

Farm Size and Land Use Changes in Vietnam Following Land Reforms

by

S. P. Marsh and T.G. MacAulay

*Department of Agricultural and Resource Economics
The University of Sydney, NSW, 2006*

Contributed paper presented to the
47th Annual Conference of the
Australian Agricultural and Resource Economics Society
The Esplanade Hotel, Fremantle
13-15th February 2003

Farm Size and Land Use Changes in Vietnam Following Land Reforms

Sally P. Marsh and T. Gordon MacAulay

Department of Agricultural and Resource Economics
The University of Sydney, NSW, 2006
Email: smarsh@fpt.vn

Keywords: agricultural policy, land reform, land market, Vietnam

Abstract

Over the last decade the Vietnamese government has instigated land reforms that recognise the household as the basic unit of production and allocate land use rights to households. Under the 1993 Land Law these rights can be transferred, exchanged, leased, inherited, and mortgaged. This Land Law provided the foundation for the development of a market for land use rights. During 2001, 400 farm households were surveyed in four provinces in Vietnam. Along with production and consumption data, evidence was sought of land accumulation and consolidation, land use changes, and attitudes to land reform issues. Analysis of the data shows that there is an active market for land use rights, but the level of activity varies considerably between provinces. Some individual households have acquired a large percentage of their land through buying or renting activities, as distinct from land that has been allocated or inherited. A more active market appears to be associated with opportunities for land use changes which lead to more profitable production activities. Lack of available land and in some cases labour, inadequate credit access, and reluctance to sell land use rights are identified as constraints to the land use right market, rather than transaction costs and the limit on land holdings.

Farm Size and Land Use Changes in Vietnam Following Land Reforms

1. Introduction

In December 1986 at the Sixth National Congress, the government of Vietnam introduced a wide-ranging set of reforms known as “*doi moi*” which recognised a number of the failures of central planning and were designed to gradually de-regulate and liberalise the economy. Associated with these reforms, the 1993 Land Law (which followed the 1988 “Resolution 10”) formalised the farm household as the main unit of agricultural production and provided for the allocation of land use rights (LURs) to households. These LURs give households farm decision-making rights related to the purchase and use of inputs, the sale of outputs, and to some extent the use of land. The 1993 Land Law also gave security of tenure over allocated land, with LURs granted for 20 years for annual crop land (increased to 30 years in 1998 revisions) and 50 years for perennial crop land. Land ceilings were imposed of 2-3 hectares for annual crop land and 10 hectares (since increased) for perennial crop land.

Under the 1993 Land Law land use rights can be transferred, exchanged, leased, inherited and mortgaged. Revisions to the Land Law in 1998 added two new additional rights: that of using LURs as capital in joint venture arrangements, and the right to re-lease LURs. By virtue of providing increased security of tenure over land, facilitating access to credit, and making LURs tradeable, the 1993 Land Law is seen as providing the foundations for a formal market for land (Do and Iyer, 2002).

In this paper land transactions for agricultural land and land use in four provinces following these land reforms are investigated. The purpose is to assess the extent of the market for LURs in various regions, and to identify factors either constraining or encouraging this market. Agricultural land holdings in Vietnam are typically small and highly fragmented, especially in the north. The assumption is that a market for LURs will translate into allocative efficiency gains and encourage land consolidation and accumulation, which may enable technical efficiency gains to be made. Some background information on land fragmentation in Vietnam, and constraints to the land market identified by previous research is given in Section 2. Section 3 briefly outlines the method used to obtain the data on land holdings, land transactions and land use in four provinces that are presented in Section 4. These data are discussed in Section 5 under headings of land holdings and land sources, the extent of market-based LUR transfers, evidence of land consolidation and land loss, and changes in land use. Conclusions and policy implications are drawn in Section 6.

2. Background

Under the Vietnamese Constitution, land is the property of the people as a whole and the State administers it on their behalf. Since land is 'owned' by the people as a whole, it is not possible for individuals (or corporations) to own land. However, since the 1993 Land

Law, individuals, households and organisations can hold and transfer rights to use land. The process of land allocation in Vietnam that began in 1981 and was formalised in the 1993 Land Law is still on-going, although it is largely complete for agricultural land, as distinct from forestry land. Approximately 80 percent of the population of some 80 million people live in rural areas and there are over 11 million household farms in Vietnam. Farm sizes vary throughout the country but they are typically small, around 0.2 hectares per capita (The World Bank in Vietnam, 2001). The average size of farms in the Mekong Delta is 1.2 hectares, but this is considerably larger than average farm sizes in the Red River Delta.

The land allocation process varied between districts, although equity between households was a primary consideration, with consideration being given both to land quality and the number of people, or more specifically labour equivalents, in a household. Consequently, the amount of land allocated varied between households and this land was typically split into a number of plots of varying land quality. The World Bank in Vietnam (1998, p. 10) says “on average, farms in the Red River Delta comprise eight or nine noncontiguous plots often no larger than 200 to 500 square meters each”. In mountainous areas, the number of plots allocated to households tended to be even greater, as the land quality was extremely variable. Typically, not all land within a commune was allocated. A proportion of land was kept (usually between 5 and 10 percent) “to defray public expenses or readjust land allocation periodically to demographic changes such as family members returning from military service” (Chung, 1994, p. 4). Other land such as ponds, lakes and garden areas, which are difficult to divide, were often also left unallocated, and then assigned to individual households on the basis of competitive bidding.

In the south of Vietnam, the degree of land fragmentation is not so pronounced, with many farmers in the Mekong Delta having only one or two plots. There was less concern with equitable distribution in the south, and land allocation to households was also more likely to be based on land held prior to re-unification in 1975 (Marsh and MacAulay, 2002; Do and Iyer, 2002; Ravallion and van de Walle, 2001, 2003).

Small and fragmented land holdings are recognised as a problem for agricultural development in Vietnam. Throughout Vietnam there are now around 70 million parcels or plots of land (Vy, 2002). Around 10 percent of these plots have an area of only 100m² or less (Phien, 2001). These small and scattered land holdings hamper mechanization and involves additional time and labour for farming activities that must be carried out in geographically distant plots.

Considerable restrictions still exist for land use and LUR transfers. In many cases the constraints on land use are associated with land zoning for residential versus agricultural land, and forest land versus cultivated land. The LUR certificate lists the plot of land and its classification of “land use purpose”: e.g. wet rice land, annual cultivated crops, perennial crops, ponds, land for grazing livestock, forest, settlement land. If the household wants to change the “land use purpose” then official permission must be sought. Official decrees also restrict when, and to whom, LURs can be transferred (see Marsh and MacAulay, 2002). Concerns about the use of land, particularly the use of

land designated to grow rice, are closely linked to food security issues, especially regional food security, as infrastructure is still poor in many remote areas.

However, following the 1993 Land Law many researchers have reported that land transfers and land use change is occurring (e.g. Fforde, 1995; Khiem *et al.*, 1999; Chung, 2000; Do and Iyer, 2002; Ravallion and van de Walle, 2003). Both before and after the 1993 Land Law it has also been reported that many land transfers and land use changes occur illegally (e.g. Chung, 1994; Kerkvliet, 2000; Do and Iyer, 2002; Vietnam News, 2002). The reasons given for these illegal transactions include the costs associated with registering LUR transfers, time-consuming and cumbersome procedures, unclear regulations, and opportunistic rent-seeking behaviour in near-urban districts and along newly constructed inter-regional roads.

It is also widely considered that further land reform is needed to remove constraints and encourage the further development of the 'land market' (The World Bank in Vietnam, 1998; United Nations, 1999; AusAID, 2001). Lee-Alaia *et al.* (2002, p. 28) have argued that "the government's intervention in the allocation, transfer, use and valuation of land ... seriously frustrate the development of a free market in land-use rights." Based on an analysis using data from the 1997/98 Vietnam Living Standards Survey (VLSS), Ravallion and van de Walle (2003, p. 11) state that "A more active rental market has clearly not emerged since the reforms". Additionally, there are concerns expressed about restrictions on land use. Hung and Murata (2001) and The World Bank in Vietnam (2001) both note that despite an official policy that supports diversification, there still remain inconsistent government documents and local pressures to produce food and rice.

In the remainder of this paper, research investigating the nature and extent of land transfers and land use changes in four provinces in Vietnam is presented and discussed.

3. Method

During 2001 a household survey was conducted in four provinces in Vietnam: Ha Tay and Yen Bai in the north, and Binh Duong and Can Tho in the south. Four hundred person-to-person interviews were conducted in 16 communes (two districts in each province). The survey was repeated in 2002, but only data from the first survey is reported in this paper.

Ha Tay province is located in the Red River Delta adjacent to the capital Hanoi. The main farming activities are rice, livestock and vegetables, although aquaculture, flower and fruit production is increasing. Yen Bai is a mountainous province in the north-west region, the poorest and most remote of the four surveyed provinces, with many households producing at subsistence level only. Main farming activities are rice (in river valleys), upland annual crops such as corn and cassava, industrial trees (paper), mixed gardens and livestock. Can Tho province is located in the heart of the Mekong Delta, and is a major rice growing region. Fruit production in this province is also important and growing. Binh Duong province is located adjacent to Ho Chi Minh City and has a very diverse agriculture, including rice, industrial trees (rubber), fruit trees and pepper. Its

location also means that some districts have substantial industrial and service provision sectors.

Given the focus of the research on land issues the sampling technique used at district level was ‘purposefully stratified’ rather than random. With the help of provincial and district authorities, two districts were chosen in each province: one with larger than average farm size for the province, and one with smaller than average farm size. Within each district this was repeated: one commune with larger than average farm size for the district was chosen to survey, and one with smaller than average farm size. Within these communes households with a range of production activities were selected with the help of commune officials, with poor, average and wealthier households represented in a ratio that approximated the population of the commune overall.

A wide range of mostly quantitative data were collected relating to land holdings and land use, assets, production (overall and on an individual plot basis), income sources, prices paid and received, use of credit, and perceptions of yield and price risk. Additionally, a number of qualitative questions were asked about land holdings and land use.

4. Survey results

4.1 Land holdings

To give an idea of the variability in farm size and plot numbers, general information on land holdings in four sample communes is shown in Table 1. For each of Ha Tay and Can Tho provinces, data are shown for the communes with larger than average farm size from the district with larger than average farm size (Thach Hoa and Truong Thanh), and the communes with smaller than average farm size in the district with smaller than average farm size (Song Phuong and Dong Thanh). Farm size in the southern province (Can Tho) is generally larger and less fragmented (fewer plots) than farms in the northern province (Ha Tay). However, these averages hide a great deal of variability in farm size within individual communes. Figures 1 and 2 show the range of household size for farms in the northern and southern communes respectively. Thach Hoa has a much larger variability in farm size than Song Phuong, and Truong Thanh has a much greater variability than Dong Thanh.

Land held by the households was classified as either cultivated land, perennial land, land used for livestock, ponds, land for forestry or settlement land. The percentage of land area as a whole held by the households under these classifications is shown in Figures 3 and 4. Most land is either cultivated or perennial land, but individual variation within households is considerable. Some farms in all communes have either all perennial land or all cultivated land, and the area of ponds is as high as 71 percent of the total area for one household in Song Phuong, and land for forestry as high as 61 percent of the total area for one household in Thach Hoa.

Table 1 Description of land holdings in 4 communes in Ha Tay province

Province	Ha Tay		Can Tho	
District	Thach That (L)	Dan Phuong (S)	O Mon (L)	Chau Thanh (S)
Commune	Thach Hoa (l) (n = 20)	Song Phuong (s) (n = 26)	Truong Thanh (l) (n = 24)	Dong Thanh (s) (n = 22)
Land farmed in 2000 (m²):				
Average total area farmed/hh	9,412	5,310	15,943	9,082
Average number of plots/hh	7	5	2.2	2.4
Average plot size (commune)	1,263	1,096	7,358	3,770
Median plot size (commune)	360	480	6,500	3,000
Avg size of smallest plot/hh	206	324	5,192	3,223
Avg size of largest plot/hh	5,475	3,064	10,148	5,905

The letters “S” and “L” indicate districts and communes with smaller or larger average farm size.

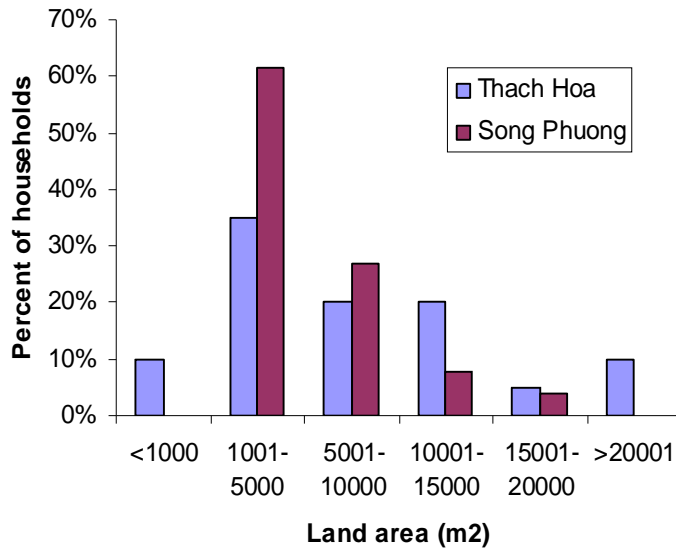


Figure 1 Household land area distribution in Thach Hoa and Song Phuong communes, Ha Tay province

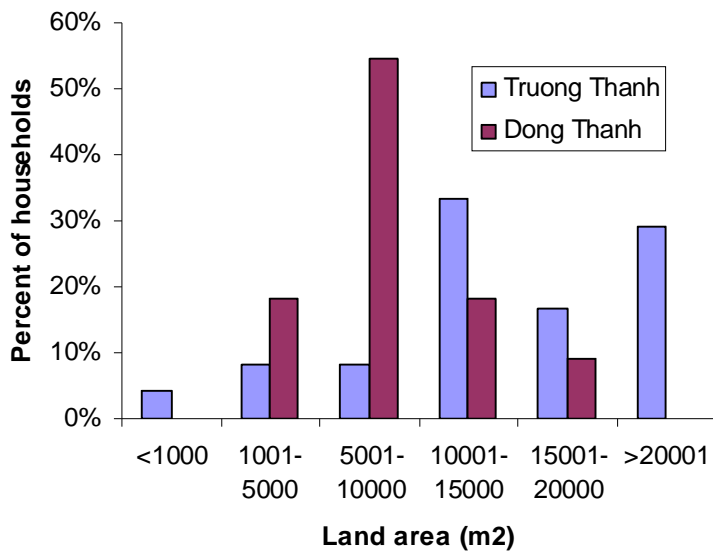


Figure 2 Household land area distribution in Truong Thanh and Dong Thanh communes, Can Tho province

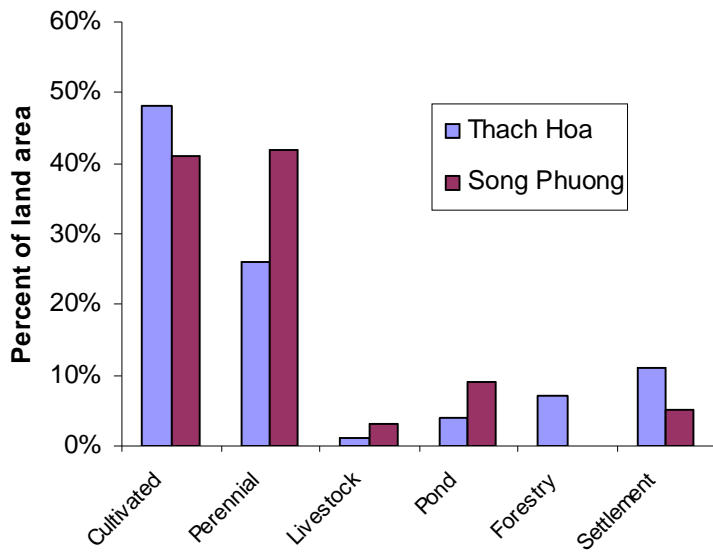


Figure 3 Percent of land in various land use classifications calculated for all surveyed households in Thach Hoa and Song Phuong, Ha Tay province

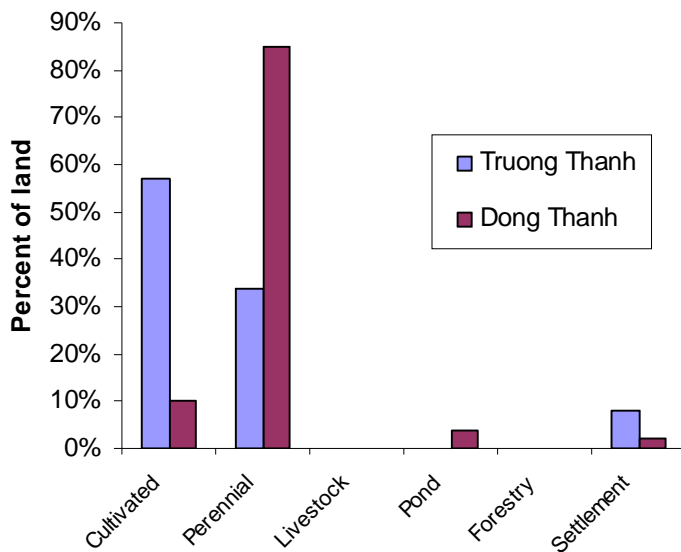


Figure 4 Percent of land in various land use classifications calculated for all surveyed households in Truong Thanh and Dong Thanh, Can Tho province

4.2 Sources of farm household land

Land farmed by the households has been acquired in various ways. Tables 2 to 5 show the source of all the land farmed by the surveyed households, expressed as a percentage of the total area held, and as a percentage of total plots held. There is considerable difference between the northern and the southern communes, especially in the area of land that is designated as having been allocated. In the southern communes, more households reported land as either inherited or having been held for a long time (*tu lau*). Also, we have no data, or an unspecified way in which the land had been acquired, for a large percentage of the land in the southern communes, indicating that our survey had some serious deficiencies in the appropriateness of the way the question about land holdings was asked of southern households. “Land acquired by other means” could include land that is inherited and land that has been bought, as these were not specific stated options offered to households in the interview. In some cases, households stated the “other reason” as land bought or inherited, and these replies have been reported separately.

Table 2 Sources of household land in four communes in Ha Tay province

Province	Ha Tay			
	District	Thach That (<i>L</i>) [#]		Dan Phuong (<i>S</i>) [#]
Commune	Dai Dong (<i>s</i>) (n = 25)	Thach Hoa (<i>l</i>) (n = 20)	Song Phuong (n = 26)	Tho Xuan (<i>l</i>) (n = 26)
Of total land farmed by the hhs in 2000, the % of land:				
Allocated	68%	70%	32%	50%
Inherited	-	-	1%	1%
Borrowed	6%	4%	2%	0%
Rented-in	5%	2%	4%	10%
Bought	6%	-	3%	-
Acquired by auction	5%	23%	55%	29%
Acquired by exchange	4%	0%	2%	4%
Acquired by other means*	1%	0.1%	0%	1%
No data	4%	0.3%	2%	5%
Of total plots farmed by the hhs in 2000, the percent:				
	Plots = 207	Plots = 149	Plots = 126	Plots = 118
Allocated	69%	87%	63%	67%
Inherited	-	-	3%	4%
Borrowed	4%	4%	2%	0%
Rented-in	7%	2%	5%	6%
Bought	7%	-	2%	1%
Acquired by auction	6%	5%	17%	11%
Acquired by exchange	0%	0%	2%	3%
Acquired by other means*	1%	1%	0%	2%
No data	5%	1%	6%	6%

The letters “S” and “L” indicate districts and communes with smaller or larger average farm size.

* “Other means” could include land that is both inherited and bought as both these options were not given as a definite choice.

In Ha Tay province, although the area allocated may not be 50 percent of the total in all communes, the total plots allocated in all communes represents more than 60 percent of the plots farmed. For the surveyed households, there is a substantial area of land and plots in these communes that has been acquired by either borrowing, renting, buying, or exchange. However, by far the greatest area and number of additional plots have been acquired by households through the auction process, from the commune, cooperative (hop tac xa) or army. It can be seen that land acquired in this way is generally a large plot, as for example, it represents 55 percent of the land area of the households surveyed in Song Phuong, but only 17 percent of the plots.

Some households in all four communes have rented-in as much as 30 to 65 percent of their farmed land, and acquired through auction from 20 to 100 percent of their farmed land.

Table 3 Sources of household land in four communes in Yen Bai province

Province	Yen Bai			
District	Van Yen (L)		Yen Binh (S)	
Commune	Mau Dong (s) (n = 24)	Dong Cuong (n = 25)	Bao Ai (s) (n = 22)	Dai Dong (l) (n = 20)
Of total land farmed by the hhs in 2000, the % of land:				
Allocated	84%	58%	90%	53%
Inherited	1%	1%	0.8%	-
Borrowed	0%	0.1%	0%	0.1%
Rented-in	0.3%	0.2%	0.8%	0%
Bought	-	-	-	-
Acquired by auction	1%	13%	0%	0.3%
Acquired by exchange	0%	0%	0%	0%
Acquired by other means	7%	1%	5.1%	0.6%
No data	6%	28%	3.2%	46.3%
Of total plots farmed by the hhs in 2000, the percent:				
	Plots = 198	Plots = 163	Plots = 156	Plots = 175
Allocated	70%	76%	75%	72%
Inherited	4%	3%	2%	1%
Borrowed	1%	1%	0%	1%
Rented-in	1%	1%	1%	0%
Bought	-	-	-	-
Acquired by auction	4%	2%	0%	2%
Acquired by exchange	0%	0%	0%	0%
Acquired by other means	8%	6%	13%	6%
No data	13%	12%	9%	18%

The letters “S” and “L” indicate districts and communes with smaller or larger average farm size.

* “Other means” could include land that is both inherited and bought as both these options were not given as a definite choice.

The relatively large amount of land in Dong Cuong and Dai Dong communes for which there are no data could be a reflection of uncertainty associated with forest land, which has been slower to be allocated in most areas. These are the communes with larger land area, and large land area is often associated with a greater amount of forest land. For the surveyed households in these communes there is much less evidence, compared to the communes in Ha Tay province, of land having been acquired by renting, buying, exchange and by auction for commune or cooperative land. In these communes land “acquired by other means” is often reclaimed land (khai hoang), which is basically expansion by households into areas previously either degraded or considered too infertile to farm, or land received from the spouse on marriage.

Some households in Bao Ai and Mau Dong have rented-in as much as 34 and 21 percent of their farmed land respectively, and one household in Dong Cuong has acquired 94 percent of its farmed land through auction. In other communes, the percentage of land farmed by the household acquired by either rental or auction is low.

Table 4 Sources of household land in four communes in Binh Duong province

Province	Binh Duong			
	District	Ben Cat (<i>L</i>)		Thuan An (<i>S</i>)
	Commune	An Tay (<i>s</i>) (n = 22)	Lai Uyen (<i>l</i>) (n = 21)	Vinh Phu (<i>s</i>) (n = 24)
Of total land farmed by the hhs in 2000, the % of land:				
Allocated	58%	49%	21%	52%
Inherited or “tu lau”	8%	7%	8%	14%
Borrowed	1%	3%	0%	2%
Rented-in	0%	0%	12%	0%
Bought or “cam co”	4%	8%	0%	7%
Acquired by auction	0%	1%	0%	0.3%
Acquired by exchange	0%	0%	0%	0%
Acquired by other means	26%	27%	51%	20%
No data	2%	6%	8%	4%
Of total plots farmed by the hhs in 2000, the percent:				
	Plots = 51	Plots = 59	Plots = 55	Plots = 53
Allocated	41%	27%	27%	15%
Inherited or “tu lau”	8%	7%	9%	26%
Borrowed	2%	8%	0%	2%
Rented-in	0%	0%	5%	0%
Bought or “cam co”	4%	8%	0%	4%
Acquired by auction	0%	2%	0%	2%
Acquired by exchange	0%	0%	0%	0%
Acquired by other means	39%	34%	44%	45%
No data	6%	14%	15%	6%

The letters “S” and “L” indicate districts and communes with smaller or larger average farm size.

* “Other means” could include land that is both inherited and bought as both these options were not given as a definite choice.

In the households surveyed in Binh Duong province a much smaller percentage of land area and plots is designated as allocated, and more land has been inherited or “had for a long time” (tu lau). No land has been acquired by exchange, and this is not surprising given that households in the southern communes do not have such fragmented land holdings as in the north. Some households in An Son, Lai Uyen and An Tay have bought in almost 100 percent of the land they now farm.

Table 5 Sources of household land in four communes in Can Tho province

Province	Can Tho			
District	O Mon (L)		Chau Thanh (S)	
Commune	Dong Hiep (s) (n = 22)	Truong Thanh (l) (n = 24)	Dong Thanh (s) (n = 22)	Dong Phuoc (l) (n = 22)
Of total land farmed by the hhs in 2000, the % of land:				
Allocated	11%	11%	25%	23%
Inherited or “tu lau”	42%	34%	34%	27%
Borrowed	0%	0%	0%	0%
Rented-in	0%	0%	0%	0%
Bought or “cam co”	16%	11%	10%	11%
Acquired by auction	0%	0%	0%	0%
Acquired by exchange	0%	0%	0%	0%
Acquired by other means	13%	18%	22%	11%
No data	18%	25%	9%	28%
Of total plots farmed by the hhs in 2000, the percent:				
	Plots = 44	Plots = 52	Plots = 54	Plots = 42
Allocated	9%	17%	26%	21%
Inherited or “tu lau”	30%	27%	33%	38%
Borrowed	0%	0%	0%	0%
Rented-in	0%	0%	0%	0%
Bought or “cam co”	20%	10%	7%	10%
Acquired by auction	0%	0%	0%	0%
Acquired by exchange	0%	0%	0%	0%
Acquired by other means	20%	19%	22%	7%
No data	20%	27%	11%	24%

The letters “S” and “L” indicate districts and communes with smaller or larger average farm size.

* “Other means” could include land that is both inherited and bought as both these options were not given as a definite choice.

As in Binh Duong province, in Can Tho province a much smaller percentage of land area and plots is reported as allocated, and more land has been inherited or “had for a long time” (tu lau). No land is reported as been acquired by borrowing, renting or exchange. More than 10 percent of land in all four communes has been either bought or acquired through “cam co” (a type of mortgage arrangement). A large percentage of land has been acquired “by other means”. This could include bought land. Some households in all the communes have bought from 65 to 100 percent of their farmed land.

4.3 Evidence of the extent of market-based LUR transfers

The data on land sources can be assessed so that an estimate can be made of the percentage of households that have been involved in LUR transaction activities, such as buying/selling and leasing/renting since 1992. Data for the four provinces are shown in Tables 6 to 9. Note that these data do not necessarily show the percent of households

with net land gains or losses, they simply reflect the percent of households that have engaged in these types of transactions in any year since 1992. LURs bought or sold are often recorded as having been “bought/sold for x years”. This is in effect a rent, but the rental money is paid up front as a lump sum. If the household reports they have either rented-in or rented-out land then the rental is paid either per season or per year. In this analysis, land recorded as having been “bought” or “sold” for a specified time is treated as a “sale” or a “purchase”, as this is how farmers talk about these transactions.

Table 6 Percentage of surveyed households in Ha Tay province involved in LUR transaction activities since 1992

Province	Ha Tay			
	District	Thach That (<i>L</i>) [#]		Dan Phuong (<i>S</i>) [#]
Commune	Dai Dong (<i>s</i>) (n = 25)	Thach Hoa (<i>l</i>) (n = 20)	Song Phuong (n = 26)	Tho Xuan (<i>l</i>) (n = 26)
Percent of households engaged in:				
Borrowing land	16%	20%	12%	0%
Renting-in land	32%	10%	12%	19%
Auctioning-in land	44%	20%	50%	31%
Exchanging-in land	4%	0%	4%	12%
Buying land ^{\$}	20%	0%	8%	4%
Lending land	0%	10%	0%	0%
Renting-out land	8%	0%	8%	4%
Selling land ^{\$}	4%	5%	0%	0%
Losing land by exchange	8%	0%	19%	38%
Giving land back to the HTX*	28%	15%	23%	19%
Giving land to offspring	12%	0%	0%	0%

The letters “S” and “L” indicate districts and communes with smaller or larger average farm size.

\$ Note that these figures could be under estimates. Some purchases or sales may be included in “land acquired or lost by other means” (percentages not shown).

* HTX = Hop tac xa (Cooperative)

Of the two northern provinces, Ha Tay province shows much more LUR transaction activity than Yen Bai province. In Ha Tay province, more than 10 percent of surveyed households have rented-in land in all communes, with more than 30 percent doing so in Dai Dong. More than 20 percent of surveyed households have been successful in obtaining land by auction, with the percentage as high as 50 and 44 percent in Song Phuong and Dai Dong respectively. Instances of land being acquired through exchange are generally low, with the highest percentage being 12 percent of households in Tho Xuan. Except for Dai Dong, the percentage of households who have bought LURs is also low.

The data for LUR transactions resulting in the loss of land show some differences. Far fewer households have rented-out or sold LURs than those who have rented-in or bought land. However, many households report losing land by exchange (although few reported obtaining land by exchange) and returning land to the Cooperative (Hop tac xa).

Table 7 Percentage of surveyed households in Yen Bai province involved in LUR transaction activities since 1992

Province	Yen Bai				
	District	Van Yen (<i>L</i>)		Yen Binh (<i>S</i>)	
	Commune	Mau Dong (<i>s</i>) (n = 24)	Dong Cuong (n = 25)	Bao Ai (<i>s</i>) (n = 22)	Dai Dong (<i>l</i>) (n = 20)
Percent of households engaged in:					
Borrowing land		4%	4%	0%	10%
Renting-in land		8%	4%	9%	0%
Auctioning-in land		25%	12%	0%	10%
Exchanging-in land		0%	0%	0%	0%
Buying land		-	-	-	-
Lending land		0%	4%	0%	5%
Renting-out land		0%	0%	0%	0%
Selling land		-	-	-	-
Losing land by exchange		0%	0%	0%	0%
Giving land to offspring		0%	4%	5%	10%

The letters “*S*” and “*L*” indicate districts and communes with smaller or larger average farm size.

The extent of LUR transaction activities is much lower in Yen Bai province (Table 7). Less than 10 percent of surveyed households have rented-in land and no buying activities are reported (except in Dong Cuong commune where one 800 m² plot is recorded as “bought until 2019” for a price of 2 million VND). More than 10 percent of households have been successful in auctioning for land, except in Bao Ai where no land is reported as being acquired through auction. Similarly, few households report having rented-out or bought LURs. Also, no households report being involved in land exchange transactions.

Reported LUR activity in Binh Duong province is generally low in all communes (Table 8). Exceptions are Vinh Phu where 13 percent of households have rented-in land, and Lai Uyen where 19 percent of households have bought land. In Can Tho province, no households report renting-in land, but 9 to 23 percent of surveyed households in the four communes report that they have bought LURs. However, less than 10 percent in all communes report selling LURs. It should be noted that in both these southern provinces, some of these reported sale and purchase transactions took place before 1992.

Table 8 Percentage of surveyed households in Binh Duong province involved in LUR transaction activities since 1992

Province	Binh Duong				
	District	Ben Cat (<i>L</i>)		Thuan An (<i>S</i>)	
	Commune	An Tay (<i>s</i>) (n = 22)	Lai Uyen (<i>l</i>) (n = 21)	Vinh Phu (<i>s</i>) (n = 24)	An Son (<i>l</i>) (n = 21)
Percent of households engaged in:					
Borrowing land		5%	10%	0%	5%
Renting-in land		0%	0%	13%	0%
Auctioning-in land		0%	5%	0%	5%
Exchanging-in land		0%	0%	0%	0%
Buying land ^{\$}		9%	19%	0%	5%
Lending land		0%	0%	4%	0%
Renting-out land		0%	0%	0%	0%
Selling land ^{\$}		0%	5%	4%	0%
Losing land by exchange		0%	0%	0%	0%
Giving land to relatives		0%	0%	0%	0%

The letters “S” and “L” indicate districts and communes with smaller or larger average farm size.

\$ Note that these figures could be either over or under estimates. Some land was bought or sold prior to 1992, and some sales may be included in “land acquired or lost by other means” (percentages not shown).

Table 9 Percentage of surveyed households in Can Tho province involved in LUR transaction activities since 1992

Province	Can Tho				
	District	O Mon (<i>L</i>)		Chau Thanh (<i>S</i>)	
	Commune	Dong Hiep (<i>s</i>) (n = 22)	Truong Thanh (<i>l</i>) (n = 24)	Dong Thanh (<i>s</i>) (n = 22)	Dong Phuoc (<i>l</i>) (n = 22)
Percent of households engaged in:					
Borrowing land		0%	0%	0%	0%
Renting-in land		0%	0%	0%	0%
Auctioning-in land		0%	0%	0%	0%
Exchanging-in land		0%	0%	0%	0%
Buying land ^{\$}		23%	13%	9%	14%
Lending land		0%	0%	0%	0%
Renting-out land		0%	0%	5%	0%
Selling land ^{\$}		9%	4%	5%	0%
Losing land by exchange		0%	0%	0%	0%
Giving land to relatives		0%	0%	0%	5%

The letters “S” and “L” indicate districts and communes with smaller or larger average farm size.

\$ Note that these figures could be either over or under estimates. Some land was bought or sold prior to 1992, and some sales may be included in “land acquired or lost by other means” (percentages not shown).

Households were also asked if they wanted to rent more land, and if so, what prevented them from doing so (Tables 10 and 11). Most households had a firm opinion on this question, with only a few answering “maybe” in most communes. The desire to rent more land is markedly different in the southern and northern communes. Over 70 percent of surveyed households in all southern communes except Dong Hiep said that they did not want to rent more land. Over 40 percent of surveyed households in all northern communes said they would like to rent more land (and this percentage was over 60 percent in two communes in Ha Tay province). The percentage of households wanting to rent more land was highest in Ha Tay province and lowest in Binh Duong.

Table 10 Percentage of households reporting that they would like to rent more land

Commune	Percentage of households*		
	Yes	No	Maybe
Ha Tay:			
Dai Dong (<i>Ls</i>) [#] (n=27)	63	37	0
Thach Hoa (<i>Ll</i>) (n=20)	40	55	5
Song Phuong (<i>Ss</i>) (n=26)	50	50	0
Tho Xuan (<i>Sl</i>) (n=26)	69	27	0
Yen Bai:			
Mau Dong (<i>Ls</i>) (n=25)	40	44	12
Dong Cuong (<i>Ll</i>) (n=25)	40	60	0
Bao Ai (<i>Ss</i>) (n=22)	45	27	23
Dai Dong (<i>Sl</i>) (n=20)	45	50	5
Binh Duong:			
An Tay (<i>Ls</i>) (n=22)	9	86	0
Lai Uyen (<i>Ll</i>) (n=21)	14	71	10
Vinh Phu (<i>Ss</i>) (n=24)	8	88	4
An Son (<i>Sl</i>) (n=21)	19	76	5
Can Tho:			
Dong Hiep (<i>Ls</i>) (n=22)	36	41	18
Truong Thanh (<i>Ll</i>) (n=24)	17	75	8
Dong Thuan (<i>Ss</i>) (n=22)	5	82	14
Dong Phuoc (<i>Sl</i>) (n=22)	23	73	5

* Percentages may not add to 100% because some households did not answer the question

“L” and “S” refer to comparative average large or small land areas for the communes

“Lack of available land”, “lack of funds” and “not having enough labour” were reasons given for not being able to rent more land, but generally “lack of available land” appears to be a greater issue in the northern communes than the southern communes, and “lack of funds” more an issue in the southern than the northern communes (see Table 11). Procedures for renting land were only perceived as a problem by two households, and the land limit was not perceived as a problem by any of the surveyed households.

Table 11 Reasons given by farm households for not being able to rent more land

Commune	As percentage of households wanting to rent more land*					
	No land available	Not enough funds	Not enough labour	Procedure too complicated	Already have land limit	Other reason
Ha Tay:						
Dai Dong (<i>Ls</i>) [#] (n=17)	88	24	6	6	0	6
Thach Hoa (<i>Ll</i>) (n=9)	100	11	11	0	0	0
Song Phuong (<i>Ss</i>) (13)	92	8	8	0	0	0
Tho Xuan (<i>Sl</i>) (n=18)	89	11	6	0	0	11
Yen Bai:						
Mau Dong (<i>Ls</i>) (n=13)	92	15	8	0	0	0
Dong Cuong (<i>Ll</i>) (n=10)	90	10	10	0	0	0
Bao Ai (<i>Ss</i>) (n=15)	67	20	13	0	0	13
Dai Dong (<i>Sl</i>) (n=10)	50	30	0	0	0	10
Binh Duong:						
An Tay (<i>Ls</i>) (n=2)	100	50	50	0	0	0
Lai Uyen (<i>Ll</i>) (n=5)	100	60	20	0	0	20
Vinh Phu (<i>Ss</i>) (n=3)	33	67	67	33	0	33
An Son (<i>Sl</i>) (n=5)	40	60	0	0	0	0
Can Tho:						
Dong Hiep (<i>Ls</i>) (n=12)	42	67	8	0	0	17
Truong Thanh (<i>Ll</i>) (n=6)	17	100	17	0	0	0
Dong Thuan (<i>Ss</i>) (n=4)	50	75	25	0	0	0
Dong Phuoc (<i>Sl</i>) (n=6)	50	100	0	0	0	17

* Percentages may add to more than 100% because some households nominated more than one reason.

“L” and “S” refer to comparative average large or small land areas for the communes

In the survey overall, few households said they were interested in “selling” (chuyen nhuong) their land use rights, between one to two households in about half the communes. The most common reason given for not selling LURs was “high risks”. Other reasons given include “complicated procedure”, “don’t have another job”, and “unable to leave”.

4.4 Prices paid and received for LUR transactions

The data for LUR transfer activities in Section 4.3 (reported as the percentage of households engaging in the activity) underestimates to some extent the amount of market-oriented activity, as some households rent-in/out, buy/lease or bid for LURs many times over. The number of reported LUR transactions by surveyed households is shown in Table 12 by province. Ha Tay has by far the highest rent-in/out activity, with a recorded 42 transactions compared to 5 or less in other provinces. The number of rent-in/out transactions in Ha Tay has increased since 1997. Ha Tay, Binh Duong and Can Tho all record considerable buy/sell activities (ranging from 16 to 28), but there is a distinct difference between Ha Tay and the southern provinces: more buy/sell transactions took place prior to 1997 in Can Tho and Binh Duong, whereas in Ha Tay more transactions have taken place from 1997 onwards. Most auction transactions take place in Ha Tay

(53) and Yen Bai (14). In Ha Tay the number of these transactions has also increased from 1997.

Table 12 Number of reported LUR transactions by category of transaction and province

	Number of reported LUR transactions			
	Ha Tay (n = 97)	Yen Bai (n = 91)	Binh Duong (n = 88)	Can Tho (n = 90)
Rent-in				
Prior to 1997	7	2	1	0
1997 and after	20	2	2	0
Year unknown	3	1	0	0
Rent-out				
Prior to 1997	3	0	0	0
1997 and after	9	0	0	1
Year unknown	0	0	0	0
Buy				
Prior to 1997	4	0	5	12
1997 and after	13	0	1	2
Year unknown	0	0	2	8
Sell				
Prior to 1997	0	0	5	2
1997 and after	3	0	3	2
Year unknown	0	0	0	2
Auction				
Prior to 1997	16	3	0	0
1997 and after	32	5	0	0
Year unknown	5	6	2	0

Of these transactions, only households in Ha Tay province reported a price for a significant number of the transactions. Generally, fewer prices were recorded for land acquired by auction. In the southern provinces, if a price was given for land bought or sold, it was usually in gold. This was never the case in the northern provinces, where prices were always reported in VND. Many prices for renting in and out were given in kilograms of rice per year or season. Average prices for various LUR transactions in Ha Tay province are shown in Table 13. These prices assume a price for paddy rice (thoc) of 1200 VND/kg.

There is insufficient data to comment on price differentials over time for much of the data, but it appears that for cultivated land, there has been a significant price increase for both land rented-in and land obtained by auction since 1997. Standard deviations are large in many cases, but this probably reflects different land classes within the broad overall classification of cultivated land. In fact the data show this land is used to grow a range of crops, from low value cassava and rice to higher value vegetables and flowers.

The prices paid for rented-in and auctioned land appear to be similar, given the limitations of the data. Statistical tests for differences were not conducted because of the small number of data and the likelihood that land class differences confound the data. Similarly, the price received for rented-out land appears to be consistent with the price paid for rented-in land. The auction price paid for a pond does not appear to have increased since 1997, and is now considerably below cultivated land. This is surprising given the profitability of aquaculture enterprises. The price of perennial land is higher than cultivated land, reflecting its generally higher earning capacity.

Table 13 Average prices for LUR transactions in Ha Tay province by land type

LUR Transaction	Cultivated land		Perennial land		Pond	
	No.	Price (VND/m ²)	No.	Price (VND/m ²)	No.	Price (VND/m ²)
Rent-in						
Prior to 1997	7	219 (24.5) [#]	1	673		
1997 and after	19	584 (311)				
Rent-out						
Prior to 1997	2	500 (236)				
1997 and after	10	509 (118)				
Buy						
Prior to 1997	1	4167				
1997 and after	13	5092 (2376)				
Sell						
Prior to 1997	-	-				
1997 and after	3	8222 (10200)				
Auction						
Prior to 1997	2	221 (65)	4	606 (128)	3	315 (210)
1997 and after	4	476 (318)	1	667	6	278 (61)

Standard deviation in parenthesis

Note: To obtain these prices paid and received the price of paddy rice (thoc) has been valued at 1200 VND/kg

4.5 Evidence of land consolidation and land loss

Surveyed households were asked how the amount of land farmed by the household had changed in the last five years (Table 14). In all but Ha Tay province, over 60 percent of surveyed households report that the land area they farm has stayed “about the same”. However, many households, especially so in Ha Tay province, report an increase in farmed area. Only in two communes in Can Tho province, Dong Thuan and Dong Hiep, do a greater percentage of households report decreased farmed area than increased farmed area.

Table 14 Percentage of surveyed households reporting increases or decreases in land area farmed in the last five years

Commune	Percentage of households*				
	Increased a lot	Increased a little	About the same	Decreased a little	Decreased a lot
Ha Tay:					
Dai Dong (<i>Ls</i>) [#] (n=27)	22	33	26	11	7
Thach Hoa (<i>Ll</i>) (n=20)	10	30	40	20	0
Song Phuong (<i>Ss</i>) (n=26)	27	27	35	12	0
Tho Xuan (<i>Sl</i>) (n=26)	23	23	31	19	0
Yen Bai:					
Mau Dong (<i>Ls</i>) (n=25)	16	12	72	0	0
Dong Cuong (<i>Ll</i>) (n=25)	4	8	80	8	0
Bao Ai (<i>Ss</i>) (n=22)	5	18	68	9	0
Dai Dong (<i>Sl</i>) (n=20)	0	15	70	15	0
Binh Duong:					
An Tay (<i>Ls</i>) (n=22)	5	9	77	9	0
Lai Uyen (<i>Ll</i>) (n=21)	10	5	67	0	14
Vinh Phu (<i>Ss</i>) (n=24)	0	13	78	0	9
An Son (<i>Sl</i>) (n=21)	0	24	71	5	0
Can Tho:					
Dong Hiep (<i>Ls</i>) (n=22)	9	5	64	14	9
Truong Thanh (<i>Ll</i>) (n=24)	4	8	83	4	0
Dong Thuan (<i>Ss</i>) (n=22)	0	9	68	18	5
Dong Phuoc (<i>Sl</i>) (n=22)	5	9	82	5	0

* Percentages may not add to 100% because some households did not answer the question

“L” and “S” refer to comparative average large or small land areas for the communes

Households were asked the reason for the land area change. There is some discrepancy in the way the question was answered, with some households saying, for example, the reason was “to increase income” or “use available labour more efficiently”, and others that “they had rented, borrowed and/or bought land”. There are also differences in these replies for different provinces, reflecting the data presented earlier in Sections 4.2 and 4.3.

In Thach That district, Ha Tay province (with larger than average farm size), 21 households gave reasons for an increase in land farmed: nine saying more land was leased (this would include land obtained by auction), exchanged or borrowed; seven saying they wanted to use excess labour; and five saying they wanted to expand production. Seven households gave reasons for a decrease in land area: two returning land to the cooperative or army; two renting-out land; one “reducing paddy rice area”; one transferring land to family members; and one having to sell and rent land to pay hospital expenses for family members.

In Dan Phuong district, Ha Tay province (with smaller than average farm size), 22 households gave reasons for an increase in land farmed: 16 saying that more land was leased, bought, exchanged or borrowed; three saying that they received more land after

“adjustment” by the commune; one saying they wanted to use excess labour; and two saying they wanted to expand production. Six households gave reasons for a decrease in land area: three having a smaller land area after exchange, two having less land after “adjustment” by the commune; and one renting out land.

In Van Yen district, Yen Bai province (larger than average farm size), seven households gave reasons for an increase in farm size: four saying they had been allocated more land; two reclaiming land; and one buying land. The three households giving reasons for a decrease in farm size said that land had been distributed to family members. In Yen Binh district, Yen Bai province (smaller than average farm size), nine households gave reasons for an increase in farm size: eight saying they had leased or bought more land; and one that they had been allocated more land. Two households gave reasons for losing land: one because of distribution to family members and one had rented out land.

In Ben Cat district, Binh Duong province (larger than average farm size), six households gave reasons for an increase in farm size: two saying they had leased or bought more land; two that they wanted to increase production; one that they wanted to use the household’s labour; and one that they were allocated more land. Four households gave reasons for a decrease in farm size: two that they had insufficient labour; one distributing land to family; one selling land to cover education expenses; and one needing to cover production losses.

In Thuan An district, Binh Duong province (smaller than average farm size), eight households gave reasons for an increase in farm size: five saying they had leased, borrowed or bought land; two that they had inherited land; and one that they wanted to use family labour. Three households gave reasons for a decrease in farm size: two giving the reason as “unprofitable production”, and one selling land.

In O Mon district, Can Tho province (larger than average farm size), five households gave reasons for an increase in farm size: four saying they had bought more land and one wanting to increase production. Four households also reported a decrease in farm size: two having to sell land to cover bank debts (“the bank foreclosed on the mortgage”); one selling land; and one “digging a ditch through the paddy”. In Chau Thanh district, Can Tho province (smaller than average farm size), three households gave reasons for an increase in farm size: two households buying land and one household inheriting land. Six households gave reasons for a decrease in farm size: two leasing or selling land; two distributing land to family members; and two to pay hospital expenses.

The survey interviewed no landless households. However, twelve households in total reported having less than 1000 m² of land, making them effectively “landless”. Of these, eight had not lost land in the last five years. In Dai Dong commune, Ha Tay province, one household with 576 m² reported distributing land to family members. Another household with 900 m² reported having to sell and rent-out land to pay hospital expenses for the mother and eldest son. This household was officially classified as a “poor” household (receiving government assistance). In Dong Cuong commune, Yen Bai province, one household with 200 m² reported leasing land because of “unprofitable

production”. This household was officially classified as “invalided” (a priority group receiving government assistance). Another household in Dai Dong district, Yen Bai province, with 360 m² gave no reason for their decrease in farm size.

Land loss is an issue of concern in Vietnam as landlessness or near landlessness is associated with poverty (World Bank, 2000; Lan, 2001). The data on reported land loss were related to self-assessment of change in household living standards and are shown in Tables 15 and 16 for the two surveyed provinces with the greatest percentage of households reporting land loss, Can Tho and Ha Tay. Land gain is always associated with an increase or stability in living standards over the last five years. Land loss can be associated with either a decrease or increase in wellbeing, and in Ha Tay more households reported being “better off” than “worse off” after land farmed had “decreased a little”. In Ha Tay province the living standard is consistently reported as being “better off” if the land holdings are unchanged, but in Can Tho replies are divided between being “better off” and “worse off”.

Table 15 Relationship between land gain/loss and living standard change in Ha Tay province (percent of households, n = 95)

Change in living standard in last 5 yrs	Reported gain/loss of land in the last 5 years				
	Increased a lot	Increased a little	About the same	Decreased a little	Decreased a lot
A lot worse off	0%	0%	0%	1%	1%
Worse off	0%	0%	0%	0%	0%
About the same	1%	3%	0%	1%	0%
Better off	8%	22%	20%	5%	1%
A lot better off	13%	4%	14%	5%	0%

Table 16 Relationship between land gain/loss and living standard change in Can Tho province (percent of households, n = 89)

Change in living standard in last 5 yrs	Reported gain/loss of land in the last 5 years				
	Increased a lot	Increased a little	About the same	Decreased a little	Decreased a lot
A lot worse off	0%	0%	3%	0%	0%
Worse off	0%	0%	25%	6%	1%
About the same	2%	2%	19%	0%	1%
Better off	2%	4%	26%	4%	0%
A lot better off	0%	1%	2%	0%	0%

4.6 Land use changes

Surveyed households were asked whether they had changed the types of crops or livestock grown or produced in the last 5 years (Table 17). Ha Tay province had the

highest percentage of households who had made land use changes, and Yen Bai the lowest. However, in 12 out of 16 communes, more than 40 percent of households said they had made land use changes.

Table 17 Percentage of surveyed households reporting land use changes in the last 5 years

Commune	Percentage of households*		
	Yes	No	Unsure
Ha Tay:			
Dai Dong (<i>Ls</i>) [#] (n=27)	70	19	7
Thach Hoa (<i>Ll</i>) (n=20)	55	35	5
Song Phuong (<i>Ss</i>) (n=26)	62	23	15
Tho Xuan (<i>Sl</i>) (n=26)	69	27	0
Yen Bai:			
Mau Dong (<i>Ls</i>) (n=25)	48	44	4
Dong Cuong (<i>Ll</i>) (n=25)	28	56	0
Bao Ai (<i>Ss</i>) (n=22)	29	57	0
Dai Dong (<i>Sl</i>) (n=20)	45	45	0
Binh Duong:			
An Tay (<i>Ls</i>) (n=22)	27	73	0
Lai Uyen (<i>Ll</i>) (n=21)	76	19	0
Vinh Phu (<i>Ss</i>) (n=24)	42	54	0
An Son (<i>Sl</i>) (n=21)	48	43	5
Can Tho:			
Dong Hiep (<i>Ls</i>) (n=22)	32	55	0
Truong Thanh (<i>Ll</i>) (n=24)	54	38	4
Dong Thuan (<i>Ss</i>) (n=22)	64	27	0
Dong Phuoc (<i>Sl</i>) (n=22)	59	36	0

* Percentages may not add to 100% because some households did not answer the question

“L” and “S” refer to comparative average large or small land areas for the communes

The types of land use changes reported varied distinctly by commune, with a range of changes reported, including: using new varieties; seedling production; changing from rice production to other annual and perennial crops; starting, increasing or changing animal production activities; starting aquaculture activities; changing annual crops grown; and increasing or changing perennial crops grown. Some of the more frequently reported changes are as follows.

In Dai Dong commune, Ha Tay, 10 households reported changing annual crops grown (mainly from sweet potato and potato to corn and soybean), and five made changes in animal production activities. In Thach Hoa commune, Ha Tay, seven households changed the perennial crops they grew (mainly changing to or increasing fruit tree production), and six made changes in animal production activities. In Song Phuong commune, Ha Tay, six households changed from rice production to other annual or perennial crops, and six made changes to other annual crops grown. In Tho Xuan

commune, Ha Tay, a similar number of households made changes from rice production and other annual crops, in favour of soybean, vegetables, flowers and fruit trees.

In Yen Bai province, fewer changes were reported overall, but in Mau Dong commune eight households reported changes in perennial crops grown, and four households in both Mau Dong and Dong Cuong communes made changes in animal production activities.

In Binh Duong province households reported making changes to annual and perennial crops grown. In Thuan An district eight households made changes from sugarcane to other crops such as vegetables, fruit trees and jasmine. In Ben Cat district, and Lai Uyen commune in particular, 16 households reported changing from cashews and fruit trees to pepper and rubber. In Thuan An district five households said they had stopped raising pigs.

In Can Tho province many households reported making changes to perennial crops grown, mainly from citrus to a variety of other fruits including mango, banana, durian, longan, and coc. Twelve households in Dong Thanh, nine households in Dong Phuoc, 11 households in Truong Thanh and two in Dong Hiep reported these changes. Six households in Chau Thanh district also reported taking land out of rice production and into fruit trees. In this province, Dong Hiep had the fewest number of reported changes in land use.

Few households reported major restrictions on their farming activities because of restrictions on land use (see Table 18). Generally, households are only restricted on some of their land, around 5 – 20 percent or less. Over 75 percent of households in 12 out of 16 communes said that they didn't face any restrictions on their farming activities. The reasons given for restrictions on land use vary from restrictions because of land type (e.g. "can only grow rice on marshy land"), land "zoning" (e.g. "not allowed to grow tea-plants on forest land", "can't chose other crops but rice") and lack of funds, to restrictions imposed by the commune or cooperative (e.g. "to fit with irrigation timetable of the Cooperative and adjoining plots", "the Cooperative doesn't allow growing fruit trees on paddy land").

Table 18 Surveyed households reporting restrictions on the crops or livestock they can grow or produce

Commune	Percentage of households*		
	Restricted on all land	Restricted on some land	No restrictions
Ha Tay:			
Dai Dong (Ls) [#] (n=27)	4	11	85
Thach Hoa (Ll) (n=20)	0	5	80
Song Phuong (Ss) (n=26)	0	19	81
Tho Xuan (Sl) (n=26)	0	12	85
Yen Bai:			
Mau Dong (Ls) (n=25)	0	20	76
Dong Cuong (Ll) (n=25)	0	8	80
Bao Ai (Ss) (n=22)	0	9	77
Dai Dong (Sl) (n=20)	0	5	65
Binh Duong:			
An Tay (Ls) (n=22)	5	14	77
Lai Uyen (Ll) (n=21)	0	5	86
Vinh Phu (Ss)(n=24)	8	13	75
An Son (Sl) (n=21)	0	10	76
Can Tho:			
Dong Hiep (Ls) (n=22)	0	0	68
Truong Thanh (Ll) (n=24)	0	13	63
Dong Thuan (Ss) (n=22)	0	0	91
Dong Phuoc (Sl) (n=22)	5	0	73

* Percentages may not add to 100% because some households did not answer the question
[#] “L” and “S” refer to comparative larger or small average land areas for the communes

5. Discussion

5.1 Land holdings and land sources

The data for land holdings and land sources were summarised in Tables 1 to 5 and Figures 1 to 4. The data from the northern provinces show the highly fragmented land holdings that are characteristic of North Vietnam. In both the north and the south, farm size varies greatly between households and there is more variability in farm size within communes with larger than average farm size. In the northern provinces a high percentage of the both the land area and the plots are reported as having been allocated. However, in the south more land has been inherited, or been in the family for a long time. These data are consistent with what has been reported about differences in the land allocation process in the north and the south (Marsh and MacAulay, 2002; Ravallion and van de Walle, 2001). Much of the land sources data in the two southern provinces is unclear, and we hope to address this deficiency with data from a second survey conducted in 2002.

There seems to be very little evidence of land exchange, with only a small percentage of the land held in Ha Tay reported as being exchanged (*doi dat*). In all four surveyed communes in Ha Tay less than 4 percent of the surveyed area and less than 3 percent of the surveyed plots were reported as “exchanged”. Exchange of land to address excessive land fragmentation has been encouraged by government and driven ‘top-down’ in some communes by local authorities (Marsh and MacAulay, 2002), and there are now indications that it is to be further encouraged by government (Vy, 2002). However, farmers often see fragmented land holdings as catering for diversified crops and seasonal variation and can perceive exchange of land plots as being undesirable and risky (Hung and MacAulay, 2002).

However, there is considerable evidence of land having been rented, either from private sources or the communal system, and bought. It should be noted that it is generally accepted that under-reporting of rental and sale transactions occurs as households often bypass official procedures (Kerkvliet, 2000; Do and Iyer, 2002), and there is no way of knowing whether the survey data are similarly affected. By far the largest percentage of land and plots obtained by rent was found in Ha Tay province, where up to 10 percent of the land area in surveyed communes was rented from the private market, and up to 55 percent obtained through auction for land owned by the cooperative, commune or army. These figures are in excess of the figures quoted by Ravallion and van de Walle (2003), who give figures based on the 1997/98 VLSS of 5.1 percent for the private market and 2.2 percent for the “auction market”. Their figures, however, are for annual crop land only, whereas the survey data reported in this study are for all land classifications. In other provinces, percentage of land obtained by renting is generally low, and virtually zero in the southern provinces.

The reported percentage of land having been bought is highest in the southern provinces, particularly Can Tho, where all four communes report more than 10 percent of the land as having been bought. In the two northern provinces, land described as being bought (or sold) is often described as “bought/sold for x years” with x equal to anything between 6 and 19 years. Land in the southern provinces reported as bought had sometimes been obtained by “*cam co*”, a type of mortgage arrangement where the price of the land is paid upfront in gold, but the seller has the right to repay the amount (in gold) after a specified number of years and regain their land. However, the likelihood of the seller being able to do this would probably be very low.

There was also evidence of high individual percentages of land rented, obtained by auction, or bought by some households. In Ha Tay, some individual households had obtained up to 65 percent of their land by private rental and up to 100 percent of their land by auction. These figures are much larger than those reported by Chung (1994), whose 1993 survey work in the Red River Delta found that leased-in areas were small, less than 3 percent of total holdings. In Can Tho and Binh Duong, some households have bought all of their land. Generally, with a few exceptions, households in Yen Bai province do not have similar large percentages of rented or auctioned land.

From these data it is reasonable to suggest that it is likely that there is a considerable and active market for LURs in some regions, and the evidence for this is discussed further in the next section

5.2 The extent of market-based LUR transfers

The data summarised in Tables 6 to 9 and Table 12 give an indication of the extent of involvement by households in market-based LUR transactions. These data generally reflect an active market for LURs, and support other reports of increases in LUR transactions since 1993 (e.g. Do and Iyer, 2002; Chung, 2000). Overall, the number of LUR transactions (including renting-in and out, buying, selling, and auction) recorded in the survey in each province ranges from 19 in Yen Bai, 21 in Binh Duong, 29 in Can Tho, through to 115 in Ha Tay. In Ha Tay province the number of recorded LUR transactions has increased since 1997, however this is not apparent in the southern communes, and possibly reflects the more developed market economy that existed in the southern areas before the 1993 land reforms (Ravallion and van de Walle, 2003).

In Ha Tay province, the figures for involvement in the rental (10 to 32 percent of surveyed households) and auction (20 to 50 percent of surveyed households) market are surprisingly high, and certainly don't portray the "thin" rental market described by Ravallion and van de Walle (2003). From the survey data it is clear that LUR transactions in Ha Tay province have increased sharply since the 1997/98 VLSS. Even in Yen Bai province, where the land area involved in transactions is reportedly low, the percentage of households involved in renting land and obtaining land by auction is sometimes more than 10 percent among those surveyed in the commune.

In Binh Duong province, the level of involvement by households in LUR transactions is generally low, except for two communes. This is surprising, given the location of this province adjacent to Ho Chi Minh City, and the consequent off-farm employment opportunities that might be expected to provide an incentive for some households to rent-out or sell land. In Can Tho many households have bought land, from 9 percent in Dong Thanh to 23 percent in Dong Hiep, although some of this land was bought before 1992.

There is some discrepancy in the survey data in the percentages of households reporting renting-in and buying LURs, compared to those reporting renting-out and selling LURs, with the former always being higher than the latter. This suggests a sample bias towards either wealthier or more efficient farmers (that is, those able to or wanting to expand production), although it could mean that some farmers rent/sell many plots to different people. The number of households surveyed in each commune (20 to 25) is only a small percentage of the total households in the commune, and some bias caused by the small sample size is likely.

Many households in Ha Tay province reported returning land to the cooperative (hop tac xa). This is indicative of some land allocation adjustment process carried out by local authorities in these districts, and also may provide an explanation for why there appears to be such a large amount of land available for auction. There is some concern that land

for auction might bypass the market system and be made available to households through a commune controlled preferential system, and whether this “continuing exercise of communal control over land (is) synergistic with market forces or opposed to them” (Ravallion and van de Walle, 2003, p. 1). However, from the survey data it is apparent that many households have successfully obtained land through the auction process, and that the prices paid for this land are comparable to prices paid on the private rental market. This supports conclusions drawn by Ravallion and van de Walle (2003) that non-market forces affecting LUR transactions are tending to work in cooperation with market forces.

There is a clear demand for rental land, particularly so in the communes surveyed in the north. There is also a clear indication (not unsurprisingly) of constraints on the rental market, but these are not procedural constraints. That lack of available land is a serious constraint, is not surprising, and overcoming this will eventually be dependent on off-farm opportunities, and the freedom of rural people to move freely and without substantial risk into other regions and occupations. Finance is perceived as a significant constraint, particularly in the south, and this raises concerns about credit availability for farm households. Farmers do not perceive procedures and the limit on the amount of land that can be held as constraints, although economists have written much about constraints on the land market and the need for further reform (e.g. The World Bank in Vietnam, 1998; United Nations, 1999; AusAID, 2001). In practice, these seem to be secondary issues to land availability and finance.

5.3 Evidence of land consolidation and land loss

More of the surveyed households say they have gained land in the last five years, than those who say they have lost land. Again, this suggests a sample bias towards wealthier or more efficient farmers. Many households said they had more land because they had leased or bought land in the last five years. It might also be assumed that those households who said they had more land “to use labour more efficiently” or “to increase production” had also leased or bought land, although there had been further land allocation or land re-adjustments in some of the surveyed communes.

Some land loss reported is a result of distribution of land to family members. In the long run, this has the potential to further fragment land holdings. There is also some evidence of households leasing-out or selling land as a result of making a choice to move out of farming. Of those households (12) with less than 1000 m² of land, only four have lost land in the last five years. In the survey three instances of households having to sell land to cover hospital expenses (two of those in Can Tho) were recorded, and two instances of land being sold after banks foreclosed on mortgages (again both in Can Tho). Other research has shown that a high percentage of households in the Mekong region are losing land (Lan, 2001), and that some of the most common reasons are health problems (having to sell or mortgage land to pay hospital expenses), and indebtedness.

Percentages of households losing land were greatest in Ha Tay and Can Tho. In Ha Tay it is balanced by a greater percentage of households who reported land gains. In Can Tho

this is not the case. Analysis of reported land loss/gain related to household wellbeing (Table 15 and 16) show that not all households report a loss in living standard after losing land. Lan (2001) made a similar observation about some households in the Mekong Delta after survey work in 2000. This may indicate that some households are indeed moving successfully out of farming activity into other pursuits.

5.4 Changes in land use

It is clear that major land use changes are occurring at the household level, and that restrictions on land use are not perceived by farmers as a major factor preventing land use change. Types of land use changes appear to occur on a distinct commune basis, giving some indication of the general planning of agricultural activities that still takes place at the commune level. Given that land holdings are small and the need for commune authorities to coordinate services such as irrigation, and that there may be market advantages in farmers in the same area producing similar crops, this may not necessarily be a bad thing. However, the wholesale change from one crop to another, such as from cashews to pepper in Ben Cat district, Binh Duong, and from citrus to other fruit trees in Can Tho province, may have unwanted market price implications if it is widely adopted throughout many communes in these districts.

There is also some indication that some households are making many changes in the effort to find a profitable activity. For example, in Ben Cat district comments such as the following were made: “Previously we replaced sugarcane with cashews. Now we replace cashew with pepper”, and “Changed from pepper to rubber and vice versa”. Continual changes in farming activity have the potential to place both financial and managerial challenges on households, but from the survey there is no evidence that this is the case.

Ha Tay province shows the greatest amount of LUR transaction activity and also the greatest amount of reported land use change. This province is close to Hanoi and there are opportunities to provide products, such as fish, meat, vegetables, flowers and fruit for the increasingly affluent Hanoi population. There has been a sharp rise in LUR transactions in Ha Tay since 1997 and an increase in the rental price being paid for land. This suggests that profitable land use change is driving LUR transaction activity. Indeed, this is an intuitive conclusion. Ensuring that land or LURs are tradeable is necessary but not sufficient for a land market to develop. There needs to be actual or perceived profitable production opportunities to drive a land market. Ravallion and van de Walle (2003, p. 6) note that, given the complexities of the initial land allocation and the multiple market imperfections in sectors affecting agricultural production (such as labour markets, credit, information) “...it would be naïve to think that simply legislating the prerequisites for a competitive land market in this setting would make it happen.”

6. Conclusions

It should be stressed at the outset that this paper is only concerned with agricultural land, not land market activities in urban areas. Research and observation support the fact that an active LUR market for agricultural land exists in Vietnam, however, it is more

developed in some regions than others. There are distinct differences between the northern and southern provinces surveyed, with both the private and communal rental market being more active in the north than the south. In the south, LURs tend to be sold rather than rented. Some individual households in all provinces had acquired a large percentage of their land holdings either by buying LURs or renting through the private or communal market. This suggests that a re-allocation of land is occurring following the initial land allocation and the 1993 legislation that enabled LURs to be traded.

There is a clear demand for rental land, especially in the north. Lack of available land and labour and insufficient access to credit are identified as constraints on the LUR rental market. Procedures and the official land limit are not perceived as constraints. Very few households indicate that they are interested in selling their LURs, however there is some indication that some households in the three provinces close to major centres (Hanoi, Can Tho City and Ho Chi Minh City) are prepared to move out of farming, and that smaller land holdings are not always associated with a lower standard of living. Sale of LURs occurring not under duress will be very much dependent on the ability of the rural population to move profitably into off-farm employment.

Changes in land use are occurring, often seemingly on a commune or village scale. Over 40 percent of households in 12 out of 16 surveyed communes said they had made changes to their production activities in the last five years. Very few households perceive major restrictions on the agricultural activities they can pursue. The survey data support this in that it appears there have been more changes in land use following land reforms than changes in land ownership. A large proportion of households in three of the surveyed provinces (Ha Tay is the exception) reported their land holdings were “about the same” as five years ago. However, it is also apparent that land use restrictions do exist and that many land use changes are made in accordance with government plans for changing production activities on a large scale (e.g. fruit production in the Mekong Delta). Continuing government direction is indicated by Vy (2002, p.6), who states that: “Farmers have rights to change land use objectives in accordance with requirements of land protection for the benefit of society. For rice cultivation areas in particular, the change in objectives must be based on a plan”.

The extensive and increasing LUR rental market in Ha Tay province, associated with many reported land use changes, suggests that profitable land use changes are driving the rental and sale of LURs in this province. Rental prices have increased considerably, and average prices being paid for rental land indicate that crops more profitable than rice are being grown on rented land. The prices being paid for land rented through the communal system appear to approximate prices being paid on the private market, suggesting that there is not a serious distortion of the market happening in these LUR transactions.

The research results from these data lead to suggestion of the following policy implications:

- Credit availability is affecting the ability of households to rent and buy land, especially in the south. Households need access to adequate credit to enable them to take advantage of market opportunities and expand their production.

- Land availability affects the ability of households to rent and buy land. Households will not lease-out or sell their LURs unless there are opportunities for them to move freely, and without overwhelming financial risk, to other regions and employment.
- There is a need for increased research and extension activities to foster and encourage profitable land use change. Profitable land use change, combined with increased off-farm opportunities, will drive the development of the market for LURs and result in allocative efficiency gains.
- There are indications that amendments to the Land Law in 2003 will promote agricultural land exchange (Vy, 2002). There is little evidence of voluntary land exchange occurring, and some anecdotal evidence that farmers consider scattered plots less risky than consolidated land holdings. In Ha Tay province where some land exchange has occurred, it was driven by local authorities, as no doubt new initiatives will also be. A larger percentage of households in Ha Tay province reported increases in land holdings and improvements in living standards, and it is interesting to reflect whether this has been partly a result of land exchange or the more active LUR market in this province. The promotion of land exchange needs to be assessed against alternative policies to encourage the transfer of LURs through the market.
- There have been considerable changes in land use since the reforms but restrictions on land use and government direction for wholesale land use change still remain a concern. Emphasis on improving infrastructure and market information would enable farmers to make their own decisions about market opportunities and consequent land use change.

The process of land reform in Vietnam is on-going, and another revision to the Land Law is mooted for 2003. Considerable pressure is being exerted on the government in relation to the completion of allocation and registration of LURs, issues related to compensation, difficulties associated with using LURs as collateral for loans, the problems of land fragmentation and the desirability of stable and long-term tenure. There is also on-going debate about the appropriate length of tenure, ceiling levels for land holdings, and the restrictions on the transfer and use of land. There is a need to address some of these issues, but development of the agricultural land market in Vietnam is possibly now more dependent on adequate credit availability, off-farm employment opportunities, improved market information and rural infrastructure than further land reform.

7 Acknowledgements

This research was conducted as part of the ACIAR-funded project ANRE 1/97/92 “Impacts of Alternative Policy Options on the Agricultural Sector in Vietnam”. The survey reported here was implemented by Vietnamese members of the ACIAR project team from Hanoi Agricultural University No.1, Professor Dr To Dung Tien, Dr Le Huu Anh, Pham Van Hung, Nguyen Trong Dac, Nguyen Huy Cuong, Nguyen Quoc Chinh, Chu Thi Kim Loan and Nguyen Phuong Le, and also some colleagues from Can Tho University and the University of Agriculture and Forestry in Ho Chi Minh City. The

authors acknowledge their contribution in the data collection, and also many valuable discussions with our Vietnamese colleagues on a wide range of issues related to the data collected, as well as the depth of understanding they have brought to the complex issues of agricultural land use in Vietnam.

8 References

- AusAID, 2001. *Vietnam: Land administration*. Working Paper 4, Commonwealth of Australia, Australian Agency for International Development, Canberra.
- Chung, Do Kim, 1994. Resurgence of Rural Land Markets after Decollectivization in Vietnam: Empirical Findings and Policy Implications. Paper presented at the International Workshop on Social Research Methods in Agricultural Systems: Coping with Increasing Resource Competition in Asia, 2-4 November, 1994, Chang Mai, Thailand.
- Chung, Do Kim, 2000. Agricultural land market in Vietnam: current situation and policy recommendations. *Nghien Cuu Kinh Te (Economic Studies) No 1 (260)*, January 2000.
- Do, Quy-Toan and Iyer, L., 2002. Land Rights and Economic Development: Evidence from Vietnam. <http://web.mit.edu/toando/Public/land.pdf>
- Fforde, A., 1995. *Vietnam Economic Commentary and Analysis No. 7*, Aduki Pty. Ltd., Canberra.
- Hung, Pham Van and MacAulay, T.G., 2002. Land Fragmentation: Effects and Modelling Approach. Paper presented at the Vietnam Workshop “Land Use in Vietnam: Policy Issues and Research”, The University of Sydney, 14-15th November 2002.
- Hung, Pham Van and Marata, Takeshi, 2001. Impacts of Reform Policies on Agricultural Sector in Vietnam, *Journal of the Faculty of Agriculture, Kyushu University* 46 (1): 165-183.
- Kerkvliet, Benedict J. Tria, 2000. Governing Agricultural land in Vietnam: an Overview. An overview paper written for ACIAR Project ANRE 1/97/92 “Impacts of Alternative Policy Options on the Agricultural Sector in Vietnam”, Research School of Pacific and Asian Studies, The Australian National University, November 2000.
- Khiem, Nguyen Tri, Pandey, S. and Hong, Nguyen Huu, 1999. Agricultural commercialisation and land-use intensification: a microeconomic analysis of uplands of northern Vietnam. Paper presented at the workshop ‘Characterization and Understanding Rainfed Environments’, Bali, Indonesia, 5-9 December 1999.
- Lan, Lam Thi Mai, 2001. Landless Households in the Mekong River Delta - A Case Study in Soc Trang Province. *Vietnam’s Socio-Economic Development* 27, Autumn 2001, pp.56-66.
- Lee-Alaia, S., Smolik, G., Mihalakas, A., and Norton, L., 2002. Antidumping Duty Investigation of Certain Frozen Fish Fillets from the Socialist Republic of Vietnam – Determination of Market Economy Status. US Office of Policy, Import Administration, Investigation Public Document A-552-801.
<http://ia.ita.doc.gov/download/vietnam-nme-status/vietnam-nme-status.htm>

- Marsh, S.P. and MacAulay, T.G., 2002. Land reforms and the development of commercial agriculture in Vietnam: policy and issues. *Australasian Agribusiness Review 10*.
http://www.agrifood.info/Review/2002v10/2002_Index.htm
- Phien, Vu Dinh, 2001. Mechanization of rice production in Vietnam, International Workshop on Agricultural Mechanization - Issues of Priorities in the New Development Stage, Hanoi, Vietnam, Dec 2001.
- Ravallion, M., and van de Walle, D., 2001. Breaking up the Collective Farm. *World Bank Policy Research Working Paper 2710*, November 2001.
- Ravallion, M., and van de Walle, D., 2003. Land Allocation in Vietnam's Agrarian Transition. *World Bank Policy Research Working Paper 2951*, January 2003.
- The World Bank in Vietnam, 1998. *Vietnam – Advancing Rural Development from Vision to Action*. The World Bank, in collaboration with the Government of Vietnam, ADB, UNDP, FAO, and CIDA, and in consultation with international donors and NGOs, Consultative Group Meeting for Vietnam, December 7-8, 1998.
- The World Bank in Vietnam, 2000. *Vietnam – Attacking Poverty*. Vietnam Development Report 2000, Joint Report to the Government of Vietnam-Donor-NGO Poverty Working Group, Consultative Group Meeting for Vietnam, December 14-15, 1999.
- The World Bank in Vietnam, 2001. *Vietnam 2010 – Entering the 21st Century*. Vietnam Development Report 2001 Pillars of Development, Joint Report of World Bank, Asian Development Bank and UNDP, Consultative Group Meeting for Vietnam, December 14-15, 2000.
- United Nations, 1999. *Looking Ahead – A Common Country Assessment of Viet Nam*. United Nations, Hanoi.
- Vietnam News, 2002. Government to take firm measures against land management lapses. *Vietnam News*, 13th July 2002.
- Vy, Nguyen Phuong, 2002. Agricultural, Rural and Farmer's Policy in Vietnam. Paper presented at the Vietnam Workshop "Land Use in Vietnam: Policy Issues and Research", The University of Sydney, 14-15th November 2002.