The Annals of "Dunarea de Jos" University of Galati Fascicle I - 2008. Economics and Applied Informatics. Years XIV - ISSN 1584-0409

Land Reform and Rural Households in the Northern Uplands of Vietnam

Nguyen TRUNG THANH

<u>thanh.nguyen@agrar.uni-giessen.de</u> Department of Project and Regional Planning Justus Liebig University of Giessen Senckenbergstr.3, D-35390 Giessen, Germany

Abstract. This paper is the abstract of my doctoral dissertation entitled "The Impact of Land Reform on Rural Households in the Northern Uplands of Vietnam" at the Justus Liebig University of Giessen, Germany under the supervision of Prof. Dr. Siegfried Bauer. The study examined the impact of the recent land reform in Vietnam on the economy of rural households in the Northern Uplands of Vietnam. It was found that the land reform has positive impact on three important aspects of rural household's economy, namely crop production, land market participation, and afforestation. However, further improvement in terms of private land rights is needed for a more sustainable development in the region.

Keywords: Land reform, panel data, crop production, land markets, afforestation, economic incentives, rural households.

1. Motivation and Outline

Poverty and environmental degradation are recognised as critical development problems and have been given high priority on the international development agenda. It is thus not surprising that these issues have been occupying a significant place in the structural adjustment policy led by the International Monetary Fund (IMF) and the World Bank (WB) in the second half of the last century in many developing countries.

Beside adverse climatic conditions and political instability, many rural people suffer from hunger simply because they are landless or, do not hold secure tenure. Or else, their properties are so small that they cannot grow enough to feed themselves (FAO, 2002). Therefore, there is a widespread belief that land reform is an important key to development, which could contribute to overcome poverty and resource degradation.

Households are principal unit of all economic societies and the main beneficiaries of development interventions in developing countries. They are directly affected by land reforms since land is the major factor of production for their livelihoods. It is, therefore, of special interest to examine the impact of land reform on the economy of households. The findings of such studies could be served as a basis for further development efforts.

Facing the stagnation of the economy in general and the agricultural sector in particular during the collectivisation period, Vietnam started its renovation policy package known as "*Doi Moi*" in 1990s. The major starting point of this structural adjustment policy was to implement land reform with the aims of economic development and rehabilitation of forest resources.

Even though there have been a huge number of studies on land reforms in the world, differences in land tenure system and in land reform as well as inconclusive empirical evidence about the impact of land reforms have created difficulties in generalising the impact and deriving sound policy implications. In Vietnam, lack of data at household level has prevented empirical analysis on the impact of the land reform on the households' economy on the one hand; long process of land reform's implementation is also a barrier to take such a needed empirical analysis on the other. These are the context that this study was motivated.

In light of this background, the study examined the impact of the land reform policy on the economy of farm households in the Northern Uplands of Vietnam. More specifically, the study: (1) analysed the impact of land reform on agricultural production of households (inputs and outputs); (2) determined factors affecting the participation of households in agricultural land market (land rental and land sales); and (3) assessed the impact of the land reform policy on afforestation efforts of farm households (afforestation intensity and economic incentives). These issues fit well to the global concerns on poverty and degradation of natural resources. Agricultural production could reduce poverty. Land market operation promotes economic structural change. Afforestation rehabilitates forest resources and brings economic returns to farm households at the same time.

2. Theoretical Background

Property rights institutions underlie the performance and income distribution in all economies. By defining the parameters for the use of scarce resources and assigning the associated rewards and costs, the prevailing system of property rights establishes incentives and time horizons for investment, production and exchange (LIBECAP, 1986). Since property rights define the behaviour norms for the assignment and the use of resources, it is possible to predict how difference in property rights affects economic activities. That linkage is critical in research in economic history for understanding variations in growth and welfare across societies and time.

Theory in land economics has long suggested that increased tenure security - classically defined in terms of private freehold ownership recognized and protected by the state - will lead to increased productivity by stimulating greater access to and demand for credit and investment, reducing conflicts over ownership, and permitting the most efficient farmers to outbid less efficient farmers in the land market (BARROWS *ET AL.*, 1990). However, these linkages are rarely empirically demonstrated and are inconclusive. This means that more attention to this issue is needed for further concrete and verified conclusions which can be applicable in practice.

3. Methodological Approaches and Study Design

For impact assessment of development interventions, the literature offers two major approaches with different concepts of measurement: The "before versus after" and "with versus without" approaches. Both have their own advantages and disadvantages. The fact that the land reform in Vietnam was conducted nation-wide limited the use of with versus without approach. Therefore, this study used before versus after approach.

Data for the study was collected from both secondary and primary sources. Secondary data was from Vietnam Living Standards Surveys (VLSS) undertaken in 1993 and 1998 by the government of Vietnam with the technical and financial supports from the WB, FAO and other international donors (see GSO, 2000 and SPC-GSO, 1994). Primary survey was conducted in 2006. Finally, a panel data set of 133 households in the study area was used for the empirical analysis with the methods of multiple linear econometric regressions and financial analysis.

4. Findings and Policy Implications

Regarding agricultural production, the study focused on crop inputs and outputs of farm households. Because many sampled households have more than one plot of land, and because most grow several crops simultaneously on a given plot, the analysis used aggregate volume of various inputs used by the households and aggregate volume of agricultural outputs produced. The implicit assumption is that each household uses the resources at its disposal optimally. So, comparison of aggregate input and output volume over years across households are valid.

In terms of the inputs in crop production, the study dealt with manure and fertilizer application. It was found that, the land reform does have a positive impact on the volume of manure and fertilizer applied per ha in terms of both land privatisation and land titling. Other factors that have a statistically significant impact on manure use include the number of cattle, education level and ethnicity of household heads and non-farm income of the households. Other factors that have a statistically significant impact on manure and fertilizer use include number of cattle, education level and ethnicity of household heads, wealth status, non-farm income, permanent non-farm jobs and agricultural land area of households as well as input and output prices. Regarding the crop output, it was found that the land reform also has a positive impact on crop productivity in terms of both land privatization and land titling. Other significantly influencing factors on crop volume per ha are education level, ethnicity, and age of household heads, farm land area and permanent non-farm jobs. Crop productivity has temporal and spatial variations in the study area.

It is thus concluded that, the land reform has critical effects on crop production of farm households. This could be used to explain the reduction of poverty rate in Vietnam in the last decades and the change for Vietnam from a net importer to a net exporter of food.

The analysis of farm land markets was built on a framework where crop production ability, the level of local non-farm development, and secure land rights drive their operation. Farm land markets include land rental and land sales. As far as land rental market is concerned, it was found that the land reform has a positive impact on the intensity of land rental market participation through the provision of land titles. Other determinants of the participation in land rental market include dependency ratio, farm land area, wealth status, non-farm income, and crop production ability of the households. Regarding land sales market, similar result was found on the effect of the land reform. Other factors affecting the demand side of the land sales market include dependency ratio, farm land area, wealth status, non-farm income and crop production ability of households. On supply side, other determinants are farm land area, non-farm income, permanent non-farm jobs, and crop production ability of households.

Therefore, it is concluded that, the land reform has an important impact on land markets by providing land titles to households which can represent the security of land property rights. This supports the hypothesis that the provision of clear, enforceable and secure long-term rights is an essentially pre-condition for the operation of land rental and land sales markets. Both land rental and land sales markets have a positive impact on productivity and provide opportunities for the households with higher crop production ability to access land. These markets have also allowed producers with smaller land endowments to gain access to more land. These suggest that, in the study area, free land transfer actually favours poorly land-endowed households with higher crop production ability.

It was also found that non-farm development is a major factor in the development of land markets. Rapid growth of non-farm opportunities is likely to contribute to the active farm land market operation. Non-farm employment is not only a key reason for the households to supply land to rental or sale markets; the increase in such opportunities can also go a long way towards explaining the observed surge in both rental and sale activities. Households with higher non-farm income, larger land endowment, and lower crop production ability are those offering land in land markets. At the same time, there is no clear evidence of distress land sale as feared for the reduction of access to land by the poor.

Regarding the impact of the land reform on afforestation by households, the study found that the land reform including privatization and titling, positively influences the number of trees that have been planted by households by providing them an economic incentive to afforest. Besides the land reform, other factors including forest land area, wealth status and permanent non-farm opportunities of households as well as the price of timber determine the intensity of the afforestation by those households.

The economic incentive to afforest of farm households was proven by the fact that, the return of this activity choice is higher than that of the most recent alternative of agricultural crop. This means that when designated forest land is endowed to the households, economic incentives drive afforestation. This is the positive impact of the land reform on households' economy. Thus, the increases in forest cover and in the stock of forest plantation in Vietnam over the last decades are contributed by rural households' afforestation through the land reform. This is beneficial in both economic return to the households and environmental values to the whole society.

From the above findings, the following recommendations are formulated: (1) Speeding up the implementation of the land reform; (2) securing private property rights of households over farm land; (3) eliminating obstacles to the functioning of farm land markets; (4) revising the efficiency of different forest land users; (5) promoting economic growth in non-farm sectors; (5) providing farmers with credit opportunities; and (6) developing education and reducing dependency ratio.

The policy implications could be relevant not only for Vietnam but also for other transition and developing economies. However, for a more comprehensive analysis on the impact of the land reform, the study proposed the following issues as the scope for further research: (1) Focusing on the impact of land reforms at national level and the interaction with other development policies; (2) deepening the knowledge on the impact of the land reform on other aspects of households' economy, including household dynamics; and (3) involving multi- and interdisciplinary analysis in impact assessment of the land reform policy.

References

- 1. BARROWS, R., and M. ROTH (1990): Land Tenure and Investment in African Agriculture: Theory and Evidence. Journal of Modern African Studies, vol. 28(2), pp. 265-297.
- 2. FAO (2002): The State of Food Insecurity in the World. Rome
- 3. LIBECAP, G.D. (1986): Property Rights in Economic History: Implication for Research. Explorations in Economic History, vol. 23, pp. 227-252.
- 4. GSO (2000): Vietnam Living Standards Survey 1997-1998. Hanoi: Statistical Publishing House.
- 5. SPC-GSO (1994): Vietnam Living Standards Survey 1992-1993. Hanoi: Statistical Publishing House.