

The Honduras Land Titling and Registration Experience

by

**David Stanfield, Edgar Nesman,
Mitchell Seligson, and Alexander Coles**

The research reported in this paper was funded by the AID Mission in Honduras and by AID's LAC/DR/RD office in Washington.

**Land Tenure Center
University of Wisconsin-Madison
June 1990**

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Forward

The research into the Small Farmer Titling Project in Honduras involved the collaboration of the University of Wisconsin, the University of Pittsburgh and the University of South Florida. The field research was conducted in collaboration with the Centro para la Promoción del Desarrollo (CEPROD) in Tegucigalpa, as well as the Instituto Nacional Agrario (INA) and the Dirección Ejecutiva del Catastro Nacional (CN).

Special thanks are owed to Roger Lopez and Ricardo Chiuz from INA; Hugo Castro from CN; Peter Lara, Gordon Straub, Emil Falck and Robert Wilson from AID/Honduras; Guillermo Molina, Lili Caballero, Rafael Diaz and Juana Nuñez from CEPROD; the work would not have been done without them. Napoleon Flores, Gautama Fonseca, Mario Ponce, Ibrahim Medina, Marco Polo Micheletti, Miguel Nuñez, Luis Pineda Batres, Julio Raudales, Hugo Noe Pino and Ramon Salgado stimulated the conduct of the research, and will almost certainly disagree with at least some of our conclusions. Such disagreements have been the basis of very fruitful dialogues, and we hope they continue. Miriam Barjum and Malcolm Childress have kept us optimistic that massive data sets can be gathered intelligently and managed electronically.

SUMMARY AND RECOMMENDATIONS

1. Background and objectives of the research project

The major objective of the Small Farmer Titling Project (Proyecto de Titulación de Tierra, PTT) begun in 1982 is to incorporate a significant portion of the untitled holders of national and ejidal land used for agriculture into the category of private land owners through the issuance of legal land titles. Over 60% of the agricultural land in Honduras has been held and used without being legally titled. The PTT also aims at strengthening the Property Registration system in Honduras, in order to provide more effective protection of the ownership rights therein recorded.

Analyses of rural areas of Latin America and the Caribbean have frequently concluded that the lack of an adequately secure ownership title to land, especially for smallholders, is a major constraint on the development of agriculture in the region. The Honduran titling project's general goal is the removal of at least some of these constraints through the legalization of private land ownership. The PTT proposes that more widespread possession of legal land titles should improve access to credit, farmer investments, levels of productivity, and the operations of the land market.

The PTT contained provisions for the evaluation of the impacts of the titling efforts. This report presents the major findings of the series of studies conducted and which began in 1983. A survey of a sample of landholders was conducted in Santa Barbara and Comayagua, prior to the titling program. Some of those landholders subsequently received legal ownership titles, issued by the Instituto Nacional Agraria (INA) for parcels delineated and mapped by the National Cadastral agency. A control group sample was also surveyed in the Departments of Ocotepeque and Yoro. Five years after the first surveys, the titled and untitled groups were re-interviewed to provide a basis for examining changes through time concerning the landholders' access to credit, investments, productivity, and land market operations. In order to provide contextual and historical perspectives, community and landholder case studies were also conducted.

2. Customary and formal property systems

The private possession of national and ejidal land, with the tacit approval of the state, but without explicit state patenting of private ownership, has led to what might be called a "customary" system of defining and transferring land rights. People locally recognize ownership claims based on possession and use. Transfers of possession and use rights to others also occur customarily rather than as the law requires. Participants in transactions use local, often municipal leaders as witnesses to those transactions and as arbitrators in cases of conflicts (Coles, 1989). Those wishing to transfer their rights do so

either with witnessed bills of sale or through verbal arrangements for sales or inheritances among friends, acquaintances or family members. Such transactions are not recorded in the Property Registry.

This customary system apparently has functioned well enough in most cases in which people from the local community have been involved. However, since the customary system does not have access to the legally defined institution for recording transactions, the Property Registry, it has presented difficulties when people from outside the local community wish to purchase land or when local people wish to obtain a mortgaged loan from a bank. The PTT proposes to transfer people's allegiances from the customary property system to the formal one.

3. Achievements of the PTT as of 1989

The PTT, as of December 1989, has delineated and mapped 174,175 parcels of national and ejidal land used for agricultural, and has issued 32,029 property titles. The majority of the titles issued are for parcels smaller than 5 hectares (55%), which is legally possible for such parcels if they contain a commercial coffee plantation. The 27,675 titled parcels smaller than 17 hectares are granted the "family agricultural unit" type of title, and cannot be subdivided or sold without INA approval; such parcels represent over 86% of the titled parcels. About 14% (4,354) of the titled parcels have been granted the "dominio pleno" type of title.

About 116,000 parcels delineated are smaller than 5 hectares, or 2/3 of the total number of delineated parcels. According to the field study in Santa Barbara and Comayagua, there is an average of 1.2 parcels per holding, which means that there are almost 100,000 families trying to scratch out a living on very meager land resources, both in size as well as in the fragility of the soil base, since most of the national and ejidal lands are located in the mountains of the various departments.

Land management requires basic information, such as where the land is which is being managed. Such basic information is often lacking. The PTT is directed to title national and ejidal lands, but little information existed prior to the project as to how much national and ejidal lands were in fact eligible for titling. The implementation of the PTT requires that boundaries of forest reserves be determined; protected areas such as sensitive watersheds to be exempted from agricultural use, areas along public roads and even the boundaries of municipalities, have to be determined. Such information was in many cases not available prior to the PTT. Agencies charged with the administration of such "untitleable land" now have basic information about the location and quality of this resource. Moreover, agencies which are responsible for the development of agricultural land and for the construction and maintenance of infrastructure now have the basic information about the ownership of the land which should assist them in dealing with the public for carrying out their mandates. These benefits of the PTT, of course, depend on institutional strengthening and

development of those agencies charged with the management of land related programs.

Recommendations: (1) Since the PTT has proved to be an effective program for coordinating cadastral and title adjudication agencies (CN and INA), the project deserves further support, especially if greater public interest emerges; (2) institutional mechanisms for incorporating the data generated by the PTT into land management and rural development planning should be strengthened.

4. Social and Economic Impacts of a Titling Program: Unexpected and Expected Results of the PTT

4.1. Land market operations among non-titled holders. The data from the Comayagua PTT Evaluation Survey show that roughly 2/3 of the national and ejidal land parcels presently held and used by individual farmers in Comayagua were purchased from non-family members or were acquired through trading one piece of land for another. About 1/3 of the parcels were inherited. Only a very few of the parcels were acquired through squatting or donations of land. These findings challenge the traditional view of the peasant as being subsistence oriented and unable to acquire rights to land through the market.

Recommendation: The means for acquiring ownership rights in land, including financing arrangements, length of the payoff period, forms of guarantee, in the customary land market have not been adequately documented. Such questions should be answered in order to design programs for improving the operations of the formal land market.

4.2. Tenure insecurity on private parcels. The PTT identified parcels of land which were once titled to a private owner, and produced cadastral maps with the parcels so identified. However, while many of the originally patented parcels remain as large, single holdings, in others the land has been subdivided extensively. Moreover, the legal status of a large number of these parcels has deteriorated in the sense of there not being a registered deed to the land in the name of the present holders.

Unlike their counterparts of holders of national and ejidal land, the holders of these "title deteriorated" private parcels dedicate the land mostly to pastures or to the planting of minimal areas in annual crops. Yet the national and ejidal land parcels are in the main planted to coffee while the private parcels are used as pastures and minimally for the growing of annual crops, very little planted in coffee. In neither case are the owners protected by having a recorded title to the land they use. In the national and ejidal land, the PTT is attempting to correct this lack of title. In the "deteriorated" private lands, the PTT is restricted from operating.

Recommendations: Since one of the objectives of the PTT is to stimulate investments and increase production of crops like coffee which

require a relatively long investment period, a study should be conducted to the tenure status of parcels on private lands to determine what policies should be developed. Exactly what the situation is on these private parcels is important to determine, since the potential for conflict is apparently great. One option would be to undertake a cadastral delineation program for the private parcels. Another option could be the use of long possession legislation to award full ownership title to those who qualify.

4.3. The PTT has been able to adjudicate title to relatively few holders of National and ejidal land. The proportion of national and ejidal land which the PTT has been able to title is low, just over 16% in six completed Departments. In large part, these untitled holders are not eligible for title under the law because the parcels they hold are less than 5 hectares in size, and are not being used for coffee production. Others are not eligible for title because the parcels are larger than 50 has. Others are holders of parcels which they use but which are in zones which cannot be titled to private owners (being in forest reserves, in particular watersheds, etc.) However, there are many holders of parcels who are legally eligible for titling who are not receiving title, and are not being incorporated into the formal registry system.

There are wide differences among the completed Departments in the proportion of parcels eligible for title because of size (between 5 and 50 hectares) which received a title, ranging from 16% in Yoro to 83% in Santa Bárbara. For the six completed Departments, an average of only 34% of the eligible parcels within the 5-50 hectare range have been titled.

Recommendation: The reasons for this lack of participation in the titling program should be determined. Part of the problem for the smaller parcels is the legal restriction of titling to those smaller parcels with coffee. Another important part of the problem is a lack of public awareness of the PTT, in which case the community public relations campaign of the PTT should be improved. Or, perhaps there are other reasons, related to the resistance of people to recognize the state's claim of ownership of the land. If this latter reason seems to be important, the value of maintaining this policy of state ownership and right to charge for the land should be reviewed. The effects of titling land without demanding payment versus the income generated for the state from the sales of the land should be judged. If by dropping this demand for payment of the land, more landholders could be titled, perhaps more resources could be generated from taxes on titled land than the net income from the collections of land debts from a relatively small number of titled parcels.

4.4. Collections of the land debt are acceptable. The collections of the land debts for the titled land of December, 1989 are higher than expected. A total of L 1,293,791 was expected to be paid by the end of 1989, and a total of L 1,331,268 was actually paid. Some people have opted to pay off their debts entirely, some have made advance payments and some are making what is required. Others, however, have not paid anything, or are behind schedule, particularly in Santa Barbara and

Comayagua. Overall, the collection rate during the first years has been good.

A problem of drop off in collections could develop, however, if the laggards continue their lack of payment.

Recommendation: A study should be conducted of the characteristics of those who have paid their land debts to INA and those who have not, and the relative importance of each group. Such a study should be part of the debate concerning whether to continue the charging for the land.

4.5. Farmer perceptions are that titled land values have increased 60% more than untitled land values. Assuming that inflation and/or speculation fueled increases in value in titled as well as untitled land holders, the increases in per manzana value of 160% for titled owners and 100% for untitled ones, indicates that the increases in perceived land values which could be attributed to titling would be about 60%. This translates into an increase of about L 795 in real value per manzana over five years, over the initial value of L 1,325 for land which was eventually titled. In dollar terms, this increase would be about \$398 per manzana from an initial value of \$663 (or an increase of \$569 per hectare).

Recommendation: The increases in land values should be verified and the causes of such increases identified. If market values have in fact increased for titled land more than for untitled land, there would be less need to consider the reduction of the land debts, but there would also be a need to consider how such changes in value affect the access of the land poor to land through the land market.

4.6 Transactions in land have not been stimulated by the titling project. In fact, from the field survey, during the five years of the study, there have been fewer transactions among the titled parcel holders than in the untitled control or untitled private holdings. The data would certainly argue against the hypothesis that titling would stimulate land transfers for the titled holder of land, although there may be a number of factors which could be influencing this tendency. There appears to be little support for the hypothesis that through titling, the peasant holders of the land will divest themselves or be bought out, at least in the short time period of five years covered by the field study.

Recommendation: The possibility of the land being bidded away from the peasant land holders is of sufficient policy importance that a further study of the transaction rates be undertaken, perhaps 10 years after the issuance of INA titles.

4.7 Credit Access. The field study indicted that there was some increase in credit access and use among the titled farmers than among those without title. However, most of the increases occurred in two communities where the research team conducted extensive case studies, including long interviews with the bank managers. If the increases in credit access in the two case study communities are due in large part to

the minimal discussions carried out, a conscious program toward this end could have significant results. Bank managers do change their policies, and such change could be the objective of special public relations and educational efforts associated with the titling project.

Recommendation: A special effort for changing bank policies and procedures for dealing with the INA titled properties should be built into future titling efforts. That effort should include informing lawyers, judges and land surveyors about the new titles and the proposed Folio Real system of property registration built on the cadastral maps.

4.8. Investment, production, use of technology. There are no consistent differences between the titled and control groups in terms of changes in investments in new coffee plantation, infrastructure, orientation of family labor toward farm production, yields, use of production technology, and overall production. If such changes do emerge, it will require more time for the institutional modifications to occur. Most important is for there to be a real increase in access to credit as well as for the titled owners to experience real improvements in their security of ownership which experience proves to be represented by the new titles. There is some evidence that the new titles can mean greater insecurity of ownership, if the state continues with a mandate to approve all subsequent transactions of titled land.

Recommendation: The potentials for increasing ownership insecurity of titled land should be reduced by making INA more accessible to those desiring to transfer their rights to the land to others. The various factors potentially being affected by wider distribution of titled ownership should be continuously monitored, especially access to credit, and levels of on farm investment.

4.9. Land transactions and insecurity of ownership. Land transactions have not increased for the titled farmers more than for the untitled ones. Titling does not appear to stimulate the divestment of parcels. However, those transactions which do occur are not being recorded in the Property Registry. This lack of recording of transactions in the Registry means that the situation of land holding without legal title which existed prior to the PTT may be recreated within a few years. High transaction costs appear to be contributing to this problem.

Recommendation: Transaction costs for titled land should be reduced, following a documentation of where in the process of transaction these costs are highest.

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1. The Problem of Untitled Land Holdings in Honduras

1.1 Major land tenure forms

The ways people treat the land depend in large part on the social rules that govern their access to it, the rules of tenure. Some of these rules are enshrined in formal laws and decrees, some in the customs of the people. In Honduras, a largely rural country in which peasant livelihood depends on access to land, there are three main categories of land, with each category defined by different rules of access and use. Land that at one point in time had been recognized by the Spanish Crown or, later, by the Honduran state as privately owned, privatized through the original patents or titles issued after Spanish colonization, are known as private lands. Ejidal lands are areas ceded by the Spanish Crown to municipalities for urban development or for leasing to local residents as a source of local government income. The remaining land, i.e., never titled as private nor titled as ejidal land, nor in public land reserves of one sort or another, is known as national land.

Roughly half of the land used for agriculture in Honduras is private, i.e., is covered by a patent from the state assigning it to private ownership. The other half is divided between national and ejidal land, but individuals and groups claim such land as theirs, use it and transfer their rights to their heirs or to buyers of those rights. Such holders of national or ejidal land, however, do not have private titles to the land as recognized by the formal legal system.

The Small Farmer Titling Project (Proyecto de Titulación de Tierra, PTT) initiated in 1982, set as its goal the incorporation of a significant portion of the holders of national and ejidal land used for agriculture into the category of private owned land through the issuance of legal land titles. This project offers the opportunity for inquiring into the effects of legalizing private land ownership on such factors as farmer investments, levels of productivity, and the operations of the land market. Analyses of rural areas of Latin America and the Caribbean have frequently concluded that the lack of an adequately secure ownership title to land, especially for smallholders, is a major constraint on the development of agriculture in the region (Salas, 1973; Salas, Knight and Saenz, 1970; Thome, 1971; Seligson, 1984; Strasma and Barbosa, 1984;

Villamizar, 1984; Stanfield, 1989) The problem has also been identified in other regions (Demsetz; Feder, 1986; Feder et al., 1988;).

The objective of this paper is to summarize the achievements to date of the PTT as well as some of its implications for future land ownership and use. The paper draws heavily on the analyses of Nesman and Seligson (1988 and 1989) as well as the work by Coles (1989) and the information produced by the PTT itself. A special before-after study was devised by Seligson and Nesman in 1982 to study the effects of the titling program. That study provides much of the quantitative measures of PTT effects. The Coles study of the land market and the meaning of the INA titles for local communities has provided much of the historical and cultural input for this paper. The PTT itself has put substantial resources into developing data management and analysis capabilities in the implementing agencies, which has enabled the project to produce much of the macro data presented in the paper.

1.2 Legalization of private and public land ownership in Honduras

The early 1970's saw some major changes in the property relations on national and ejidal land in Honduras, mostly in response to pressures for agrarian reform. Two important pieces of legislation were passed which implemented these changes. One action was Decree No. 8 of 1973 which stated that individuals could freely move onto national lands, and possess and use them for agriculture without making formal application to the state for the possession of that land. To a certain extent this decree stimulated the occupation of national land, but was far more important as validating land occupations which had already occurred spontaneously.

The second major legislative action was the Agrarian Reform Decree No. 170 of 1975, which inserted the state into the management of ejidal lands and identified the National Agrarian Institute (INA) as the state agency with the responsibility for managing ejidal and national lands. Article 21 of that Decree canceled the rights of municipalities to allocate ejidal lands and awarded that responsibility to INA. The Agrarian Reform Decree also specified INA as the agency with the responsibility for assigning private ownership rights of national and ejidal land to individuals, and the steps and procedures to be followed to carry out this adjudication of private ownership titles.

Despite these important steps designed to alter the rules of access to national and ejidal lands in the 1970's, in practice the legal ownership status of these lands was not significantly affected. This failure occurred in part because the private holders and users of this land did not activate the legal mechanisms for patenting the land, and in part because INA, the agency charged with managing these lands, did not take the initiative to patent eligible national or ejidal land which was privately held.

INA's priority instead was the agrarian reform, which in the early years at least, principally involved negotiating with foreign landowners,

particularly the banana companies for the acquisition and re-assignment of land to the landless and land poor. INA also became embroiled in negotiations between peasant organizations and Honduran latifundistas over land rights. The land invasions that stimulated these negotiations often revolved around the legal status of the invaded land, i.e., whether or not it had been appropriated by the large landowners illegally and should be recovered by the state for reassignment to reform beneficiaries.

INA assigned a low priority to defining the legal status of the national and ejidal land occupied by small and medium sized farmers. This private possession of national and ejidal land, with the tacit approval of the state, but without explicit state patenting of private ownership, has led to what might be called a "customary" system of defining and transferring land rights. People locally recognize ownership claims based on possession and use. Those who engage in transfers of possession and use rights to others use local, often municipal leaders as witnesses to those transactions and as arbitrators in cases of conflicts (Coles, 1989). Those wishing to transfer their rights do so either with witnessed bills of sale or through verbal arrangements for sales or inheritances among friends, acquaintances or family members.

2. Customary private ownership

The customary property system apparently has functioned well enough in most cases in which people from the local community are involved. However, since the customary system does not have access to the legally defined institution for recording transactions, the Property Registry, it presents difficulties when landowners wish to sell or mortgage their property to those from outside the local community. Although little evidence is available on the operations of the land market under such conditions in Honduras, it seems reasonable to assume that it has been limited largely to transactions involving people who know one another, people from the area or known to the local community members. It also seems likely that people or agencies who do not have recourse to the local validators of ownership or who themselves do not recognize the validity of these local property mechanisms, tend to abstain from land transactions. The result is the suppression of the land market.

Especially problematical have been the operations of banks that operate by procedures standardized for the country as a whole. These procedures are specially designed for urban land parcels and certain rural properties legally recorded in the Property Registry. Banks typically require a recorded, "marketable", title to the land as evidence of the true ownership of the land by someone requesting a loan, in order to guarantee that loan through a mortgage.

Transactions involving customary property rules other than mortgages, such as purchases or even claiming inheritances, also may be difficult for people or agencies who are not known in the local community. By contrast, for land owners whose chain of title is recorded

in the Property Registry, the procedures for determining interests in land as specified by law are known and applied by attorneys trained in such matters. Local, community knowledge and recognition of ownership claims play much less of a role. For recorded transactions, the search of the Registry helps to determine if the individual requesting the loan or selling the land is indeed the owner of the land being pledged for a mortgage or offered for sale.

If an individual requesting a loan does not have a recorded deed, such a procedure cannot be followed, thereby making a loan on the basis of a legally recorded mortgage or effecting a sale whose deed can be recorded virtually impossible.

This is not to say that individuals holding national and ejidal land without recorded title have had no access to credit or have not had their lands purchased by "outsiders." Alternatives do exist for such transactions. In the case of credit, agricultural production credit programs have functioned for years, especially for small and medium farmers, mostly through the national agricultural development bank (BANADESA), local cooperatives or even local, privately owned banks without reliance on recorded mortgages. Rather such flows of credit have been based on past loan repayment behavior of those requesting loans, or through the use of liens on production as the loan guarantees or through the guarantee of another person or agency such as INA or IHCAFE.

Such arrangements for loans without land as mortgaged collateral have traditionally been most easily made through BANADESA, the state agricultural development bank. BANADESA has the chartered responsibility to provide agricultural production and investment loans to farmers, and has the ability to reach agreements with other government agencies such as INA for them to "guarantee" loans made by BANADESA. Private banks have few offices in rural areas, and where they do operate, they do not loan much for agriculture, and then mostly to the larger producers who have both a variety of collateral resources and the advantage of usually being known personally to the bank managers.

3. The Small Farmer Titling Project (PTT)

The PTT has as its objective the removal of the constraint on rural development which results from not many landholders not having legally recognized and recorded titles to land. This objective is to be reached through the legalization of title for 40,000 farmers in seven Departments, who claim ownership of parcels less than 50 ha. in size. The PTT requires the cooperation of the National Cadastral Directorate, which has the responsibility and capability for producing cadastral maps, and the National Agrarian Institute, INA, which has the legal responsibility for awarding private title individuals claiming valid possession of national and ejidal land.

The PTT uses the procedures established by law for adjudicating private title to national and ejidal land, and organizes field teams to

describe the location and boundaries of parcels used privately (the cadastral component) and to adjudicate claims of ownership and issue land titles to the appropriate claimants (the INA component). Only applications for parcels between 5 and 50 hectares are eligible for titling through the PTT, except for parcels planted to coffee, which could be smaller than 5 hectares. The PTT facilitates matters substantially since the project procedures are relatively rapid and rely on the information which the PTT takes the initiative to collect rather than requiring the claimant to assemble such information and seek out INA.

The project does not charge the eligible applicants claiming ownership of parcels less than 50 hectares for the costs of the land survey and the recording of title. Those titled do, however, have to pay INA for the land, at a per hectare rate which INA sets (usually a price lower than the going market rate). The purchaser has 20 years to pay for the land. There is no interest charge, nor is there any cost of living adjustment in the balance owed.

For parcels larger than 50 hectares, the PTT charges eligible applicants for the costs of the land survey and title recording, since it is assumed that the claimants to larger parcels can afford to pay for these services. Those owners of larger parcels who receive title also are required to pay INA for the land, also with a 20 year mortgage.

The field work of the PTT begins with the work of the Administrative Teams, which search the existing land titles and records. The purpose of that investigation is to delineate the location of administrative boundaries of municipalities and Departments as well as the boundaries of private land, i. e. land that at some point in time has been patented to private ownership. The location of the boundaries of ejidal land, is also done in this phase. The remaining land, never titled as private nor titled as ejidal land, nor in reserves of one sort or another, is delineated as national land. The holdings on ejidal and national lands are the major focus of the titling component of the PTT. Other state land such as that in the forest reserves and the areas bordering on certain bodies of water or public roads are in theory at least located and excluded from the titling process along with the private land.

The PTT "administrative teams" consult property registries and existing maps and municipal and other administrative data sources to produce base maps containing the boundaries of "private", national and ejidal land as well as topographic data and landmark information (roads, geodetic control points, boundaries of urban areas). Cadastral teams from Catastro Nacional contact all or nearly all of the claimants to land in each Department, working from aerial photographs, in order to determine the boundaries of the land they claim as theirs. The cadastral teams ask claimants to the land to point out their boundaries, and then locate those boundaries on aerial photographs through pin pricks of the parcel corners. Subsequently, in the teams transfer the boundary information marked on the aerial photographs to topographical base maps, which are in turn digitized and entered into a geographical data base.

Each parcel of land located on the cadastral maps corresponds to a verbal information file, containing data about the person claiming to be the owner of the land and about the parcel (land use, size, how the owner acquired the land, what documentation of ownership exists. . The cadastral teams collect that information through interviewing the owners and through observing land uses on the parcels. This information is recorded on "cadastral cards" (fichas catastrales), one for each claimant, which is also entered into the geographical data base. The INA adjudication teams use this information for identifying the claimants to the land in subsequent visits. The cadastral information may also be used subsequently for the valuation of properties for tax purposes.

Since the claimants to parcels over 50 ha were judged to be capable of absorbing the costs of securing title in case they so desired, the PTT has been limited to offering the project's legal services of drawing up the titles and arranging long term financing of the INA declared value of the parcels to claimants of parcels smaller than 50 has.

The INA adjudication field teams use the information gathered by the cadastral teams to help them in the adjudication process. The INA teams visit local communities and call meetings of the claimants to the land. They collect additional information from those who contact the teams in order to determine if titles can be issued according to the criteria established under Honduran law. Those criteria include whether the parcel meets the minimum size criterion of 5 ha. (or if smaller than 5 hectares has a commercial stand of coffee), whether the claimant is Honduran and can prove age and citizenship, and whether the claimant produces witnesses who attest that the claimant is the legitimate holder of the land. Only those people who provide such information are evaluated as to their rights to receive title to the land.

INA issues two types of titles for those claimants of national and ejidal land who apply for title and who qualify. For those parcels smaller than 17 hectares, INA issues "family titles" (dominio pleno de una unidad agricola familiar), which require INA approval for subsequent transfer or partition. For those parcels larger than 17 hectares, "full titles" (dominio pleno) are issued which are not so restricted.

The achievements of the PTT 1982-1989 are shown in Tables 1, 2 and 3.

TABLE 1: Areas Delineated and Titled by the PTT in Hectares as of December, 1989

	Delineated Area	National/Ejidal Area	Percent Titled	Percent Titled area	Percent titled	Private Area	Percent of total
S. Bárbara 1982-84*	350,962	205,571	59%	88,778	43%	145,391	41%
Comayagua 1984-86	517,942	359,758	69%	36,863	10%	158,759	31%
Copán 1986-87	326,722	175,171	53%	71,788	41%	151,551	47%
Cortés 1987-89	395,796	214,795	54%	22,641	10%	181,011	46%
La Paz 1988-89	248,056	162,597	65%	9,337	5%	85,459	35%
Yoro 1988-89	781,532	457,867	58%	28,015	6%	323,665	42%
El Paraíso 1988-89**	564,200	326,131	57%	(Not yet titled)		238,069	43%
Atlantida 1987-89	430,541	404,263	94%	(Not yet titled)		26,278	6%
Total	3,615,750	2,306,144	64%	257,422	16%***	1,310,181	36%

*Does not include the Municipios of Colinas, Quimistan, San Luis and Azacualpa, which were part of a pilot project not involving National Cadaster.

**Does not include the border area with Nicaragua due to Contra and refugee problems

***This percentage is relative to the total delineated national and ejidal land in all Departments except El Paraíso and Atlantida as of December, 1989, (1,575,750 has.) since the titling program had not begun in those Departments by that date, even though the delineation was completed. The percentage also does not include the four pilot municipalities in Santa Barbara.

Source: National Cadaster and INA

In Table 1, the amount of land which has been held and used in some way by private individuals but without ever being patented by the state to private ownership totals to 64% of the total agricultural land area of the 8 Departments delineated as of December 31, 1989. Only 36% of land occupied and used by private individuals has been titled at some point in Honduran history to private owners. Copán and Cortés have the highest proportion of land privately titled prior to the PTT, while in Atlantida, only 6% of the rural land has ever been titled to private owners.

Table 2 shows the number of parcels delineated and titled as of December 31, 1989, according to different size categories. A striking result of the delineation process is the discovery of a very large number of very small parcels possessed in National and Ejidal lands, in all Departments delineated. About 116,000 parcels delineated are smaller than 5 hectares, or two thirds of the total number of parcels. According to the field study conducted in Santa Barbara and Comayagua as part of this research project, there is an average of 1.2 parcels per holding, which means that there are almost 100,000 families trying to scratch out a living on very meager land resources, both in size as well as in the fragility of the soil base, since most of the national and ejidal lands are located in the mountains of the various departments.

Table 2 also shows that the majority of the titles issued are for parcels smaller than 5 hectares (55%), which is legally possible for such parcels if they contain a commercial coffee plantation. The 27,675 titled parcels smaller than 17 hectares are granted the "family agricultural unit" type of title, and cannot be subdivided or sold without INA approval; such parcels represent over 86% of the titled parcels. About 14% of the titled parcels are granted the "dominio pleno" type of title.

Table 3 shows the costs incurred in the delineation and mapping in the 7 Departments completed by December, 1989. The average cost for delineating a parcel is US\$48 or about US\$2.48 per delineated hectare. Following delineation INA adjudicates the ownership of the eligible parcels, and places a value on each parcel titled. A total of about US\$11.3 million has been invoiced to the titled farmers for future payment, representing an INA mortgage on the titled parcels. About US\$1.4 million has been collected.

**TABLE 2: Parcels Delineated and Titled on National and Ejidal Land
Through 31 December, 1989**

Number Depart.	No. Parcels Delineated				Total	No. Parcels Titled			Total
	< 1 ha	1 - 5 ha.	5-50 ha.	50+ ha.		0 - 5 (Fam)	5 - 17 (Fam)	17-50 (Full)	
S. Bárbara 1982-84	259	13,837	6,498	693	21,287	6,917	4,174	1,208	12,299
Comayagua 1984-86	466	23,166	9,316	1,021	33,968	3,706	1,565	561	5,832
Copán 1986-87	529	15,179	6,753	423	22,884	4,244	2,400	1,373	8,017
Cortés 1987-89	384	10,711	5,912	822	17,829	687	809	468	1,964
La Paz 1988-89	130	17,818	5,335	425	23,708	1,081	385	138	1,604
Yoro 1988-89	297	14,943	8,844	1,945	26,029	893	814	606	2,313
Paraíso 1988-89*	284	17,875	9,504	1,206	27,586	(not completed, 31/12/89)			
Total	2,349	113,665	52,162	6,534	174,175	17,528	10,147	4,354	32,029

Source: National Cadaster

Table 3: Costs of PTT (in US\$ at US\$1.00 = L 2.00)

	Mapping and Cost per Delineated Parcel	Delineation Cost per delineated hectare	Price of Parcels Titled			Collected Amount, as of 12/89
			Total Invoiced	Price /title	Price /ha.	
S. Bárbara	33.68	2.04	3,114,893	253.27	37.09	532,499
Comayagua	31.52	2.07	1,731,519	296.90	46.97	288,217
Copán	36.91	2.59	2,553,383	318.49	35.57	510,552
Cortés	59.78	2.69	2,273,493	1157.58	100.42	96,995
La Paz	32.42	3.21	291,516	181.75	31.22	265
Yoro	58.08	1.94	1,338,131	578.53	47.77	11,824
El Paraíso	55.20	2.83	(Not yet titled)			
Total/Ave.	48.59	2.48				

Source: National Cadaster and INA

This process of determining the boundaries of municipalities and Departments, the boundaries of lands once titled (private lands), the location of forest reserves and watersheds bordering on certain lakes, the location of costal areas which cannot be owned by foreigners, has provided the country with basic land information not previously available, and has dealt with a number of tenure problems which have plagued the country for decades if not centuries.

4. Contributions of the PTT to land management

Land management requires basic information, such as where the land is which is being managed. Such basic information is often lacking. The PTT was directed to title national and ejidal lands, but little information existed prior to the project as to how much national and ejidal lands were in fact eligible for titling. The implementation of the PTT, however, required that boundaries of forest reserves be determined; protected areas such as sensitive watersheds to be exempted from agricultural use, areas along public roads and boundaries of municipalities, had to be determined. Such information was in many cases not available prior to the PTT. Agencies charged with the administration of such "untitleable land" now have basic information about the location and quality of this resource. This is of course a potential benefit, depending for its realization on institutional strengthening and development of those agencies charged with the management of such land.

The potential contributions of the PTT to improving land management in Honduras include the following:

4.1 Inventory of National and Ejidal Land

The PTT has provided for the first time detailed information concerning the distribution of landholdings located in national and ejidal land. The PTT also has provided data concerning the nature of land use for each parcel of land, as well as information concerning the means by which the land was acquired by the present holders as well as the names of those holders. This information can be extremely useful for the planing of development projects which affect the land, such as soil and water conservation, watershed management programs, technological transfer oriented toward particular crops, as well as programs oriented to the solution of problems of extreme poverty due to fragmentation of land.

4.2. Clarification of the boundaries of private lands.

The boundaries of the private lands in many cases have been chronically difficult to determine, for a variety of reasons. In some cases boundaries are unclear because of the vague metes and bounds descriptions used in the older deeds, the lack of accurate land surveys, or because of subdivisions made subsequent to the original deeds but carried out without being recorded. Other boundary vagueness has

resulted from the un-authorized expansion of finca boundaries into ejidal and national lands.

The cadastral mapping exercise, which involved the walking of the boundaries of each parcel with the claimants to these parcels, resulted in comprehensive cadastral maps with parcel boundaries agreed upon by adjoining owners and marked on maps at least to the precision of the scale used in the aerial photographs. While the precision of this mapping and marking of boundaries is not as high as would be obtained through traditional survey techniques, the property descriptions contained in the cadastral maps are undoubtedly more precise and useful than the metes and bounds descriptions or the verbal agreements which in most cases existed prior to the PTT.

4.3. Clarification of Boundaries of Administrative Units (Departments, Municipios)

The delineation of administrative boundaries between Departments and municipalities has been ambiguous and often undefined. The PTT ran into this confusion when carrying out the cadastral mapping of parcels, which required the identification of parcels according to their location by Department. In many instances the existing maps of boundaries did not correspond with geographical features on the ground, or there was a long standing dispute as to which Department or municipality had jurisdiction over a particular area. Areas which have been in dispute between administrative units have been submitted to arbitration by the Ministry of Justice.

This confusion has meant that the public in these administratively ambiguous areas have difficulties in knowing where to go to secure such documents as birth and death certificates and even to record land transactions. But perhaps more important for the future institutional development of Honduras, the intention of using cadastral information to launch the "Folio Real" system requires that Departments be surveyed completely before that system can be initiated. The location of Departmental boundaries is of fundamental importance. Moreover, municipal boundaries have to be clear in order to permit the operation of the municipal cadastral offices, which collect land taxes.

The PTT contributed substantially to the clarification of such administrative boundaries, thereby providing the basis for the future development of the Folio Real as well as municipal land tax administration.

4.4. Identification of land acquired by municipalities (private municipal land)

Owing to acquisition of land by municipalities over the years, the PTT uncovered certain difficulties with such lands, mostly deriving from the Municipalities not having clear legal or administrative abilities to manage such lands. Over the years individuals have moved onto these lands and used them much in the same way as in the national and ejidal

lands. The result is the private possession and use of municipal land but without the ability of securing marketable title. In such cases of "private, Municipal " land, the PTT had no jurisdiction to delineate and title, but in some instances the PTT procedures, or at least the precedent of a public agency titling land under its jurisdiction, led Municipalities to do their own PTT. It would be interesting to see how the criteria for delineation and titling may have differed in these instances from those used by the PTT, and what has happened subsequently.

4.5 Clarification of boundaries of public lands not subject to titling

The PTT has significantly contributed to the clarification of boundaries of land which is "untitleable", such as forest reserves, certain critical watersheds (such as the land around the Yojoa Lake), along public roads, and the lands assigned to municipal administration which is subject to different rules for occupation and titling.

5. Social and Economic Impacts of a Titling Program: Unexpected and Expected Results of the PTT

The PTT experience of dealing with the myriad of property claims and situations has provided important information concerning the operations of the land tenure system in Honduras. The following discussion presents that information which may contradict the expectations of some while confirming others. The experience has been a rich one, which deserves more analysis than can be attempted in this report.

5.1. The transfer of property rights to ejidal and national land is common

Contrary to the notion of the peasantry as not being a participant in the national product and land markets, the PTT, particularly the cadastral survey component, showed that dealing in land is quite common for the small farmers affected by the PTT. The present possessors of national and ejidal lands have acquired them through purchases and inheritances for the most part, often quite some time in the past. Transactions, transfers of property rights, have apparently been quite active, even without the protection from fraud which the Property Registry offers for participants in such transactions

The data from the Comayagua PTT Evaluation Survey show that roughly two thirds of the national and ejidal land parcels presently held and used by individual farmers in Comayagua were purchased from non-family members or were acquired through trading one piece of land for another. About 1/3 of the parcels were inherited. Only a very few of the parcels were acquired through squatting or donations of land.

While such land prior to the PTT in a strictly legal sense was the property of the state, and any transactions therefore supposedly referred only to the improvements made to the land, this distinction probably was

not particularly appreciated in most transactions. Clearly sales involved the improvements to the land, but they also signified the transfer of rights to use and enjoy the land itself, the right to exclude others from that use and enjoyment, and the right to subsequently transfer the land should the new owner so desire. These rights certainly come close to the full property rights held by titled owners, except for the claimants access to the state's laws and Property Registry for protection of these rights.

It is also the case, however, that the state's claim prior to the PTT of the ownership of the land has meant that the state could at some point in time demand payment for its interest in the land. Clearly this interest of the state was not explicitly articulated in Decree 8 which invited people to appropriate national and ejidal lands. No mention was made in that decree of any subsequent request by the state for the possessor of that land to pay for it.

Moreover the effective absence of the government from land management matters once the municipalities' management practices were undercut by the Agrarian Reform Decree, further weakened the perceived interests of the state in national and ejidal lands. The "reappearance" of the state and its interests in national and ejidal land through the PTT has created some difficulties. One problem, which may have its roots in the perception by many landholders of already having paid for the land, is the difficulty which INA has had in collecting the price it is charging. Many people believe that they are already the rightful owners, having paid for the land once. In other instances, however, people have recognized the right of the state to sell the land to them and are, in fact, paying.

A second problem with this difference in perception about who owns land which was purchased privately is the lack of interest of many people in applying for title through the PTT. Title to the land is partly a legal concept, and partly a local definition of who has the right to use and transfer property. The lack of a cultural recognition of the role of the state's property institutions, especially the Property Registry, and the conviction that title is acquired and validated by previous transactions may be a reason for lack of cooperation with the PTT in distributing INA titles.

The operation of the land market in the past under what we have called "customary" rules, the paying of value for the right to use the land, exclude others from its use, and transfer the property, made the land seem very much like private property. The only practical difference between these holdings and other cases of private property was the recording of title for the latter in the Property Registry. This difference, however, is apparently an important one, and implies differences in perceived land values, which will be explored below.

The existence of a functioning market in national and ejidal land, however, has apparently undermined some of the operations of the PTT. People have very frequently and in some cases for generations bought and

sold rights to the land, have used the land, have willed it to their heirs. The PTT reasserted the right of the state as owner of the land with the attendant right to charge value for its sale to private claimants. People's resistance to recognizing this claim in part comes from their "experiences" of ownership which come from market transactions and from their locally recognized rights to the land.

5.2. Investment patterns on subdivision of private lands appear to be inadequate.

The PTT identified parcels of land that were once titled to a private owner, and produced cadastral maps with the parcels so identified. However, while many of the originally patented parcels remain as large, single holdings, in others the land has been subdivided extensively. Moreover, the legal status of a large number of these parcels has deteriorated since the present holders no longer hold a registered deed to the land.

The PTT did not adjudicate these parcels, since the land had been patented at some point in time, and was therefore considered as private and not national or ejidal land. However, the cadastral mapping effort and the field experiences of the INA teams has brought the existence of this deteriorated tenure situation to the attention of public agencies as well as to the evaluation research team.

The field survey conducted in Comayagua included as a control group a sub-sample from these parcels carved out of larger, once patented areas of private lands. These parcels are roughly the same average size as parcels of national and ejidal land, a little more than 5.5 manzanas. Moreover, like their counterparts on national and ejidal lands, over 90% of the holders of these parcels also lack recorded deeds, which means that title has "deteriorated" from the original deeds which were recorded to un-recorded possession today.

These parcels are in approximately the same ecological zones as the parcels found on national and ejidal land, are roughly the same size, and are in a similarly "untitled state". Yet the national and ejidal land parcels are in the main planted to coffee while the private parcels are primarily used as pastures, minimally used for the growing of annual crops, and very little of the land is planted in coffee. In neither case are the owners protected by having a recorded title to the land they use. In the national and ejidal land, the PTT is attempting to correct this lack of title. In the "deteriorated" private lands, however, the PTT is restricted from operating.

It is intriguing to speculate on the tenure security of the holders in both types of land. It may be the case that the holders of untitled private parcels have greater reason to fear the loss of their land because of the existence of a recorded deed in the name of another person for the land they are occupying, than do the holders of national and ejidal lands. In the latter case, the state does not often eject farmers from national or ejidal land, while in the former the probability of conflict may be higher.

Based on the above speculation, there appears to be a relation between tenure insecurity and the lack of investments in coffee, when comparing holders of private and state lands. Where there is apparently greater insecurity, i.e., among the holders of untitled parcels on private lands, there is much less investment in coffee than where there is relatively less tenure insecurity, i.e., among the holders of untitled parcels on state land. It appears that the problem of tenure insecurity is greater on private lands than on state lands, at least in terms of the apparent effects on land use and investments.

Since one of the objectives of the PTT is to stimulate investments and increase production of crops like coffee which require a relatively long investment period, perhaps more attention should be paid to the tenure status of parcels on private lands. Exactly what the situation is on these private parcels is important to determine, however, in that the potential for conflict is apparently great. Perhaps a cadastral effort could be undertaken, and the basis laid for automatically awarding title on the basis of laws which award prescriptive title based on continuous and undisturbed possession of the land.

5.3 There appears to be a lack of interest in obtaining INA titles in some areas of the country.

As shown in Table 1, the proportion of national and ejidal land which the PTT has been able to title is low, just over 16% in six completed Departments. In large part, these untitled holders are not eligible for title under the law because the parcels they hold are less than 5 hectares in size, and are not being used for coffee production. Others are not eligible for title because the parcels are larger than 50 has. Others are holders of parcels which they use but which are in zones which cannot be titled to private owners (being in forest reserves, in particular watersheds, etc.) However, there are many holders of parcels who are legally eligible for titles who are not receiving them, and are not being incorporated into the registry system.

Table 4 shows that there are wide differences among the completed Departments in the proportion of parcels eligible for title because of size (between 5 and 50 hectares) which received a title, ranging from 16% in Yoro to 83% in Santa Bárbara. For the six completed Departments, an average of only 34% of the eligible parcels within the 5-50 hectare range have been titled.

TABLE 4: The Titling of Parcels Eligible for Title because of Size, through 31 December, 1989

<u>Depart.</u>	No of parcels eligible for title, because of being 5-50 has.	No. of parcels 5-50 has titled	Percentage Titled
S. Bárbara	6,498	5,382	83%
Comayagua	9,316	2,126	23
Copán	6,753	3,773	56
Cortés	5,912	1,277	22
La Paz	5,335	523	10
Yoro	8,844	1,420	16
Total	42,658	14,501	34

Source: Table 2

The PTT also adjudicates title to holders of parcels smaller than 5 hectares, if there is a commercial stand of coffee on the parcel. Table 7 shows the proportion of parcels smaller than 5 hectares which are being adjudicated title. Again there are substantial differences among the Departments in terms of the proportion of parcels smaller than 5 hectares which are adjudicated title, in part because of coffee is not a ubiquitous crop. Overall only 18% of the holders of parcels smaller than 5 hectares have received an INA title. The highest proportion of the smaller parcels which have been titled is the 49% in Santa Bárbara, with the Departments of Cortés, La Paz and Yoro reaching only 6% of the delineated parcels.

Table 5: Parcels Smaller than 5 Hectares which have been Adjudicated Title

<u>Depart.</u>	<u>No. of Parcels Delineated, 0-5 hectares</u>	<u>No. of Parcels titled, 0-5 hectares</u>	<u>Percentage titled</u>
S. Bárbara	14,096	6,917	49%
Comayagua	23,632	3,706	16%
Copán	15,708	4,244	27%
Cortés	11,095	687	6%
La Paz	17,948	1,081	6%
Yoro	15,240	893	6%
Total	97,719	17,528	18%

Source: Table 2

The causes of this lack of participation in the titling program are not clear. Part of the problem for the smaller parcels is the legal restriction of titling to those smaller parcels with coffee. Another important part of the problem is a lack of awareness of the PTT, in which case the community public relations campaign may be failing. Or, perhaps there are other reasons, related to the resistance of people to recognize the state's claim of ownership of the land. If this latter reason seems to be important, the value of maintaining this policy might be reviewed. The effects of titling land versus the income generated from the sales of the land should be judged. Perhaps more resources could be generated from taxes on the titled land than the net income from the collections of land debts from a relatively small number of titled parcels.

5.4. Some people are not paying their land debt, while others are paying off the land debt more rapidly than expected.

The mortgages for the titled parcels are for 20 years, and there is no interest charge on the debt. People can make the mortgage payments at the regional offices of INA. They can pay all the debt without penalty.

Table 6: Rate of Collection of Land Debts through December, 1989

	Year Finished	Total Value of land mortgages	No. of years	Expected yearly collections	Total Expected	Actual Collect.
S. Bárbara	1984	3,114,893	5	155,745	778,725	532,499
Comayagua	1986	1,731,519	3	86,576	259,728	288,217
Copán	1987	2,553,383	2	127,669	255,338	510,552
Total		7,399,795		369,990	1,293,791	1331.268

Source: Table 3

As shown in Table 6, for the three Departments where INA has completed the issuance of titles to those eligible who had requested titles, the collections of the land debts as of December, 1989 are higher than expected. A total of L 1,293,791 was expected to be paid by the end of 1989, and a total of L 1,331,268 was actually paid. Some people have opted to pay off their debts entirely, some have made advance payments and some are making what is required. Others, however, have not paid anything, or are behind, particularly in Santa Barbara and Comayagua. Overall, the collection rate during the first years has been good.

A problem of drop off in collections could develop, however, if the laggards continue their lack of payment. INA's abilities to finance future titling efforts will be limited, and the titled farmers in arrears will not be able to deal in the land, at least legally, because of the first mortgage held by INA. Part of the problem appears to be the lack of effective insistence by INA that people pay, and part of the problem may be the feeling that with time INA will forget about the mortgage. This problem was cited at the beginning of the PTT by some critics who argued that the issuance of titles before the land was paid for was asking for trouble, besides being contrary to the law. Subsequent efforts by INA to collect these debts have proved relatively effective, i.e., when INA sends teams to ask people to pay, many do so. Certainly the question deserves further inquiry.

5.5 Possibilities for increasing ownership insecurity attributable to the PTT.

Prior to the PTT, the holders of national and ejidal lands carried out sales and inheritances with no interference from the state. They did not have access to the Property Registry, but they had developed alternative procedures for such transactions and for validating ownership claims, which were described above as customary procedures.

Following the implementation of the PTT, the newly titled holders of the land have discovered that they are now governed by the restrictions from the agrarian reform law concerning transactions of land titled by INA. Such restrictions are particularly serious for the "family titles" for the parcels smaller than 17 hectares, whose owners must secure INA approval for selling or subdividing the parcels. Titled owners have found that approval to be costly to secure in time and money, and frequently INA denies the applications (Coles). For all titled parcels, INA must certify that the debt owed for the land by the titled farmers to INA has been paid, in essence that the mortgage held by INA is paid off. These requirements mean that INA has been inserted into land transactions where it played no role prior to the PTT.

As noted above, the legal theory was that prior to the PTT, any sales or inheritances only referred to the improvements made to the land, not the land itself. Now the land itself is involved. For small parcels, INA has to approve the transaction proposed to assure that the buyer is a potential agrarian reform beneficiary, to secure the mortgage payment, and to prohibit subdivisions. For large parcels, over 17 has. INA must certify that the owners have paid the mortgage which INA held following the issuance of titles.

The implication for landowners titled by INA is that for transactions that occur without INA approval, INA may negate their validity, and possibly confiscate the property. Since such involvement of INA in land transactions depends on actions of a distant and seemingly arbitrary agency, such factors as the political affiliations of buyers and sellers, hit or miss oversight capability of INA, and even extra charges for speeding processing of transaction requests, may play a role in carrying out land transactions. Should such apparent arbitrariness become widespread, a result of titling and the insertion of the state in the land market may in fact heighten insecurity of ownership for those with INA titles.

5.6 Costs of transactions are high.

Largely because of the need for the titled owners or their representatives to make multiple trips to Tegucigalpa to persuade INA to grant approval of sales, subdivisions and inheritances of titled land, the costs of transactions are becoming inordinately high. As a result, farmers tend to avoid INA approval requirements, carrying out transactions without INA approval. The data secured in the Coles' Santa Barbara study of the impact of the PTT demonstrate that this appears to

be happening, a trend also reported by subsequent INA contacts with titled farmers (Coles).

If transaction costs are too high, and if farmers possessing INA titles return to the customary mechanisms for carrying out transactions outside of the formal property system, the result will be the rapid and massive recreation of untitled holdings. Reduction of the transaction costs are required to maintain the value of the investments already made in issuing INA titles.

5.7 The value of titled land has increased more than the value of untitled land

The diacronic study of the impact of the PTT in the Department of Comayagua included two samples of parcels. One sample of 369 parcels was drawn at random from lists of parcels prepared by the cadastral field teams in 1985. These 369 parcels were theoretically eligible for titling, since they were either between 5 and 50 hectares in size, or if smaller than 5 hectares, had a commercial plantation of coffee trees. (Actually a total of 553 parcels were studied in 1985, but in order to reduce field costs, those parcels which were not eligible for titling on the basis of size or coffee plantings were eliminated from the re-study survey, yielding the final "treatment group" of 369 parcels.)

The holders of those parcels were interviewed concerning the size and use of the parcels as well as other characteristics of the holders, parcels and total farm size, including parcels other than those in the original sample.

A second sample of 98 parcels was drawn in 1985 from lists of coffee producers in the neighboring Department of Yoro, and the holders interviewed using the same interview schedule as used in Comayagua. The Yoro sample was drawn as a control group, taking advantage of the design of the PTT which was not to function there during the time period of the study, yielding a group which would not receive title through the PTT.

Subsequent to the 1985 sample survey in Comayagua and Yoro, the PTT activities in Comayagua resulted in the issuance of titles to 107 of the originally surveyed 369 parcels, or 30% of the eligible parcels. For analysis purposes, there are three groups: (a) the eligible but untitled 262 parcels in Comayagua, (b) the 107 titled parcels in Comayagua, and (c) the 98 control group parcels in Yoro.

In 1989 the re-study field teams returned to the baseline sample and re-interviewed the holders of the originally sampled parcels. The above mentioned samples define the final data set for which both Time 1 and Time 2 data are available. Over 90% of the attempted interviews were completed, so that there is little concern that the problem of sample attrition affects the results of the analysis.

Table 7 gives a general description of the three groups of parcels. In statistical terms there are no significant differences among the three

Table 7: Parcel Size, Total Farm Size, and Coffee Planting

Characteristic of Sample	Sample Groups			Signif.
	Eligible, untitled <u>Comayagua</u>	Titled <u>Comayagua</u>	Control <u>Yoro</u>	
Sample Size	262	107	98	
Parcel Size (ave.)	12.7 mza.	5.4 mza	7.03 mza	NS
Ave. Total Land owned	42.3 mza	12.8 mza	12.3 mza	NS
Percent in coffee	63%	88%	86%	
Time to travel from house to parcel	35.2 min.	21.1 min.	69 min	Sig.

Source: PTT Impact Survey, 1985-1989

groups in terms of parcel size or total amount of land owned, although the eligible but untitled sampled holders in Comayagua appear to have larger total land holdings, and slightly larger parcels than do the titled parcels in Comayagua and the control group in Yoro. In terms of the planting of coffee, the eligible group has a lower percentage of parcels with some planting of coffee (63%) than the other two groups, but the titled and control groups have very similar proportions of parcels planted to coffee, 88% and 86% respectively. The control group parcels in Yoro are significantly farther from the holders' residence than are the parcels in Comayagua, for both the eligible (but untitled) and the titled parcels.

Table 8 shows the data concerning land values. These data come from two questions in the 1989 survey, one asking the landholder "In your opinion, what is this parcel worth presently?", and the next questions asking, "Five years ago, how much do you estimate the parcel to have been worth?" These questions get at the perceptions of the landholders of the change in value of the land over a five year period.

Table 8: Parcel Values (Lempiras per Manzana) Currently and Five Years Ago

Value of Parcels, Lempiras per Mza	Sample Groups			Level of Signif.
	Eligible, untitled <u>Comayagua</u>	Titled <u>Comayagua</u>	Control <u>Yoro</u>	
Five Years Ago	1,251	1,325	614	Sig.
Current Value	2,456	3,457	1,255	Sig.
Change in Value	+1,205	+2,132	+641	Sig.
Percentage Change	+ 96%	+161%	+104%	
Sample Size	262	107	98	

Source: PTT Impact Survey, 1985-89

The farmers in Yoro perceived their parcels to be worth substantially less per manzana five years ago than the farmers in Comayagua, about half the per manzana value. Perhaps the relative isolation of the parcels in Yoro affects the perceived value differences. Despite these differing initial value levels, the Yoro and Eligible groups increased in value at about the same rate over five years, just about a doubling in value for both samples in five years. What is striking is that the perceived increase in value during this same five year period for the titled farmers in Comayagua was substantially greater than those not receiving title (eligible and control groups), over 160%.

If we assume that inflation and/or speculation fueled increases in value in all three groups in a relatively equal manner, (i.e. producing an increase in perceived value in the land of about 100% over about five years), then the increases which could be attributed to titling would be about 60%, or about L 795 in real value per manzana over five years, over the initial value of L 1,325 for land which was eventually titled. In dollar terms, this increase would be about \$398 per manzana from an initial value of \$663 (or an increase of \$569 per hectare). Increases in land values of this magnitude following a titling program were also found

in Thailand, between 30% and 80% increases (Falloux, 1987, p. 9). Such increases in land values, if the data are correct, would imply major financial benefits for the holders of land who managed to secure titles. For those left out of the titling process, especially those who can claim no land, may find it more difficult to get that access via the market in the future. Such problems have been identified in urban areas which have undergone title legalization (Doebele, 1987).

To simplify matters, we can assume that the 329,600 Mza (or 230,720 has. as of November, 1989) of land which the PTT has titled over the life of the project land has also increased in value in roughly the same amount. Also assuming that all of this land titled was worth an average of US\$663 prior to being adjudicated title, and that the farmers' perceptions of value are an accurate reflection of actual market value of the land, we could conclude that the PTT has helped capitalize the titled land by a total of about US\$ 131 million. On an investment of \$12 million, this is not a bad rate of return!

We need to qualify these findings. First, the variability in values of the land appear to be high, from an average of L 614 in Yoro to L 1,325 in the titled group from Comayagua. Second, the perceptions of farmers stated in an interview situation may have little relation to the actual market prices for land. Perhaps the farmers' perceptions of value are not grounded in actual experiences, particularly during a relatively short period of time.

Third, the titled farmers perceptions so soon after receiving title may be too rosy. After there is wider experience with actual transactions involving the titled land, with the above mentioned costs of INA's involvement in the transactions as a result of the titling program for those who received title, the perceived value differential may be reduced, disappear or even become negative for the titled farmers.

The data in Table 7 would seem to support this note of caution about the psychological value which people place on the INA titles. In the diacronic study of a sample of land holders, respondents were asked to respond to the question: "In your opinion, what are the advantages and disadvantages, that is, what is good and bad about having an INA property title". It was possible to have more than one response to this question. The question was asked before the distribution of title (t_1) and four or five years after the distribution of titles (t_2) in Santa Bárbara and Comayagua. A control group of farmers was interviewed in Ocotepeque and Yoro.

Table 9: Changes in Farmer Perceptions of Advantages and Disadvantages of INA Titles

	Titled Parcels (n = 349)			Control (n = 220)		
	t ₁	t ₂	Change	t ₁	t ₂	Change
Advantages:						
None named	10.6%	16.0%	+5.4	16.4	20.9	+4.5
Some named	89.4	84.0	-5.4	83.6	79.1	-4.5
Disadvantages:						
None named	77.1	51.9	-25.2	86.8	77.3	-9.5
Some named	22.9	48.1	+25.2	13.2	22.7	+9.5

Source: Nesman and Seligson, 1988; Seligson and Nesman, 1989

There was little change in the farmers' perceptions of advantages of INA titles for both the titled and control groups. There was a slightly more positive view of titles in the control areas.

On the negative side, there do appear to be some differences between the titled and control groups in their capacities to perceive some disadvantages of INA titles. The titled group increased their abilities to verbalize disadvantages of INA titles, while the control group declined in their abilities to name disadvantages. These data would seem to support the notion that the farmers' experiences with the titles, or the information they have received about the titles, have soured their opinions somewhat. Perhaps the growing realization of the impact of transaction costs is partially responsible for this shift in opinion.

The data on perceived changes in land values shown in Table 8 are indicative, however, of the perceived importance of title to the group of farmers who went through the titling project procedures. The lingering question remains, however, as to why only 30% of the eligible parcels were titled, if farmers in general perceive there to be substantial capitalized value in parcels that are titled.

One possibility is that the titled farmers are somehow more entrepreneurial, more market oriented, than the eligible but untitled farmers. The farmers who went to the trouble of getting title had to produce various documents about their claims to the land and their citizenship, identification, and had to get affidavits from neighbors about their ownership. Those who went to this trouble may have a clearer idea of the commercial value of legal title than those who felt secure enough in their present situations, and had little inclination to use the land commercially for loan collateral or in a land sale or other transfer. The titled farmers may be more entrepreneurial in this sense than the un-titled but eligible farmers. We have no direct measure of such a psychological trait, although the data from the survey could be re-analyzed to classify farmers according to their use of innovations. This would be a point to include in future studies of the impact of improving the institutional security of ownership through titling.

5.8 Title Distribution and Land Sales

One of the contradictory aspects of the titling program is the set of competing hypotheses concerning the sale of titled land. The distribution of INA titles was based in part on the expectation that the dealing in such land would be facilitated, at least as far as making the titled land more acceptable as collateral for loans. In the case studies, conversations with farmers indicated that some at least expected that the titled land would have a higher value in the marketplace, since the title holder would have easy proof of ownership and the right to sell, should a potential buyer appear. Using this line of argument, it would seem that the titling program should facilitate land transactions, and that we should expect to see a higher proportion of titled land changing hands as time passes than untitled land.

This conclusion is precisely one of the points of criticism of the titling effort, i.e., that it will facilitate the loss of land by those who possess it, making the titled land the target of land purchases by those in the area as well as by outsiders who have money to invest in agriculture and want to expand their ownership of the land. The fear is that these acquirers of land will be the moneyed classes, whereby the titling project will contribute to the further concentration of landholdings of the terratenientes, a result counter to the mandate of the administrator of the titling program, INA.

The counter hypothesis is that the titling program will give the peasant holders of the land greater incentive to invest in its future productivity, to invest their time and capital in the future of the land itself. If such roots do grow, the titled farmers would be less likely to sell their land and move on to other lands or participate in agrarian reform groups, or move to the urban areas in search of non-farm employment. A variant of such an argument was common in colonial times, when the terratenientes argued against giving the lower classes title to land, precisely to assure themselves of a stable and dependent labor force on their haciendas. Similar expectations have appeared in the modern popular press of Honduras, but from the point of view of urban

middle classes and professionals who see the titling program as tying the peasantry to the land and keeping them out of the cities. A similar argument has been made by some members of the peasant organizations who argued that the titling program is an effort to convince the peasantry that by having a legal title to the land, they now are property owners and do not have much to gain by pressuring for further agrarian reform. Each variant of the argument agrees that the titling program will tend to tie the peasantry to the land, and that we should expect to see fewer sales of titled land than untitled land.

An additional possibility, as noted above, is that the titling program is in reality reasserting the role of the state in land transactions, by requiring the approval of INA for each transaction. That approval is costly, making the dealing in titled land more costly, thereby possibly dampening the interests of the peasant holders of titled land to sell or otherwise transfer it.

Table 10 shows what the interview teams found when they returned to the sampled parcels five years after the first visit.

Table 10: Number of Parcels which Had Changed Hands in Five Years

Santa Barbara:	Titled Parcels	Control (Untitled)
Number of parcels with the same owners	201 (83.4%)	94 (77.7%)
Number of parcels with different owners	40 (16.6)	27 (22.3%)
Total :	241 (100%)	121 (100%)

Comayagua:	Titled parcels	Control	Private untitled
Number same owner	100 (94.3%)	84 (85.7%)	81 (88.0%)
Number diff. owner	6 (5.7%)	14 (85.7%)	11 (12.0%)
Total:	106 (100%)	98 (100%)	92 (100%)

Source: Same as Table 9

In both areas there appear to be proportionally fewer transactions among the titled parcel holders than in the untitled control or untitled private holdings. The data would certainly argue against the hypothesis that titling would stimulate land transfers for the titled holder of land, although there may be a number of factors which could be influencing this tendency. There appears to be little support for the hypothesis that through titling, the peasant holders of the land will divest themselves or be bought out, at least in the short time period of five years covered by the field study.

5.9 Impact of the Legal Title on Credit Access, Investments, Productivity

The adjudication of legal titles through the PTT was devised as part of an effort to improve the productivity of agriculture in Honduras, particularly the productivity of the coffee producers. The causal argument began with the expectation that by titling coffee parcels, their owners would have greater access to credit. With more of this external capital, the owners with improved ownership security would be more inclined to invest that capital, plus income generated from the parcels themselves: (1) in planting more coffee, (2) in the installation of coffee handling infrastructure on their farms, and (3) in the production technologies which would generate higher yields, thereby increasing overall production.

As noted previously, the assumptions underlying these expectations may not hold, because other factors such as climatic variations (rainfall), soil quality, location of the parcels in reference to market, and the overall capital structure of the holding may be more important in determining credit access, investments in new coffee plantings, infrastructure, and production technologies than whether or not the farmer has a recorded INA title.

The data indicate that the hypothesized importance of legal title for access to credit appears to have some support, even in the relatively short period of time of the study in Honduras. Table 11 shows that in the areas studied there was an increase in the number of credit recipients among the titled farmers (from 17.8% in time 1 to 24.6% in time 2), an increase significantly larger than among the control group farmers (from 21.9% to 22.3% between time 1 and time 2). The net regional effects of the titling program on the number of farmers getting credit during a five year period would then be 6.4%. This increase is not dramatically impressive, given the low levels of credit access in time 1, but there appears to be some relationship between the titling project and credit access.

In addition, not all credit sources are equally responsive to changing title status, but rather private banks are largely responsible for the increase in credit access in the titled areas (See Table 11). The public sector credit sources (BANADESA and IHCAFE) maintained about the same number of credit recipients between time 1 and time 2 in both the titling and control areas. Private, individual sources of credit

declined in the number of clients they dealt with in both titling and control areas. The private banks, however, increased the number of credit clients from 4% of the farmers in the titled areas at time 1 to about 12% in time 2. In the titled areas, the private banks increased their coverage sufficiently to exceed the number of clients dealt with by public sector credit sources. The private banks also increased their coverage in the control areas, but only from 4.5% at time 1 to 8.2% at time 2.

TABLE 11: CHANGES IN CREDIT ACCESS

	Titled		Control	
	T ₁	T ₂	T ₁	T ₂
No. of farmers with access to credit:				
Public Sector Sources	34	33	29	30
Private Banks	14 (4%)	42 (12%)	10 (4.5%)	18 (8.2%)
Other*	14	11	7	1
Subtotal	62 (17.8%)	86 (24.6%)	46 (22.1%)	49 (22.3%)
No. without credit:	287 (82.2%)	263 (75.4%)	174 (79.1%)	171 (77.7%)
Total	349 (100%)	349 (100%)	220 (100%)	220 (100%)

*Other includes businessmen, moneylenders, family and friends.

Source: Nesman and Seligson (1988); Seligson and Nesman (1989)

In terms of the amount of capital loaned to farmers in the Honduran sample, Table 12 shows that there was a substantial increase in capital loaned in the titling areas (+107%) and a substantial decrease in the capital loaned for agriculture in the control areas (-39%). Similar shifts occurred in the changes in the average amount of money loaned (see Table 12).

TABLE 12: CHANGES IN CAPITAL LOANED FOR AGRICULTURE IN TITLED AND CONTROL AREAS

	Titled		Control	
	T ₁	T ₂	T ₁	T ₂
Total Capital Loaned				
Santa Bárbara	94,182	203,463	160,060	115,528
Comayagua	75,254	147,486	107,978	48,783
Total	169,436	350,949	268,038	164,311
No of Farms in sample	349	349	220	220
Capital available per farm in the sample	485	1,006	1,218	746
Percent change:	+ 107.4%		-38.8%	
Number of loans	62	86	46	49
Average/loan	2,733	4,081	5,827	3,353
Percentage change:	+48.6%		- 42.4%	

Source: See Table 11

One problem with being too sanguine about the PTT's effects on credit access is that the numbers receiving credit are small. With or without title, only about 1/4 or less of the farmers in the sample had access to any credit even after the titling program. This low level of access to credit could be due to the shortage of loanable funds for agriculture, or the class and cultural gaps between the traditional clients of banks and the small scale peasant farmers, or other factor. The wider distribution of legal titles to the land may not overcome these factors which tend to limit the access of small scale farmers to credit. Also the variance in the samples was very large, so that the observed average differences based on a small number of loans are not very stable, and may be a statistical artifact.

In this particular study, there appears to be another problem with attributing systematic credit access benefits from the titling program, namely that most of the new credit recipients in time 2 were from two

communities in Santa Barbara. Both of these communities were chosen for intensive case studies by the research project where the research personnel had substantial contacts with the local bank managers. In one community, Colinas, a small but relatively prosperous coffee producing municipio, the manager of a branch of a private bank (Banco del Occidente) did accept some of the new INA titles as collateral for loans for farmers who five years earlier did not have agricultural loans. However, the bank manager did not record mortgages on the titled properties in the Property Registry, but simply put the titles in his vault until the loans were repaid.

This manager also was willing to loan more money to at least some of the possessors of INA titles than had been the case five years previously, as compared with those who had no recorded title. This particular bank manager had been the treasurer of the local coffee producers' cooperative and personally knew most of the people who now come to him now for loans. He was apparently willing to combine this personal knowledge of the farmers' loan repayment capacities with the value which farmers place on the INA titles to justify a more positive relationship with the titled farmers. The manager of the bank calculated that the INA titles were valued by their holders, and that perceived value helps motivate the owners to pay back their loans to retrieve the titles physically from the manager's vault. It appears that a similar reaction occurred by the manager of a savings and loan association in Quimistán, the second community selected for extensive study.

These two cases, however, do not seem to be replicated in other areas studied. It appears that the study teams' inadvertent discussions about the titling program with the bank managers in the case study communities contributed to their decisions to increase credit access for titled farmers.

Perhaps the problem in the other communities is that there had passed relatively little time before the conduct of the re-study, meaning that banks managers in other communities who had not explored the meaning of the INA titles, had not adjusted to the new INA titles, did not know what their legal meaning was, or what importance the titles have to the farmers. Or perhaps the problem is that the banks on the national level had not made clear to their managers how to treat the new INA titles, implying certain risks for managers who took the initiative to deal with the holders of such titles.

The Honduran private and public sector bank policies of not loaning very significantly to peasant agriculture, and not even to agricultural projects, except perhaps to large export or cattle raising enterprises whose owners and managers have personal and economic bases for getting loans, may be overall tendencies (Nesman and Seligson, 1988). However, such tendencies do change, as shown in Santa Barbara. In fact, if the increases in credit access in the two case study communities are due in large part to the minimal discussions carried out, a conscious program toward this end could have significant results. Bank managers do change

their policies, and such change could be the objective of special public relations and educational efforts associated with the titling project.

What about the subsequent and more general effects of title on farmer behavior, such as investments in new coffee plantation, infrastructure, orientation of family labor toward farm production, yields, use of production technology, and overall production? The data indicate that there are no consistent differences between the titled and control groups in terms of these measures of agricultural development. Table 13 shows that the slight changes in investments and yields in the titling and control areas were essentially similar. The measures of investments included the area planted in coffee, permanent improvements in the parcel, and the use of specific practices to improve the productivity of coffee.

Table 13: Changes in Investments in Coffee and Yields, Santa Barbara and Comayagua Combined

	Titled Parcels (n = 349)			Control (n = 220)			Signif.
	t ₁	t ₂	Change	t ₁	t ₂	Change	
Area planted to coffee	3.0 mza	2.9	-0.1	2.7	2.5	-0.2	ns
Improvements made since t ₁	+1.3					+1.4	ns
Coffee practices since t ₁							
Pruning			+27.5%			+39.5%	ns
Shading			+38.1%			+37.7%	ns
Disease control			+23.2%			+25.5%	ns
Weed control			+44.4%			+31.4%	ns
Coffee yields (qq/mza)	7.1	6.8	-0.3	7.2	7.3	+0.1	ns

Source: Same as Table 11

Table 13 also shows that there were no significant differences between titled and control groups in the average coffee yields; there was a slight average decrease in yields in the titling areas and a slight increase in the control areas, but the differences between the two groups of landholders.

These results underline the need for a wide variety of programs for improving the productivity of agriculture, one of which may be the titling of untitled farmers. Programs are needed for working with banks and other local agencies which may not be familiar with the new titles nor able institutionally flexible enough to adapt to their meaning for the title holders. Programs to increase the overall availability of credit funds may also be needed. Certainly continuous efforts at technological improvements as well as increasing the access of small farmers to land are needed to deal with the problems of poverty and low productivity in a sustained fashion.

Table 14 shows the data on how family incomes were generated, i.e., the extent to which the families in the sample worked off the farm. While the mean amount earned by family members off the farm increased in nominal terms in both the titling and control groups, the changes were statistically indistinguishable. People are working more off the farm, perhaps because there are more opportunities presently than five years ago for such employment, or perhaps because they are forced to do so to make ends meet. Title to the land does not seem sufficiently strong to motivate them to invest more of their labor time on the farm.

Table 14: Changes in Family Income from Off Farm Employment

	Titled Parcels (n = 349)			Control (n = 220)			Signif.
	t ₁	t ₂	Change	t ₁	t ₂	Change	
Average Income from off farm jobs	369 Lemp.	1532	+1163	324	1535	+1211	ns

Source: Same as Table 11

6. Conclusions

Analyses of rural areas of Latin America and the Caribbean have frequently concluded that the lack of an adequately secure ownership title to land, especially for smallholders, is a major constraint on the development of agriculture in the region. In Honduras over 60% of the land in agriculture is held without legal title. Correcting this situation by adjudicating titles should have positive effects on credit access, farmer investments, levels of productivity, and the operations of the land market.

The major objective of the Small Farmer Titling Project (Proyecto de Titulación de Tierra, PTT) begun in 1982 is to incorporate a significant portion of the untitled holders of national and ejidal land used for agriculture into the category of private owned land through the issuance of legal land titles.

6.1 Customary property system dominates on national and ejidal land.

This private possession of national and ejidal land, with the tacit approval of the state, but without explicit state patenting of private ownership, has led to what might be called a "customary" system of defining and transferring land rights. People locally recognize ownership claims based on possession and use and on transfers of possession and use rights to others using local, often municipal leaders as witnesses to those transactions and as arbitrators in cases of conflicts (Coles, 1989). Those wishing to transfer their rights do so either with witnessed bills of sale or through verbal arrangements for sales or inheritances among friends, acquaintances or family members. These rights are not recorded in the Property Registry, nor are land management agencies, such as the Municipal Cadastral Offices, informed of existing rights to land.

This customary system apparently has functioned well enough in most cases in which people from the local community are involved. However, since the customary system does not have access to the legally defined institution for recording transactions, the Property Registry, it has presented difficulties when people from outside the local community wish to purchase land or when local people wish to obtain a mortgaged loan from a bank. Moreover, when there are conflicts among people over rights to land, recourse to formal law and the courts for adjudicating the conflicts is limited. The power or prestige of the parties involved frequently weigh more heavily than the merits of the claims to the land. The PTT is attempting to incorporate the users of the customary property system into the formal one.

6.2. Achievements of PTT

The PTT, as of December, 1989, has delineated and mapped 174,175 parcels of agricultural land, and has issued 32,029 titles. The majority of the titles issued are for parcels smaller than 5 hectares (55%), which is legally possible for such parcels if they contain a commercial coffee plantation. The 27,675 titled parcels smaller than

17 hectares are granted the "family agricultural unit" type of title, and cannot be subdivided or sold without INA approval; such parcels represent over 86% of the titled parcels. About 14% (4,354) of the titled parcels have been granted the "dominio pleno" type of title, which does not require INA approval for transfer or subdivision.

About 116,000 parcels delineated are smaller than 5 hectares, or 2/3 of the total number of delineated parcels. According to the field study in Santa Barbara and Comayagua, there is an average of 1.2 parcels per holding, which means that there are almost 100,000 families trying to scratch out a living on very meager land resources, both in size as well as in the fragility of the soil base, since most of the national and ejidal lands are located in the mountains of the various departments.

The PTT has provided the basis for significantly improving land management in Honduras. Land management requires basic information, such as where the land is which is being managed. Such basic information is often lacking. The PTT is directed to title national and ejidal lands, but little information existed prior to the project as to how much national and ejidal lands were in fact eligible for titling. The implementation of the PTT required that boundaries of forest reserves be determined; protected areas such as sensitive watersheds to be exempted from agricultural use, areas along public roads and even the boundaries of municipalities, had to be determined. Such information was in many cases not available prior to the PTT.

Agencies charged with the administration of such "untitleable land" now have basic information about the location and quality of this resource. Moreover, agencies which are responsible for the development of agricultural land and for the construction and maintenance of infrastructure now have the basic information about the ownership of the land which should assist them in dealing with the public for carrying out their mandates. These benefits of the PTT, of course, depend on institutional strengthening and development of those agencies charged with the management of land related programs.

One implication of the project is that more attention should be paid to strengthening these land management and development agencies to maximize the benefits of the PTT.

6.3. Social and Economic Impacts of a Titling Program: Unexpected and Expected Results of the PTT

6.3.1. Land market operations among non-titled holders. The data from the Comayagua PTT Evaluation Survey show that roughly 2/3 of the national and ejidal land parcels presently held and used by individual farmers in Comayagua were purchased from non-family members or were acquired through trading one piece of land for another. About 1/3 of the parcels were inherited. Only a very few of the parcels were acquired through squatting or donations of land. This active market in land rights belies the traditional view of the peasantry as being subsistence oriented, and without means for acquiring land.

6.3.2. Tenure insecurity on private parcels. The PTT identified parcels of land which were once titled to a private owner, and produced cadastral maps with the parcels so identified. However, while many of the originally patented parcels remain as large, single holdings, in others the land has been subdivided extensively. Moreover, the legal status of a large number of these parcels has deteriorated in the sense of there not being a registered deed to the land in the name of the present holders.

Unlike their counterparts of holders of national and ejidal land, the holders of these "title deteriorated" private parcels dedicate the land mostly to pastures or to the planting of minimal areas in annual crops. Yet the national and ejidal land parcels are in the main planted to coffee while the private parcels are used as pastures and minimally for the growing of annual crops, very little planted in coffee. In neither case are the owners protected by having a recorded title to the land they use. In the national and ejidal land, the PTT is attempting to correct this lack of title. In the "deteriorated" private lands, the PTT is restricted from operating.

Since one of the objectives of the PTT is to stimulate investments and increase production of crops like coffee which require a relatively long investment period, a study should be conducted to the tenure status of parcels on private lands to determine what policies should be developed. Exactly what the situation is on these private parcels is important to determine, since the potential for conflict is apparently great. One option would be to undertake a cadastral delineation program for the private parcels. Another option could be the use of long possession legislation to award full ownership title to those who qualify.

6.3.3. The PTT has been able to adjudicate title to relatively few holders of National and ejidal land. The proportion of national and ejidal land which the PTT has been able to title is low, just over 16% in six completed Departments. In large part, these untitled holders are not eligible for title under the law because the parcels they hold are less than 5 hectares in size, and are not being used for coffee production. Others are not eligible for title because the parcels are larger than 50 has. Others are holders of parcels which they use but which are in zones which cannot be titled to private owners (being in forest reserves, in particular watersheds, etc.) However, there are many holders of parcels which are legally eligible for titling who are not receiving title, and are not being incorporated into the registry system.

There are wide differences among the completed Departments in the proportion of parcels eligible for title because of size (between 5 and 50 hectares) which received a title, ranging from 16% in Yoro to 83% in Santa Barbara. For the six completed Departments, an average of only 34% of the eligible parcels within the 5-50 hectare range have been titled.

The reasons for this lack of participation in the titling program should be determined. Part of the problem for the smaller parcels is the legal restriction of titling to those smaller parcels with coffee. Another important part of the problem is a lack of public awareness of the PTT, in which case the community public relations campaign of the PTT should be improved. Or, perhaps there are other reasons, related to the resistance of people to recognize the state's claim of ownership of the land. If this latter reason seems to be important, the value of maintaining this policy of state ownership and the attendant right to sell the land should be reviewed. The effects of titling land without charging for the land versus the income generated for the state from the sales of the land should be judged. If by dropping this demand for payment of the land more landholders could be titled, perhaps more resources could be generated from taxes on titled land than the net income from the collections of land debts from a relatively small number of titled parcels.

6.3.4. Collections of the land debt are acceptable. For those titled, the collections of the land debts for the titled land of December, 1989 are higher than expected. A total of L 1,293,791 was expected to be paid by the end of 1989, and a total of L 1,331,268 was actually paid. Some titled landholders have opted to pay off their debts entirely; some have made advance payments; and some are making only the required payments. Others, however, have not paid anything, or are behind schedule, particularly in Santa Barbara and Comayagua. Overall, the collection rate during the first years has been good.

A problem of drop off in collections could develop, however, if the laggards continue their lack of payment.

A study should be conducted of the characteristics of those who have paid their land debts to INA and those who have not, and the relative importance of each group. Such a study could be part of the debate concerning whether to continue the charging for the land.

6.3.5. Farmer perceptions are that titled land values have increased 60% more than untitled land values. Assuming that inflation and/or speculation has fueled increases in value in titled as well as untitled land holders, the increases in per manzana value of 160% for titled owners and 100% for untitled ones, indicates that the increases in perceived land values which could be attributed to titling would be about 60%. This translates into an increase of about L 795 in real value per manzana over five years, over the initial value of L 1,325 for land which was eventually titled. In dollar terms, this increase would be about \$398 per manzana from an initial value of \$663 (or an increase of \$569 per hectare).

The increases in land values should be verified and the causes of such increases identified. If market values have in fact increased for titled land more than for untitled land, there would be less need to consider the reduction of the land debts, but there would also be a need

to consider how such changes in value affect the access of the land poor to land through the land market.

6.3.6 Transactions in land have not been stimulated by the titling project. From data generated through the field surveys, during the five years of the study, there have been fewer transactions among the titled parcel holders than in the untitled control or untitled private holdings. The data would certainly argue against the hypothesis that titling stimulates land transfers for the titled holder of land, although there may be a number of factors which could be influencing this tendency. There appears to be little support for the hypothesis that through titling, the peasant holders of the land will divest themselves or be bought out, at least in the short time period of five years covered by the field study.

The possibility of the land being bid away from the peasant land holders is of sufficient policy importance that a further study of the transaction rates be undertaken, perhaps 10 years after the issuance of INA titles.

6.3.7 Credit Access. The field study indicated that there was a greater increase in credit access and use among the titled farmers than among those without title. However, most of the increases occurred in two communities where the research team conducted extensive case studies, including long interviews with the bank managers. If the increases in credit access in the two case study communities are due in large part to the minimal discussions carried out, a conscious program toward this end could have significant results. Bank managers do change their policies, and such change could be the objective of special public relations and educational efforts associated with the titling project.

A special effort for changing bank policies and procedures for dealing with the INA titled properties should be built into future titling efforts. That effort should include informing lawyers, judges and land surveyors about the new titles and the proposed Folio Real system of property registration built on the cadastral maps.

6.3.8. Investment, production, use of technology. There are no consistent differences between the titled and control groups in terms of changes in investments in new coffee plantation, infrastructure, orientation of family labor toward farm production, yields, use of production technology, and overall production. If such changes do emerge, it will require more time for the institutional modifications to occur. Most important is for there to be a real increase in access to credit as well as for the titled owners to experience real improvements in their security of ownership. Only experience will prove to people that the INA titles do provide greater ownership security. There is some evidence that the new titles can mean greater insecurity of ownership, if the state continues with a mandate to approve all subsequent transactions of titled land.

The potentials for increasing ownership insecurity of titled land should be reduced by making INA more accessible to those desiring to transfer their rights to the land to others. The various factors potentially being affected by wider distribution of titled ownership should be continuously monitored, especially access to credit, and levels of on-farm investment.

6.3.9. Land transactions and insecurity of ownership. Land transactions have not increased for the titled farmers more than for the untitled ones. Titling does not appear to stimulate the divestment of parcels. However, those transactions which do occur are not being recorded in the Property Registry. This lack of recording of transactions in the Registry means that the situation of land holding without legal title which existed prior to the PTT may be recreated within a few years. High transaction costs appear to be contributing to this problem.

Transaction costs for titled land should be reduced, following a documentation of where in the process of transaction these costs are highest.

Sources Cited

- Barnes, Grenville. 1988. "A Comparative Evaluation Framework for Cadastre-Based Land Information Systems (CLIS) in Developing Countries." Ph.D. Thesis. Madison: University of Wisconsin.
- Coles, Alexander. 1989. "Land Transactions and the land Titling Project in Honduras", Madison: Land Tenure Center, Paper presented to LASA, Miami, December, 1989.
- Doebele, William A. 1987. "The Evolution of Concepts of Urban Land Tenure in Developing Countries", *Habitatintl*, Vol II, No. 1, pp 7-22.
- Falloux, Francois. 1987. "Land Management, Titling and Tenancy", paper presented in the World Bank Agricultural Sector Symposium, Washington, D.D., January, 8-9, 1987.
- Nesman, Edgar G. and Mitchell Seligson. 1988. "Land Titling in Honduras: An Impact Study in the Santa Bárbara Region". Madison: Land Tenure Center Mimeo paper.
- Seligson, Mitchell and Edgar G. Nesman. 1989. "Land Titling in Honduras: An Impact Study in the Comayagua Region". Madison: Land Tenure Center Mimeo Paper.