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A Land Administration Project in Honduras Assesses the Positive Effects of Land Titling

Fabrice Edouard

Investment Center of FAO

Fabrice.edouard@fao.org

Ricardo Lorenzano and Fernando Bier

RegioPlan

<mailto:rdlorentur@yahoo.com>

Roma Alvarez

General Coordinator UAP-IP (ex PATH)

roman.alvarez.ip@uap.hn

Enrique Pantoja

World Bank

epantoja@worldbank.org

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ABSTRACT

Improving the transparency of property information, land administration services and tenure security are some of the main objectives of the Land Administration Project in Honduras (PATH for its Spanish acronym), a project that began in 2004 under the lead of the Property Institute (PI). Financed by the World Bank and with the FAO's technical support, the PATH has focused on updating cadastral information, land titling, the recognition of indigenous territorial rights, and strengthening land administration institutions, including municipalities. In order to **determine whether reinforcing land tenure rights and facilitating land titling processes improves livelihoods in poor households**, an impact assessment was conducted, considering 21 hypotheses organized into nine major topics. This assessment reveals the project results and establishes lessons learned during the first two phases that may be useful for the formulation of a potential third phase of the PATH.

The hypotheses address the **link between land tenure security and improving the livelihoods of poor households** in terms of their economies, physical assets, access to services, capacity development, and strengthening social capital. The PATH hired two specialized firms at the beginning and end of the project to interview a representative sample of the households whose land plots were subject to cadastral surveys during Phases I and II of the project. **A total of 1,800 households were surveyed at the beginning and over 2,000 at the end of the project**, which allowed for a comparison to be made between households in similar conditions: with and without land titles granted under the PATH (the treatment group and control group, respectively). The procedures used to compare these two groups involved analyzing the results using experimental and quasi-experimental methods. The surveys of PATH I beneficiaries were analyzed quantitatively in order to confirm trends detected in PATH II, considering that the PATH I beneficiaries had previously been granted land titles.

According to the results of this assessment, **the PATH II's land titling efforts were focused on households in situations of relative and moderate poverty (90% of the population)**. In regard to the use of these lands, nearly 90% of the properties that were granted land titles are for residential use, while 5% of them are used for production purposes. The data also shows that for non-project participants, less than 5% of the population with lands in irregular legal situations was able to obtain land titles through their own efforts, while nearly half of the project participants were granted titles.

The 40,000 households that received land titles through PATH II experienced a greater level of tenure security and a decrease in the risk of being dispossessed of their land or homes due to conflict. In contrast to the households that were not granted titles, the project beneficiaries considered that the value of their property had increased by 30%, and one out of every five invested their own resources in improving their property. **More than half of the land title beneficiaries are women, and of those who opted to invest in their property, many did so in order to build a home**, specifically 20% more than men. Although the resulting observations do not allow for solid conclusions to be made regarding access to financial services, an analysis of certain cases reveals that the project beneficiaries obtained more than double the amount of loans than in the control group. Additionally, a 5.3% increase was reported in the payment of the local property taxes to the municipalities.

Lastly, there is only minimal evidence of land titles improving poor households' access to different types of services, which necessitates the consideration of how to link land tenure regularization processes with rural and territorial development processes, which would consequently help increase the economic benefits for the most vulnerable populations.

1. INTRODUCTION

The present study describes the results of the Evaluation of the Impact of the land titles at household level within the framework of the Program of Land Administration of Honduras (PATH II), and aims to contribute to the final evaluation of the pertinence, effectiveness and effectivity of the design and implementation of the Project. Additionally, a full package of external evaluations revised the achievements of the development indicators and indicators of results of each one of the Project components, in accordance with its Result Framework.

The research was conducted from July 2016 to January 2017, and was based on evaluation methodologies of land administration projects developed by FAO and the World Bank¹. The team; FAO Investment Center also participated in the design of the evaluation and analysis of the results.

The objective of the PATH-II is to provide the population in the Project area with better services of decentralized lands administration services including better access and greater reliability of the information of the Land Registry and land transactions.

The Project has five Components: i) Institutional Strengthening and Policy Framework, ii) Cadastral Survey and Land Regularization, iii) Demarcation of Protected Areas, iv) Strengthening the Land Rights of the Miskitu People, v) Management, Monitoring and Evaluation.

This document is only a summary of a comprehensive Spanish report elaborated by RegioPlan, the firm hired to carry out the field work and the analyses of data, which is organized according to the following index:

- Executive Summary Chapter describes the main results of the study.
- Main objective and the specific objectives of the study.
- Methodology used to carry out the study.
- Sample of Households
- Hypotheses and Variables
- Analysis of Results and Impact Evaluation Conclusions Chapter, describes the main ones found in the study.
- Observations and Recommendations.
- Lessons Learned.
- Annexes

¹ See toolkit for the formulation and evaluation of the Land Administration Projects in Latin America in <http://www.fao.org/in-action/herramienta-administracion-tierras/en/>

2. MAIN OBJECTIVE OF THE STUDY

The main objective of the evaluation consisted of evaluating the impact generated by the Land Management Project (PATH) in its Phase II related to the strengthening of certainty and security over land tenure of households located in the intervention area of the Project, using the PATH II Baseline and an experimental evaluation methodologies as a reference.

Specific Objectives of the Evaluation

- Define the ideal processes to know the effects and real impacts of the Project at the household level based on predefined indicators and hypotheses.
- Review and arrange the existing information in the database of the PATH II household Baseline and expand the results according to the universe of beneficiaries.
- Review and adjust the sampling scheme and the questionnaires used for the baseline survey so that they respond to the needs of the final evaluation.
- Raise information in the field with a sample of households intervened and not intervened comparable to the Baseline, in order to obtain an experimental impact evaluation design.
- Compare the information from the cadastral survey with the expanded baseline and determine the effects of the PATH II according to the hypotheses and indicators established at the level of the beneficiary households.
- According to the findings of the evaluation, describe the lessons learned and useful for the design and evaluation of new interventions in land administration.

3. METHODOLOGY

FAO, PATH team and the firm RegioPlan participated in the elaboration of the research protocol, identifying the actors involved, establishing the general and the expected results of the evaluation, the area of intervention, the methodology of the survey that includes the definition of the sampling frame and the hypotheses with their respective variables, the elaboration of the questionnaire, the training and selection of the team, a pilot test, and the collect of the information in the field. The FAO Investment Center supported the PATH and RegioPlan teams on the design of the methodology, the adjustment of the instruments in the field and the analysis of the data.

The information was collected in 2 stages:

- Stage 1. Delivery to the PATH II supervision team of the first 50 questionnaires.
- Stage 2. Survey and supervision of the rest of the cases.

For the purposes of the research, a sample of 2,201 properties was defined, distributed according to the following groups: 82% of the cases of the intervention group and 18% of the control group.

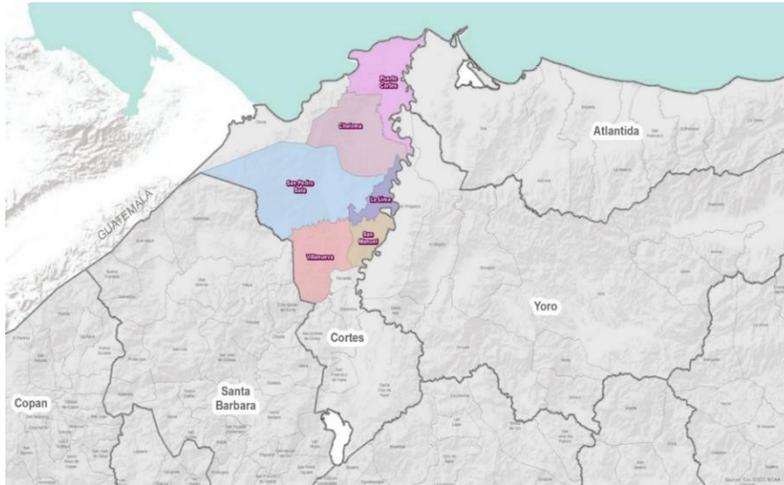
Table 1: Sample of the final evaluation

Urban Strata		PATH II Sample	Confid. Level
	Regularization for Public Need (poor suburbs)	455	
	Regularization in Municipal property	233	
	Good faith occupancy in Public lands	322	
Control	Irregular occupancy	416	
Total Estratos Urbanos		1,426	95%
Rural Strata			
Intervention	Regularization in Municipal property	31	
	Good faith occupancy in Public lands	307	
Control	Irregular occupancy	50	
Total Estratos Rurales		388	95%
Universo Fase II		1,814	95%
		PATH I Sample	-
Urban Strata		Total	
Intervention	Regularization for Public Need (poor suburbs)	285	
	Regularization in Municipal property	102	
Univers Phase I		387	-
Total Phase II + Phase I		2,201	-

The sample was determined on the basis of urban and rural properties included in six (6) municipalities of the department of Cortés, specifically San Pedro Sula, Puerto Cortes, Choloma, La Lima, Villanueva and San Manuel, which were built. The sample also considered land that was surveyed and regularized in Phase 1 of the PATH (2006-2010) and in Phase 2 (2010-2016).

The Conceptual Design of the Impact Evaluation on property rights at the household level is defined based on the hypotheses that are to be tested. For this purpose, 9 thematic and 21 hypotheses were defined, which compliance must be evaluated.

Map 1: Localization of the impact evaluation



For this research, a cause-effect analysis was carried out to verify the central hypotheses of the project where an experimental model for Phase 2 was designed, in which the situation of groups of households intervened and not intervened by the PATH was compared. For Phase 1, a qualitative analysis was carried out to know what happened in previous years after the titles were issued and to analyze whether some trends identified in Phase 2 have been consolidated, over time. Finally, other methods were used, such as the formulation of Logit probabilistic models and the performance of parametric and non-parametric tests to measure the influence and incidence of the Program on the target variables.

Logit probabilistic models were used to determine the probabilities of households with property titles to comply with the evaluation characteristics proposed in the hypotheses. Nonparametric independence tests were also carried out in which the null hypothesis is the independence of the attributes of the variables under study, trying to infer, at a certain level of significance, the existence or not association between the variables investigated.

In 2012, the PATH II carried out the survey of the Baseline, under an experimental model, this was carried out after the cadastral survey in order to identify potentially beneficiary households, who could receive a land title. The data base is then formed by a treatment group, which includes households that might receive a new property title, and a reference group or control group, which includes households that have conditions of irregularity, because they are located on private land or land with environmental risks. The potentially titled properties were determined on the basis of information from the Cadastral Survey and the corresponding Public Exposures. In this sense, the definition of the sample was made based on the records of the cadastral records in the Unified Registry System (SURE).

Once the survey of the final evaluation was collected and introduced in the data base, a re-categorization of the households was carried out, because a proportion of the treatment group had not yet received the titles, therefore they could not have benefited from the expected effects,

and another very small number of households, within the control group, had been able to obtain title by their own efforts.

Both for the Baseline and for the Final Evaluation the data were disaggregated by sex of the landholders and beneficiaries, therefore this evaluation includes the analysis of certain variables with results disaggregated by gender, such as: the characterization of the households, effectiveness of the titles, perception of security over tenure, and access to different kind of services.

It is important to mention that the analysis carried out was based on the available data within the baseline data base and the final evaluation of the project. In these bases some validation and incompatibility problems were found that made some comparisons, estimations and weights difficult. However, alternative methods were considered to take advantage of most of the available data and try to meet the research objectives.

4. SUMMARY OF THE MAIN RESULTS

According to the data of this evaluation, the effectiveness of the program in terms of titling is 44%, in other words, out of 100 people who could potentially receive a title 44 obtained it, as the result of the Project intervention and 56 require to continue the process with the accompaniment of the competent institutions. Within the universe of those who received a title 51% were women. On the other hand, only 2% of households in the control group managed to obtain titles through their own efforts.

The level of satisfaction expressed by the owners of the properties in terms of the cadaster survey and titling process is very high, since 99.2% for the group of households benefited by PATH II feel satisfy by the services obtained.

More than 90% of the households that were potentially beneficiaries and included in the control group are in the categories of vulnerability and average poverty. It should be noted, however, that the percentages of people living in extreme poverty are higher (6.8%) within the group of people which could not be benefitted by the Project, because they were in a risk zone or located in private land. Regarding gender situation, there seems to be no significant difference between the poverty situation of the men and of the women benefitted by the Project.

Within the group benefited by the PATHII, the vast majority (88.4%) of the land is used mainly for housing, 9.4% are unoccupied properties, and only 5.4% of all the properties are used for production or business.

The results of the impact evaluation reflected balanced results regarding the effects of the project on the livelihoods of the beneficiaries. In terms of family patrimony, land market and perception of security over tenure, the results were positive. The evidence supports the idea that households benefiting from PATH II have a perception of the increase in the value of their lands, 29.3% higher than those households not benefited by the program, as a result of the legal certainty of ownership and ownership. The data also reflect that in the titled households there was a 35% decrease in the perception of risk of someone else registering a deed on the property, with respect to the group potentially benefited in the Baseline.

As effects of this greater security, the homes of the treatment group have invested more in the improvement of their property and their house. 86.7% of those titled households have 100% of their land fenced in compared to only 69.5% of the control group. Within the treatment group that have made investments in their property, women have made greater investments in housing with respect to men (20% against 8%). When comparing the amounts of investments in equipment and inventory between groups, it is estimated that 23% of households benefitted are in the upper category of investments (greater than 50,000 Lempiras) compared to only 5% of households in the control group.

The 20 % of the titled households who made a productive investment in their land declared to have been influenced by the cadastral survey or titling to acquire or construct said infrastructure, this value contrasts with the only 3 % observed of the non-benefited households. Within the 20 % of households benefited and influenced by the cadastral survey or titling, 70.5% invested in productive infrastructure later.

Although the number of records related to access to credit is not sufficient to make a solid analysis, when analyzing access to financial services it was observed that the average amount granted for items such as microenterprises and food were 164 % and 180 % respectively, higher in the treatment group. Lower percentages, but always higher than those households that did not benefit, were reflected in small business (17%), housing improvement (9%), education (38 %) and health (49%).

Regarding the existence and resolution of conflicts related to the property, the statistical evidence compiled in the Baseline and in the Final Evaluation do not show a significant effect of the program either in the reduction of conflicts related to the possession of the land or in access of services to solve them.

Regarding access to household services such as electricity, water and sewer system, it seems that the program had no effect on access to infrastructure since there are no significant differences between the groups of analysis. The comparison between baseline and final evaluation only reflects that there has been a greater development of services from 2012 to 2016, but the project might not be the cause.

Finally, it can be mentioned that the data show an increase of 5.3%, with respect to the Base Line, of those households that covered the municipality taxes for their property. It is also relevant to note that the group that declares the highest local tax payment is the one benefited by PATH in its first phase, 69% compared to 52% of the households benefited during the Phase II of the PATH.

5. CONCLUSIONS AND RECOMMENDATIONS

The results of this evaluation, which was focused on the title effects on household livelihoods, generate important lessons learned regarding the scope of the Project outcomes but also to guide the actions that need to be continued and eventually incorporated into the design of a third phase. This evaluation shows that the two phases of the PATH has adequately targeted its target population, covering mainly the vulnerable and middle-income strata of the population, who do not have legal certainty about their patrimony. The PATH has however focused the titling efforts towards the urban population however, a large part of the regularization processes in rural areas

is still pending and should be addressed by the new phase. Although the legal certainty of housing is a fundamental aspect of the resilience of poor households, the strengthening of legal certainty may have greater economic effects in rural areas, considering that the figures obtained show clear evidence of the increase in investments made by the household on their land, once they have been titled. Evidence regarding the effects of the project in terms of increased tax collection also shows the positive effect of the Project in fiscal matters.

Although the perception of security over tenure increased consistently with the strengthening of the legal security provided by the Project, it appears that the land conflicts were not sufficiently addressed by the Project. This is reflected in the current institutional arrangements, where the support for the resolution of conflicts through alternative mechanism, as conciliation, was not incorporated in the project design. This aspect should also be taken into account in the next phase of the land administration program in Honduras.

Finally, the effects of the Project in terms of facilitating access by households to different types of services seem to be minimal, which also highlights the need to link the regularization processes of tenure with those of rural and territorial development, in order to maximize the economic benefits of the most vulnerable populations.