

**Enfranchising a Property-Owning Class:
The Politics of the Allocation of Long-Term Agricultural Land Use Rights in Vietnam**

by

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Abstract

Do all benefit equally from the implementation of agricultural land policy reforms? Vietnam is progressing towards the development of a real estate market where long-term land use privileges can be mortgaged, sold, traded and inherited. Since 1987 and 1988, Vietnam's agricultural collectives have been dismantled and many rural inhabitants have been granted long-term land use rights over individual and family farm plots. However, not all households have been granted long-term use rights to the land they use for agricultural purposes. Some land is contracted or leased by the State or State-owned enterprises and some households may not have clear use rights at all. This paper examines the situation of long-term land use rights allocation in 1998 at the household level in Vietnam to explore the geographical and socio-economic factors that determine the probability that a household has long-term use rights to its agricultural land. Using household-level survey data from the 1998 Vietnam Living Standards Survey, this study finds that location and household ties to the land and community play a role in determining whether a household has long-term use rights. The study finds weaker evidence that other socio-economic factors directly determine the likelihood of having long-term use rights. These variations in implementing private property rights stem from the dependence of the central government on local actors for implementation. This can be seen as a principal-agent dilemma for the central authorities, which seek to implement strict standards of property ownership across the country. These findings show that tenure security, although requisite for ensuring that property rights play a role in economic development, may be very difficult to ensure on a nation-wide basis.

I. Introduction

Development specialists have shown that property rights to land are a significant factor in encouraging enhanced agricultural productivity and fueling economic growth in developing countries. Given these arguments that private ownership fuels productive investment and the development of land markets, while allowing for land use planning, resource protection, and tax collection, the weight of contemporary empirical development research has focused on measuring these benefits to economic development associated with the transition to private property rights regimes. Little empirical work has approached the question of how the establishment of a property rights regime in a developing country affects different groups and types of land users. In enfranchising individuals with land ownership rights, do some groups get left behind? The answer to this question hinges on two spheres of political interaction: that between citizens and government at the local level and that between the central and local governments.

This paper considers whether there is a disparity between property rights policy and its implementation that leads to unequal allocation of rights among different groups of people using different types of land. This is important given that property rights are considered to matter for economic development and that private property rights regimes are being installed in many countries as part of state development policy. This study hypothesizes that those who depend on forests and water resources for their agricultural production are more likely to be lacking in tenurial security. It also posits that farms located in less densely populated areas and in regions where the idea of private property rights is more novel are less likely to have private property rights. Finally, this analysis ventures that the poor and socially or politically marginalized are more likely to be left behind in the imposition of a private property rights regime. Thus, a

household's probability of holding officially allocated long-term land use rights is hypothesized to depend upon a number of geographic, farm and household characteristics.

These hypotheses are tested in the case of Vietnam, a socialist country which dismantled its agricultural collectives beginning in 1988 and has since proceeded on a track towards establishing a system of exclusive, household-based, long-term use rights to land. It serves as a useful case for testing these hypotheses because it is in the midst of a state-sponsored transition to a private property rights framework. Vietnam's 1993 Land Law, which formalized this system of long-term use rights, was implemented to:

...stimulate agro-forestry production, create favorable conditions for the national industrialization and urbanization process, encourage foreign investment in Vietnam, strengthen state land management work, make everyone fully understand the Party's renovation lines and meet the legitimate aspirations of [the Vietnamese] people, especially peasants (Nguyen Cong Tan 1993)¹

Vietnam's efforts towards the implementation of long-term use rights have been hailed as highly successful, contributing to national food security, promoting high levels of economic growth, and leading to phenomenal growth in agricultural exports over the past ten years. Furthermore, the country has maintained high levels of equality in land holdings and land has been allocated to much of the country's agricultural population, which makes up 80% of Vietnam's 79 million people.² Nonetheless, there are many who, as of 1998, did not have long-term use rights to their land and this study seeks to test whether those who lagged behind in the transition follow the patterns of the non-enfranchised in other countries.

This analysis uses logistic regression based on household-level data from the 1997-1998 Vietnam Living Standards Survey conducted jointly by the Socialist Republic of Vietnam and the World Bank. While a number of studies have pointed out how implementation of property

¹ Minister of Agriculture and Food Industry, at a news conference in Hanoi broadcast on national radio on July 26, 1993, to announce the new Land Law.

² 2001 figure.

rights legislation can leave some groups behind, none have attempted to measure the degree of the effect that certain household characteristics have on the likelihood of having long-term land use rights. Considering the significant benefits to economic development associated with the transition to a private property rights regime, it is important to measure whether all are equally likely to be enfolded in such a transition. Such a study is further necessary for political scientists seeking to understand how the implementation of institutional design is either centrally controlled or locally dominated and how this creates winners and losers, setting the stage for future conflicts.

Prior to the presentation of the logistic model used to test whether property rights allocation is dependent upon certain household characteristics, this paper introduces the theory of property rights and its relation to contemporary economic development policy. Then, the paper explores research on the problems associated with the transition to property rights systems in developing countries, from which hypotheses for testing the model in this paper are drawn. The fifth part of the paper provides background on the case of Vietnam's transitioning property rights regime and explains how it serves as a useful case from which to generalize about the implementation of property rights in other developing countries experiencing a similar transition, especially from a socialist or state-owned model of land control. This is followed by a presentation of the statistical model and then, the results of the analysis, and a discussion of how the decentralized nature of property rights implementation complicates arguments that adopting a private property rights regime will result in wide tenure security that will, in turn, encourage economic development. The paper concludes by noting the limitations of a national quantitative analysis of this sort and offers questions for further research.

II. Arguments on the Benefits of Property Rights for Economic Development

The model tested in this paper examines the characteristics of households granted private property rights in the case of Vietnam to measure the effectiveness of the central government in implementing its policies at the local level. While this paper does not test the assumptions of the benefits of private property rights, these assumptions guide a country's decision to implement such legislation. Therefore it is important to understand what these assumed benefits are. A private property right can be defined as an "exclusive right," protected by law, whereby the owner of that right can prevent others from using or accessing his/her property (Clemson University ca. 2004). Assuming that rights to private property can be defined and enforced, there is agreement among most economists and many political scientists that there are a number of economic and political benefits to developing countries with effective property rights regimes, especially in terms of rights to agricultural land.

Private property policies that both discourage land concentration into the hands of a few rich owners (see Koo 1982; Huntington 1970; and Popkin 1979), while guaranteeing secure tenure (see Canto 1985; Prosterman et al. 2000) have come to be favored by the international development community because of their argued contribution towards economic development. Equitable and secure private property rights encourage economic development by promoting food security (see Lofchie 1975), encouraging economic growth and offering targeted incentives to the poorest households, giving people the tools with which to invest in improving their own livelihoods (see Dekker 2003; Deininger 2003; Powell 2002; and Koo 1982). In terms of economic growth, more efficient investment and higher productivity resulting from secure private tenure leads to increasing returns to investment and, in turn, economic growth (Deininger

2003, xix).³ Furthermore, the development of land markets leads to a more efficient allocation of resources (Ravallion and Van de Walle 2003; Deininger 2003; Powell 2002). Because land is the main asset for most of the world's poorer agrarian population, secure land ownership represents an opportunity for these people to "make productive use of their labor" without depending on wages (2003, xx). In support of these arguments, Powell finds that countries with more secure private property rights tend to have higher life expectancies and incomes (2002, 16).

Finally, in addition to the individual advantages noted above, the implementation of a property rights system offers direct benefits to the State. These include allowing for planning and natural resource management, offering a source of government tax and fee revenue, and fostering political stability. Registered land ownership systems increase a government's ability to monitor the use of land allotments and to oversee that protected areas are not exploited, allowing for infrastructure development to adjust to population and economic growth (United Nations Economic Commission for Europe (UNECE) 1996, 8,9).

Furthermore, for developing countries, the ability to tax land offers the government a large potential source of revenue. Property rights systems that register land owners provide clear information linking individuals with their land. In developing countries where citizens' actual income is difficult to track because of incomplete financial infrastructure, taxes on land provide a useful supplement to income tax because land cannot be hidden as easily as income (UNECE 1996, 8). For these reasons, cadastres,⁴ and their associated cadastral maps delineating ownership of land, are referred to by Kain and Baigent as "symbols of state control over land," (1992, 340). Dekker also notes how the register of property rights in itself can serve as a source

³ See Alston et al. 1999, Li et al. 2000, and Do and Iyer 2003 for studies of this in the Brazilian Amazon frontier, China and Vietnam, respectively.

⁴ S. Rowton Simpson, in his classic and thorough work, *Land Law and Registration*, defines a cadastre as "a public register of the quantity, value, and ownership of the land of a country compiled for the purpose of taxation" (1976, pp. xxxvii).

of State revenue through the extraction of fees for information from the register and taxes collected through registration and transfer of rights (2003, 146).

Given the above discussion, it is no surprise that international development institutions and the governments of many developing countries seek to institute property rights regimes that emulate the private property codes and land registration systems of Western developed countries. While there is great institutional variation in different property rights regimes, even among nations with highly institutionalized private property systems, there are some basic elements to a property rights regime for land which are fairly consistent. As a country transitions deeper into the institutionalization of private property rights in land, it must develop all of these elements. A study of such a transition may provide valuable insight into the nature of local-national government relations as well as local government relations with citizens.

III. Transitioning to a Property Rights System: A Principal-Agent Problem for the State

The model in this paper used to test who receives property rights as part of a reform seeks to delve deeply into the process of implementation that may cause inequalities in allocation of rights. It is therefore important to first understand the administrative burden that property rights reform places on the State. Prior to the implementation of a land registration system, which is designed to serve the “perception of land tenure security,” there must exist a national authority with the capacity to maintain a detailed record of land ownership (2003, 121). The national character of this authority is essential because an effective land register requires “radical standardization” and a cadastre needs “national codification” (2003, 121). The benefits of property rights depend on land tenure security, and security, in turn, depends on potent national government. Dekker defines “modern land registration systems” as:

...containing a record of interests in land (e.g. rights, restrictions and responsibilities) [...], a geometric description of land parcels linked to other records describing the nature of the interests, and ownership or control of those interests, and often the value of the parcel and its improvements (2003, 132-133).

The administrative task of transitioning towards such a system is thus great for developing countries. The transition requires the formation of an appropriate legal code, careful survey and mapping of land interests, the allocation of land use rights, the assignment of title to land owners and registration of their interests, the establishment of a system for adjudicating conflicts over land interests, and a method of keeping the records up-to-date. These efforts, which serve the goal of “reducing uncertainty” and “establishing authority” over rights to land, lead to the “drawing of invisible lines” to divide the land (Dekker 2003, 1).

Property rights legal codes contain language that is general and ambiguous because of their need to be highly standardized. Furthermore, there is frequently a high level of conflict between individuals and groups over the resources that such codes seek to regulate. When a policy exists in such an environment of “high ambiguity” and “high conflict,” Richard Matland argues that the policy implementation process will necessarily be decentralized and dependent on local actors (1995, 168). As a result, “the policy course is determined by the coalition of actors at the local level who control the available resources” (Matland 1995, 168). Thus it is no surprise that there is great variation in the level of implementation of property rights reform across localities. Further, as Donald Williams has argued in the case of Africa, the weakness of governments at the national level further contributes to the emphasis on local implementation of land policy (1996, 220). Sikor and O’Rourke further note weakening “mechanisms of central control” as a factor in Vietnam’s dependence on local government in land reform implementation (1996, 616).

This problem of national governments' dependence on local implementation of land reform points to a principal-agent dilemma whereby the principal (the national government) must employ multiple agents (local governments) with differing interests, local conditions, established practices and administrative capacity to implement a strict, nationalized legal code. Land reform requires "radical standardization" and "national codification" in order to establish tenure security that will lead to increased productivity and the development of a land market that benefits the nation (Dekker 2003, 121). Thus, in order for land reform to offer the benefits hailed by economists, it must be implemented according to strict code at the local level. However, dependence on diverse and diffuse local agents complicates this proposition. There have been a number of studies focusing on the nature of this principal-agent dilemma.

IV. Research on Problems in Establishing Private Property Rights Systems

The main problems that researchers have noted that arise in the implementation of property rights systems are extreme variation in implementation of property rights legislation across localities (from region-to-region or village-to-village), conflicts and confusion over how to apply property rights legislation to communal lands or property used by multiple groups, and continuing tenure insecurity and inequalities in access to land rights for the poor and socially marginalized. These problems are argued to stem from inflexible legal codes, conflicting established local practice and local administrative control over a decentralized implementation process. This paper uses these problems noted by other researchers as a basis for its own hypotheses to be tested in the model.

Fernandez-Gimenez and Batbuyan's study of implementation of the 1994 Mongolian Land Law at the local level among nomadic herders found that the more well-to-do households are more likely to be allocated land possession leases over pastoral properties such as pastures

and campsites (2004, 141). In addition, the rich are becoming more sedentary as a result of access to these land leases, while the poor are becoming more mobile. The authors note that the change in mobility patterns reflects not only increased sedentarism among these herders after institutionalization of property rights, but the increased mobility of the poor herders is a sign of these households' increased insecurity over property as a result of their inability to gain access to the campsites and pastures in the traditional areas (162). Finally, the Land Law acknowledges the existence of communal land, but the implementation code focuses only on management of private leaseholds, with little explanation of how to manage land that is shared within the community of herders (163). Implementation of the private leaseholds in Mongolia is benefiting the more well-to-do herders at the expense of others, introducing new areas of uncertainty and potential conflict and altering the social relationships between herders and their way of life.

There is also some evidence to show how the poor, because of their situation of poverty, may not be able to feel property security, even if they have property rights. Deininger warns that the development of prices that reflect efficient market values in emerging land markets are contingent upon the effective functioning of credit markets and this is a problem for developing countries (2003, xxxi). Because many small, poor farmers do not have access to credit, they sometimes must make "distress sales" of their land at prices below the value of the land, further eroding the development of efficiency gains from a functioning land market, as well as the property security of the poor (2003, xxxii). Participants in an international workshop on land tenure security in Burkina Faso in 2002 also argued that the privatization of land markets forces poor farmers, in many cases, to "give up farming and become waged laborers" (International Institute for Environment and Development (IIED) Workshop Proceedings 2004, 111).

Donald C. Williams' survey of the implementation of land reform in a number of countries in Africa further elaborates on the variation in implementation of property rights legislation across localities. He argues that the nature of the legislation, the impotence of African national governments to affect change at the local level and their subsequent dependence on local elites has led to an overall inability to implement new property rights legislation and change the structures of property ownership at the rural level (1996, 214). Rather, the dominant local authorities are able to control implementation. Williams notes that "land reforms have in many cases reinforced the position of local authorities who can bridge the wide gap between the state and community institutions" (220). Those individuals who benefit from the property rights legislation are those elites who are connected to the local authorities. "Beyond these elites," Williams says, "regulation is uneven and unpredictable" (221). The proceedings from the international workshop "Making Land Rights More Secure" substantiate these claims, arguing, for example, that in Cameroon, tenurial reforms in 1974 benefited the "neo-ruraux," or new migrants to the rural areas (IIED 2004, 111). In this way, land reform policies, while intended to improve the economic standing of those who do not have close connections to local sources of power, can actually exacerbate existing differences, further entrenching the power of those who are already well off.

Finally, shared property may be more prone to tenurial insecurity and conflict than property clearly used by only one owner. Types of shared property include "communal lands," and resources which have multi-layered usage, such as forests and water surfaces. As noted above in Fernandez-Gimenez and Batbuyan's study of Mongolian herders, communal land, while defined under the Land Law, remains a grey area in terms of the law and how joint ownership is to be allocated and managed (2004, 163). This issue is also prominent in the IIED

workshop proceedings (2004, 163). While the unique nature of communal properties is acknowledged by most property rights legislation, the existing legal frameworks for implementing property rights do not effectively deal with the management of shared resources. Furthermore, informal management systems already in place in many communities are made subordinate to ‘codified’ systems (IIED 2004, 163). The codified systems focus more on exclusive property rights.

Forests, because “they offer different, and not necessarily compatible, benefits to different people” over the same plot of land are also difficult to allocate as private property and are therefore associated with lower security of tenure (Brown et al. 2002, 2). Multiple households may use the same plot of land, with each household having “private” ownership over particular resources in that plot, but these sorts of ownership are not easily delineated and conflict with typical property rights codes. In addition, “forest-dependent people are typically widely dispersed and not well organized, [...and with] negligible public voice,” further eroding their potential for tenure security (2002, 2). Sikor and O’Rourke note how land allocation in Vietnam’s forested areas has proceeded more slowly than in other areas “as individual land rights [...] conflict with locally observed community-based regulations” (1996, 614). Forest users’ interests may also conflict directly with those of the State, which often seeks to control highly marketable resources such as forests (Brown et al. 2002, 2).

Another shared resource for which similar issues are noted is water surfaces, such as ponds and lakes, or sections of a stream or river. Multiple households may share a pond, lake, or river area and may or may not have exclusive privilege to a number of uses of that water. There are inherently “divergent economic, environmental and social objectives” between individuals as well as the government in the use of water surfaces (Australian Government Productivity

Commission 2003, 1). Because this resource is difficult to delineate according to typical property rights legislation, it may be associated with lower tenure security.

The studies discussed above show trends in the ways in which property rights legislation is unevenly implemented across localities, shedding light on the nature of the principal-agent dilemma faced by a national government in implementing private property rights policy. This research consistently notes that certain groups tend to be left behind as a formal property rights system emerges and from this, we can pose a number of hypotheses about the groups who are likely not to be included, at least initially, in the transition to a Western-style property rights regime. From this, we can form hypotheses of three types: (I) those who depend on certain types of shared resources, such as water and forests, are likely to face tenurial insecurity; (II) people in sparsely populated areas with lower levels of governmental infrastructure and in areas with little recent experience with private property ownership are likely to lag in the transition as the local government administration simply lacks the resources to effectively implement the transition and overpower local forces that might resist the change; and (III) the poor and politically marginalized will be lacking in tenurial security.

V. Fifty Years of Reforming Land Policy: The Case of Vietnam

Vietnam is an interesting case to examine because of the range of experiences it has had in terms of changing land policy and because of its current transition towards private property rights. Land issues have been tightly connected to political and social mobilization in Vietnam since the effective land redistribution carried out by the National Liberation Front in the 1950s.

As part of a larger strategy of anti-colonial resistance against the French, the National Liberation Front (NLF) of the Viet Minh was able to consolidate its power base in the northern Vietnamese countryside through a series of land reforms from 1946-1956 that sought to seize

land from rich landlords and redistribute it to the large population of landless peasants (Moise 1983). This was the final step in the socialist process before completion of land reform through the total collectivization of agriculture in the North in the later 1950s (1983, 269). By 1968, 88% of households in North Vietnam were members of socialist agricultural collectives and many households in the South had received land from the NLF (Low 1996, 119).

In the South during the American presence in Vietnam, under the U.S.-backed President Thieu, one attempt at land reform proved rather successful and pushed the southern regime much further towards the formation of a system of private property rights than experienced in the North. In 1970, the Land-to-the-Tiller (LTTT) program was implemented to completely eliminate tenancy and “grant...definitive titles to all current tillers, regardless of their legal status upon the land or of their alignment in the civil war” (Callison 1983, 81). This program proved quite successful and by 1975, over one million hectares of land had been redistributed in the South, accounting for approximately half of the total rice-crop land (1983, 327). Nonetheless, the war dictated the outcome and on April 30, 1975, the Communist regime of North Vietnam assumed control over the South and the Americans left. The new regime in Vietnam then collectivized agriculture in the South, pursuing full agricultural collectivization in the country by 1977.

Collectivized agriculture proved to be an inefficient and unproductive system and food shortages and declining Soviet aid prompted reform. D.A. Low notes how farmers resisted the collectives in the South and how these institutions never fully took form because of the lasting influence of the LTTT program (1996, 120). Throughout the country, Vietnam’s collectives never materialized into the highly-mechanized industrial system that would fuel economic growth, as envisioned under the model for a planned economy. By 1981, Vietnam began an

“output contract system”⁵ within the collective whereby individual families were assigned land plots and production contracts to fulfill. Any output beyond the contract was allowed to be marketed freely (Fforde and de Vylder 1996, 139). By the mid-1980s, productivity had stagnated to the point that there were food shortages and the Land Law of 1987 was passed, allocating land to individual households for use between three and fifteen years. However, land could not be transferred, mortgaged, sold or inherited (Haque 1994, 6). Alongside this, Decree No. 10 was passed in 1988, making collectives in charge of their own costs and revenues, though still responsible for fulfilling contracts to the State. Fforde and de Vylder note this as the “herald of decollectivization” (1996, 228). Under the new “No. 10 Contracts,” farmers were allowed to keep at least 40% of their contracted output (1996, 157). Concurrent with these reforms were the freeing of prices to reflect market values and other steps towards encouraging a market economy and a private sector. These reform policies have come to be known collectively as *Doi Moi*.⁶

The final shift in land policy towards a private property rights regime in Vietnam came in 1993 with the introduction of the Land Law clearly granting long-term use rights over land to households and individuals, along with Decree 64-CP specifying land allocation conditions. The Government declared that the law would “contribute [...] to the development of agriculture production, the improvement of the peasants' life and the stabilization of the socioeconomic situation in the countryside” (Voice of Vietnam 1993). One consultant to the Government of Vietnam noted also that Vietnam, in order to increase its attractiveness to foreign aid donors, was seeking to “rais[e] revenue from the general population through taxes, and that hinges on land management laws” (Gary Bugden, quoted in Woods 1993).

⁵ under Party Decree CT-100.

⁶ literally, “to change anew / renovate.”

Under the 1993 Land Law, which has served as the basis for all subsequent land legislation since, all land is managed by the State, but the State grants long-term use rights of twenty years for annual crop land and fifty years for perennial crop land (National Assembly 1993, Section 20). The land user can exchange, transfer, rent out, inherit and mortgage land-use rights within the approved use period and for approved uses (1993, Section 3.2). Once the use period has expired, a land user can renew his/her land use rights for another term as long as he/she has followed the use conditions for the land (1993, Section 20). Land users also have the right to be granted land registration certificates. First however, the user must be officially allocated land. Under Decree 64-CP, land rights are allocated to the individuals who were using it on or before October 1993 (Government of the Socialist Republic of Vietnam (Government SRV) Decree 64-CP 1993). Plot sizes are limited to two hectares for annual crops in the most densely populated areas and three hectares in other areas and are not to exceed 10-30 hectares for perennial crops, depending on the region (Government SRV 1993). The local government People's Committees are charged with implementing the Land Law (Government SRV 1993, Section 8). Finally, the State can seize land only under certain cases of concern for national security or public welfare or misuse. When land is seized under no wrongdoing on the part of the user, the land user is entitled compensation laid out under other regulations.

As the above discussion outlines, Vietnam's recent land reform policies fall in line with the theory of private property rights, granting individuals and households long-term ownership to encourage productivity and investment. While the newer Land Law came into effect in 1993, families were farming private plots as early as 1987 under the previous Land Law. Under plans laid out under this newer land legislation, Vietnam seeks to implement a full cadastre for the country and to maintain an up-to-date registry of land users, with users holding clear registration

titles to their land, resulting in “a unified state land management organization [...] from the central to the grassroots levels” (Nguyen Cong Tan 1993). However, a necessary precondition to a household being granted a registration certificate is being allocated long-term use rights in the first place. While much of the population has been allocated these use rights, and many users now even hold registration certificates (called ‘red certificates’ in Vietnam), many users, as of 1998, did not have long-term use rights to the land they farm. The process of implementing the cadastral registry and issuing red certificates continues without them. This analysis explores the characteristics of those users that had not yet been granted long-term use rights.

VI. The Model to Test for Characteristics of Land Users without Long-term Use Rights

Using household-level data from the 1997-1998 Vietnam Living Standards Survey (VLSS), this analysis tests whether households with certain characteristics are more likely to have been allocated long-term use rights to their land than others by 1998. Using the research findings from Section III of this paper as a theoretical basis, this paper hypothesizes that having long-term use rights by 1998 is contingent upon the following geographical, farm, and household characteristics: low dependence on forests and water resources for agricultural production (Type I hypotheses); location in more densely populated areas and in the southern regions (where socialist agricultural collectivization had a lighter and more temporary impact) (Type II hypotheses); and higher socio-economic standing (Type III hypotheses). These hypotheses are explained in detail below and summarized in Appendix I.

The 1997-1998 VLSS dataset is the product of a survey of approximately 6,000 households throughout Vietnam conducted by the General Statistical Office (GSO) of the Government of the Socialist Republic of Vietnam in 1997 and 1998, with funding from the United Nations Development Program (UNDP) and the Swedish International Development

Authority (SIDA) and with technical assistance from the World Bank under their Living Standards Measurement Study household survey project (World Bank 2001, 1). The sample of households was chosen so that the geographical regions of Vietnam would all be adequately represented. As a result, the sampling was not proportional to the number of households in the nation nor to population. Thus, to correct for this selection bias so that statistical judgments about the nation based on the survey sample can be made, the sample observations must be weighted by “the inverse of the probability of a household being sampled times a growth factor for the village” where the household is located (General Statistical Office 1998). The weights are provided within the dataset. This analysis considers only those households located in rural areas and “minor urban areas” where there are likely to be some farms. The sample is also limited to those households who have some agricultural land. Therefore, a number of sampling clusters and some households were excluded from the survey, namely those listed under the “major urban areas” and “medium urban areas”⁷ in Appendix G of the World Bank’s Basic Information on the VLSS Dataset, 1997-98 (World Bank 2001, 59-60), and those households with land area equal to zero, leaving 3,931 observations (households).

The dependent variable used in the logit analysis is a binary variable where the number one represents a household stating that at least one of its plots of land has been allocated to them for “long-term use.” Households who did not designate any of their land as being for “long-term use” are recorded as zeros, not having long-term use rights. This is not to imply that households without long-term use rights somehow fall outside of the law, but simply to designate their private tenure as being less secure. Households who did not designate their land as being for “long-term use” may have also responded that their land is under contract from a State-owned enterprise or is contracted directly by the State. They may also have responded “other,” meaning

⁷ These areas represent clusters 1-36.

that their land proprietorship fits none of the above categories. While these other use rights may be legal, the author argues that these other use rights are less secure, as the contracted land follows the protocol of the previous “Number 10” contracts listed above, a quota-based contract system, making the land users more like tenant farmers than proprietors of their own land.⁸ Of the 3,931 households who answered the questions about whether they hold long-term land use privileges, only 105 households stated they do not have long-term use rights for any of their land.⁹ Thus, most households do have some long-term use privileges. Nonetheless, this remains an interesting case to test the hypotheses above to determine whether there are similarities in the remaining cases that do not have long-term use rights, as the subset of the population surveyed is meant to be representative of the set of households in the nation. Finally, for unknown reasons, 73 of the 3,931 households examined here did not answer all of the questions in the survey which are used as independent variables in the analysis. In order to correct for possible selection bias from these non-responses, the analysis uses the Amelia program to impute values for the missing observations.¹⁰

The analysis considers geographic and farm variables, as well as household variables that fall in line with hypotheses of Types I, II, and III above. The Type I variables considered are household dependence on annual land, perennial land, forest and water surfaces. The Type II variables are whether the household lives in the northern half of the country and the population density of the province where the household lives. The Type III variables are the quality of the household’s farmland, the years they have farmed this land, the size of their household

⁸ National Assembly of the Socialist Republic of Vietnam. 1993. *Ordinance on the Rights and Responsibilities of Domestic Organizations Allocated Land*, Chapter II, Section 5.1.

⁹ Rare event logit estimation, which could correct for any potential bias that results from a small number of observations in the without use rights bin, would only change the estimates by less than 1% (at the most), given the large sample size of 3,931, despite the fact that only 2.7% of the observations are without use rights, and so, it is not used here (see King and Zeng 2001, pp. 152).

¹⁰ See King, Honaker, Joseph and Scheve, 2001 and Honaker, Joseph, King, Scheve, and Singh, 2001.

expenditures, the size of the household, whether the head of the household is literate, female, or was born in the place of current residence, and whether the head of the household is an ethnic minority (non-Kinh ethnicity).

Household dependence on land type is calculated as the proportion of a family's total agricultural property (measured in square meters) that is annual land, perennial land, forest or water surfaces. These variables, taken together, represent a mutually exclusive set, accounting for the total of a household's land, thus only three of the four are included in the regression equation at any one time. This paper hypothesizes that higher dependence on forest and water surfaces is negatively associated with long-term use rights, according to the Type I hypotheses mentioned above.

The variable "North" is a dummy variable where the number one represents a household located in the northern half of the country. Quang Tri province is used as the southernmost North province, based on the 17th parallel that represented the Demilitarized Zone separating North and South Vietnam after the 1954 Geneva Conference. The author hypothesizes that households in the North are less likely to have long-term use rights, because they experienced socialist agricultural collectives much longer than the South, while the South largely implemented a private property rights regime with registration titles by 1975. Thus, it may be easier for the southern region to transition back towards this system. Population density is measured as the number of people per square kilometer in each province, generated from the Vietnam General Statistical Office's 1999 estimation of a province's population, divided by its land area. Households in more densely populated regions are hypothesized to have higher probabilities of having long-term use rights both because the necessary administrative infrastructure to issue these rights is more developed in more populated areas and because

households in less crowded areas may feel less pressure to establish their property claims formally. They may even resist a change that conflicts with local practice.¹¹ These hypotheses represent the Type II classification discussed above, measuring local aspects that might be more resistant to change.

Finally, the Type III variables seek to measure whether those that may be economically, politically or socially marginalized are less likely to have been allocated long-term land use rights. The average quality of the household's land might affect whether a household has use rights. Households using higher quality land might be more likely to have use rights because of the higher demand for security of tenure over this preferred property.¹² Households with larger farms may be more likely to have use rights, as the household may exert some influence in the community and have closer connections to the authorities granting use rights. Farm size is measured as the total area a household farms, in square meters. The number of years a household has farmed the land may positively affect the likelihood that they have long-term use rights, as well. The longer a family has been using the land, the less likely there is to be contention over whose land it is, and so, the more likely it is that a family has been granted use rights.

Households with higher living standards, as measured by the size of their per capita household expenditures,¹³ are hypothesized to be more likely to have use rights. Larger households, measured by the number of resident members, are hypothesized as being more

¹¹ While highly crowded urban areas have been noted as constituting an impediment to the issuance of property rights because of the high prevalence of conflicting land claims, there may be a different problem in the countryside. The author hypothesizes that households in more populated rural areas are actually more likely to have use rights because of their access to local government and their cognizance of the benefits of this security of tenure vis-à-vis their neighbor.

¹² One could argue that there is an endogeneity problem here, as higher tenure security is associated with productive investments in the land, leading to higher land quality. However, land quality classifications, set under 1993 Land Law legislation, are fixed for ten years. Thus, land quality levels reported in 1997-1998 at the time of the survey reflect those set in 1993 or later and do not reflect changes in the land since that time.

¹³ This is the variable `pcexp1` in the VLSS dataset's `hhexp98n` file.

economically strained and thus, less likely to have use rights. Households headed by individuals who are illiterate (a dummy variable with one representing individuals who have no difficulty reading) are hypothesized as being more socially and politically marginalized and therefore, less likely to have been allocated long-term use rights. In addition, households headed by women (a dummy variable with one representing a female-headed household) are hypothesized as being less likely to have long-term use rights because of the noted difficulties women have had in gaining access to the local political system. For example, household registrations, up until 2003, generally only carried the husband's name, and women frequently lost property to the husband's family after their husband died (United Nations Volunteers 2003). Households headed by migrants to the area may be associated with lower probabilities of having use rights, because of their weaker social and political ties to the locality.¹⁴ Finally, ethnic minority households may be less likely to have long-term use rights, as they are noted to be a politically marginalized group in Vietnam, dominated by a political system which benefits the Kinh (ethnic Vietnamese) majority (Human Rights Watch 2002). A dummy variable designating the number one for non-Kinh heads of household is used to measure the effect that being an ethnic minority has on the probability of having long-term use rights. These hypotheses are summarized in Appendix I.

VII. Results

The results of the logistic regression, shown in Appendix II, reveal that a number of the geographic and farm variables have a statistically significant relationship with the probability of having long-term use rights, while only two of the household characteristics, local born and household size, are statistically significant. Dependence on water, location in the north, and

¹⁴ Although some have noted how recent migrants to some areas represent a more political and social elite, moving "spontaneously" to areas to pursue new agricultural opportunities, especially in perennial cash crops (Human Rights Watch 2002), the author hypothesizes that these elite represent only a small subset of the total population of people moving to new areas.

household size have a negative effect on the probability of having long-term use rights, while population density, land quality, the number of years the farmer has been on the land, and being locally born have a positive effect on the probability of having these use rights. Meanwhile, total land area and being an ethnic minority are nearly statistically significant and positive.

Dependence on perennial land, annual land, or forests neither increases nor decreases the likelihood of a household having long-term property rights. There is also no indication that households with lower expenditures, households headed by people who cannot read or households headed by women are less likely to have use rights. But what substantive impact do the variables which are statistically significant or nearly significant have on the probability of a household having long-term use rights to their land?

Because the coefficients from the logit regression cannot be interpreted intuitively, the author has calculated a series of expected probabilities from the statistically significant¹⁵ coefficients which measure the expected marginal impact of individual variables on the likelihood of having long-term use rights.¹⁶ All other continuous variables are held constant at their means and the dichotomous variables are held at their medians while expected probabilities are calculated across a range of the independent variable to isolate the impact of each variable. These expected probabilities are displayed in Table 1 below.

Table 1. Marginal Impact of Variables on Probability of Long-term Use Rights

¹⁵ Thus, the variables per capita expenditure, Literate, Female Head of House are not included in the table of expected probabilities.

¹⁶ The author uses the program CLARIFY, created by Tomz, Wittenberg and King, 2003. See also King, Gary, M. Tomz and J. Wittenberg 2000.

<i>Explanatory Variable</i> <i>(all other continuous variables held at means, binary variables held at medians)</i> ¹⁷	<i>Initial Probability of having Long-term Use Rights</i>	<i>Expected Probability after change in variable</i>	<i>Change in Probability</i>	<i>Confidence Interval for Change in Probability</i>
DEPENDENCE ON WATER SURFACES (change from 0 to 100%)	.990	.844	-.147	-.525 – .002
LOCATION IN NORTH (change from 0 to 1)	.998	.990	-.008***	-.013 – -.004
POPULATION DENSITY (change from 20 th to 80 th percentile)	.967	.998	.031***	.018 – .048
LAND QUALITY (change from 20 th to 80 th percentile)	.983	.994	.010**	.005 – .017
TOTAL AREA (change from 20 th to 80 th percentile)	.987	.991	.004**	-.000 – .009
YEARS ON LAND (change from 20 th to 80 th percentile)	.968	.996	.028***	.016 – .041
HOUSEHOLD SIZE (change from 20 th to 80 th percentile)	.992	.988	-.004*	-.009 – .000
LOCALLY BORN (change from 0 to 1)	.977	.990	.013**	.004 – .029
ETHNIC MINORITY (change from 0 to 1)	.990	.995	.005*	.000 – .009

*** change is significant at the .001 level, ** significant at the .05 level, * significant at the .10 level

Higher population densities, location in the South, land quality, the years the farmer has been on the land, and being born locally all have a positive, substantive impact on the probability of having long-term use rights. Meanwhile, total land area, household size, and being an ethnic minority have little substantive impact in themselves on these probabilities. Less densely populated areas are 3.1% less likely to have long-term use rights than areas in the 80th percentile of population density. The lack of government administrative infrastructure in sparsely populated rural areas and the lack of pressure from encroachment by one's neighbors may combine to lessen the allocation of individual use rights in these areas.

Furthermore, simply being located in the North decreases the probability of having long-term use rights by .8%, even after controlling for population density differences between regions. The southern part of the country, with its prior legacy of private property rights under the Land-

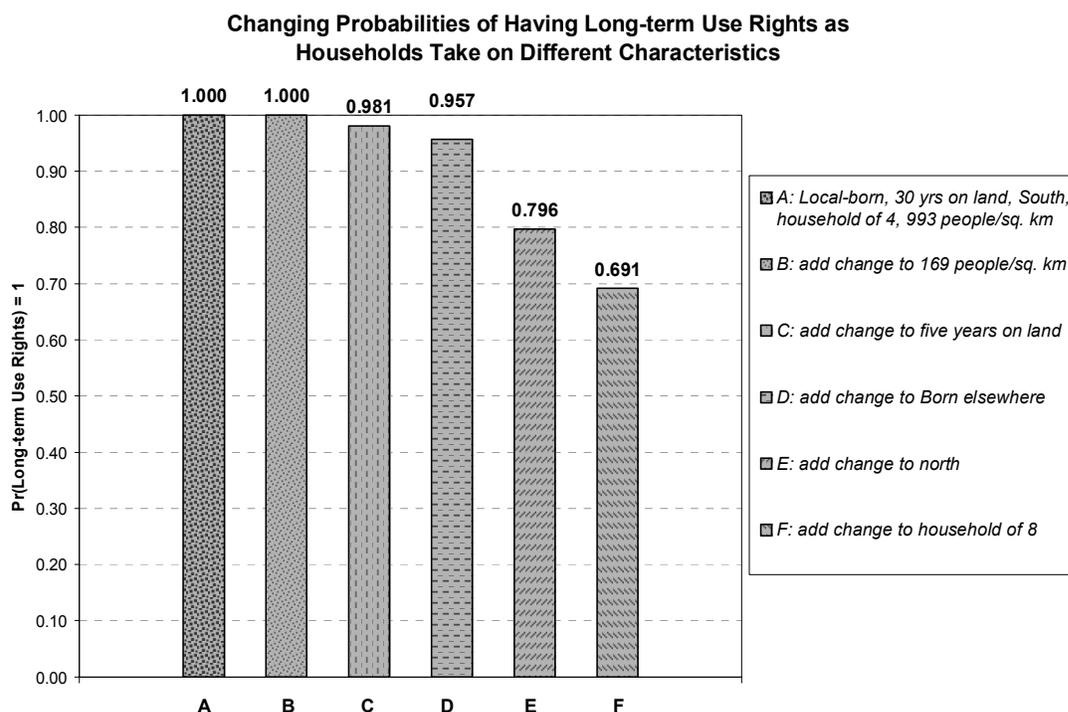
¹⁷ The other variables are held constant at the following values: Perennial Dependence (.14), Forest Dependence (.05), Water Dependence (.01), North (1), Population Density (543.6 people per km²), Land Quality (3.4), Area (7,829 m²), Years on Land (12.32), Per Capita Expenditure (2.32 million Vietnamese dong per year- about US\$ 189 per year in 1998 values), Household Size (4.8), Literate (1), Female Head (0), Local Born (1), Minority (0).

to-the-Tiller program and its limited implementation of socialist agricultural collectives, may have retained much of the administrative capacity built under the previous program to reinstitute a private property rights framework. In addition, people located in these areas, with their memory of this program, may have been more enthusiastic supporters of the reform and registration process than in the North, where the socialist collective was deeply tied to ideas of rectifying colonial injustices and ensuring the welfare of a broad base of northern citizens.

Higher quality land is confirmed to be associated with higher probabilities of long-term use rights, in itself increasing these expected probabilities by 1%. Those with higher quality land may feel a greater impetus to secure exclusive tenure over this land. Finally, length of tenure over the land and being a local to the area increase the likelihood of having long-term use rights by 2.8% and 1.3%, respectively. These results are not surprising, as long-time tillers are likely to be locally acknowledged by authorities and neighbors as the sole proprietors of their land, reducing the likelihood of land conflicts which could slow the allocation process. Furthermore, locally born heads of household may have stronger connections with the local administrative authorities, easing any complications they might have in the administrative process of being allocated long-term use rights.

While any of the individual characteristics considered above do not, in themselves, greatly reduce the overall high probabilities of having long-term use rights, Figure 1 below demonstrates how, as a number of these characteristics combine, the probability of having long-term use rights declines significantly. Household A, being locally born, having used the land for thirty years, being located in the South in an area of 993 people per square kilometer (80th percentile), and having four members in the household, has a very secure probability of having long-term use rights.

Figure 1.

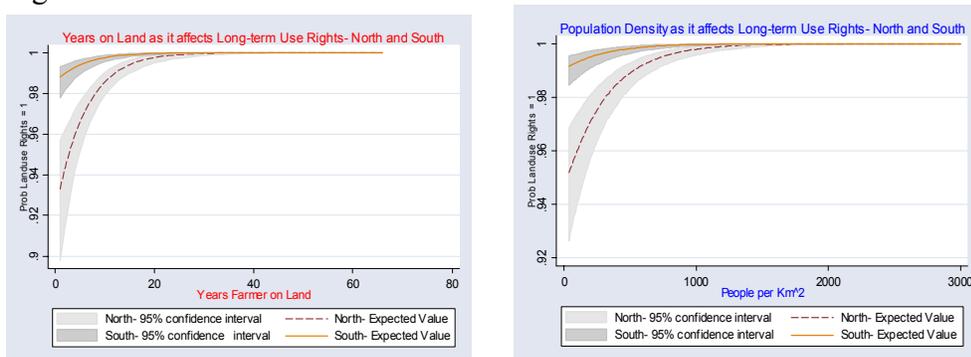


Household B is in nearly the same position. Although living in an area in the 20th percentile of population density with 169 people per square kilometer, because Household B has all of the other characteristics of Household A, it still is nearly guaranteed to have long-term use rights. However, as we continue to add different characteristics, the probabilities for having use rights decline substantially. With Household C being like B, but having only been on the land for five years, the expected probability declines to .981. Household D, like C, except that the Head of household was not born locally, has a probability of .957. Household E, like D, but simply located in the North, has only a probability of .796 of having long-term use rights. Finally, Household F, living in an area in the 20th percentile for population density, having only been on

the land for five years, where the head of house was born elsewhere, located in the North and with a larger household of eight, has only a .691 probability of having long-term use rights.¹⁸

As noted above, location in the North combined with any of the other characteristics that negatively affect the probability of having long-term use rights increases this negative impact (see Figure 2, below).

Figure 2.



It is not until a farmer has been on the land for about twenty years that the differences between location in the north versus south disappear and the farmer’s probability of having long-term use rights becomes almost certain.¹⁹ With population density, the divergence between north and south disappears at around 1000 people per square kilometer.

VIII. Discussion: The Principal-Agent Dilemma Revisited

The establishment of a system of property rights in land based on private ownership, deemed essential for encouraging agricultural productivity, encouraging the development of a land market and creating a means for the State to secure tax revenue and plan for sustainable land use, requires “radical standardization” of policy and implementation in order to ensure the

¹⁸ These estimates are all significant at the .001 level. These hypothetical households have been created by the author to demonstrate the joint, non-linear effect of combined characteristics on the probability of having long-term use rights. While they are hypothetical constructions, they nonetheless represent highly reasonable combinations of characteristics.

¹⁹ The author also tested separately for an interaction effect between North and population density as well as North and years on land to determine whether population density and years on land has a different effect (slope) in the North versus the South, as opposed to the different intercept posited above. The interaction variables were not significant.

tenure security necessary to secure these benefits (Dekker 2003, 121). At the same time, the State is utterly dependent on local government to carry out these reforms. Yet local implementation leads to variation in implementation across regions, dampening the prospects of achieving a standardized policy across the country. This is the principal-agent dilemma inherent in the implementation of land reform. Vietnam serves as an interesting case in which to examine this dilemma because it is in the midst of transitioning towards a private property rights system and because, to a large extent, Vietnam had made great progress in the issuance of long-term use rights in land to its citizens by 1998. In addition, there is little evidence of direct and wide negative discrimination against many of those typically thought to be socially or politically marginalized in the creation of a private property rights regime: those dependent on different types of crops and land, female-headed households, ethnic minorities, the poor and the illiterate. In this way, the case of implementation in Vietnam is exemplary.

At the same time, however, this case provides evidence supporting previous authors' claims that implementation is not even across groups and types of land users and that this variation is caused by dependence on local authorities in the implementation. This fact sheds light on the nature of national-local government interactions as well as relations between local government and citizens. For one, the property rights transition in Vietnam seems to be occurring more smoothly in the southern half of the country, a region with a historic remembrance of a similar property rights system that resisted implementation of socialist agricultural collectives. Local actors with the more optimal starting conditions for implementation of a private property rights system are located in the South and it appears that it is these local actors which have had more success in implementing the reform. Thomas Sikor has also argued that the village collective continues to exert a political voice in some northern

communes, expressing its members' concerns to local government through the collective unit (2004, 189). This collective mindset has impeded the imposition of the new land regime in some cases (2004, 188-189). Furthermore, the less populated rural areas are lagging in the transition to private-property rights-based agriculture. In the case of rural areas in Vietnam, only the more populated regions may have the administrative capacity to implement the reforms according to national rote. To Xuan Phuc points out, in the case of one remote commune, that the "local state is too weak" to enforce national policy, especially when faced with conflicting local practices (2002, 12). Lacking access to administrative infrastructure and isolated from the central authorities, households in sparsely populated rural areas are less likely to be enfolded in the new system.

Recent migrants to an area and those who are new to the land they farm are left behind in the implementation of private property rights as well, as locals and long-time cultivators are brought into the system. Locals and long-time cultivators are already tied to local government through taxation and other community commitments. Locals also have a prerogative to the land that is more likely to be accepted within the community. Thus there is an obvious interaction between the allocators and receivers of land use rights. The probability that a household is allocated long-term use rights is dependent not only on the capacity of the allocators to fulfill their administrative duty as noted earlier, but also on the level of acceptance of the reform within the community and the strength of a household's ties to the local government from which it must receive its long-term land use rights. While most econometric studies on private property rights reform have sought to show how the process is beneficial for productivity and economic development, this quantitative study provides an important check on such optimism, showing that the State's ability to implement the reform in a certain locale is proportional to local

administrative might vis-à-vis local interests and the depth of local government's ties to its citizenry.

The resulting variation in implementation of private property rights reform may have large implications for a nation's economic development because a private land market will begin to develop in certain regions while, in others, an individual's tenure security will continue to be determined by local practice. Local practices that conflict with current national policy will translate into less secure tenure when the new property rights regime is fully enforced. As the property market begins to take hold, individuals responding to the resulting market incentives may push aside those with lower levels of tenure security under the new system.

IX. Limitations and Areas for Future Research

As a quantitative analysis of a set of households representative of an entire nation, this study has elucidated a number of characteristics that affect whether households are allocated long-term use rights to their agricultural land. However, such a study cannot fully explain the processes by which higher local administrative capacity and closer ties to local government lead to a household being allocated long-term use rights. Such a study further lacks primary evidence of the process by which local governments in the southern half of the country were able to implement private property rights legislation more easily than in the North. Did they have the old cadastres from the Land-to-the-Tiller program and were these still sufficiently accurate to reflect current conditions? Is it the memory of the successes of the previous system which has facilitated implementation in the South? Closer case-study analysis could trace the ways that implementation has proceeded easier in the South and in more densely populated rural regions.

Further research should examine the consequences of being left behind in the implementation of a property rights system. Do those who do not initially benefit from long-

term use rights under the new system eventually ‘catch up,’ as implementation leaks down to the areas with the least administrative infrastructure? Does administrative infrastructure grow alongside, or because of, property rights legislation? Or do some households continue to be left behind as the land market develops, eventually losing their land because they lack sufficient tenure security? If tenure security is as essential to productive investment, economic development and resource protection as many argue, what can be done to ensure that the development of such a system affords everyone an opportunity?

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Appendix I. Independent Variables and their Hypothesized Effects

<i>Hypothesis</i>	<i>Hypothesized Effect of Variable on Probability of having Long-term Use Rights</i>	<i>Hypothesis Type</i>
H1: Higher Dependence on Water Surfaces and Forests lowers the probability of having long-term use rights.	WATER DEPENDENCE - FOREST DEPENDENCE -	I
H2: Households in the North are less likely to have use rights.	NORTH -	II
H3: Households in densely populated areas tend to have use rights.	POPULATION DENSITY +	II
H4: Households with higher quality land tend to have use rights.	LAND QUALITY +	III
H5: Households with larger farms tend to have use rights.	TOTAL AREA +	III
H6: Households who have farmed the land for a longer period of time are more likely to have long-term use rights.	YEARS ON LAND +	III
H7: Households with higher per capita expenditures are more likely to have long-term use rights.	PER CAPITA EXPENDITURE +	III
H8: Larger households are less likely to have long-term use rights.	HOUSEHOLD SIZE -	III
H9: Literate heads of household tend to have long-term use rights.	LITERATE +	III
H10: Households headed by women are less likely to have long-term use rights.	FEMALE HEAD OF HOUSE -	III
H11: Heads of household that were born in the current district of residence are more likely to have long-term use rights.	LOCAL BORN +	III
H12: Ethnic minority (non-Kinh) households are less likely to have long-term use rights.	MINORITY -	III

Appendix II. Logit Regression Results

Dependent variable: LONG-TERM USE RIGHTS	Coefficient	Standard Error
PERENNIAL CROP DEPENDENCE	-.039	.453
WATER DEPENDENCE	-2.70**	1.22
FOREST DEPENDENCE	1.00	.732
NORTH	-1.763***	.294
POPULATION DENSITY	.003***	.0004
LAND QUALITY	.368***	.093
TOTAL AREA	.000045*	.000025
YEARS ON LAND	.178***	.029
PER CAPITA EXPENDITURE	-.0000872	.0000801
HOUSEHOLD SIZE	-.138**	.068
LITERATE	-.119	.326
FEMALE HEAD OF HOUSE	-.140	.270
LOCAL BORN	.841***	.254
MINORITY	.653*	.357
Constant	.955	.685
Observations	3,931 households	

χ^2 (14): 215.53 Pseudo R²: .23 *** significant at the .001 level, ** significant at the .05 level, * significant at the .10 level