmers; (b) land tenure regularization of about 900,000 ha; (c) demarcation and land titling of about 1,500 small farms; and (d) assistance to the newly created State Land Institute.

4.9 The acquisition and distribution of land were the most important, as well as the most controversial, aspects of the project. Major worries were that (a) large landowners would unite and block land offers to the project; (b) land offered would be exclusively of poor quality; (c) and the project would fuel land speculation, driving up the price of land in the area.

4.10 Surprisingly, these concerns proved to be unfounded during the course of project implementation. "The drought during

the 1980s, the constrained macroeconomic situation, the modernization of Piauí (the landholding elite diversified into other activities), and the Governor's explicit declaration that lands with productive potential would be expropriated if not used are probably the major factors responsible. Conservative and committed project management in the first couple of years was also important" (World Bank 1990, 5).

4.11 Despite this level of political support, however, the activity of land discrimination (study of land claims, recovery of public lands, and title regularization) was less successful than that of redistribution. Staffing and funding problems hampered progress. About 43% of the original targeted area was actually discriminated by the time the project was closed as a result of national level political problems (World Bank 1990, 6) .

B. Conflicting Bureaucratic Priorities

4.12 Closely interlinked with the last issue are bureaucratic inefficiencies on the part of public institutions, such as land administration, or cadastral services. This problem is in part a result of the fact that the land component is usually a minor element of the project in expenditure terms and not carried out by the principal project agency. Thus, the agency responsible for the titling is likely to have its own priorities and have little incentive to make major efforts to facilitate implementation of the Bank financed operation. In three of the projects this was the principal reason for shortfalls in implementation, Bolivia - Livestock and Agricultural Credit projects, Malawi - Shire Valley Agricultural Development Project, and Thailand - Northern Agricultural Development.

4.13 The two projects in Bolivia (1971 - 1980), Third Livestock Project and the First Agricultural Credit Project, were both primarily credit operations, were administered by the same project unit and were assessed in a joint PPAR. The projects assisted the Agricultural Bank of Bolivia (BAB) credit operations in the agricultural sector. According to a preparatory consultant study on land tenure, lack of titles in the Santa Cruz area and the Altiplano was a serious impediment to obtaining development credit, and the Government promised to give high priority to a land titling program.

4.14 Neither project actually contained a component to assist in the land titling effort, but covenants were included in the project agreements pledging the Government to ensure that the titling program would be pursued with due vigor. However, "the support which the Government was able to give was insufficient and the increase in the number of titles has been only 27,000 during the project life, from 566,000 to 593,000. ... [Towards the end] the titling process almost ceased" (World Bank 1982, 41). And "despite assurances that prompt clarification of land titles ...

would enable rapid .. [credit] disbursements, the problem of documentation of land titles to satisfy BAB requirements for mortgage guarantee was still the major reason for rejection of credit applications" (World Bank 1982, 31). Thus, in 1978, BAB finally changed its lending policy toward small farmers. Land titles as collateral were no longer required and chattel mortgages were accepted as security. As a result, actual disbursements as a percentage of appraisal estimates rose rapidly from 44% to a final level of 87% (World Bank 1982, 4). This case does also raise the question of the necessity of requiring land for security purposes, especially for livestock related borrowing, and where the land market is thin and, therefore, foreclosure is not a viable option.

4.15 The Shire Valley Agricultural Development Project Phase II was one in a series of three agricultural development projects that were implemented in the lower Shire Valley in Malawi between 1968 and 1983. The project sought to provide integrated rural development with emphasis on increasing crop yields, livestock and fishery production, and it comprised extension and training services; credit, markets, roads and water supplies, improvement of health services, preservation of wildlife and land registration.

4.16 Existing land laws in Malawi provided the processes by which title might be granted to those holding land under customary tenure. The project aimed at encouraging farmers to apply for title and providing the necessary staff and equipment to prepare for the application of the legislation.

4.17 However, this project component was not implemented because of a change in Government policy. The land registration unit divided its activities between demarcation and gazetting of land in non-project areas, and implementing the other project components in the project area. The authors of the PPAR found no explanation for this and it appeared that the Bank had made little effort to press for implementation of the registration program. Supervision reports do not indicate that the issue was raised (World Bank 1979, 23).

4.18 A somewhat different set of problems led to persistent difficulties in the implementation of the Northern Agricultural Development Project in Thailand. This was a multicomponent area development project (1979 - 1988) designed to reduce poverty and curtail environmentally damaging shifting cultivation among upland smallholders and hill tribes in northern Thailand. The project involved the classification of land based on its capability for permanent agricultural use. Titles and land-use certificates were to be given to beneficiaries to motivate investment and conservation. Land not suitable for farming would be protected as forest reserve.

4.19 Land matters proved to be among the most difficult elements of the project. The land classification carried out proved

to be not detailed enough to provide a basis for delineating and alienating land suitable for farming. This was particularly troublesome in the highlands, where arable land occurs in small, scattered pieces, not identifiable by large scale or satellite imagery. Project design provided for land classification surveys of 172,000 ha in the highlands and 50,000 in the lowlands, to be followed by issuance of 6,500 land use permits to highland farmers and an unspecified number of land titles to upland farmers. No analysis of the practicability, recent experience, procedural difficulties or legislative adequacy was presented. This is particularly problematic in the highlands, where much of the area has steep slopes, provides the watershed for downstream irrigation systems, and is generally not suitable for intensive agriculture. Providing land-use certificates to patches of highland would in no way restrict poaching, logging, and shifting cultivation in the adjacent forest reserves (World Bank 1991b, xxix).

4.20 Traditionally the Forest Department in Thailand has been extremely reluctant to release land from Forest Reserves. Given this view and the design inadequacies noted above, the department saw little benefit from the program. As a result, the issuance of land titles and use permits was far below target (World Bank 1991b, x).

C. Lack of Institutional Capacity.

4.21 To certain political groups aiming at reducing state interventions in economic and environmental policy and promoting the delegation of power to private decision makers, land titling might appear to be an easy and promising policy intervention. But a property-rights-oriented land policy relies fundamentally on the state to perform specific tasks. For successful land titling, the state has to provide the needed infrastructural services for delineation, registration and transfer of land rights. However, in many developing countries, public administration is frequently not able to provide these conditions because of limited financial, human and technical capacities. The problems of this type in the projects reviewed cannot be completely separated from the previous two problem areas, since with adequate political and bureaucratic support institutional capacity would in most instances be created, except under conditions of severe general shortage of resources.

4.22 India - Orissa Agricultural Development Project. This project, which was implemented from 1977 to 1983, had as its major focus a reorganization of extension and research. But there was also a large land survey and land records component. A serious deficiency in land records and a complete absence of maps for many villages were highlighted both in identification and appraisal. Even where records did exist, the system for retrieval and updating was cumbersome and time consuming. This meant tenure insecurity and limited access to credit for farmers. Under the project, however, little progress appears to have been made in improving these

systems and implementation of the land surveys remained slow. Various factors caused the delays including inaccurate estimation of time required, staffing shortages, delays in producing adequate maps (World Bank 1986, 58). At the same time, costs exceeded the appraisal estimates considerably. Instead of the Rs. 47.8 Million, Rs. 90.5 Million were spent (World Bank 1986, 87), a much greater cost overrun than for other project components. All of which suggests that inadequate attention had been paid in preparation and appraisal to the implications of the program which was proposed.

4.23 Somewhat similar difficulties were encountered in the implementation of the Ceara, Paraiba and Pernambuco Rural Development Projects (1977 - 1986) which were three of ten first generation Bank funded rural development projects in eight states of the Northeast of Brazil. These differed from the rest in having land titling components. Though the three states have diverse farming environments and agricultural potential, the projects were very similar in aiming to increase the incomes and living standards of small farmers, and of small non-farm enterprises by the provision of infrastructure and a package of agricultural support including credit, extension, research, improved seed and more secure land tenure, and project performance was evaluated in one PPAR (World Bank 1989a). As far as land tenure is concerned, the intervention was not simply a registration of former informal, untitled land rights, but involved redistribution of land from large landholders.

4.24 Performance of this project component in Ceara was poor (World Bank 1989a, 44). Only 3,439 hectares were distributed to landless farmers (49% of the targetted 7,000 hectares), and only 36 titles were issued.

4.25 In Paraiba, performance was somewhat better, although only 3,047 hectares of land were distributed (36% of the targetted 8,488 hectares) and about 7,560 titles issued. Implementation of these components was difficult due to a combination of factors:

- The screening of potential areas for redistribution was time consuming.
- Only at the end of the project was a proper cadastral service became available for the whole project area.
- INCRA (National Institute of Colonization and Agrarian Reform), which is responsible for land acquisitions and redistribution, did not have regional offices in all project areas.
- The purchase of land in the states had to be reviewed by INCRA headquarters in Brasilia.

- Delays caused by legal disputes resulting from government attempts to acquire land for redistribution were underestimated.
- High costs per beneficiary of land acquisition/redistribution. In the Paraiba project, the only one of the three projects with data available, the actual costs of titling and distribution were 464% of the appraisal estimates (World Bank 1989a, 82).

The PPAR concludes the list of problems by mentioning that "probably ... it was not very realistic of the Bank to expect the government to act decisively in this very sensitive area" (World Bank 1989a, 44).

4.26 One of the major, even though hardly quantifiable, reasons for the success of the Thailand Land Titling Project was its emphasis on institutional development and strengthening of the Department of Lands which, even before the project, had well developed systems for land survey and titling. The problem of inadequate administrative capacities may be related to the fact that most projects reviewed had multiple components or were integrated projects, and were trying to address many important constraints on rural development, including land tenure. But, in such projects, where land tenure may not be the central concern, these important institutional factors may easily be neglected. Single-component projects (like the Thailand Land Titling Project) may, however, have their own, specific problems. Their weakness is, that in the absence of other policy interventions (in particular, credit) the impact of land titling may be reduced. The Thailand Land Titling Project was successful because, fortunately, all the other crucial conditions were given.

D. Inadequacies in Planning and Design.

4.27 In most of the projects reviewed, qualitative statements were made in the evaluation reports, such as that the difficulties of implementing land tenure project components were underestimated, or that the targets were only partly achieved. Specific data about the actual costs of the land titling components are only available for a few of the projects. All available data indicate considerable cost overruns. For example, in the Brazil - Agricultural Development and Environmental Protection Project, the Staff Appraisal Report estimated 0.4% of the project costs for the land titling component, but in the event, they turned out to be 4.9% (World Bank 1991a, 45). In the Brazil - Paraiba Rural Development Project, actual costs were 464% of the appraisal estimates (World Bank 1989a, 82), and in the India - Orissa Agricultural Development Project, 189% (World Bank 1986, 87). These cost overruns are considerably greater than those of other project components and, in general, indicate that the complexity of the tasks involved had been underestimated during preparation.

4.28 The difficulties encountered by the Northern Agricultural Development Project in Thailand, when the proposed approach turned out to be very difficult to implement, have already been noted. The Central Visayas Regional Development Project in the Philippines also encountered difficulties resulting from faulty design. This project was aimed at raising rural incomes in four watersheds in the relatively backward Central Visayas region through the establishment of improved systems of resource management. These included rehabilitation and conservation to arrest degradation of the farming, forest and fishery resources in upland and near-shore habitats. It also supported institutional changes to help implement the government's policy of decentralization of responsibility for economic development programs. The state owned most of the land in the Central Visayas region, and land tenure for the occupants was quite insecure (World Bank 1983, 9). This led to short-term, low-cost production strategies and to the deterioration of natural resources.

4.29 To counteract these negative effects, the stewardship program granted leases to the occupants of public lands that provided them with use rights for 25 years, extendable to 50 years, on condition of compliance with a resource management plan. That is, it is a system of mixed property with exclusive individual use rights provided on land that remains state property. Certificates of Stewardship Contracts were given to both individuals (64,000) and to communities (7). The collective agreements, known as Community Forest Stewardship Agreements, were issued mainly to organized tribal groups for common management of their community area.

4.30 Preliminary investigations of the stewardship program in the Philippines indicate that there are considerable problems with the program's design and implementation (World Bank 1989b, 24). The stewardship contracts are heritable within the 25-year limit, but since they are not otherwise transferable, they are not a bankable instrument. A major weakness has been the lack of "content control" - registration targets were assigned to regional directors, leading to careless certificate issue. In addition, the scheme gave insufficient attention to parcel management and support services.

5. CONCLUSIONS

5.1 This report has reviewed the Bank experience in land titling and related tenure activities for agricultural and rural development projects for which land tenure related activities were stated in summary documentation as being among the project objectives. In general, performance in these activities was not good. It should also be noted that this report includes virtually all of the material contained in the various evaluation reports on land titling related activities and that, despite the generally poor performance, limited attention has been given to titling

related activities. Thus, while land tenure and land titling are very much in fashion, caution is in order. The experience reviewed here suggests that land titling is not the "silver bullet", that will solve problems of rural development and land degradation. A wide range of intrinsic political, bureaucratic and administrative problems can constrain the implementation of land titling project components.

5.2 It is also important to note that there are no quick fixes to land tenure problems. Except in particularly favorable circumstances, improvements in this field can only be achieved in the long run. For example, the Thailand Land Titling Project funded the first phase of a twenty year program designed to eliminate the titling backlog, and (for rural land) covered only nine of the seventy-two provinces. As far as developing countries are concerned, such a situation, (i.e., where an effective institutional structure and legal system exists with strong political support and where a massive titling program can be undertaken without the complexities of land reform) is likely to be the exception rather than the rule. Thus, in any other country, countrywide expansion of a titling system is likely to require a much longer period. Therefore, while in the long run active promotion of titling is necessary for a market oriented agriculture, effective systems are unlikely to be in place quickly enough to serve as the basis for tackling short-term land degradation problems.

5.3 Given the usually tremendous problems, which were discussed in this paper, land titling efforts will have to commit considerable resources to institutional development in the executing agencies, so that there are sufficient technical and human capacities available for successful project implementation. And such projects should only be pursued if the necessary political support can be expected. Greater attention to the technical complexities of the titling process so as to improve project design, is also indicated.

5.4 Meanwhile, consideration could be given to alternative means of tackling the problems resulting from inadequate titles, such as changing the requirements for mortgage guarantee, such as in the Bolivia - Livestock and Agricultural Credit projects, where the Agricultural Bank of Bolivia changed its lending policy and accepted chattel mortgages as security.

5.5 This brief paper represents the results of a limited review of available documentation. It has not included additional activities which may have been undertaken in connection with projects but which were not noted in summary project documentation. However, the results of this review are sufficiently unambiguous to suggest that a more detailed evaluation of experience would be in order before land titling is made the centerpiece of efforts to address land resource degradation problems.

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