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## Land Reform and Changes in Land Ownership Concentration: Evidence from Rice-Growing Villages in the Philippines

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Philippine Institute for Development Studies  
*Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas*

## Land Reform and Changes in Land Ownership Concentration: Evidence from Rice-Growing Villages in the Philippines

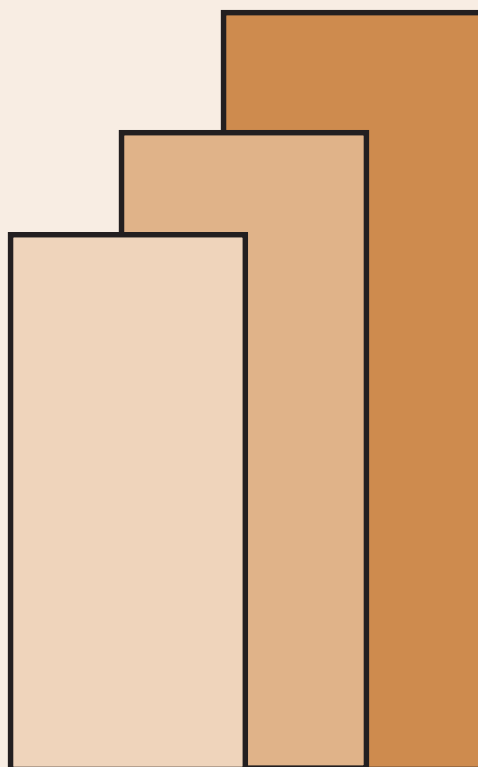
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## **ABSTRACT**

This paper examines the effect of land reform and land transfer actions of farmer beneficiaries on land ownership concentration. A case study of two rice-growing villages was used to track down ownership changes over a period of time. Land reform has succeeded in the break up of huge estates in rice-growing villages but has not effectively improved land ownership concentration due to evasions tactics of landlords who have retained a significant portion of lands to the family through land schemes that are apparently legitimate under the land reform laws. Land transfer actions of farmer beneficiaries have not necessarily worsen the current land ownership concentration but in the absence of progressive land tax, these actions can lead to widening land concentration.

Key words: land reform, land ownership concentration, land ownership consolidation

## **Land Reform and Changes in Land Ownership Concentration: Evidence from Rice-Growing Villages in the Philippines**

*Marife Ballesteros and Alma de la Cruz*<sup>1</sup>

### **I. Introduction**

Land reform has been the main policy response of government to correct the sharp inequalities in the distribution of land ownership in the Philippines. The historical records show that the process of disposal of State lands has heavily favored households with economic and political power. These households had undue advantage over the common populace in acquiring property rights through the Spanish system of royal grants and the American system of land cadastre. The result has been the ownership of big landholdings by few families and the rise of *haciendas* or family estates comprising several hundreds and thousands of hectares.

Land reform efforts to correct these inequalities have been traced back to the Commonwealth period.<sup>2</sup> The main motivation of the earlier reforms was the break-up of monopoly ownership and control of land resources. Starting the 1960s, however, major advances in the implementation of land reform program in the country took place. In 1963, the Agrarian Reform Code was enacted which introduced the concept of owner-cultivatorship and leasehold tenure. Owner-cultivatorship provided tenants the opportunity to own land while leasehold tenancy afforded tenants permanent use rights over the land. The 1963 Code paved way to a “modern” concept of land reform which envisioned a broad-based human and economic development for the agriculture sector. This concept broach the idea of an agrarian reform program instead of merely land reform to emphasize the concern not only with the acquisition and distribution of land but also of uplifting the political and socioeconomic status of beneficiaries. It is in this light that the 1972 and 1988 land reform programs have been instituted. In particular, Presidential Decree 27 (PD 27) of 1972 resulted in the following changes in the program - one, coverage of the reform was not limited to pilot areas but applied comprehensively; two, acquisition of private lands was made compulsory; three land ownership ceiling was substantially lowered from 75 to 7 hectares; and four, the inclusion of support services to assist beneficiaries attain economic efficiency in production.<sup>3</sup> Additional reforms were instituted under Republic Act (RA) 6657 of 1988 or the Comprehensive Agrarian Reform Law (CARL). CARL has all the basic design of the 1972 program but coverage was expanded to all agricultural lands while ownership ceiling was further reduced to 5 hectares.

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<sup>1</sup> Research Fellow, Philippine Institute for Development Studies (PIDS) and Professor, Central Luzon State University (CLSU)

<sup>2</sup> The start of land reform in the Philippines has been traced back to the break-up of friar lands in 1908. This was followed by other Acts that focused on tenancy reforms and resettlement on public lands. Tenancy reforms involved regulations on contracts and landlord-tenant relations aimed at protecting tenants against abuses by the landlords (Public Act 4054). On the other hand, resettlement involved the opening up of new settlement areas and the purchase of friar lands for distribution to peasants. (Murray 1972 in Hayami and Kukulchi book 1981).

<sup>3</sup> The earlier programs were never implemented on a large scale. In particular, the 1963 program covered only pilot areas in Central Luzon. The retention limit under the 1963 Code was 75 hectares. Government expropriated land in excess of 75 hectares. In 1972, landowners were allowed to retain at most 7 hectares plus 3 hectares for each heir of the land they currently owned.

Despite the shortcomings of the land reform programs in the Philippines, these programs specifically PD 27 and CARL paved way to the break up of huge estates. In several areas the increase in the number of owner cultivators has been observed even in provinces where the hacienda system used to dominate. However, the “rampant selling and mortgaging of lands awarded to farmer beneficiaries” have also been reported (DAR 1996). The Department of Agrarian Reform reports that in 23 provinces covered by land reform the proportion of farmer beneficiaries in a village which have had sale transactions range from a low of 7% to a high of 100%.

In general, the land reform law prohibits the transfer of awarded lands except by hereditary succession. This legal impediment however has not prevented the sale of awarded lands. Sales and other forms of land transfer actions of farmer beneficiaries have been attributed to the demand for overseas employment and to the low productivity of agriculture (Nagarajan, et al 1990; Estudillo 2004). Studies show that such actions are not necessarily regressive but have led to an increase in investments of rural households in education (Estudillo et al 2004). However, there is a growing concern over the possible consolidation of agricultural lands which can again lead to widening land ownership distribution.

So far, there is no systematic effort to monitor ownership of agriculture lands despite the legal prohibitions under CARL. Thus, the effects of land distribution and the subsequent land transfer actions of agrarian reform beneficiaries on landownership are not known. This study is undertaken to address this gap. The study also aims to show a possible methodology in the determination of land ownership in agrarian reform areas.

The discussion proceeds as follows. Section II presents the methodology of the study focusing on the sources of information and the process of identifying land ownership changes over a period of time. The next section discusses the agrarian structure in the case study villages. Section IV presents the scope of the land reform and land distribution program in the study villages. Section V discusses the transfer action activities of farmer beneficiaries. Section VI examines changes in land ownership distribution across three periods. The last section concludes the study.

## II. Methodology

The Philippines has a poor land information system. The specific characteristics of land cannot be readily determined due to poor record system, overlapping functions of land agencies and the absence of data sharing among these agencies (Llanto and Ballesteros 2003). The study thus utilizes village level analysis to track down land ownership and ownership transfers over a period of time. The case study approach allows a closer examination of land transactions— the nature of and the persons involved in the transactions.

The study villages are rice-growing areas in the Nueva Ecija Province in Central Luzon Region. The villages were selected based on the researchers' familiarity with the area. These villages are among the identified areas in the loop survey of the International Rice Research Institute (IRRI) which conducts household surveys of rice growing villages for its major projects. They represent two different rice farming environments- Village 1 (NE1) is irrigated with two cropping seasons while Village 2 (NE2) is rain-fed with one cropping season. These villages also represent two types of

land ownership structures prior to the implementation of land reform in the area. Village 1 (NE1) was primarily operated under a hacienda system. It consisted of few landowners with one dominant land owning family. In contrast, NE2 consisted of several medium-size landowners (owning from 25 to 60 hectares) with no one land owning family dominating the village. Both villages are under the political jurisdiction of the Municipality of Muñoz which is known as the “Science City” north of Manila.

To determine current ownership and track down ownership changes overtime, the study utilizes data from several offices- the Municipal Assessor’s Office (AO), the Municipal Treasure’s Office, and the Department of Agrarian Reform (DAR) provincial and municipal offices. Key informant interviews have also been conducted in 2003 and 2005 to determine the status of owners recorded at the AO and DAR offices. Local knowledge of landowners and key informant interviews provide crucial information to understand records on land ownership and transfers in the village.

Ownership changes have been traced corresponding to three periods which represent the relevant time periods in the implementation of land reform in the study villages. The periods are as follows: (1) the year prior to the enactment of PD27 in 1972; (2) the land reform distribution phase which represents the period from the identification of farmer beneficiaries under PD 27 and CARP to the issuance and registration of land titles, i.e Emancipation Patents (EP) or Certificate of Landownership Awards (CLOAs) and (3) the post land distribution phase, which is the period from the registration of titles up to the survey year (2005). Unfortunately, It is not possible to trace ownership changes year to year because title cancellation from AO and DAR records are not supported by date of cancellation. The landownership changes across periods is determined based on key informant interviews of the landowners prior to land reform and transfers of their lands based on DAR and AO records.

The current list of land owners in the villages was initially estimated from records of AO and DAR. The AO and DAR records do not necessarily match because most farmer beneficiaries have no incentive to register their lands for tax purposes. To update the AO records, we obtain from DAR records the original landowners file and the corresponding land parcel that was subject to land reform. Agrarian reform beneficiaries with unknown original landowners are excluded from the dataset. Also, records from the AO of landowners (i.e. non-agrarian reform beneficiaries) whose original landowners are unknown were excluded. The current ownership was further verified from the names of current taxpayers at the Treasurer’s Office.

Given the exclusion of some titles, from the DAR and AO records, the actual area covered by the study is less than the total area of each village based on the Assessors’ 1996 tax map. Below are the details on area covered and excluded from the list.

	Total Area (has) (AO tax map)	Area covered by the study (based on titles)	Area excluded from the study (based on titles)	% Deviation from AO area *
NE1 (hacienda)	486.58	434.45	86.00	+ 7%
NE 2	434.45	364.90	75.46	+ 1%

\* the deviation arises from discrepancy in area from DAR and AO titles.

Based on the list of current owners we tracked down the changes in ownership that correspond to the periods mentioned above. The pre- 1972 period provides the list of landowners prior to the 1972 land reform which is estimated from the retained landholdings of the original landowners plus the land that was distributed under land reform. For the land reform period, the landowners consist of the names of DAR beneficiaries plus those of the original landowners which continue to own land in the area. For the post land reform period, land transfer actions of farmer beneficiaries were identified from AO records. For transfers that were not recorded from AO or DAR, we relied mainly on key informant interviews.

To examine changes in landownership concentration, we use the Herfindahl index and the size distribution of landownership based on the estimated list of owners across the period in review. The Gini ratio was also estimated to examine equality of land distribution across time.

### III. The Agrarian Structure in the Study Villages

Rice-producing areas specifically in monsoon villages are typically characterized by small farms (Hayami, Quisumbing and Adriano 1990). However, this has not been the case in the rice bowl region of Central Luzon specifically the inner core provinces where the hacienda system developed. In the province of Nueva Ecija, in particular, land accumulation proceeded through large purchases of alienable and disposable State lands. It is also one of the provinces where land grabbing through title registration was pervasive (McLennan 1969 p668). This development was reported to be different from rice growing areas in Laguna and Iloilo provinces where land accumulation proceeded "piece by piece mainly through money-lending-mortgaging operations" (Hayami, Quisumbing and Adriano 1990). Moreover, Laguna and Iloilo have started as rice-growing areas while lands in Nueva Ecija were initially used for cattle ranching. The province developed a system of rice monoculture in the late nineteenth century which remains to be the dominant farming system to date.

As in other agriculture sector in the Philippines, landlordism has also been pervasive in Nueva Ecija. The landlord-tenant relation that developed in the region however, is less paternalistic than in other rice-producing areas.<sup>4</sup> Under a paternalistic arrangement, the landlord obtains the loyalty of the tenant by advancing tenant's credit needs whether for production or consumption purposes. In the case of Nueva Ecija, the relationship is governed by a tenure contract based on fixed rent or sharecropping system.<sup>5</sup> There is also less contact between the landlord and tenants but the latter can be bound to the former by perpetual debts (Hayami et al 1990).<sup>6</sup>

The extent of land ownership concentration has not been easy to determine due to the poor land information system in the country. The distribution of operational landholdings has been commonly used to measure land concentration. Operational holdings however do not necessarily correspond to ownership holdings because of the

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<sup>4</sup> An elaborate discussion of the development of landlordism in Central Luzon is found in Hayami, Quisumbing and Adriano (1990).

<sup>5</sup> Within haciendas, it is common for tenants to sign detailed contracts even prior to the land reform program. For areas outside haciendas, verbal contracts are more common (Umehara 1974 in Hayami 1990).

<sup>6</sup> The usual practice is for the landlord to take residence in Metro Manila and employs a *katiwala* (overseer) to manage the affairs of the hacienda.

prevalence of tenure arrangements in agriculture. Rice production, unlike export crops is usually not governed by a central management where labor is mostly hired. In rice-growing, only the overseer or *katiwala* is considered an employee while farmers work through contractual arrangements. In most contracts, the farmer leases the land from the landowner either by fixed-rent leasehold or sharecropping. For fixed rent, the farmer pays a rent to the landlord which is a fixed percentage of the output. Based on historical accounts, the fixed rent was the common tenure arrangement in the early stage of development of the haciendas. However, as population and the labor force grew and the rice economy developed, most landowners shifted into the sharecropping system (Hayami et al 1990). A usual sharecropping arrangement is for the landlord to provide the inputs while the farmer provides labor. The share of the farmer to the total output varies from 30 to 10 percent. In most cases, the farmer ends up giving all of the produce due to debts from the landowner (Hayami et al 1990).

Based on agricultural census and household surveys, the extent of tenancy in rice farming has been high which reflects a high level of ownership concentration. Tenancy however has declined significantly during the land reform period. In the 1970s, prior to the 1972 land reform, about 53% of riceland in Nueva Ecija is cultivated under a tenancy arrangement (**Table 1**). This is noted to be the highest among the major rice producing provinces in the country. The implementation of the recent land reform programs, however, has seen the reduction in tenancy arrangements and increase in owner cultivation. In 1980 after P.D. 27 was enacted, rice land under tenancy declined to 42% (from 53% in 1971) while ownership cultivation (i.e fully-owned plus owner-like possession) increased from 32% in 1971 to 56% in 1980. Although tenancy declined further in the 1990s, it remains popular in the province with about one-third of rice areas operated through leasehold and share tenancy arrangements.<sup>7</sup> Share tenancy though has declined substantially and in some villages, it is no longer practiced. Hayami and Otsuka (1993) argued that the decline in share tenancy is primarily due to fears of landowners to have their land subject to land reform. Thus, most landowners prefer to use wage labor (or *porsiyentohan*) as an alternative arrangement to share tenancy. Under *porsiyentohan* the laborer gets 10% of output based on pre-assigned tasks.

A similar pattern has been observed in the study villages. The study villages are among the survey sites of the International Rice Research Institute (IRRI) which conducted household surveys in several periods. The initial survey conducted in 1985, thirteen years after the implementation of P.D. 27, shows that 86 % of rice land in village 1 is cultivated under a tenancy arrangement. In village 2, tenancy rate is at 76%. The tenancy rate includes land operated by Certificate of Land Transfer (CLT) holders. CLT holders are the agrarian reform beneficiaries who have yet to acquire title on the awarded land. Prior to 1988, titles to awarded lands are given only upon full payment by beneficiaries of land cost to the government. However, most beneficiaries have not been able to do so. With the enactment of Executive Order 228 in 1997, the beneficiaries of PD 27 were “deemed full owners” and were issued EPs regardless of amortization status.

The tenancy data with CLT holders in 1985 may be indicative of the situation prior to PD 27 in the study villages. The data can be adjusted to estimate the effect of land reform on tenancy by excluding the CLT operated land areas since they may

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<sup>7</sup> Several authors have argued that tenancy per se is not regressive. Sharecropping, for instance is an efficient arrangement in peasant agriculture based on principal agent argument (Hayami and Otsuka 1993).



already be considered as owner-cultivators. Based on an earlier analysis of the same data set, the extent of rice areas under CLT in village 1 (NE1) is about 24.5% and 24.7% for village 2 (NE 2) (Deininger 2000). Excluding the CLT cultivated areas in the two villages shows that the tenancy rate (leaseholders and share tenants only) in 1985 is about 62% in NE1 and 51% in NE2. The results show that the extent of tenancy in these villages is much higher than the provincial average for Nueva Ecija. In particular, NE1 which used to be operated under a hacienda system has a much higher rate of tenancy. On the other hand, NE2 which used to be dominated by medium sized farms (25 to 50 hectares) has comparatively lower rate of tenancy but nevertheless land concentration is still high.

With the implementation of land reform, a significant number of tenants became owner-cultivators. The extent of tenancy at present in these villages has been reduced to about 30%. The absence of share tenancy and the dominance of “porsiyentohan” in the villages have also been observed. Hayami and Otsuka (1993) noted that share tenancy has become unpopular while the incidence of wage labor or “porsiyentohan” has risen. As early as 1987, “porsiyentohan” in the study villages was at 36%. Landholdings under pawn-in arrangement have also risen significantly in recent years. A recent survey undertaken in the study villages show that rice areas under pawn-in arrangement increased from 6% in 1985 to 18% in 2004 in NE1. A similar pattern was observed in NE2 where pawn-in arrangement increased from 6% to 13% in the same period.<sup>8</sup>

#### IV. The Scope of Land Reform in the Study Village

The 1972 land reform was implemented mainly for rice and corn lands. Central Luzon specifically the inner region was identified a priority area due to the prominence of the hacienda system and the increasing tenant uprising in the region. The scope of land reform in the region has been variable across municipalities and villages. To a large extent, this has been influenced by the tenure arrangement and the structure of landownership in village.

The identification of the lands for expropriation and redistribution under land reform is subject to several guidelines. First, only tenanted areas were included in the reform while owner-cultivated rice and corn farms were excluded. Second, the program differentiates between lands for leasehold and for ownership. This is determined by the maximum retention or land ownership limit imposed on landlords. Under P.D 27 landlord's retention limit is 7 hectares while each legal heir is allocated a maximum area of 3 hectares.<sup>9</sup> The landlord's retention limit under CARP was reduced to 5 hectares while the retention for heirs remained the same. Under the Operation Land Transfer program or OLT government expropriated land areas beyond the retention limit of the landlord and his heirs and distributed them to identified tenants. This scope or area may be further reduced by adjustments made on non-agriculture land use such as the area utilized as residence by owners or heirs, drying area, village plaza, etc. On the other hand, lands retained by landlords and heirs are subject to the Operation Leasehold

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<sup>8</sup> Based on a complete enumeration of households in the study village. The survey was conducted in 2004 with assistance from IRRI (Estudillo 2006).

<sup>9</sup> Ideally, retention limits apply to total agricultural land area owned in the country. However, due to a problematic land information system in the country, total ownership of lands is difficult to determine even on a municipality level.

(OLH) program which provides existing tenants perpetual usufruct rights over the property.

The implementation of land reform has not been the same for all villages in Nueva Ecija province. Nueva Ecija is divided into South and North districts. In villages at the South district distribution has been relatively slow primarily due the presence of armed groups and difficulty in reconstituting mother titles (DAR 1996).<sup>10</sup> Land redistribution in the South district is only 79% accomplished to date compared to more than a hundred percent (103%) accomplishment in the North districts.

Overall, for the province of Nueva Ecija, about 24% (171,318 hectares) of total agricultural land in the province was subject to the OLT program (**Table 2**). The scope of OLT is higher in the study villages than the provincial average. In NE1, the land distribution program or OLT has been implemented to more than fifty percent (54.1%) of the total agricultural area in the village. This means that about 263.4 hectares of private agricultural land area in the village have been expropriated and redistributed by the government. About 23% (or 114.5 hectares) of the land area was subject to leasehold operation. On the other hand, in Village 2 (NE2) land distribution program (OLT) has been implemented to 43% of the total agriculture area while only 7.5% was under the leasehold program. Comparatively, the proportion of land for redistribution and leasehold was higher in NE1 than NE2. Prior to the 1972 land reform, we found that several small landowners or owner-cultivators are already operating in NE2 compared to NE1.

Most of the identified land reform areas (72%) in the Province of Nueva Ecija have been distributed under the 1972 land reform program (**Table 3**). These are lands covered by Emancipation Patents (EPs), which refers to the title issued under the program. Initially, beneficiaries received certificates of land tenure (CLT) which were converted into legal titles (or EPs) upon full payment of land they acquired. However, very few of the OLT beneficiaries have judiciously paid their land amortization thus prior to 1988 only about 3% of the agrarian reform beneficiaries (ARBs) have obtained titles to their lands.<sup>11</sup> Most awarded lands under PD 27 obtained EP status by virtue of EO 228 of 1987 and CARP. Executive Order 228 was passed declaring full land ownership to beneficiaries covered by the 1972 land reform. The law was also adopted under CARP which enabled beneficiaries to convert their CLTs into EPs regardless of amortization status. Under these laws, titles can be issued to beneficiaries upon approval of the DAR and the Land Bank.<sup>12</sup> Thus, most beneficiaries of PD 27 have their titles (or EPs) issued and registered during the period 1988 to 1999. On the other hand, beneficiaries of CARP are directly issued titles or Certificate of Land Ownership Awards (CLOAs). CLOA areas cover less than 30% of the land reform areas in the province of Nueva Ecija.

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<sup>10</sup> In several cases titles to the land subject for land reform are not available thus subdivision and registration of new titles cannot be immediately undertaken. A process of title reconstitution that involves public hearings and judicial undertakings are necessary.

<sup>11</sup> As of Dec 31 2000, Land Bank reports a collection rate of only 22% (i.e. based on principal + interest) and a recovery rate of 9% (based on principal). See de la Cruz, Joseph et al. 2000.

<sup>12</sup> Approval of the Land Bank implies that a trust fund has been allocated for the landowner as payment for the land. The landowner may accept or reject the land valuation but this does not stopped government from redistributing the land and issuing titles (RA 6657 Implementing Guidelines). CLTs were also converted to EPs during the transition period from 1985 to 1988 as preparatory arrangement for the CARP.

In the study villages a 100 percent accomplishment on land distribution based on targets have been achieved. However, land distribution has been implemented at a slower rate in the hacienda and irrigated village (NE1) than in the rainfed area (NE2) based on the accomplishment under PD27. While 74% of the land reform area in NE2 has already been distributed under PD 27 (EP titles) only 55% have been distributed in NE1. The accomplishment of NE1 under PD 27 is much lower than the average for the province.

About 30% and 20% of the scope of land reform in NE1 and NE2, respectively were completed under CARP. It is also observed that several beneficiaries in NE1 are still holding collective titles (i.e. CLOA-C). Collective titles are issued in the absence of subdivision plans that will identify specific areas of farmer beneficiaries. DAR may not be able to immediately undertake subdivision surveys due to budgetary constraints (de la Cruz et al. 2003). However, it is also possible that some beneficiaries specifically beneficiaries who have close family ties have no immediate need to subdivide the property.

A major difference in PD 27 and CARP is that several modes of land distribution have been made available under CARP. Land distribution under PD 27 was implemented primarily through compulsory acquisition. CARP, however, offered several modes of land transfer. One mode is the Voluntary Offer to Sell (VOS) which provides an incentive to landowners who voluntarily surrender their land for land reform. The incentive is in terms of a 5% increase in the cash portion in the landlord's compensation compared to a compulsory acquisition.<sup>13</sup> Another mode is the Voluntary Land Transfer or VLT scheme which involves a direct payment arrangement (in kind or cash) between the landowner and beneficiaries based on a contract agreement that is approved by the DAR. In a VLT arrangement, the government has no monetary obligation to the landowner.

The VLT scheme is noted to be popular in the study villages specifically in NE1. In the former hacienda village (NE1) 37.6% of the scope of OLT have been distributed via VLT (**Table 4**). In NE2 land distribution via VLT is about 21%. This implies that of the total land distributed under CARP, about 84% and 81% of in NE1 and NE2, respectively were accomplishment under the VLT.

## V. Land Transfer Actions of Agrarian Reform Beneficiaries

The break-up of large estates into small farms through land reform has increased transactions in the rural land market. Property rights on land have provided the farmer beneficiaries access to the land market through the trade of ownership rights and usufruct rights in exchange for money. These land transactions referred to by DAR as land transfer actions of farmer beneficiaries require the farmer-beneficiary to "give up his right to be in continuous possession and cultivation of the awarded landholding in favor of another person who is willing to cultivate the property". Often, these actions lead to change of ownership although some transactions are purely for credit reasons.

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<sup>13</sup> Payment to landlords is in the form of cash and bonds. Cash payment varies depending on land size- for lands 24 hectares and below, 35% cash; between 24 to 50, 30 % cash and from 50 hectares and above, 25% cash. The remaining balance is paid in the form of LBP bonds with interest rates based on a 90-day Treasury bill rates. One-tenth of the face value of the bonds matures every year until the 10<sup>th</sup> year (RA6657; sec 18).

Land pawning or *sanglaan*, in particular, is considered an informal credit facility that involves a transfer of usufruct rights which can be redeemed upon payment of the loan. Loans obtained from through pawning can remain outstanding for as long as thirty years. The extent to which pawning transactions lead to sale remains an empirical issue. Usually, a permanent transfer of ownership rights occurs when the debt accumulates and remains unpaid after a long period of time (Nagarajan, David and Meyer 1992 p.94).

On the other hand, sale or intrahousehold transfers result in ownership transfers. Intrahousehold transfers may be through inheritance or marriage. Transfer by succession or "*pasalin*" (local term) is legal and also a customary practice in agrarian reform villages. This often occurs due to old age, death or disability of the original beneficiaries. Transfers due to marriage of children are also legal and common. Often, intrahousehold transfers are not recorded in DAR offices. One reason is that these actions would require expenses in subdivision, survey and individual titling.

Transfer by sale, on the other hand, is subject to restrictions. DAR defines sale as the outright transfer of ownership rights or usufruct rights of agrarian reform beneficiaries to another person (including former landowners) for cash considerations. In general, the law prohibits the transfer of land reform awarded lands except by "hereditary succession or to the Government or Land Bank or to other qualified beneficiaries" (RA 6657). Overtime, however, the provisions of the law have been interpreted in a more liberal manner. The DAR distinguishes two types of awarded lands- the first, are lands awarded under P.D 27 and the second are lands covered by the 1988 Comprehensive Agrarian Reform Law. Transfer actions on the former are allowed because farmer beneficiaries are deemed full owners. Subsequently they can be sold or transferred once fully paid to Land Bank (EO 228 of 1987; DAR AO 8 s of 1995).<sup>14</sup> On the other hand, awarded lands under CARL have a prescription period of ten years from date of award prior to transfer which makes CLOA-titled lands not easily traded even if full payment can be made.

There can be several modes of sale. Many sales are done indirectly via waiver of rights, land conversion or pawning. Waiving of rights refers to the act of farmer beneficiaries to make written waivers in favor of other persons. The act involves a voluntary release of ownership and possession of awarded lands. It is common knowledge in agrarian villages and in the municipal DAR offices that waiver of rights has been used by contracting parties to effect sale transactions or ownership transfers (DAR 1996, p. 7). Comparatively, there are more transfers via "waiver" that have been recorded at DAR municipal office than sales. One possible reason for the use of "waiver" instead of sale is that many of the awarded lands have not been fully paid. Most lands thus are not eligible for sale transaction. A waiver or a voluntary transfer is initially undertaken until such time that amortizations are paid through the proceeds of the farm. The buyer may allow the farmer beneficiary to continue farming on the land or hire laborers ("*porsiyentohan*").

Another indirect way to sale of awarded lands is converting land to non-agriculture uses. The sale transaction is then undertaken upon conversion. The

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<sup>14</sup> In practice, if a sale occurs on land with EP titles, payment of land to Land Bank is made part of the sale agreement.

conversion to non-agriculture use allows the land to be sold without the restrictions imposed upon by the land reform law. Land conversions are common on lands located along highways or major roads which are ideal for agro-industrial uses (drying area, warehouse, milling, etc). It is also possible that small farm parcels in an agricultural village are converted to residential lots which improve collateral value of the land both in the informal and formal credit sectors.

In 2002 and 2005, key informant interviews (KIs) among barangay officials, farmers, and knowledgeable persons were undertaken to validate ownership records based on the Municipal Assessors office tax payers' file and the DAR masterlist of beneficiaries. The KIs were conducted on all the names listed in AO and DAR records and information about their residence status and farming activities in the village were obtained from the key informants.

Based on 2005 DAR records, the agrarian reform beneficiaries (i.e. those who were awarded lots) in NE1 and NE2 consist of 141 and 103 households, respectively. In both villages, many of the beneficiaries still own and currently cultivating the land awarded to them (**Table 5**). Transfers via inheritance to wife or heirs are also common. In both villages, about one-third of the farmer beneficiaries have transferred their land to their wives or children. On the other hand, some beneficiaries have sold the land awarded to them. This proportion of beneficiaries who sold land is higher in NE2 (31%) than in NE1 (23%).

The extent of pawning among the beneficiaries is lower than selling. However, it is possible that some of those who sold their properties have initially pawned the land. Some pawning transactions have remained outstanding for more than 3 years.

The extent of land transfers via sale overtime could also have been higher. Land transfers have started even in the early years of the land reform program prior to the issuance of titles specifically EPs. Transfers prior to the issuance of EPs have been mostly undertaken through waiver of rights. It is possible that some farmer beneficiaries in the DAR records are no longer the "original" farmer beneficiary. The waiver of rights executed by the original farmer beneficiary implies that the title (EP) which may not have been issued yet at the time of sale can be granted in the name of the buyer or "new" beneficiary. These type of transfers are difficult to account for since the DAR office has no systematic record of changes in names of beneficiaries even prior to the issuance of EPs or CLOAs.

Land transfers do not necessarily have to be between farmer beneficiary and original landowner. The contribution of overseas workers in the households has improved incomes of some farmer beneficiaries which enabled them to increase landholdings. The socioeconomic profile of buyers shows that they have better incomes than sellers but are not necessarily the elite in the municipality. They have better financial standing than the other farmers due to the presence of household members working overseas (**Table 6**). With the income from non-farm activities, they have become sources of financing in the village. It has also been a customary practice in the village that farmers with intention to sell initially approach relatives or co-farmers with sufficient cash before they approach non-relatives or professional money-lenders.

Sellers are predominantly those who are totally dependent on farm income. In addition to the land they own they also work in other farms as "porsiyentohan". Farm

and household assets are also fewer than buyers (**Tables 7 & 8**). These households are also dependent on animal power than mechanical power for farming.

The results of the survey show that direct and indirect land transfers are widely acceptable practices in the village. These transactions are legalized by registration in DAR municipal and provincial records and/or with the registry of deeds and assessor's office. A description of the process of registration for the different schemes to sell awarded land is provided below.

#### Direct Sale Transactions

1. Farmer beneficiary approach a possible buyer, which is usually a person with available cash.
2. Farmer-beneficiary and buyer agree on the price and other conditions of sale.
3. The farmer beneficiary files with the DAR Municipal Office a written request to transfer landholding with the following documents (DAR Administrative Order 8 series of 1995/1996): (a) certification of Full payment of amortization to be issued by the Land Bank or the DAR for Voluntary Land Transfer and Direct Payment schemes; (b) certification on full payment of irrigation fees; (c) certification on loans from DAR or LBP; (d) Tax clearance; (e) Affidavit of that the land has no pending case with the DARAB, DAR, Courts or the Office of the President.
4. The Buyer submits the following documents: (a) affidavit of aggregate area of agricultural landholding in the country; (b) certification of the provincial Assessors Office regarding the extent of buyer's landholding within the province; (c) copy of income tax return and residence certificate.
5. DAR Provincial Office reviews and evaluates the documents and provide recommendation.
6. DAR Regional Office reviews the documents and recommendations of the DAR PO.
7. The Regional Director approves or disapproves the recommendations of the DAR Provincial Office.
8. The decision of the Regional Director is forwarded to the Legal division for proper disposition. Copies of the decision will be given to the contracting parties, DARPO and DARMO.
9. The decision of the regional Director may be appealed to the Secretary through the Bureau of Agrarian Legal Assistance.

#### Sale Transactions through Waivers of Rights

10. Farmer beneficiary approach a possible buyer, which is usually a person with available cash.
11. Farmer-beneficiary and buyer agree on the price and other conditions of sale.
12. Farmer-beneficiary executes "waiver of rights" in favor of the buyer.
13. Surviving heirs also sign the waiver of rights to indicate their agreement to the sale.

14. The barangay chairman, BARC or other local officials affixed their signature as witnesses.
15. Buyer and farmer beneficiary submit waiver to DAR Municipal Office and sign additional documents - (a) Affidavit of acceptance of new farmer beneficiary (i.e. buyer); (b) OLT Form No. 9; (c) Recommendation of ARBA/SN/BARC; (d) Production survey form of former farmer beneficiary (seller); (e) Investigation Report; (f) Farmer's Undertaking.
16. DAR Municipal Office issue Transfer Action Order to serve as basis for releasing the new title in favor of the new farmer beneficiary.
17. The new farmer beneficiary will be listed in the PARO Masterlist Record.

#### Sale Transactions via pawning

1. Farmer-beneficiary in need of cash offers to pawn his land to relatives or to a "rich" farmer or person.
2. Written contract or loan agreement is executed by the farmer-beneficiary and lender (or pawnee) and witnessed by the barangay chairman or and/or BARC. If between relatives, a BARC clearance is not required.
3. The pawning contract is usually for 2 years.
4. Upon giving the cash loan, the lender takes over the cultivation of the land or hires laborers ("porcientohan") to work on the farm.
5. The loan remains outstanding until the farmer beneficiary repays the loan.
6. The farmer-beneficiary may draw additional loan from the land in which case, the lender may require that a waiver of rights be executed.
7. If farmer is unable to pay large loan for a long time, the pawnee offers to buy the land.
8. If farmer-beneficiary agrees, the documentation for sale transaction is started.

#### Sale via Land Conversion Transactions

1. A buyer convinces the farmer beneficiary to sell land usually by offering a price above the current market price of land.
2. If the beneficiary agrees to the price, buyer prepares documents for land conversion with the farmer beneficiary as applicant.
3. DAR evaluates and approves land conversion.
4. Upon conversion, buyer registers the land transfer to the Registry of Deeds.

These sales are recorded either at the DAR offices, Registry of Deeds and the Assessor's Office. However, there is no system of coordination and data sharing in these offices thus establishing current ownership requires tedious matching of individual records from these offices.

#### VI. Land Reform, Land Transfer Actions and Ownership Distribution

In the early 1970s (prior to the 1972 land reform), land in the study villages was owned by a few prominent families. These families are usually the political elite or have strong ties with the ruling classes. They are well-known in the villages because

ownership of lands has been with the family for generations. Based on the estimated landholdings of owners during this period, there are about five prominent families in NE1 that own more than 60% of the agricultural land in the village (**Table 9**). One family owns more than hundred hectares or 32% of the total agricultural land in the village. In village 2 (NE2), ownership is less concentrated with no single family owning more than hundred hectares. Ownership distribution though still remains with few (7) prominent families who owns about 60% of the total agricultural land in the village.

As in other developing countries, landlords tend to evade land reform. Land remains a measure of wealth and in the absence of a progressive agricultural land tax in the country the cost of holding land is minimal. Thus, there have been concerted efforts by the landlords to resist the reform through several forms of evasions. One mode has been to increase the retained land area of the landlord by registering excess holdings in the names of sons, daughters, close relatives or even dummy relatives (Otsuka 1991). Some landlords also sold excess land or mortgage land to defer the implementation of land reform. In particular, the 1972 land reform applied only to tenanted land planted to rice and corn, thus conversion to other crops or to non-agricultural use have been another form of evasion (Adriano 1988). Land reform also excluded from the coverage lands under direct administration of landlords (i.e. the landlord manages the farm and employs hired labor). This provision has allowed landlords to expand the areas under their direct supervision by evicting tenants or paying off tenants (Hayami et al 1990). In a survey of households in the study villages in 1985, about 20 to 30% of the landless agricultural laborers residing in the study villages were evicted tenants (Otsuka 1987).

Likewise, CARP has provided opportunities for evasion. Although CARP covered all agricultural lands, the program has only prevented evasions via conversion to other crop use. The provision of “market-oriented” modes of land transfers under the program has increased opportunities for evasion. In particular, the voluntary land transfer (VLT) scheme has practically legalized evasion. It has been reported that most land distribution that occurred under the VLT are transfers to children and relatives of landlords (Borras 2002). VLT transactions are believed to be “faked land transfers” since there is no real transfers or redistribution yet these transfers are recorded as accomplishments by DAR officials (Borras 2002).

An examination of the distribution of landholdings of prominent landlords in the study villages reveals the extent of evasion that had taken place under the land reform program. In NE1, for instance, about 78% of the total landholdings subject to redistribution of the largest landowning family in the village were distributed to relatives via the VLT mode of transfer (**Table 10**). This implies that less than 30% of the total land holdings for land reform have been distributed to legitimate farmer beneficiaries. Transfer to children and relatives to increase retention limit had been another scheme used in the village. This scheme is more common in NE2 possibly because land reform in the village has been implemented primarily under PD 27. VLT scheme though has also been used for transfers to relatives for the remaining lands covered under CARP. The popularity of the VLT in both villages as also indicated in Table 4 shows that in the later part of land distribution, most transfers have been facilitated due to landlords decisions to whom land should be transferred and under contractual arrangements that is favorable on them.

While some landlords have been blatant in evading land reform, other landlords have adhered to the implementation of a real land redistribution program not only for



altruistic reasons but also for economic reasons. Based on interviews, most landlords who have given up their lands have shifted investments from agricultural production to agricultural support services or non-agricultural services.

Despite the apparent shortcomings of land reform, what has been apparent in the study villages is that large landholdings have been broken down. In NE1, the average landholding per household declined from 9 hectares to 2 hectares considering only landholdings of holdings of family (**Table 11**). In NE2, the average landownership under land reform is 2 hectares from an average of 5 hectares prior to 1972. The effect of land reform is more significant when total holdings of original landlord (i.e. family + relatives) are considered. Table 12 shows that average landholdings per household prior to land reform was at 16 hectares in NE1 and 8 hectares in NE2.

Moreover, the increase in the number of owners due to land reform has also been significant. The number of landowners in NE1 more than tripled from 50 families owning a total land area of 434.35 hectares to 189 families for the same area. A similar trend is observed in village 2 (NE2). Before the implementation of the land reform program, it is estimated that there were 74 family owners to an area of 364.9 hectares in the village. The number of owners more than doubled with the implementation of land reform in the same area.

It is however observed that about 40% of the landowning households own less than one hectare. The registered lands of farmer beneficiaries in Assessors and DAR records are mainly homelots. Moreover, the distribution of landholdings to families including those transferred to relatives show that the evasion tactics of landlords have been significant in retaining lands to the family. Estimation of landlords landholdings including those of their relatives show that the top 10% families still own 69% of the land area in village 1 and about 55% in village 2 (**Table 12**).

The structure of ownership in the villages has not substantially change after the implementation of the land reform program. Although the rural land market have been active with the break up of huge estates and land transfer actions of farmer beneficiaries, these transfers have yet to significantly affect the ownership structure that resulted from land reform. Transfers under the post land reform era in both villages have primarily been through inheritance both for the families of landlords and agrarian reform beneficiaries. Some farmer beneficiaries have migrated to other villages or regions and sold their lots either to migrants in the village or other ARBs. Transfer to original landlords is uncommon possibly because the evasion schemes have already allowed the landlords to retain a significant portion of their property. The more significant change in ownership distribution in the post reform era is that land transfers have provided an opportunity for farmer beneficiaries to own larger landholdings. In NE1 of the total landowners in the village, about 3 of the farmer beneficiary own farms greater than 5 hectares (**Table 13**). In NE2, about two of the farmer beneficiary households have an average land area of about 6 hectares. Land ownership has enabled tenants to undertake non-agricultural investments to support farm incomes. For those beneficiaries that have succeeded to do so, the improvements in incomes have been significant.

Aside from the ARBs, land buyers include migrants from other provinces or municipalities usually with relatives in the village. About 4% of medium sized landowners in the study villages are new buyers.

The change in ownership concentration for the periods in review has been estimated using the Herfindahl index and Gini ratio. Both measures show an improvement in the distribution of ownership with the implementation of land reform (**Table 14**). This is observed using different clusters of ownership. The improvement in ownership distribution is seen in the increase number of households with equally sized landownership and lower Gini ratio. The improvement in land ownership concentration is apparently better in NE2 than NE1. It is possible that in villages where the hacienda system is dominant, the impact of the land reform program tend to be limited because of stronger resistance from the landlord and relatives.

It is also observed that a possible land consolidation is taking place wherein some owners are able to acquire lands beyond the 5-hectare ownership ceiling. The post land reform scenario shows that this condition seems apparent in NE1. The decrease in the number of households in the village with equally sized landownership holdings and increase in Gini ratio imply increases in the landholdings of some owners.

## VII. Summary and Conclusions

Land reform has provided land to tenants and succeeded in breaking up huge estates but the program has failed to effectively address land ownership concentration. The original landowners with their relatives still own a significant portion of the agricultural area in these villages. This occurred not because of transfer actions of beneficiaries in the land market but because of a flawed land redistribution program. In particular, the evasion tactics of landlords have been ignored and in several cases have been recorded as accomplishment of the program. The various schemes of landlords to evade land reform have prevented real land redistribution to take place in the country.

In the study villages, the transfer of land to relatives has been apparent under the CARP VLT mode of land distribution. Although these villages are among the priority areas under PD27, the implementation of the land distribution program (OLT) have been slow. The delay in which land reform has been completed has resulted to generational transfers among families of the prominent landlords through the VLT scheme.

Although land reform has not significantly improved land allocation, it has brought positive impacts for some households by providing beneficiaries opportunities to improved incomes primarily through overseas employment and non-farm activities. Higher incomes have allowed some beneficiaries to increase landownership holdings.

The existing ownership distribution in the villages shows that transactions of farmer beneficiaries in the rural land market have yet minimal effect on the current concentration of landownership in the villages. However, if remained unchecked, these transactions can contribute to a widening land ownership distribution.

The poor land information system in the country has contributed to the difficulty in controlling evasion and in monitoring land ownership. An efficient land information system is needed before modernization of agrarian laws can be undertaken. There is also a need to revisit discussions on the importance of instituting a progressive agriculture land tax in the country but again this can only be effective when an efficient land information system is in place.

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**Table 1. Percentage of rice area under tenancy <sup>a/</sup>**

	1971	1980	1991	2002
Census of Agriculture <sup>b/</sup>				
Nueva Ecija	53	42	31	26
Laguna	44	21	47	49
Iloilo	37	39	38	39
Household Survey <sup>c/</sup>				
Nueva Ecija 1 (NE 1) <sup>d/</sup>		86 (62) <sup>e/</sup>		33
Nueva Ecija 2 (NE 2) <sup>d/</sup>		76 (51) <sup>e/</sup>		32

a/ Refers to share tenants, leaseholders and rent-free arrangements

b/ Reference years - 1971, 1980, 1991, 2002

c/ Based on surveys conducted under the International Rice Research Institute (IRRI)

d/ Data includes CLT holders. In 2002, only minimal percentage of riceland under CLT (Estudillo, 2006)

e/ Excludes CLT holders. Author's estimates based on earlier analysis of the same data set that provided % CLT holders in the villages and average farm size (see Deininger, et al, 2000)

**Table 2. Scope of Land Reform (PD27 & CARP), Nueva Ecija**

	Total Agricultural Land (ha)	Working Scope (ha)						% Accomplishment		No. of FBs	
		Total	%	OLT	%	OLH	%	OLT	OLH	ARBs <sup>c/</sup>	LH <sup>c/</sup>
Nueva Ecija	714,514.86	171,318.00	24.0	171,318.00	24.0	...	<sup>a/</sup>	92.2 <sup>b/</sup>	...	...	...
City of Muñoz	14,893.38	8,417.06	56.5	6,824.11	45.8	1,592.95	10.7	100.1	100.0	3,966	837
NE 1	486.58	377.39	77.6	263.24	54.1	114.15	23.5	100.0	100.0	141	44
NE 2	467.09	235.31	50.4	200.44	42.9	34.87	7.5	100.0	100.0	103	17

Source: DAR Accomplishment Report, Policy and Planning Division

Municipal Agrarian Reform Office, City of Muñoz, Nueva Ecija

Assessor's Office, City of Muñoz

a/ data not available

b/ Average of North and South Nueva Ecija:

% Accomplishment of North Nueva Ecija = 103%

% Accomplishment of South Nueva Ecija = 79%

c/ Beneficiaries of OLT are the agrarian reform beneficiaries while OLH are the leaseholders

**Table 3. DAR Land Distribution Program by title type and by year, Nueva Ecija**

	1972-1987		1988-1999		2000 up		Total	
	Area (ha.)	% to total area	Area (ha.)	% to total area	Area (ha.)	% to total area	Area (ha.)	% to total area
<b>Nueva Ecija</b>								
EP	3,639.28	2.6	94,404.37	66.6	3,405.09	2.4	101,448.74	71.6
CLOA-I	-	-	14,945.22	10.5	2,022.96	1.4	16,968.17	12.0
CLOA-C	-	-	22,791.39	16.1	496.10	0.4	23,287.49	16.4
Total	3,639.28	2.6	132,140.97	93.3	5,924.15	4.2	141,704.41	100.0
<b>NE 1</b>								
EP	3.15	1.6	97.89	50.5	6.49	3.3	107.53	55.5
CLOA-I	-	-	44.08	22.7	4.43	2.3	48.51	25.0
CLOA-C	-	-	37.79	19.5	-	-	37.79	19.5
Total	3.15	1.6	179.75	92.7	10.92	5.6	193.82	100.0
<b>NE 2</b>								
EP	18.18	11.1	98.85	60.5	3.71	2.3	120.75	73.9
CLOA-I	-	-	24.33	14.9	4.00	2.4	28.33	17.3
CLOA-C	-	-	14.42	8.8	-	-	14.42	8.8
Total	18.18	11.1	137.61	84.2	7.71	4.7	163.50	100.0

Source: DAR Masterlist updated 2005 for Maragol and Gabaldon; 2002 for Nueva Ecija

Note:

EP - Emancipation Patent (PD 27)

CLOA-I - Certificate of Land Ownership Award, Individual

CLOA-C - Certificate of Land Ownership Award, Collective

**Table 4. DAR Land Distribution Program by Mode of Transfer, Nueva Ecija**

	Area (ha.)	% to Total area distributed
Nueva Ecija		
Tenanted Rice/Corn (OLT)	106,858.00	67.6
VOS	10,397.00	6.6
VLT	8,315.00	5.3
CA	3,821.00	2.4
Others <sup>a/</sup>	28,646.00	18.1
NE 1		
OLT	107.53	55.5
VOS	13.51	7.0
VLT	72.79	37.6
Others <sup>a/</sup>	0.00	0.0
NE 2		
OLT	120.75	73.9
VOS	7.73	4.7
VLT	35.02	21.4
Others <sup>a/</sup>	0.00	0.0

Source:

DAR Accomplishment Report, Policy and Planning Division

Municipal Agrarian Reform Office, City of Muñoz, Nueva Ecija

a/ Others include GFIs and non-private agricultural lands (settlements, landed estates, government-owned lands (GOL), KKK)

b/ OLT - Operation Land Transfer

VOS - Voluntary Offer to Sell

VLT - Voluntary Land Transfer

CA - Compulsory Acquisition

**Table 5. Transfer Action Cases of ARBs in Study Villages**

	<b>NE 1</b>		<b>NE 2</b>	
	No. of ARBs	%	No. of ARBs	%
Currently operating	53	40.2	29	30.2
Transfer to wife/child	39	29.5	31	32.3
Sold (full or partial)	30	22.7	30	31.3
Pawned-out (full or partial)	10	7.6	6	6.3
Total ARBs w/ KI	132	100.0	96	100.0
Not known in the village	9		7	
Total ARBs listed	141		103	

Source: Key informant interviews 2002 & 2005

**Table 6. Socioeconomic Profile of Buyers, Sellers, Pawns and Pawnees in Study Villages**

	No. of Respon- dents	Average Annual Income			Average farm size	Average owned land	Age of HH Head	Size of HH	% with HH members working overseas
		Farm	Non-Farm	Total					
NE 1									
Buyers	5	203,971.00	64,600.00	268,571.00	3.25	2.90	60.4	3.8	60.0
Sellers	6	113,624.17	27,333.33	140,957.50	1.93	1.60	57.7	4.2	0.0
Pawners	29	88,289.40	41,793.10	130,082.50	2.29	1.39	57.6	4.7	34.5
Pawnees	8	280,024.31	64,800.00	344,824.31	2.25	0.85	47.1	4.1	25.0
Non-participant	58	114,035.59	32,495.17	146,530.76	1.70	1.03	49.4	5.0	3.4
NE 2									
Buyers	8	77,174.06	112,575.00	189,749.06	2.04	1.11	48.1	3.8	12.5
Sellers	4	43,268.75	0.0	43,268.75	2.33	0.75	44.8	4.3	0.0
Pawners	24	71,181.15	45,775.00	116,956.15	1.87	1.16	48.8	4.4	8.0
Pawnees	11	158,954.43	120,936.36	279,890.80	3.06	1.32	47.8	3.7	45.5
Non-participant	60	52,901.40	21473.33	74,374.74	1.96	0.91	49.0	4.3	3.3

Source: 2005 FarmHH Survey



**Table 7. Farm Assets of Buyers, Sellers, Pawners and Pawnees in Study Villages**

Brgy	No. of respon- dents	Farmshed		Bodega		Large tractor		Small tractor		Farm work animals		Thresher		Irrig Pump		Sprayer		Plow		Harrow	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%		
NE 1																					
Buyers	5	1	20.0	0	0.0	0	0.0	3	60.0	0	0.0	0	0.0	3	60.0	2	40.0	0	0.0	0	0.0
Sellers	6	1	16.7	1	16.7	0	0.0	2	33.3	4	66.7	1	16.7	1	16.7	2	33.3	1	16.7	2	33.3
Pawners	29	3	10.3	0	0.0	2	6.9	9	31.0	11	37.9	0	0.0	1	3.4	14	48.3	0	0.0	1	3.4
Pawnees	8	0	0.0	3	37.5	0	0.0	9	112.5	2	25.0	4	50.0	2	25.0	9	112.5	0	0.0	1	12.5
Non-participant	58	4	6.9	6	10.3	4	6.9	18	31.0	19	32.8	4	6.9	0	0.0	18	31.0	4	6.9	2	3.4
NE 2																					
Buyers	8	1	12.5	0	0.0	2	25.0	5	62.5	8	100.0	2	25.0	3	37.5	5	62.5	1	12.5	1	12.5
Sellers	3	0	0.0	0	0.0	0	0.0	1	33.3	0	0.0	0	0.0	1	33.3	2	66.7	0	0.0	0	0.0
Pawners	24	3	12.5	0	0.0	1	4.2	7	29.2	12	50.0	0	0.0	6	25.0	8	33.3	0	0.0	0	0.0
Pawnees	11	2	18.2	0	0.0	2	18.2	6	54.5	6	54.5	3	27.3	5	45.5	5	45.5	2	18.2	0	0.0
Non-participant	60	2	3.3	0	0.0	3	5.0	9	15.0	11	18.3	4	6.7	14	23.3	20	33.3	7	11.7	3	5.0

Source: 2005 FarmHH Survey

**Table 8. Household Assets of Buyers, Sellers, Pawners and Pawnees in Study Villages**

Brgy	No. of respon- dents	House		Resid'l lot		Jeep/ owner		Tricycle/M otorcycle		TV		VCR/VCD /DVD		Radio		Stereo		Ref		Waching mach.	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
NE 1																					
Buyers	5	1	20.0	4	80.0	0	0.0	0	0.0	4	80.0	0	0.0	3	60.0	0	0.0	1	20.0	0	0.0
Sellers	6	4	66.7	5	83.3	0	0.0	0	0.0	6	100.0	0	0.0	5	83.3	1	16.7	2	33.3	2	33.3
Pawners	29	19	65.5	24	82.8	0	0.0	0	0.0	27	93.1	0	0.0	21	72.4	2	6.9	9	31.0	5	17.2
Pawnees	8	7	87.5	6	75.0	2	25.0	1	12.5	10	125.0	0	0.0	6	75.0	3	37.5	7	87.5	2	25.0
Non-participant	58	42	72.4	44	75.9	2	3.4	0	0.0	50	86.2	1	1.7	33	56.9	9	15.5	22	37.9	21	36.2
NE 2																					
Buyers	8	9		6	75.0	1	12.5	0	0.0	9	112.5	1	12.5	6	75.0	2	25.0	4	50.0	3	37.5
Sellers	3	2	66.7	3	100.0	0	0.0	0	0.0	2	66.7	0	0.0	1	33.3	0	0.0	0	0.0	0	0.0
Pawners	24	18	75.0	17	70.8	0	0.0	0	0.0	20	83.3	1	4.2	12	50.0	4	16.7	6	25.0	5	20.8
Pawnees	11	7	63.6	8	72.7	1	9.1	0	0.0	11	100.0	0	0.0	8	72.7	1	9.1	6	54.5	3	27.3
Non-participant	60	42	70.0	39	65.0	0	0.0	0	0.0	50	83.3	1	1.7	36	60.0	13	21.7	15	25.0	11	18.3

Source: 2005 FarmHH Survey

**Table 9. Estimated Landholdings of Prominent Landlords  
in Study Villages (before 1972 Land Reform) <sup>a/</sup>**

	<b>Area (ha.)</b>	<b>% to Total Area</b>
<b>NE 1</b>		
OLO A	31.0856	7.2
OLO B	31.8693	7.3
OLO C	32.2728	7.4
OLO D	48.7270	11.2
OLO E	140.1292	32.3
Total	284.0839	65.4
<b>NE 2</b>		
OLO A	16.3962	4.5
OLO B	17.8201	4.9
OLO C	24.1221	6.6
OLO D	29.5834	8.1
OLO E	30.4883	8.4
OLO F	37.8669	10.4
OLO G	68.9176	18.9
Total	225.1946	61.7

a/ refers to landowners with landholdings of 30 hectares or greater in NE1;  
for NE2, landlords with landholdings greater than 15 hectares

Source of basic data:

Assessor's Office

DAR Provincial Masterlist

Key Informant Interview

Note: OLO - original landowner

**Table 10. Distribution of Estimated Landholdings of Prominent Landlords in Study Villages**

	Own Land & Heirs (hectares)	Transfer to Relatives (ha)	Land Reform Beneficiaries (hectares)					Mode of Transfer to Relatives
			Relative	% to total	Tenant	% to total	Total	
NE 1								
OLO A	14.8613				16.2243	100.00	16.2243	
OLO B	9.6307				22.2386	100.00	22.2386	
OLO C	17.0391		9.0000	59.08	6.2337	40.92	15.2337	VLT
OLO D	27.2553	19.0017			2.4700	100.00	2.4700	OLT
OLO E	28.8192	24.7258	63.154	77.98	17.8384	22.02	80.9924	VLT
NE 2								
OLO A	6.4375				9.9587	100.00	9.9587	
OLO B	4.000	9.8169	4.0032	100.00			4.0032	OLT/VLT
OLO C	14.8347				9.2874	100.00	9.2874	
OLO D	26.0834				3.5000	100.00	3.5000	
OLO E					30.4883	100.00	30.4883	
OLO F	13.638				35.5565	100.00	35.5565	
OLO G	6.0200	40.0266	22.8710	100.00			22.8710	OLT/VLT

Source of basic data: updated DAR Masterlist 2005; AO records and Key Informant Interviews

a/ relatives includes 3rd to 4th generation blood relation; second family and dummies

**Table 11. Distribution of Estimated Land Ownership by Size (by family\*)**

Pre-1972 Land Reform					Land Reform Period				Post-Land Reform			
Size	No. of House-hold owners	%	Area covered (ha)	%	No. of House-hold owners	%	Area covered (ha)	%	No. of House-hold owners	%	Area covered (ha)	%
<b>NE 1</b>												
0 ≤ 1.0	9	18.0	3.41	0.8	82	43.4	13.43	3.1	80	44.4	13.37	3.1
1.01 - 2.0	6	12.0	9.24	2.1	38	20.1	59.65	13.7	32	17.8	48.92	11.3
2.01 - 3.0	6	12.0	15.26	3.5	33	17.5	87.45	20.1	31	17.2	82.06	18.9
3.01 - 4.0	5	10.0	17.50	4.0	16	8.5	53.27	12.3	15	8.3	50.44	11.6
4.01 - 5.0	3	6.0	13.23	3.0	1	0.5	4.49	1.0	3	1.7	13.16	3.0
> 5.0	21	42.0	375.83	86.5	19	10.1	216.15	49.8	19	10.6	226.50	52.1
Total	50	100.0	434.45	100.0	189	100.0	434.45	100.0	180	100.0	434.45	100.0
Average			8.69				2.30				2.39	
<b>NE 2</b>												
0 ≤ 1.0	29	39.2	7.42	2.0	61	38.6	26.69	7.3	70	44.0	27.88	7.6
1.01 - 2.0	9	12.2	12.39	3.4	40	25.3	60.06	16.5	32	20.1	47.65	13.1
2.01 - 3.0	8	10.8	20.79	5.7	28	17.7	72.35	19.8	26	16.4	66.88	18.3
3.01 - 4.0	4	5.4	13.92	3.8	12	7.6	43.11	11.8	11	6.9	39.53	10.8
4.01 - 5.0	3	4.1	13.78	3.8	4	2.5	18.08	5.0	4	2.5	18.08	5.0
> 5.0	21	28.4	296.60	81.3	13	8.2	144.61	39.6	16	10.1	164.88	45.2
Total	74	100.0	364.90	100.0	158	100.0	364.90	100.0	159	100.0	364.90	100.0
Average			4.93				2.31				2.30	

\*note: family - husband and wife

**Table 12. Distribution of Estimated Land Ownership by Size (family + relatives)**

Pre-1972 Land Reform					Land Reform Period				Post-Land Reform			
Size	No. of House-hold owners	%	Area covered (ha)	%	No. of House-hold owners	%	Area covered (ha)	%	No. of House-hold owners	%	Area covered (ha)	%
<b>NE 1</b>												
0 ≤ 1.0	0	0.0	0.00	0.0	75	52.4	9.80	2.3	73	52.9	10.01	2.3
1.01 - 2.0	4	15.4	7.13	1.6	23	16.1	32.24	7.4	19	13.8	25.96	6.0
2.01 - 3.0	2	7.7	4.80	1.1	21	14.7	54.97	12.7	20	14.5	52.39	12.1
3.01 - 4.0	2	7.7	6.30	1.5	10	7.0	32.49	7.5	10	7.2	33.22	7.6
4.01 - 5.0	2	7.7	8.79	2.0	1	0.7	4.49	1.0	3	2.2	13.16	3.0
> 5.0	16	61.5	407.42	93.8	13	9.1	300.45	69.2	13	9.4	299.70	69.0
Total	26	100.0	434.44	100.0	143	100.0	434.44	100.0	138	100.0	434.44	100.0
Average			16.71				3.04				3.15	
<b>NE 2</b>												
0 ≤ 1.0	11	25.0	2.37	0.6	39	33.9	19.68	5.4	41	37.3	17.02	4.7
1.01 - 2.0	7	15.9	9.04	2.5	34	29.6	52.06	14.3	28	25.5	41.94	11.5
2.01 - 3.0	4	9.1	10.42	2.9	18	15.7	45.67	12.5	14	12.7	35.17	9.6
3.01 - 4.0	3	6.8	10.86	3.0	10	8.7	36.05	9.9	10	9.1	35.66	9.8
4.01 - 5.0	1	2.3	4.31	1.2	0	0.0	0.00	0.0	0	0.0	0.00	0.0
> 5.0	18	40.9	327.89	89.9	14	12.2	211.45	57.9	17	15.5	235.11	64.4
Total	44	100.0	364.89	100.0	115	100.0	364.91	100.0	110	100.0	364.90	100.0
Average			8.29				3.17				3.32	

**Table 13. Estimated Landownership > 5 has. by type of owner**

	NE 1			NE 2		
	No.	Area covered (ha)	Average area (ha)	No.	Area covered (ha)	Average area (ha)
Original Landowner (OLO)	8	139.62	17.45	8	101.62	12.70
Relative of OLO	2	12.27	6.13	0	0	0
Buyer/New Landowner	6	52.45	8.74	6	51.78	8.63
Farmer-beneficiary	3	22.16	7.39	2	11.48	5.74
Total	19	226.50	10.63	16	164.88	10.34

Source of basic data: based on estimated family (husband and wife) ownership, post land reform

**Table 14. Land Ownership Concentration  
from Estimated Landowning Households in Study Villages**

	Pre-1972	Land Reform	Post LR
<b>NE 1</b>			
<i>Unique Names</i> <sup>a/</sup>			
Herfindahl Index	0.096	0.019	0.022
No. of HH owners w/ equally sized farms <sup>b/</sup>	10	54	45
No. of owners	55	195	188
Gini ratio	0.63	0.64	0.66
<i>Family (Husband &amp; Wife)</i>			
Herfindahl Index	0.100	0.021	0.026
No. of HH owners w/ equally sized farms	10	47	39
No. of owners	51	192	180
Gini Ratio	0.64	0.65	0.67
<i>Family + Relatives</i>			
Herfindahl Index	0.140	0.105	0.103
No. of HH owners w/ equally sized farms	7	10	10
No. of owners	26	143	138
<b>NE 2</b>			
<i>Unique Names</i>			
Herfindahl Index	0.051	0.028	0.027
No. of HH owners w/ equally sized farms	20	36	37
No. of owners	76	162	163
Gini Ratio	0.69	0.57	0.60
<i>Family (Husband &amp; Wife)</i>			
Herfindahl Index	0.051	0.029	0.028
No. of HH owners w/ equally sized farms	19	35	36
No. of owners	74	158	159
Gini Ratio	0.69	0.57	0.60
<i>Family + Relatives</i>			
Herfindahl Index	0.078	0.059	0.060
No. of HH owners w/ equally sized farms	13	17	17
No. of owners	44	115	110

a/ individual names of landowners based on titles

b/ reciprocal of the Herfindahl Index