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Land-Tenure Policy Reforms

Decollectivization and the Doi Moi System in Vietnam

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Notices

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ABSTRACT

Vietnamese land-tenure policy reforms were embedded into general economic reforms (Doi Moi), enabling the country's transition toward a market economy. Since 1998, they were implemented incrementally together with complementary instruments such as agricultural market liberalization and new economic incentives. Major steps included disentangling socialist producer cooperatives and assigning land-use rights to its former members, developing and adapting a national legal framework (Land Law), and enhancing tenure security through gender-balanced inheritable land-use certificates. In addition to promoting individualized rights, successive reforms have contributed to accelerating the agricultural transformation process by encouraging perennial crop and agroforestry systems (and thus long-term leasehold), and allowing rural land rental and land sales markets to re-emerge.

During the 1990s, combined reform efforts sped up agricultural growth and industrialization, thereby enhancing food security, and combating hunger and rural poverty. Individualized rights, liberalized product and input markets, and a new entrepreneurial spirit resulted in intensified irrigated rice production, agricultural diversification, and better food quality. Although reform achievements—accompanied by policy interventions such as export quotas—are tremendous in terms of improved nutritional status and rural livelihoods, more efficient farming and agrarian structures, more secure land investment, access to collateralized credit, and poverty reduction, some challenges to consolidate reforms exist. These challenges include addressing increased urban—rural and regional income disparities, landlessness resulting from emergency land sales, misuse of local elites' power in land allocation, and endangered "commons" through land privatization.

Keywords: Millions Fed, Food Security, Vietnam, Rice, Land Tenure, Land Reform, Doi Moi, Decollectivization

1. INTRODUCTION

Decollectivization and Doi Moi Reform: An Overview

Following periods of slow growth, declined food production, and famine as an outcome of collective agriculture, the Vietnamese government in 1986 enacted a series of reforms to transform Vietnam from a centrally planned to a market-oriented economy. This *Doi Moi* reform not only dismantled the rural collectives, but also assigned land rights to farmers. Later, agricultural markets were liberalized, and even wider economic reforms were implemented. In part, because these reforms unleashed a new entrepreneurial spirit that resulted in intensified rice production, diversification into new crops such as coffee, and improved food quality, within five years (from 1993 to 1998) the share of people living in poverty fell by 21 percent. From 1993 to 2002, poverty incidence dropped from 58 to 29 percent.

With the reforms, agricultural collectives had to contract land to households for 15 years for annual crops and 40 years for perennial crops. Households were allowed to buy and sell animals, equipment, and machinery, and the private sector started to engage in food marketing. Further reforms followed, including relinquishing control over prices and opening domestic and international markets. As a consequence, agricultural growth reached 3.8 percent a year during 1989–92, and Vietnam became the world's third-largest exporter of rice by 1989, alleviating national food shortages. Agriculture became a driver of overall economic growth.

While it was still difficult for farmers to grow perennial crops because long-term land rights were not yet secured and financial institutions refused to accept them as collateral, Vietnam passed a Land Law in 1993 that extended land tenure to 20 years for annual crops and 50 years for perennials. As a result, GDP growth reached 7 percent a year within the period from 1993 to 2000. Agriculture grew at 4 percent annually, and the nonagricultural sector grew by more than 8 percent. Decollectivization and land titling have thus generated powerful incentives to invest in agriculture. The resulting rural growth has raised households' incomes and standards of living, and overall, reforms have led to greater food security and better nutritional status, partly through increases in rice production.

The economic reforms pulled many Vietnamese out of poverty. From 1993 to 2002, the incidence of poverty in Vietnam dropped from 58 to 29 percent. Vietnamese farmers now work under more secure land rights, and reforms initiated active markets in buying, selling, and renting land. Moreover, because land can be transferred to more efficient farmers, farmers diversified their production into aquaculture, livestock breeding, and investments in trees and shrub crops.

However, the new system does not necessarily work to everyone's advantage. Some rural poor may sell and therefore lose their land in times of emergencies; thus, the emergence of landlessness has to be monitored carefully. Also, land-tenure reforms have not yet increased rural people's access to credit as much as may have been expected. One reason is that formal banking institutions still seem reluctant to accept land-use certificates as collateral, believing that the land will be hard to seize in case of credit default. Finally, reforms have had mixed results on the environment. On the one hand, more secure property rights have led farmers to adopt agroforestry and other anti-erosion measures. On the other hand, strengthening people's individual rights to land can put fragile lands at risk when land reform allocates rural wetlands to households who then convert them to farmland or aquaculture.

2. THE PROCESS OF DECOLLECTIVIZATION AND DOI MOI REFORM IN VIETNAM

Land reform and decollectivization in Vietnam has been implemented as part of the general economic reform (*Doi Moi*) of the country. The history of this reform process goes back as far as 1954, when the Vietnamese Communists defeated the French, and can be divided into five periods:

- Historical background 1954–80: Socialist land reform and agricultural collectivization
- Pre-reform period 1980–88: Incentives to increase the efficiency of collective agriculture
- Market-oriented reform 1988–93: Land relocation to farm households and decollectivization
- Building market institutions 1993–2001: Land Law 1993 and new form of agricultural cooperatives
- Market reform consolidation 2001–present (2009): Land market liberalization, agricultural commercialization, and international integration

The following subsections review each of these periods, focusing on approaches, processes, actors, and outcomes of interventions that contributed to the success of decollectivization and land reform in Vietnam.

Historical Background 1954–1980: Socialist Land Reform and Agricultural Collectivization

Under the Geneva Accords in 1954, Vietnam was divided into two countries with opposing ideologies: The Democratic Republic of Vietnam in the north—influenced by the former Soviet Union and China with their socialist ideology—and the Republic of Vietnam in the south—dominated by the United States with its capitalist economic system. Right after independence, both the northern and southern governments conducted land reforms to redistribute large landholdings—owned either by French plantation owners or Vietnamese landlords—to farmers (Do and Iyer 2003).

During the war period up until 1975, the agrarian structure between North and South Vietnam was very different. Northern agriculture was characterized by fragmented landholdings and small-scale petty commodity production even under the collective system, while southern agriculture was more export-oriented—highly commercialized with a production relationship based on tenancy and sharecropping between the landlord class and what at that time was called the rural proletariat (Watts 1998). In North Vietnam, as a reward for farmers' contribution during the war for independence, in the mid-1950s land reform that distributed land ownership to farmers was carried out. But right after this reform begun, Communist ideology gained enough strength in the late 1950s to impose a centrally planned model 1 and forced agricultural collectivization. 2 Conversely, in South Vietnam in 1970, a land-

¹ Fforde and Pain (1987) named it as the DRV (Democratic Republic of Vietnam) model. This model may be sketched out in terms of eight features: (1) Nationalization of the major part of industry and the whole banking system; (2) Economic development through centralization and mandatory planning; (3) A high priority given to the medium-term plans of industry and within industry to increase its production of investment goods and of heavy intermediate inputs; (4) Land collectivization in agriculture and the establishment of cooperatives and state farms; (5) Along with the mandatory planning, state-fixed prices; (6) Egalitarian income distribution; (7) The allowance of foreign trade in limited amounts, linking primarily with the Council of Mutual Economic Assistance (CMEA) countries and sometimes China; and (8) Limited access to foreign direct investment from capitalist countries.

² Even under socialist central planning and collective agriculture, the state could not establish effective control over rural production. Chu et al. (1992) and Beresford (1985) remark that the collective system was firmly established only in the period of 1965–68, when there were heavy American bomb attacks that motivated traditional collective actions within the communes. During other times, the system worked very loosely and inefficiently as it was imposed from outside. Furthermore, the phenomena of "sneaky contracts" took place within the collective system since the 1960s. As a result, agricultural productivity

to-the-tiller program with a land ceiling of 20 hectares per family created a more middle-class peasantry and favored extensive agricultural commercialization.

After reunification in 1975, it was apparent that the war against America left Vietnam with severely damaged infrastructures and enterprises. It was estimated that 60 percent of villages were destroyed in South Vietnam and 70 percent in North Vietnam. Additionally, 29 northern provinces were under bomb attack, in which 12 provinces were outright destroyed, including 6 big cities like Hanoi and Haiphong. Four hundred industrial enterprises and the infrastructure system were seriously damaged (Nguyen 1990). Despite those difficulties, Vietnam's Communist Party (VCP) attempted to strengthen the centrally planned system as a model for the whole country in general, 3 and large-scale agricultural collectivization in particular (Fforde and de Vylder 1996; VCP 1977; White 1982). In North Vietnam, even since the 1974 Thai Binh Agricultural Conference 4 small-scale cooperatives were ordered to transform into large-scale and so-called "advanced" ones with support from the state, which invested in the mechanization and agricultural infrastructure systems. The size of the cooperatives was expanded from hamlets with dozens of households to entire villages with hundreds of households. In 1979, the average size of a cooperative in North Vietnam was 202 hectares of land, on which an average of 378 households lived and worked. In some cases, the advanced cooperatives included 2-3 villages with more than 1,000 hectares of land. Almost 97 percent of rural northern Vietnamese households belonged to 4.151 cooperatives (Do 1998). The cooperatives managed resource allocation decisions about production and distribution in accordance with the material targets of the State Planning Committee. As in most other socialist countries, cooperatives were also responsible for the provision of social services. The basis of production, however, was formed by brigades, who were responsible for directing fieldwork labor; cooperatives provided planned targets to the brigades, who then delivered the output to them. The system revolved around a detailed framework of labor categorization and norms that would formulate the required labor and other input needed to meet output targets, and calculate labor remuneration. Within cooperatives, peasants were still allowed to retain small personal plots amounting to no more than 5 percent of the total area of the cooperative. Some of the output of these plots, along with the surplus production of the cooperative, entered the heavily regulated public and private markets either at "negotiated prices" offered by state trading agencies or free market prices in the "unorganized" markets (Chu et al. 1992; Fforde and de Vylder 1996; Dat 1997).

Along with the socialist transformation in the southern big cities,5 particularly in Ho Chi Minh City, southern peasant households were forced to participate in so-called "low-level" or pre-cooperatives that were based on labor exchange or formed "solidarity teams." Some pilot cooperatives were also subsequently developed. The purpose was to immediately strengthen the district level and prepare the necessary conditions to undertake rapid large-scale collectivization. However, the practice of collectivization in South Vietnam was not particularly successful. In 1979, there were only 272 cooperatives in South Vietnam and in 1980, only 24.5 percent of farm households belonged to a cooperative. In many cases, southern cooperatives were listed in the papers as notional cooperatives rather than cooperates that actually functioned in practice (Kerkyliet 1995; Tran 1998).

was declining, and food shortages forced North Vietnam to live off of the support of foreign aid.

³ There was a strong debate within the party about the pace of integration of South Vietnam into the central planning system in North Vietnam. Within the scope of the socialist central planning system, it would have been more beneficial to gradually set up institutions of a central planning system in the south. Nevertheless, in the end politics were more influential (Lang 1985; Vo 1990).

⁴ This conference was held in the Thai Binh province (located in the Red River Delta) in 1974, with the major purpose of reviewing agricultural collectivization, and preparing next steps for further socialist transformation in the rural sector.

⁵ Socialist transformation was gradually undertaken against the industrial and commercial capitalists of South Vietnam from 1976. The state thought that it would make full use of the productive capacity of the private sector, which it perceived as a critical provider of consumption goods and foreign exchange. Nevertheless, the leeway given to the private sector did not prove as beneficial to the economy as the state had expected. If anything, the continued existence of capitalist traders badly disrupted central control and distribution of necessity goods. This failure motivated the drastic move against the private sector in South Vietnam in March 1978. The state ordered the abolishment of all trade and business operations of bourgeois tradesmen while small merchants could retail those goods not controlled by the state (Lang 1985; Nguyen 1990).

Not surprisingly, collectivization in the post-unification period generated very poor agricultural performance. Annual agricultural growth was very low at only 0.7 percent during 1976–80. Specifically, agricultural growth declined by 0.5 and 6.6 percent in 1976 and 1977, respectively. Food grain availability fell by 1.5 percent during 1976–79, despite the sharp rise in food grain imports. Food procurement by the state fell from 2 million tons to 1.4 million tons during 1976–79 because farmers tried to avoid the state procurement system with its unfair prices, and increasingly sold output through private "unorganized" markets (Akram-Lodhi 2001). It was reported that private markets offered prices 10 times that of the public sector (Fforde and de Vylder 1996).

This failure of collectivization and poor agricultural performance were attributed to four major factors. First and foremost was farmers' disincentives through the collective agriculture system, which tied output to brigades rather than to individuals, resulting in low prices for farm output produced in excess of the quota (Kerkvliet 1995; Nguyen 1995). Second, state trading agencies did not have enough intermediate input and consumption goods to exchange with peasant households. Facing the unfair terms of trade, peasant households were discouraged from participating in an exchange with state trading agencies. Third, a lack of trained managers led to cooperative inefficiencies. Cooperative members paid little attention to cooperative works, and focused more on the 5 percent of land that they could use as personal plots to sell surpluses in the private markets6 (Nguyen 1995; Kerkvliet 1995; Jamal and Jansen 1998). Finally, the macroeconomic structure was imbalanced in a way that the state highly favored the development of state-owned enterprises (SOEs) in heavy industries while neglecting the development of light industries, particularly agriculture. Major shares of state investments went to heavy industries while those that went to agriculture were reduced to a bare minimum (Fforde and de Vylder 1996). Taxes imposed on agriculture were relatively higher than those on industry.

Pre-Reform Period 1981–1988: Making Incentives to Increase Efficiency of Collective Agriculture

In the early 1980s, an economic crisis occurred due to a shortage of state commodity funds 7 along with a decrease in Western and Chinese aid, state food procurement, and an upcoming food crisis. In combination with the stabilization of foreign relations with China and the defeat of the "capitalist bourgeoisies" in South Vietnam, the worsening economic state led to debates within the party that focused on the economic sphere (Lang 1985). Local experiments of "sneaky contract" and "fence-breaking" phenomena led the Communist leadership for the first time to officially acknowledge the legitimacy of individual interests alongside those of collectives and society.

The most radical changes occurred in the agricultural sector. The aim to collectivize agriculture, resisted by peasant households in South Vietnam, was suspended. More importantly, Directive No. 100 of the party, famously known as Contract 100 (Khoan 100) or output contract (Khoan san pham), was issued on January 13, 1981 to present tactical concessions to cooperative members and therefore prevent the spontaneous breakdown of the unpopular agricultural cooperatives. The output contract system

⁶ There is evidence that during the 1970s in parts of the country, the actual amount of cooperative land used by households for their small plots ranged from 7 to 13 percent of the cooperative area. This proportion was well in excess of the legal maximum of 5 percent (Kerkyliet 1995).

⁷ Under the central planning system, market transactions and money transfers were very limited. The state played a dominant role in centralizing all commodities from economic agents (such as producers and consumers), then allocating them according to its economic plan. Therefore, the availability of the state commodity fund was critical for the state to control and operate the central planning system.

⁸ Those phenomena were not part of the plan—they were ordered by the state due to shortages in the state commodity fund and low prices set up by state trading agencies.

⁹ In 1977 and 1978 in the Do Son district near Haiphong, household contracts were introduced by a cooperative. Under these contracts, households received land from the cooperative for the cultivation of rice. Once the household fulfilled its quota obligations to the cooperative, it was allowed to retain the surplus as either a use-value or an exchange-value. The household was also encouraged to reclaim wasteland and work this land for themselves, retaining the entire output. The results were so impressive that in 1980 the authorities in Haiphong instructed all agricultural cooperatives to adopt the new production scheme, a reform that served as a prelude to countrywide reform in the 1980s.

decentralized control over much of the labor process, benefiting the cooperative members, consisting of mostly peasant households. A cooperative thus distributed land to each household. The responsibility for production shifted down from the level of the cooperatives to the production brigades and from the brigades to the peasant households, which, in principle, took over the tasks that were formerly performed by the cooperative, namely, the tasks of growing plants, weeding, applying fertilizer, and harvesting. This output contract system provided incentives for increased output by setting a production quota for the households, a quota that was determined on the basis of productivity of the land during the previous three years. Peasant households were allowed to keep or sell surpluses on the private markets or to the state trading agencies at "negotiated prices" (Vo 1990). In mid-1981, along with drastic price regulation measures, procurement prices for agricultural goods were increased to the same level as market prices (Beresford and Fforde 1996). In addition, control stations that were established along main transportation routes in order to check illegal circulation of state-controlled goods, which led to the situation of ngan song, cam cho (river damming and market banning), were abolished (Harvie and Tran 1997).

This partial reform was quite successful in the beginning. Starting from 1979, agricultural growth accelerated at 6.6 percent per year on average during 1981–84, reaching its peak at 10.6 percent in 1982. Compared with the 1976–80 period, food per capita increased from 260 kilograms (kg) to 293 kg during 1981–84. Nevertheless, such reform measures arguably had only an ad hoc effect on output growth. Agricultural growth started to decelerate in 1983. In particular, food production increased less than 1 percent in 1983, leading to a decline in food per capita under the minimum subsistence level of 300 kg. Inflation accelerated at more than 60 percent per year during 1980–84. The gap between free market and official prices was kept at 10 times or more (Nguyen 2006).

Moreover, the failure of price, wage, and currency reforms ¹⁰ in 1985 deteriorated the situation further. During 1985–88, the GDP growth rate was reduced to 4.6 percent on annual average. Agricultural growth decelerated to only 2.2 percent per annum during 1985–88 and was recorded at negative 1.8 percent in 1987, when food production decreased by 4.4 percent. This led to famine in some provinces as food per capita was only 281 kg. Inflation started at 91.6 percent in 1985 and accelerated to three-digit percentages for three years during 1986–88. Inflation hit a staggering 774.7 percent in 1986.

The poor agricultural performance, food shortages, and resulting high inflation and low economic growth during 1984–87 were attributed to three factors. First, the output contract system did nothing to move the rural economy toward market-based prices, for either input or output. The state trading agencies still tried to dominate the marketable surplus of food staples at deteriorating terms of trade, ¹¹ although peasant households, under the output contract system, were, in principle, free to sell their surplus in the free market (Fforde and de Vylder 1996).

Second, the agricultural cooperatives still retained the ability to increase or decrease the cooperative members' share of the contracted amount by altering the system of payment for the input assigned to both themselves and the members. ¹² In many cases, peasants returned land to the cooperatives, and put more effort into their personal 5 percent plots of land. It is estimated that during 1983–87, peasant households received only 16–17 percent, or even 13 percent in some places, of the contract output, an amount that could not possibly compensate production expenses (Vo 1990). Finally, agricultural stagnation was further exacerbated by insufficient state investment.

¹⁰ By 1985, spiraling inflation forced a reform proposal to solve the problem of high free market prices "at a stroke," because otherwise it might have further worsened the state's control over resources. A combination of currency reform, increased state prices, and higher wages was introduced; however, this partial reform effort also could not help stabilize the central planning economy because the state could not procure enough commodities under hyperinflation due to huge in-cash subsidies to SOEs (Beresford and Fforde 1997).

¹¹This negative effect of price scissors on agricultural production was further exacerbated by the inefficiencies of the state distribution system. Particularly, the agricultural sector did not have enough intermediate input. Peasants received only 30 percent of the fertilizer they needed. The quality of industrial equipment used for agricultural production was also very poor.

¹² Cooperatives still performed certain tasks, usually caring for water supply, seeds, and land preparation, which were paid for by the contracted amount of output. Taxes and deductions for the local schools as well as other less popular fees imposed by the local authorities also had to come out of the contracted amount (Fforde and de Vylder 1996).

Market-Oriented Reform Period 1988–1993: Land Relocation to Farm Households and Decollectivization

A package of measures was implemented during 1987–89 that fundamentally changed the nature of Vietnam's economy from a centrally planned to a market-oriented system. While the previous partial reform measures had focused only on improving the efficiencies of the socialist central planning model and collective agriculture, this reform attacked then demolished the very foundation of the old system. It was not merely a "structural adjustment," as recommended by IMF in other developing countries, but a virtual revolution in the entire development concept and strategy. It was not only the measures of "getting the prices right," but "making the prices matter" (Fforde and de Vylder 1996).

The *Doi Moi* reform process originated from the Sixth National Party Congress of the Vietnamese Community Party (VCP), held in December 1986. Confronting high inflation, erosion of state institutions, and severe shortages in the economy, *Doi Moi* was seen essentially as a matter of life or death for the existence of the VCP. As intended from the Sixth National Party Congress of the VCP, objectives of this reform were to:

- 1. Stabilize the economy under high inflation and serious economic imbalances
- 2. Develop the private sector
- 3. Increase and stabilize agricultural output
- 4. Shift the focus of investment from heavy to light industry
- 5. Focus on export-led growth, based on the experience of Vietnam's dynamic regional neighbors
- 6. Attract foreign direct investment (FDI), seen as essential for economic development

However, it was only since the end of 1987 that such reformist intentions had been consolidated—when high inflation and food shortages threatened people's living standards and eroded the state's resources. Besides, it was clear by 1988 that Soviet aid would soon decline, implying that more domestic resources and changes in investment priority from heavy industry to agriculture and light industry were needed for economic growth. A soft budget policy could no longer be sustained.

In agriculture, Resolution No. 10 (popularly known as Contract 10 or *Khoan Muoi*), issued by the VCP in 1988, initiated the process of decollectivization and revived the development of the peasant household economy in rural areas. Resolution 10 obliged the agricultural cooperatives to contract land to peasant households for 15 years for annual crops and 40 years for perennial crops. Although the terms of land allocation varied across Vietnam, in most instances land was allocated on the basis of family size. With decollectivization, cooperatives no longer controlled capital stock, working capital, and other means of production. Instead, they retained ownership of these elements, but were obliged to rent them out to peasant households. Moreover, peasant households were allowed to buy their own capital stock and working capital irrespective of the supply available from the cooperatives. They could thus buy and sell animals, equipment, and machinery.

This resolution also stated that the proportion of the contracted amount to be left to cooperative members should not be less than 40 percent. Unit prices in the contract, as well as the contract itself, had to be fixed for five years. The contracts were to be signed between the peasant and the cooperative, whereas previously the production brigades had to be involved (Fforde and de Vylder 1996). Households who did not meet the quota had to compensate the cooperatives in cash or in kind, at the market price. ¹³ The quota was fixed for five years, bringing a degree of certainty to peasant households that had hitherto been lacking. Peasant households also had to pay agricultural taxes equivalent to an average of 10 percent of annual output. Finally, and importantly, the state accepted private sector food marketing.

During 1987–91, price liberalization was carried out with sequential reform measures to abolish the ration system and the gap between official and market prices. Price liberalization was accompanied

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¹³ In fact, this eliminated the work point system, which had been retained under Directive 100.

by the opening of markets for both internal and external trade. In 1987, internal control posts were abolished, accelerating trade between regions, between SOEs and private sectors, as well as between urban and rural sectors. In 1988, foreign trade reform was initiated as tariffs began to replace quantitative restrictions. The government then concurrently ceased its exclusive control of foreign trade through state trading agencies and import—export licenses. Finally, in December 1989, to bolster the competitive position of the economy, the official exchange rate was sharply devalued and brought to near equality with the free market rate (Sepehri and Akram-Lodhi 2002).

The reform generated positive economic results. The inflation rate was tamed to only 36 percent in 1989 after accelerating at very high rates during 1986–88. The Growth was accelerated first of all in agriculture, leading to a high demand for the construction and services sectors, which had previously been depressed. During 1989–92, GDP growth was 6.1 percent on annual average, of which growth of agriculture and nonagriculture was 3.8 and 6.9 percent, respectively. Despite the negative impacts of foreign aid cuts due to the collapse of the eastern European socialist system during 1990–91, Vietnam could still maintain a GDP growth of 5.1 and 5.8 percent in 1990 and 1991. By 1992, Vietnam had fully recovered from the shock caused by the collapse of the socialist system, and growth climbed to an 8.7 percent rate (Dollar 1994).

The improved economic performance during 1989–92 was attributed first to the leading role of the agricultural sector, not only in saving the country from a food crisis but also in actively contributing to demand acceleration and releasing foreign exchange constraints. Arguably, market and price liberalization had a positive impact on the agricultural sector by improving terms of trade and income for peasant households, thus giving them incentives to expand production and marketable surplus. Vietnam became the third largest exporter of rice in 1989 even though it had to import about 400 tons of food during 1987–88. The availability of food, along with the large inflow of consumption goods due to the opening of foreign trade, played a positive role in taming inflation and setting up a sound base for growth in the industrial sector. In addition, rice exports played an important role as the main source of foreign exchange earnings during this period as imports financed by foreign aid from CMEA¹⁵ countries ended.

However, further economic growth could not be sustained as the domestic saving and investment rate was still too low. ¹⁶ More importantly, the legal and institutional framework for the efficient operation of the market had not been firmly established, particularly in factor markets, leading to massive rent-seeking problems (Fforde and de Vylder 1996). In agriculture, impacts of reform measures were limited to subsistence crops, and the development of commercial crops was impeded. From the perspective of land policy, there were four types of limitations to the commercialization of agriculture. First, the duration of land-use rights was not long enough to encourage households to invest in agricultural production. Second, land transfer was not allowed, hence land acquisition by peasant households, crop specialization, and commodity production in agriculture were discouraged. Third, land-use rights were

¹⁴ This arose from measures to bring monetary growth under control and to stabilize the Vietnamese currency (*dong*), as well as to increase the availability of products. The monthly interest rate was raised to 12 percent in early 1989, which ensured a positive real interest rate. In turn, this helped absorb the monetary overhang by encouraging people to put their saving in a *dong* account instead of hoarding dollars, gold, and physical goods, all of which lower monetary velocity. The declining rate of inflation was also assisted by the growth of food supplies, thanks in part to the positive effect that Contract 10 contributed to agriculture and the availability of imported consumption goods as a result of foreign trade liberalization. Nevertheless, the lowering rate of inflation was not sustained in 1990–91 as the state still tried to rescue SOEs by injecting more subsidies and credits into them after the collapse of the CMEA. The large budget deficit and increase in money supply led to a high inflation rate close to 70 percent during 1990–91. Inflation was curbed again in 1992 when hard budget constraints were firmly imposed on SOEs.

¹⁵ The Council for Mutual Economic Assistance was established as an economic block among socialist countries during the 1970s and 1980s and was strongly influenced by the former Soviet Union.

¹⁶ It was claimed that the private sector, as a main source of domestic savings, was treated unfairly under new economic policies, discouraging the use of this important source for investment (Fforde and de Vylder 1996). In fact, share of the state sector in total GDP increased from 32.5 to 34.3 percent during this period. Particularly, most of the growth in the state sector was concentrated in heavy industries. SOEs mostly received credit from the banking system to compensate for the loss in direct subsidies from the state, since the state-owned commercial banks still functioned as money distributors for the state. The state still played a monopolistic role in foreign trade.

not accepted as collateral by financial institutions, so households were prevented from raising loan funds for agricultural investment. Fourth, local governments still played a dominant role in deciding crop patterns for specific types of land. Most of the land continued to be used for food production due to the emphasis placed on food security, while agricultural diversification and commercialization were not sufficiently encouraged.

Decollectivization left an institutional vacuum in the rural sector since old-style cooperatives could not adapt to the new market system. Many peasant households, especially poor and smallholding households, had difficulties in accessing production technologies, and input and capital for production, and these demands were not served well by the cooperatives. Many cooperative were dismantled or transformed. They survived on member contributions, which were based on the land area of each household, and 90 percent of cooperatives reportedly remained weak or nonfunctional.

For food-security reasons, state trading agencies received privileged access to rice export quotas, which studies claim reduced substantially the farm-gate price of rice. David (1994) estimates that state intervention in rice exports undervalued the domestic rice price by 25 to 30 percent, of which two-thirds was caused by the inability of state trading agencies to obtain the highest possible export price. Though devaluation brought substantial gains to exporters, the exchange rate was still considered to be overvalued, hampering the incentives of exporters, particularly in the rice sector.

Building Market Institutions 1993–2001: Land Law 1993 and New Form of Agricultural Cooperatives

This period witnessed a series of efforts for international integration—starting with the resumption of lending from the IMF and World Bank and large inflows of FDI—and ending with a number of trade agreements with the Association of Southeast Asia Nations (ASEAN) and the United States. Reforms continued during the period between 1993 and 2001, mainly to consolidate the previous policy initiatives, but at a slower pace than before. After a long history of war, poverty, hunger, and international isolation, it was a desire of both the VCP and the Vietnamese people to look for economic growth, prosperity, and international integration. After learning from the experiences of the previous Asian Tiger economies, the state actively opened the economy to export expansion and foreign investments, subsequently achieving high economic growth. Following the idea of making the prices matter, the state also pushed ahead for making the prices right by conducting further market liberalization, though gradually, in the factor markets (particularly credit and labor markets) and developing new institutions to replace the previous state administrative system.

In agriculture, the 1993 Land Law built on Resolution 10 by extending land tenure to 20 years for annual crops and 50 years for perennial crops. While households were limited to 3 hectares of land per farm for annual crops in the Red River Delta and 5 hectares per farm for annual crops in the Mekong Delta, for the first time the exchange, transfer, lease, inheritance, and mortgaging of land-use rights was permitted (Sepehri and Arkam-Lohdi 2002). To aid in the development of the land market in the wake of the 1993 Land Law, a process of issuing peasant households with land-use certificates began. By 1999, more than 10 million households had received certificates for agricultural land, representing about 87 percent of peasant households and 78 percent of the agricultural land in Vietnam (ANZDEC 2000).

Also in 1993, the government promulgated a range of decrees aimed at institutional reform and improving investment and technological innovation. Decree 12/CP was focused on the reform of state-owned agricultural enterprise management, while Decree 13/CP was focused on the development of

¹⁷ Perhaps the most significant structural reform of the period was in the area of trade policy. With the exception of rice, export quotas ceased. Import quotas were reduced to only seven items, and import permits were introduced for most remaining controlled items.

¹⁸ Since the Eighth Party Congress, objectives of the socialist revolution became "prosperous people, strong country and civilized and equal societies" (VCP 1996).

agricultural extension services, and Decree 14/CP dealt with credit for extended agricultural and rural development.

Tax reform has been another method through which the government attempted to provide greater incentives to the agricultural sector. The 1993 Land Law reduced agricultural land-use tax from an average of 10 percent of annual output to 7 percent of annual output. Perennial crops farmed on newly reclaimed land were exempted from tax.

In March 1996, the Law on Cooperatives was approved by the National Assembly of the Socialist Republic of Vietnam, clarifying the cooperatives' role as service providers and establishing a legal framework for the cooperatives within a multisectoral commercial economy. This law originated from the failure of the former cooperative system, which couldn't meet the smallholding farmers' diverse demands for production technologies, capital, and market outlets. The new legal framework provided new directions for the cooperatives' development. For instance, the scope of cooperative activities was diversified, and included integrated trade and service supply cooperatives, as well as sector-focused and professional cooperatives (including those for pig raising, dairy cow raising, safe vegetables, rice seedling supply, tea farming, sugar cane farming, fruit tree planting, and aquaculture).

The period of 1993–2000 was considered the golden age of the market economy in Vietnam. In the words of Sepehri and Arkam-Lohdi (2002), "it was the period in which it appeared that the Vietnamese economic dragon would finally emerge from hiding." GDP growth was as high as 7 percent per year, in which agricultural growth was maintained at 4 percent and the nonagricultural sector accelerated to more than 8 percent.¹⁹ It is worth noting that despite the Asian financial crisis during 1997–2001, Vietnam still maintained an economic performance that was quite good, and to which the agricultural sector positively contributed with a more than 5 percent annual growth rate.²⁰ This figure stands in contrast to the deceleration of nonagricultural growth to 6.8 percent during the Asian financial crisis.

However, researchers questioned the sustainability of agricultural growth because it was mostly dependent on the incentives made by the previous land reform, decollectivization, and price liberalization. The focus was still on quantitative growth rather than on improving the quality and competitiveness of agricultural production. Food security still dominated the options of export-oriented and commercialized agriculture. The transformation of crop structure occurred very slowly. The rural—urban income gap was widening and more than 70 percent of the poor were concentrated in the rural sector (World Bank 1998, 2000).

Land fragmentation was the major constraints for agricultural commercialization. Land was supposed to be allocated on the basis of need (usually indicated by the size of households) and also the ability to farm the land (meaning, the number of household members who can work on the land). Such land fragmentation imposed negative effects on production efficiency and land productivity, thus impeding marketed surplus and agricultural commodity exchange.²¹ Moreover, land markets have failed to develop strongly without a clear regulatory and institutional framework (Dang et al. 2005; Arkam-Lohdi 2001; Nguyen 2006).

The efforts to develop a new style of agricultural cooperatives were not successful. In some areas, relatively few cooperatives have survived for longer than a year. Moreover, among those considered successful, the majority was very small, with an average capital of about 1 billion Vietnamese dong (VND) or US\$63,000. Cooperatives worked mostly in irrigation, plant protection, extension

¹⁹ From the second half of the 1990s, growth was led by the industrial sector that accelerated on average at 14 percent annually. Growth was driven by unprecedented levels of investment, which reached a high level of 30 percent as a result of sharp increases in FDI that accounted for one-third of total investment.

²⁰ In addition, agricultural export expansion made a great contribution to financing the increasing growth of industrial imports.

imports.

21 The egalitarian spirit of land regulation was undermined when wealthier individuals who had left the village for employment reasons could maintain their registration as residents and rent their land to other farmers. Depending on the crop produced, rents could amount to as much as 40 percent of farm output value, hence inhibiting new farm investment as well as reintroducing social stratification.

services, and seed and input supplies. Only a minor proportion (9–15 percent) were engaged in soil preparation, credit provision, and marketing the output.

Agricultural tax reform led to new categories of local fees imposed on rural households. Since agricultural tax had previously provided the main source of rural tax revenue to the budgets of local governments, the tight budget constraints under the impact of structural adjustment forced the state to restrain its spending on rural services—such as health and education—that the cooperatives previously funded. As a result, local governments were forced to supplement budgetary expenditures by levying fees for the provision of these services and the latter constituted the heaviest form of taxation on the rural population.

Finally, food security still weighted heavily in the balance of policy objectives, therefore the state kept a tight control on the volume of rice exports. The quota was set each year based on estimates of domestic supply and utilization. The right to export rice under the national quota was allocated to two regional state-owned trading enterprises—VINAFOOD I (also known as the Northern Food Company) in Hanoi and VINAFOOD II (Southern Food Company) in Ho Chi Minh City—and to a number of provincial state-owned trading enterprises. This state control of exports partially limited incentives to rice farmers.

Reform Consolidation Efforts and Future Challenges 2001–Present: Land Market Liberalization, Agricultural Commercialization and International Integration

Since 2001, reform efforts have been focused on SOEs, financial reforms, the development of factor markets after recovering from the Asian financial crisis, and trade liberalization to become a member of the WTO in 2007. Along with international integration, policy reform measures were more influenced by international donors that established their support agenda around the Comprehensive Poverty Reduction and Growth Strategy (CPRGS), proposed by the World Bank. This document can be interpreted as a major turning point in the planning processes of Vietnam. Previous plans and strategies were very much based on a command view of the economy. By contrast, CPRGS relied on spelling out clear development goals (such as the Vietnam Development Goals [VDGs]), using empirical evidence and consultation to identify the policies best suited to attain those goals, aligning resources behind those policies, and setting up appropriate monitoring and evaluation mechanisms.

In agriculture, as documented in the World Bank report *Vietnam: Advancing Rural Development from Vision to Action*, policy measures focused around three pillars of rural development: (1) creating opportunity through accelerating market orientation, (2) managing natural assets for broad based growth, and (3) mainstreaming poverty reduction through inclusion and empowerment. The goal of these policy measures was to push up agricultural commercialization, increase competitiveness and the value-add of agricultural production, improve rural livelihoods, narrow the rural—urban income gap, and promote agricultural sustainable growth.

Agricultural market-based growth was enhanced further by the amendments of the Land Law in 2001, 2003, and 2004. The Land Law amendment in 2001 mostly permitted foreign investors to acquire land-use rights and attempted to promote land consolidation in agriculture. The 2003 revision was introduced to simplify buying and selling procedures to make the land market operate more efficiently, and in so doing deepen the land market. The 2003 Land Law allowed land-use certificate holders to buy and sell their usufruct rights or change the functional assignation of their land, within the overall indicative planning framework of the government. In addition, land markets were also broadened through authorizing the communes to have the right to change the functional classification of land. A further revision of the Land Law in 2004 made an important contribution to gender balance by titling the names of both the husband and the wife in land-use certificates.

In 2001, the state scrapped rice export quotas and fertilizer import quotas, allowing all firms engaged in the domestic trade of these commodities to enter international arrangements. Furthermore, reform of the taxation system that begun in 2000 has involved a phasing out of the agricultural tax. By

2003, the agricultural tax raised only 1.3 percent of tax revenue and 0.1 percent of total government revenue (World Bank 2004).

To speed up rural transformation, various policy measures were issued during 2000–05 to support private investment in the rural sector, the application of modern technologies, development of rural nonfarm activities, and improvements in rural physical and social infrastructures, with a focus on education and healthcare. The Enterprise Law introduced in 2000 and revised in 2005 created an enabling environment for private investment in the rural sector. In 2002, Decree 80 was introduced to promote contract farming and remove the agricultural value-chain fragmentation. The following year, the government issued Resolution 28, which concretely requested that the SOEs in the agricultural sector be reduced in number and restructured. Moreover, state forest enterprises (SFEs) were obliged to reform and relocate forest land to local communities that were mostly composed of poor ethnic groups in mountainous areas.

Since 2001, Vietnam's agricultural growth has been continuing at 3.7 percent per annum despite a difficult external environment of low commodity prices on world markets. Food per capita increased from 420 kg in 2001 to 470 kg in 2007, ensuring national food security and enabling more than 4 million tons of rice export every year. Agricultural diversification and commercialization aggressively took place. Many cash crops such as coffee, rubber, black pepper, and cashew nut have gradually occupied important positions in the international market. The export turnover of agricultural, forestry, and fishery products during the period of 2001–07 was \$US49.6 billion, gaining an annual growth of 16.8 percent. Vietnam has become the second largest coffee exporter and the first largest exporter of Robusta coffee since 2000. Within a decade from 1995, coffee production increased by three times, and Vietnam earned more than US\$1 billion from coffee exports in 2007. Similarly, Vietnam has become the largest exporter of cashew nut and pepper, accounting for more than 50 percent of world exports since 2003–04.

Since 2007, the state has reconsidered its agricultural and rural development strategies, partly due to the negative impacts of the upcoming global economic recession, ²² declining agricultural growth, and experiences in rural social stability learned from China. Resolution 26 issued by the VCP on August 5, 2008 made concrete efforts to promote the parallel development of agriculture–rural–peasant livelihoods. New policies were followed to improve peasant income, rural livelihoods, and the infrastructure system, in order to organically integrate agriculture and rural development into ongoing strong industrialization and modernization. Resolution 26 reaffirms the transfer and exchange of land-use rights, releases constraints of land ceilings, promotes rural land accumulation, and gradually establishes unified and fair market prices for land transfers: for instance, rural–urban land and agricultural–industrial–residential land. The resolution also states that industrial development policies should get stronger support in rural areas by focusing on agro-processing and agricultural input production industries and services. It also included a premise for further agricultural investment by requesting double state investment in agriculture every 5 years.

Summary: Key Factors, Interactions, Outcomes

Land reform and decollectivization in Vietnam have been implemented as part of the state's general economic reforms (*Doi Moi*). This reform process must be seen in the context of historical events that led to the division of the country in 1954, the Vietnam War, its reunification, and the collectivization of the whole country in the 1970s. After the war, weaknesses in the collective system became obvious. The economic and food crisis in the late 1970s led the Communist Party to reconsider its economic development models and it provided more incentives to individuals. The main purpose was to increase the efficiency of the socialist system rather than to adopt a market system.

The momentum of partial economic reform was further strengthened by the Soviet *perestroika* and the economic crisis in the mid-1980s. The salient events during this period were the relocation of

²² Decision 497 issued by the prime minister on April 17, 2009, provided a state budget of \$US1 billion to support peasant households in purchasing agricultural intermediate input and machinery and to improve housing conditions.

land to farmers' households, decollectivization in 1988, and a series of market liberalization policies from the late 1980s onward. This process was gradual.

The second half of the 1990s witnessed the golden age of Vietnam's economic growth with reforms in the regulatory and institutional framework of commodity and labor markets, and intensified international integration. This reform and growth period ended with the Asian financial crisis, leading the government to hesitate on providing further reform. During the new millennium, following high growth and industrialization, Vietnam's government furthered its economic reforms by liberalizing financial and land markets.

Land reform and decollectivization can therefore not be separated from the overall *Doi Moi* in Vietnam, and it is necessary to add a stronger policy perspective to the common understanding of the reform process, which is characterized as bottom-up, path-dependent and crisis-driven (van Brabant 1990; Fforde and de Vylder 1996). Active policy measures along with market liberalization and international integration, which not only generated innovative ideas but also consolidated the reform process' performance and outcomes, have become more important. In agriculture, land-tenure reform and decollectivization started first with peasant households, then in the 1960s and 1970s local authorities implemented them within the collective system. Though keeping strictly to socialist ideologies and central planning, the state, under severe economic shortages, gradually accepted individual interests and formally illegal contract practices. When the upcoming food crisis threatened the survival of the central planning and collective system, the political leadership actively reviewed those local experiments and scaled them up into national policies.

In the 1990s, market liberalization was chosen to speed up economic growth and industrialization after a long period of hunger, poverty, and international isolation. Under this pressure, the state played a more active role in consolidating reform results and looking for new options. However, reform efforts in the 1990s focused more on nonagricultural sectors, as agriculture and rural development were still benefiting from the momentum brought about by the drastic reform through Resolution 10 in 1988. In the new millennium, benefits from high economic growth again established a sound base for the state to reconsider its new urban-bias development strategies. Declining agricultural growth, widening rural—urban income gaps, and decreasing rural social stability became major factors contributing to the new tendency toward balancing intersectoral growth and integrating agricultural and rural development into the high-speed process of industrialization, modernization, and international integration (World Bank 2008; Dang 2009). Resolution 26 issued by the VCP in 2008 opened a new era for agricultural and rural development in Vietnam.

3. IMPACTS OF LAND-TENURE POLICY REFORMS IN VIETNAM

When analyzing land-tenure policy reforms, some key messages from the recent history of relatively mature transforming economies in central and eastern Europe and newly industrializing countries like China become underlined (Rozelle and Swinnen 2004). One key message is that the allocation of land rights to individual households is a necessary but insufficient approach to generating incentives for productivity increases in agriculture, creating spread effects within and beyond the rural economy, and disentangling existing growth potentials. Reforms that shift the rural economy from rigid control-andcommand farming institutions toward a market-based model combined with individual incentives can play an important role in stimulating economic growth (Ravaillon and van de Walle 2008). "Getting property rights right" has to go hand in hand with the decollectivization of labor relations and farm structures and with liberalizing markets for agricultural products and factors of production (Rozelle and Swinnen 2004). These reforms have to be further embedded into efforts to secure property rights, acknowledge their temporal and permanent transfer, and strengthened with mechanisms that recognize land as collateral, even when the state remains the legal owner. Land-tenure reforms thus present a major challenge to policymakers, such as reducing rural poverty while avoiding socially unacceptable inequalities in land ownership and living standards (Rayaillon and van de Walle 2008). What is then the impact of these comprehensive reforms on agriculture, the rural economy, and Vietnamese society as a whole? Is it possible in the context of a two-step reform (implementing the decollectivization of land rights and making rental and land sales markets dynamic) to clearly isolate cause–effect mechanisms?²³

Growth and Productivity Increases

Land-tenure reforms in Vietnam have—together with complementary productivity enhancing instruments—generated powerful incentives to invest in farming, particularly in the intensified production of annual crops in the lowlands bur, as well as in perennial crops. In turn, these reforms have induced a strong rural-based growth process, raising households' incomes and their standards of living (Rozelle and Swinnen 2004; Beckman 2001; Henin 2002). Since the early 1990s, Vietnam has maintained an annual GDP growth rate of 7.6 percent (Fritzen 2002; Minot 2003); however, these rates have slowed down at the turn of the millennium to only 5 percent (1998–2001) but sped up again during the last few years. Agricultural growth achieved its peak during the years from 1996 to 2000, showing an annual rate of 4.7 percent; growth rates seen from a longer term perspective (from 1986 to 2005) attained a level of 3.8 percent per annum.

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²³ For methodological problems and dealing with available statistics, see Ravaillon and van de Walle 2008, Chapter 3.

Table 1. Agricultural growth accounting estimation in Vietnam, 1986–2005

Period	Ag. GDP	Labor	Tractor	Pump	Fertilize r	Area of Annual Crop	Area of Perennial Crop	TFP
Growth (percent	:)							
1986–90	2.7	2.5	-4.7	-1.2	-3.4	0.8	5.4	
1991–95	4.7	6.9	28.6	25.6	13.4	2.0	7.8	
1996-2000	4.9	1.3	10.5	10.3	4.0	2.7	9.8	
2001-05	3.7	1.0	5.7	4.4	1.4	1.0	3.0	
1986–2005	3.8	2.7	10.5	9.8	8.0	1.7	6.3	
Factors contribu	ting to grow	th, based or	n their elastic	ities (perce	nt)			
1986–90	2.7	0.8	-0.2	-0.1	-0.5	0.3	0.2	2.0
1991–95	4.7	2.2	0.9	1.4	1.8	0.8	0.4	-2.8
1996-2000	4.9	0.4	0.3	0.6	0.5	1.1	0.4	1.5
2001-05	3.7	0.3	0.2	0.2	0.2	0.4	0.1	2.2
1986–2005	3.8	0.9	0.3	0.5	1.1	0. 7	0.3	0.0
Percent of factor	s contributi	ng to 1 perc	ent agricultui	ral growth				
1986–90	100.0	29.9	-5.9	-2.4	-17.1	12.4	9.2	73.9
1991–95	100.0	47.5	19.9	29.4	37.9	17.6	7.4	-59.7
1996-2000	100.0	8.9	7.0	11.4	10.9	22.3	9.1	30.3
2001-05	100.0	8.5	5.1	6.5	5.2	11.4	3.7	59.5
1986–2005	100.0	23.2	9.1	14.0	28.3	18.2	7.5	-0.3
Elasticities (per c	ent)	32.5	3.3	5.4	13.4	40.9	4.5	

Note: TFP is the residual of agricultural growth minus the sum of factor growth weighted by elasticities.

Source: Nguyen, D.A.T. 2008. Relationship between investment and agricultural growth. Hanoi: Vietnam, Ministry of Agriculture and Rural Development.

Table 1 underlines the high growth in total factor productivity from 1986 to 1990, thanks to new incentive structures for smallholders generated by Resolution 10. The increasing use between 1991 and 1995 of farm input such as fertilizers and pesticides is reflected in price increases for agricultural products and is partly the result of the better availability of rural credit that the Vietnam Bank for Agriculture and Rural Development initiated in 1993. From 1996 to 2005, the role of land expansion becomes clear, enabled by increasing production efficiency, more capital-intensive input, and improvements in existing irrigation systems.

Private land ownership has contributed to this growth process—in part by allowing land to be reallocated to more efficient farmers who thereby increase aggregate output. In his early research on the reform, Hayami (1994) saw the new legal framework on land as a trigger to more efficient agriculture without fear that an inequitable agrarian structure would emerge (Hayami 1994; Ravallion and van de Walle 2006). This expectation was confirmed some 10 years later: an emerging, active land market contributed to more rapid poverty reduction, redirected land into the hands of the most efficient producers, and fostered agricultural diversification.

Major components of this growth, which led to reduced rural poverty, are attributable to higher per hectare yields in rice and other crops. These yield increases went hand in hand with the diversification into new or intensified non-crop endeavors, such as aquaculture, livestock breeding, and nonfarm activities. The sharply different growth rates in the acreage of annual crops (1.7 percent) compared to perennial crops (6.3 percent) (Nguyen 2008) indicate the impact that strengthened incentives such as secured land-use rights for tree and shrub cultivation have had on long-term investments in land. With 43 percent intensification, improved irrigation and an increased application of fertilizer contributed

most to this growth (from 1986 to 2005), whereas labor input contributed only one-third. Interestingly, total factor productivity as a residual proved irrelevant, and showed even slightly negative figures (-0.3 percent) during the 1986–2005 period, meaning that improved factor quality arising from the reform process does not seem to be important, except in the context of organizational innovations during the early period of reform (from 1986 to 1990).

Enhanced Tenure Security through Land-Use Certificates and Investment

Together with expanding rental periods for annual and perennial crops, the transfer of land rights from the collectives to households through the 1988 Land Law as a first step, then allocating individual, inheritable land-use certificates (LUC) to them as a second step, resulted in a major increase in rural tenure security. Ravallion and van de Walle (2003, 2008) noted that lower inequality resulted (making the poorest better off) when land allocation through the 1988 Land Law together with simulated market-based outcomes were analyzed, compared to an analysis of market-force allocation alone. Decollectivization strongly unleashed farmers' incentives for investment; however, this approach needed additional steps, such as the introduction of titling as a second reform step in 1993 to achieve further efficiency and growth. Once the approach was chosen, some arbitrariness in decisionmaking on land allocation remained; because of problems with enforcement, local favoritism and emerging local conflicts were the prices to be paid (Do and Iyer 2008).

Beyond decollectivization, issuing land titles is considered critical to enhancing tenure security, promoting investment, and triggering the emergence of tenancy and land sales markets (Do and Iyer 2008; Deininger and Jin 2008). By 2000, nearly 11 million land certificates had been issued to rural households. Regarding the scale and speed of implementation, Vietnam's titling program has outpaced similar initiatives in other counties (for example, Thailand, Indonesia, and Peru) and thus has gained genuine interest from the developing world (Do and Iyer 2008). Starting with a coverage rate of 24 percent in 1994, the titling program already reached 90 percent of the rural population by 2000 (Do and Iyer 2008), but with variations among the provinces. By 2003, 91 percent of rural households had been issued LUCs (Vietnam Development Report 2005).

Nevertheless, the positive impacts of issuing LUCs dominate: At the community level, certificates have been found to be associated with higher levels in the share of total area devoted to perennial crops, and increased investment in irrigation (Deininger and Jin 2008). In one highly registered province, a household on average increased its share of cultivated land devoted to perennials, such as coffee, tea, rubber, or fruits like citrus, pineapples, bananas, and mangoes, by 5.6 percent compared with a household in a low-registration province (Do and Iyer 2008). Furthermore, a statistically significant increase in the proportion of total cultivated area devoted to perennial crops (by 7.5 percent) could be observed within a province in which everybody had a LUC, compared with a province in which no one had such a certificate. This increase comes at the expense of annual crops, with a decline of 6.5 percent in the share of total cultivated area.

In addition, titling has had a significant impact on the labor input in nonfarm activities. Households in high LUC-issuing provinces increased their nonfarm activities by 2.7 weeks per active household member as cultivating perennials normally is a labor-saving practice (Do and Iyer 2008). New incentives were thus given to marketing, food processing, woodworking, and the local garment industry, thus diversifying rural incomes and safety nets.

However, experiences with land-tenure reforms in other countries have shown that it would be naïve to think that legal prerequisites, such as the Land Law, alone would assure tenure security (Ravallion and van de Walle 2003). Power struggles at the local level and the capture of rents by local elites may either lead to even worse distributional outcomes than before the reform or to an increased desire to protect the poor. In concrete terms, despite improvements in legal security, uncertainty persists in the villages in some provinces on whether these rights can, for example, really be called inheritable rights if they will not be reallocated by the end of the 20-year use period—although government statements repeatedly stress that this will not happen (Saint-Macary et al. 2008).

From the beginning of the reform, the local authorities' frequent reassignment of land to maintain land productivity resulted in underinvestment (Pingali and Xian 1992). Case studies in Vietnam's northern mountain region have shown that within the guaranteed 20-year leasehold, two phases of land reallocations have already occurred to accommodate new settlers in the villages. Therefore, there is insufficient evidence (Saint Macary et al. 2008) that tenancy contracts under titling, from the tenants' viewpoint, are more secure than the rural collectives' practices. Furthermore, in mountainous areas, no clear indicators exist that the LUC system is more secure than traditional allocation mechanisms (Neef et al. 2007). For instance, case studies (though using small samples) have shown that half of the investigated households obtained tenure security through traditional mechanisms only. For the remaining households, however, who in the past have not been able to secure rights through this system, tenure security for new rice terraces through titling increased (Neef et al. 2007). Nevertheless, threats of de facto expropriation through land reallocations do discourage investment and technology dissemination, including measures to avoid soil erosion. In some regions, tenure security thus remains an issue.

Secured Tenancy and Rural Factor Markets

Land Rental Markets

As research in other countries in transition has shown, land rental and land sales markets respond differently to measures that increase resource access to the rural poor and enhance farm efficiency; therefore, short-term rental and permanent land transfers will be treated separately (Deininger and Jin 2008).

From the early 1990s on, high economic growth combined with an emerging strong rural nonfarm economy that provides new jobs are associated with a significant though regionally differentiated increase in land market activities (Deininger and Jin 2008). Between 1993 and 1998, rental market participation more than quadrupled from 3.8 to 15.5 percent. Although per capita expenditure increased within this period by 5.9 percent based on a highly egalitarian distribution (Gini coefficient of 0.26), the rural economy was still quite poor. Other sources state that land market transactions increased tenfold from 2.5 percent in 1993 to 25.0 percent in 1998 (Do and Iyer 2008). Contrary to this promising start, rental markets have not increased in importance over time (Brandt et al. 2006). In 2004, only 3.61 percent of all agricultural land was rented, with 10.7 percent renting in and 6.0 percent renting out. However, for households renting in, tenancy plots are the source of nearly a third of their managed lands.

During early phases of market development, rental transactions did not involve direct payments from current users to owners, although land users already had to pay land taxes. During liberalization, fixed rental contracts and sharecropping quickly gained importance (Deininger and Jin 2008). This situation should be of interest to future researchers who can consider the strong orientation toward efficiency and good performance of tenants (those who agreed to fixed rental contracts) on the one hand, while weighing the risks, vulnerability, and equity issues (sharecropping) on the other hand.

Who is active in rental markets? Deininger and Jin (2008) state that agricultural plots are transferred preferentially to only those households having limited asset endowments but a high level of agricultural abilities (Deininger and Jin 2008). Consequently, they have been able to increase the productivity of land by transferring resources exactly to those producers who can make better use of them. At the same time, rental markets allowed those whose comparative advantage is not in agriculture to provide land rentals and join nonagricultural sectors, where they gain a higher remuneration for their labor. Transfers positively impact not only efficiency but also equity standards. Neither female headed households nor those being threatened by adverse shocks are discriminated against in accessing local rental markets. However, some elements of discrimination do exist, as smallholders in the most productive age are preferred to the old age strata.

Regarding the scope and performance of rental markets, it is impossible to generalize because strong regional differences exist. Motives for renting out land are manifold; however, there is no evidence that they are dominated by the perceived low abilities of landlords, or by too-large landholdings

for which, because of supervision problems, self-cultivation and the employment of agricultural labor may be inefficient or too risky.

Land Sales Markets

The fast development of rental markets was also accompanied by a re-emergence of land sales transactions. In the 1990s, informal, illegal land markets developed where land is not only mortgaged and rented but also bought and sold (Henin 2002). In the beginning, the scope of permanent transactions was weak due to substantial underreporting; land sales were forbidden and a tax was imposed on all land transactions (Do and Iyer 2003). By circumventing these regulations, more and more people bought land without having been impeded by credit market imperfections (Deininger and Jin 2003). Compared to rental arrangements, the expansion of land sales markets developed in an even more pronounced way, initiated by those households who remained active in agriculture. In fact, market activities increased from 1 percent of producers in 1993 to 7.2 percent in 1998.

However, the positive impact of land sales markets to rural poverty reduction remains limited because resource-poor producers could rent land but not buy it. This situation applies to female headed households in particular. "Neither the 1993 Land Law, nor the land titling process appear to have had an appreciable effect on the volume of land market activity" (Brandt et al. 2006, 2). At the same time, those who opt to leave agriculture will rent out land but not necessarily sell their rural holdings, which serve as a safety net. Therefore, attained farming abilities, the level of local nonfarm development, as well as the security of land rights strongly determine the operation of rural land markets, with rental markets having a pioneering impact on both equity and productive efficiency.

In this context, the role of bureaucracy in dealing with land sales markets is unclear. Do they tacitly facilitate or constrict permanent transfers? Have local administrators, driven by fear of losing influence within control-and-command allocation, inhibited the development of land markets, or are they actively supporting transfers for rent-seeking reasons? On the one hand, due to a lively transfer of plots without titles, a quasi market largely independent of state control has emerged (Ravaillon and van der Walle 2008). On the other hand, evidence exists that local authorities tried to stop poor families from selling their lands in order to protect them against the dynamics of land markets. The local state thus continues to play an active role in setting the terms of land transactions as a measure to prevent landlessness (Ravaillon and van de Walle 2008).

These ad hoc interventions may result in making the village even worse off (Ravaillon and van de Walle 2008) if illegal transactions develop as a result of prohibitions offering less favorable contract terms to vulnerable households that must sell after adverse shocks. As a consequence of emergency sales, wealthier households will accumulate land. New landlord—tenant relations may thus develop, with land concentration and the hiring of agricultural labor becoming re-emerging issues, which will indicate new dynamics in rural labor markets.

Rural Credit Markets

Having received an LUC that is regarded as legitimate should improve a rural household's access to credit, particularly from formal banking institutions such as commercial or rural cooperative banks (Do and Iyer 2008; Ravaillion and van de Walle 2008). However, there is insufficient evidence that recent credit market development will complement ongoing land-tenure reforms, facilitate permanent land transfers, and contribute to higher rural investment (Do and Iyer 2008). In the late 1990s, access to formal credit remained limited: The share of producers having credit access increased from 9.0 to 21.0 percent between 1993 and 1998, with more than one third in the Mekong Delta while other regions remain relatively low (Deininger and Jin 2008). Following this line, credit market institutions are not yet fully developed and focused toward new demands for loans.²⁴ Although access to credit in rural Vietnam

²⁴ Some years ago, the major lender in rural areas had been the state-owned Vietnam Bank for Agriculture and Rural Development (Do and Iyer 2003)

is apparently related to land market reforms, during which the government gave land title equivalents to households, the linkages between land and credit markets remain weak. Nevertheless, a strata of landless poor already emerged that is not well served, either by formal or informal credit institutions (Kemper and Klump 2009; Ravaillon and van de Walle 2008)

The volume of credit did not increase significantly after land reforms, and the ability of households to borrow is still low (Do and Iyer 2008). Case study data show that approximately only half of all households have outstanding loans. Interestingly, the probability of receiving a loan goes down by 11.0 percentage points when a province implements the land reform fully. It is important to note that the amounts borrowed as a fraction of total household expenditure is lower in households within highly registered provinces. Additionally, there is no change in the fraction of loans from formal sources after tenure reform is implemented. "Overall, these results do not suggest a positive impact of the LUC on households' ability to borrow in the post-reform period." (Do and Iyer 2003, 16). Thus, the Land Law has not been very effective in alleviating credit constraints for rural households (Do and Iver 2008). The argument that households in provinces issuing land titles are wealthier and thus better prepared to finance the purchase of land out of their equity does not hold either: Households in high-issuing provinces show a smaller increase in real household expenditures than those in low-issuance provinces. Case studies in other regions of the country underline the fact that even after the issuing LUCs, rural households remain excluded from formal lending institutions because land is not vet well acknowledged as collateral (Henin 2002). These studies further stress that the linkage between land and credit markets has not yet been fully acknowledged, and as a result, there are efficiency losses and investment shortages. Research from the Ha Tinh region shows that due to local authorities' continued control of land transfers, commercial banks in the regions do not accept LUCs as collateral (Ravaillon and van de Walle 2003).

Food Security and Nutrition Status

As stated previously, the liberalization of Vietnamese agriculture has proceeded in a series of small steps rather than a big bang approach—with land-tenure reform being a key element to encouraging individualized decisionmaking and a new entrepreneurial spirit (Pingali and Xuan 1992). In the beginning, reforms that responded to rising food insecurity, farmers' unrest, and insufficient nutritional status had to be pushed ahead. Already in the early 1990s, Pingali and Xuan (1992) stated that encouraging the family contract system had a significant effect on rice productivity, transforming Vietnam from a rice importer to one of world's largest exporters. Annual growth in rice yields per hectare of land had risen by about 32 percent in North Vietnam and 24 percent in South Vietnam from 1980 to 1984 (Pingali and Xuan 1992). Most of this growth had been attributed to increases in yields per hectare rather than expansions in cultivated areas. During this period, annual rice output per capita increased by about 40 kg for the whole of the country, underlining the newly generated potential for improved food security and nutritional status.

Rice is by far the most important staple food in the Vietnamese diet, and it is consumed in nearly all households (99.9 percent). In fact, rice is satisfying about 75 percent of the total calorific intake of a typical Vietnamese household.²⁵ Therefore, the continuing increase in per capita rice production in the 1990s has contributed to increased food security (Minot and Goletti 2000). What is more, to ensure an adequate domestic supply of rice the Vietnamese government levied rice export quotas during this time equivalent to an export tax of 20 to 25 percent.²⁶

As reforms stabilized the economy, rice prices have become less volatile and have substantially increased during the 1990s, directly impacting Vietnamese households—72 percent of which both

²⁵ By contrast the three minor staples (maize, cassava, and sweet potatoes) together represent less than 8 percent of the value of consumption expenditure and less than 4 percent of caloric intake (Minot and Goletti 2000).

²⁶ Although export quotas can be criticized for many reasons and have shown a resurrection during the food crisis of 2007, it should be underlined that for Vietnam the simulation modeling shows that a complete elimination of this quota system would have led to an additional increase in rice prices by 14 to 22 percent, with adverse effects on urban and other nonfarm rural households (Minot and Goletti 2000).

produced and consumed rice. As such, surplus rice-producing regions would have realized a net benefit from rising prices, whereas deficit regions would lose (Minot and Goletti 2000). On average, higher rice prices would benefit rural households at the expense of urban households. Simulation models have shown that a uniform 10 percent increase in rice prices would hurt mainly urban households, nonfarms, and families living in the five rice-deficit regions, although the effect on real income would be less than 2 percent on average. Price increases would benefit farmers, however, particularly those in the rice bowl areas (Minot and Goletti 2000). As poverty entails vulnerability and as poverty in Vietnam is still rural, these figures highlight the potential the reforms created to reduce food insecurity and improve nutritional status by attacking some roots of rural poverty.

Changes in rice production and prices are thus likely to have a significant impact on the welfare of Vietnamese households and on rural and urban poverty levels (Niimi et al. 2004). During the 1990s, per capita rice consumption was relatively stable. Given that per capita GDP increased during that time at about 6.0 percent annually, the implication is that the income elasticity of rice demand is close to zero (Minot and Goletti 2000). As could be expected, rice consumption varies regionally and is closely correlated to urbanization and incomes, with the more urbanized and richer southern regions consuming less rice. Rice still plays a major role in the expenditures of the poorest quintile of the population (47 percent) and in the poorer rural areas, with 163 kg compared with 127 kg for urban households. For low-income levels, rice is a normal good; however, beyond certain income levels, rice consumption begins to fall and is substituted with meat, eggs, and dairy products (Minot and Goletti 2000). In concrete terms, some nutritional indicators showed a rapid improvement between 1993 and 1998, with stunting rates for children younger than age five decreasing from 53 percent to only 33.4 percent. Rates for underweight children younger than age five have declined much more sluggishly (Fritzen 2002). These observed changes in nutritional patterns—the larger diversification in food intake in particular—have had a positive impact on the average nutritional status of the Vietnamese.

Changes in Farming Systems and Agrarian Structures

Market reforms have radically transformed agricultural production and rural structures not only in the rice growing plains but also in the more remote upland villages (Henin 2002). In both regions, state cooperatives have been dissolved and substituted by family farms, mainly consisting of individual households that formed the membership of these cooperatives (Beckman 2001). Together with the land, other means of production, such as capital goods, have also been handed over to the new family farms.

In the first reform phase in the 1990s, per household land endowments remained small although variable across regions with an average of 0.3 hectares of annual and 0.06 hectares of perennial crops (Deininger and Jin 2008). In the densely populated Red River Delta, average farm size is only about 0.25 hectares, whereas in the Mekong Delta, families cultivate on relatively large farms of 1.1 hectares (Minot and Goletti 2000; Deininger and Jin 2008). Land distribution did not lead to a significant increase in land inequality during the 1990s—on the contrary, the national Gini coefficient for per capita land endowments had declined slightly from 0.53 to 0.50. However, regional differences persist, illustrated by the difference in the national per capita land endowment Gini coefficient, ranging between 0.34 and 0.37, for the southeast and the Mekong Delta, where it is much higher. Extending the survey period from 1993 to 2004, the Gini coefficient for rural household per capita land rose from 0.49 to 0.64, which is a remarkable change (Brandt et al. 2006).

Although land assignment to households was initially equitable, with a focus on giving commune members roughly the same irrigated land, some households ended up with less land than would have been the case in a competitive market allocation (Ravallion and van de Walle 2006). This process also led to the fragmentation of holdings in the form of small, dispersed plots, generating some efficiency losses. In 2004, the average number of plots was 4.3 per rural household, with a mean of 4.9 in the Red River Delta and only 2.0 in the Mekong River Delta (Brandt et al. 2006). With land consolidation projects having started, the number of plots is again declining.

As part of these impacts on agrarian structures, predominant farming systems and cropping patterns changed considerably within only a few years. Besides increased investment in irrigation systems and rice production, a higher share in total agricultural area became devoted to perennial crops due to enhanced tenure security for these cultures (Deininger and Jin 2008). Through a stepwise improvement of tenure security for perennial crops in particular, land cultivated with these two types of cropping changed remarkably during the reform process (Do and Iyer 2008): Plots dedicated to multiyear cropping significantly increased at the expense of annual crops, with the coffee boom in Vietnam being one indicator.

Poverty Reduction and Equity Issues

Impact on Rural Poverty

Agricultural growth has to be seen as the main way of escaping poverty (Ravaillon and van de Walle 2008). Several key factors initiated this growth and consequent decline in rural poverty, with land-tenure reform being one of them (Beckmann 2001). When more than 50 percent of the labor force is still employed in agriculture and the major share of consumer income is spent on food, reforms in the agricultural sector can have a major impact on poverty reduction (Rozelle and Swinnen 2004).

Regarding the first reform of decollectivization and the privatizing of land-use rights, two modeled benchmarks apply: (1) equal allocation of each commune's land per capita and (2) a consumption-efficient allocation equalizing expected consumption or utility that coincides with market-based land allocation (Ravaillon and van de Walle 2008). Efficient and equal land allocation together hypothetically would have resulted in slightly lower poverty rates (two percentage points) than the actual rates. If, however, the poverty lines used at that time (early 1990s) were applied—and if a purely market-based land allocation were implemented—instead of the ones used in the model, poverty incidence would have been higher. When differentiating among the rural poor, the result become more evident: Nationally, mean consumption gains from privatizing land rights are about 15 percent for the poorest, with losses of about 20 percent for the richest. However, interregional differences apply, reflecting the specific pre-socialist situation in South Vietnam. Decentralized reform resulted in a more equitable outcome than would have been expected from a purely consumption-efficient one through land markets. In general, "it seems that an effort was made to protect the poorest and reduce overall inequality at the expense of overall consumption (Ravaillon and van de Walle 2008, 97)." The researchers went on to say that, "Clearly, both equity and efficiency were valued positively."

The second reform stage was to introduce markets in privatized land-use rights. Those households, having started with inefficiently low amounts of croplands in the first phase, increased their holdings over time and vice versa for land-rich users. Market forces tended to favor the "land poor" and those who are well-rooted in rural society, namely male headed households and the better educated. If this process was a poverty-increasing driving force, then it has to be analyzed by the dynamics of rural landlessness (Ravaillon and van de Walle 2008). In other words, is there a poverty increasing landlessness effect?

Those empirical studies that were based on datasets from the 1990s have problems in showing how an improvement of tenure security by LUCs links to increased lifetime income and expenditure patterns (Do and Iyer 2008). The time lag between the issuing of the Land Law in 1993 and the data collection period of 1997–98 only allows for transitional outcomes. For instance, investments in perennial crops and trees pay off only after a minimum of four years. While credit constraints and rationing exist, consumption can fall even in periods of investment.

Extending the observation period leads to more diversified results. For instance, during the period 1993–2004, there was not only a reduction in landlessness among the poorest, but also, the trend rate of poverty reduction between 1993–2004 is slightly higher for the landless than for the rest of the rural population, with the exception of the Mekong Delta, which has a unique history of land ownership (Ravaillion and van de Walle 2008). Overall, rising landlessness in Vietnam has been poverty reducing,

an effect that is statistically significant. Thus, land market development and titling strongly contribute to overall poverty reduction in rural areas. Rising landlessness as a by-product of the reforms has not jeopardized the gains of the poor, and has not counteracted the first reform step.

However, regional differences in poverty reduction can be observed: whereas improvements in rural standards of living occurred mainly in the rice growing areas in the lowlands during the last two decades, poverty persisted in the highlands, mostly due to a continuing lack of access to complementary productive factors in agriculture. Impediments included not only limited access to irrigation water, agricultural credit, and markets, but also insufficient access to land (Henin 2002).

Although the direct impact of tenure reforms cannot be imputed from more recent rural poverty figures because of assignment issues, the general trends in the decline of rural poverty are evident (Vietnam Development Report 2008). Household survey data from 2006 confirm the continued reduction of poverty in Vietnam: The fraction of households living below the poverty line reached only 16 percent, compared with 28.9 percent in 2002 and 58.1 percent in 1993, the year the Land Law was issued. As such, about 35 million people moved above the Vietnamese poverty line. (These positive changes apply independently from the methodologies applied for poverty measurement). The *Vietnam Development Report 2005* clearly attributes the strong decline of rural households living in poverty, from 46 percent in 1998 to 36 percent in 2002, to successful land reforms combined with agricultural product market liberalization (Vietnam Development Report 2005). Even methodological problems in adequately measuring poverty should not divert from the impressive performance of Vietnam in its attempts to reduce poverty (Vietnam Development Report 2007). Compared with any other country in the region, including China, Vietnam has reduced poverty much faster.

Most of the poor still live in rural areas but it is the rapid decline in rural poverty that is reducing poverty at a national level. Using the food poverty indicator, which gives an idea of the incidence of (temporary) hunger in rural areas, 9 percent of rural households are still affected, reaching 29 percent for ethnic minority households. In other words, around 13.5 million people still live in poverty and 5 to 6 million remain food poor; however, even food poor people are moving close to the poverty line.

Regional poverty differences remain wide: People in the mountainous areas are much poorer than the lowland population. Rural poverty is greatest in the remote upland areas in the northern and the north central coast areas with poverty rates varying widely between districts and communes (Minot et al. 2006). A combination of fast declines in poverty in the poorer areas and a slower decline in the richer ones is actually resulting in a narrowing of the poverty gap and a convergence between regions (Vietnam Development Report 2008).

Asset Distribution and Landlessness

While efficiency gains from land-tenure reforms are undisputed, the effects on income, wealth distribution, and equity issues are controversially discussed. From a macro perspective, considerable equity benefits dominate after nearly two decades of reforms (Deininger and Jin 2003). Land allocation, the Vietnamese approach of titling through LUC and securing land rights, has at least partially initiated a wave of investment in agriculture, particularly in irrigated rice production in northern Vietnam, and thus contributed to a more equal asset distribution even in mountainous regions (Neef et al. 2007).

Nevertheless, there is some disputable evidence on the question of whether formalizing land rights and land market development has created an increase in landlessness, ²⁷ as people are now able to sell land in times of need. In fact, anecdotal reports and even more normative statements attest to rising landlessness, particularly in the Mekong Delta (Ravaillon and van de Walle 2008). Conversely, Do and Iyer (2008) state that the proportion of landless households has decreased in the 1990s from 11.4 to about 7 percent; however, these trends are similar across high-issuance and low-issuance provinces of titling so that a clear effect cannot be identified. They found no evidence that the 1993 Land Law resulted in major changes in land distribution in Vietnam. Data based on the Vietnam Living Standard Survey from 2004

²⁷ A household is landless if it has no land other than the land it rents, resides on, or if it follows shifting cultivation. Households that offer land rentals are "noncultivating" ones (Rvaillon and van de Walle 2008, 53)

state that 85.6 percent of all households report having agriculture-related land, with about 94 percent in the Red River Delta in North Vietnam and only 61.2 percent in South Vietnam (Brandt et al. 2006), reflecting also historical differences. Yet the percentage of rural households with land has fallen from 92.2 percent in 1993 to 89.7 percent in 1998 and 85.6 percent in 2004.

How to interpret rising landlessness in the aftermath of the agrarian reforms? One line of argument holds that starting from relatively equitable land distribution, land market reforms have created new rural class structures as they allowed rich farmers to buy land from poor farmers, who then became poor landless laborers. The other line holds that the more affluent have become landless as they shift partially out of farming into occupations with higher labor remuneration. In this way, rising landlessness and falling poverty happen together as part of a wider process of economic transition (Ravaillon and van de Walle 2008). If consumption is taken as a proxy for wealth, then models show 10 years after the implementation of the Land Law that the poorest tend to be the least likely to be landless in Vietnam.

If landlessness increases, how should it be assessed? More to the point, "does rising rural landlessness in the wake of market-oriented reforms signal an emerging new poverty concern for Vietnam, or is it simply a by-product of poverty reduction?" (Ravallion and van de Walle 2006, 21) For some researchers, rising land inequality is a bad development even if it is accompanied by less poverty. Other views focus on raising absolute levels of living accompanied by a partial shift out of farming—the selling of lands and resulting inequalities being an acceptable by-product of strengthening tenure rights and allowing for land market development. Following this interpretation, which is favored by economists, both rising landlessness and falling poverty jointly reflect a process of economic transition enabled by the introduction of land markets following land-tenure reforms.

Land-Use Rights and Gender Equality

Enforceable rights to real property enhance the potential of both women and men to use property for economic purposes in the most efficient way. However, women's access to land often depends on their marital status, so that unmarried and divorced women who significantly contribute to agricultural labor input on the land are rarely named on titles. Similarly, land certificates only bear the name of husbands (World Bank 2002). In Vietnam, land-tenure certificates had space for only one name per family resulting in the systematic discrimination of women and disregard of their contribution to productivity increases and welfare generation.

Through pilot project initiatives, this imbalance is already addressed with revised certificates that name both women and men as the rights holder, thus creating incentives for women in particular to invest in land and reap its benefits in case of divorce or widowhood. This is possible only if strong partnerships are developed with local government representatives who support such innovative approaches, which put existing informal rules and power relations into question. From their research showing that women are not discriminated against in land rental and land sales markets, Deininger and Jin (2008) suggest that it is all the more important to ease access to these markets for women through gender-balanced titling systems.

Regional Differences

Preexisting differences between North Vietnam and South Vietnam have not yet been eliminated through market reforms (Deininger and Jin 2008; Ravaillon and van der Walle 2006, 2008). In the Mekong Delta, for example, villagers had resisted forced collectivization (see Section 2)—only 10 percent had been organized in collectives. In North Vietnam, however, nearly all the land was collectivized (Ravaillon and van de Walle 2008). As a consequence, the spirit of a market economy remained more developed in the south, where adjustments through land reallocation were more easily implemented at an individual farm level. On the other hand, North Vietnam apparently had developed strong formal and informal institutions for collectively dealing with risks in agriculture. Contrary to the Mekong Delta, farmers in the north suffering from external shocks will almost never need to sell their land in order to cope with

these shocks (Ravaillon and van de Walle 2008). A much longer and intensified tradition and experience with collectivized agriculture and local networking have helped them to cope.

Case studies in North and South of Vietnam have shown that the province level Gini coefficient of land ownership declines over time. The decrease is mainly attributable to the south where it fell from 0.58 to 0.50 and started from a much higher level of inequality than in the north, which remained constant at around 0.37. As land-tenure reform is only one major element to transforming rural society, research cannot easily provide answers on the question of how much inequality is attributable to the land factor and how much to other factors? In general, socioeconomic disparities have increased within and among rural communities, most markedly in lowland rice areas or villages close to towns where structural reforms are occurring hand in hand with economic diversification (Henin 2002). Beyond single reports on increasing landlessness in South Vietnam, there is no supportive evidence on sharply rising income or consumption inequality in rural areas (Ravaillon and van de Walle 2008).

What might be expected as a future outcome of tenure reform on distributional issues are intergenerational problems triggered by relatively high population growth, as it is often the young households consisting of just married couples having left their parents' homestead who lack access to land (Beckman 2001). Land legislation thus cannot be separated from family law because it provide orientation in cases of inheritance.

Governance and Power Relations

The impact of a new legal framework for land access and transaction cannot be underestimated: Securing property rights matters and it is up to government organizations at different levels to support and finance institutions that ensure security (Deininger 2003). The Land Law together with its implementing directives has allowed rental and sales markets to emerge. It has made possible a more efficient allocation of land, enabling economies of scale in agriculture and yield increases, and is inducing demand-driven land consolidation of highly fragmented plots. However, as market economies depend on decentralized decisionmaking, competition, and innovativeness, a reformed legal framework elaborated by the central state is by far not enough for reforms to work well. Vietnam's diverse ecosystems and agricultural systems, economic gaps between favored and disadvantaged regions, and cultural differences call for a multilayered governance system. In Vietnam, national legislation is transformed into rules and regulations applicable at the local level; therefore, devolution and governance issues are relevant in fully assessing the impact of reforms for local users and stakeholders.

In northern Vietnam, the national government is aiming at large-scale devolution of the use, management, and governance of land and forest resources (Neef et al. 2007). In Dak Lak province, the local government has transferred forests formerly owned and managed by state enterprises to the local people. It is now their duty to protect and certify the forests, and enforce protection contracts (Thanh and Sikor 2006). It is not surprising that such a far reaching devolution of responsibilities has created new problems: Case studies show that devolution resulted in discrepancies between formal legal rights, actual interpreted rights, and forest-use practices. The scope and reach of actual rights has become an issue of intense negotiations or even conflicts among actors involved in local resource use (Thanh and Sikor 2006).

There is evidence that land market development is restricted as long as local political authorities retain their old handed-over power on land. The local state in Vietnam continues to play an active role in setting the terms of land-use conversions. Local party cadres still oversee titling, define land-use restrictions, and declare land appropriation for infrastructure (Ravaillon and van de Walle 2003, 2006). Poor farmers have protested about inadequate compensation in cases of redistribution and misconduct by local officials. Yet it is the same authorities who are often defending villagers' interests against national ones, specifically regarding public infrastructure. Land-tenure reform did not undermine the power of the local state when considering, for example, the administration's role in the periodic reallocations that are in response to demographic changes and new family formations. Concerns on the institutional quality

and sustainability of the reforms arise as, for example, perceptions of corruption in officialdom already ranked among the highest in the world with an upward trend (Fritzen 2002).

Impact on Natural Environment

The impact of land-tenure reforms on resource protection is multidimensional. When estimating the determinants of farmers' decisionmaking to invest in agroforestry, particularly in soil conservation technologies, the reform impact appears considerable. The issuing of LUCs has led to a significant increase in the adoption of agroforestry practices, including the development of ditches (Saint-Macary et al. 2008). In North Vietnam, increasing investment in rice terraces due to higher tenure security has led to stronger protection against erosion on steep slopes. Enhanced tenure security on agricultural lands thus supports solutions for environmental concerns (Neef et al. 2007). Compared with other direct approaches, such as the planting of hedges or contour strips, this effect seems to be far more reaching and durable.

Regarding farming systems other than intensive irrigated rice cultivation, case studies show that the impact of individual property rights may have negative effects on endangered ecosystems: allocating land rights to families leads to a conversion of rural wetlands into agricultural land. As utilization rights depend necessarily on using plots in question for agricultural purposes or allocating them to new settlers, the common pool management of the wetlands is in danger. Those areas with the highest agricultural potential become privatized while others shift to open access (Adger and Luttrell 2000). Additionally, concerns arise that market reforms have undermined collective action to ameliorate flooding hazards (Adger 1999, 2000). Consequently, land privatization together with reduced public expenditure might exacerbate the vulnerability to coastal flooding. These risks are aggravated by the diminishing role of former rural cooperatives to provide local public goods, such as protection against floods or other hazards.

4. SUSTAINABILITY OF THE APPROACH

Assigning long-term use rights, titling land, and thus allowing for temporary and permanent land transactions had a statistically significant impact on long-term agricultural investments as well as on nonfarm activities in rural Vietnam (Do and Iyer 2008). However, the results were not yet large in magnitude. Land-tenure policy reform in Vietnam does not stand alone as a single reform instrument. It was a key element of a broader reform process that includes complementary incentives to develop rural product and factor markets (Rozelle and Swinnen 2004). Enabled through land-tenure reform, land rental and sales markets had a positive impact on agricultural productivity as well as on overall growth. As for economic and social sustainability, creating private land rights strongly contributed to making the transition process toward a market economy in Vietnam irreversible. It also generated the necessary economic incentives for family farms, made the agricultural sector an engine of economic growth, and changed social structures in rural areas.

The reforms provide opportunities for households with higher abilities for good farm management and innovativeness to access land. Even producers with smaller initial endowments started to offer parcels for rent after the barriers that prevented land access vanished. Some researchers give credit to the gradual sequencing of reforms, which initially focused on rising incentives, namely decollectivization, and property rights reforms and the delay of major changes to the marketing system (Rozelle and Swinnen 2004).

Financial sustainability of the intervention requires the public to establish tenure institutions entailing a public good element—even if land administration may be partly privatized in the future. No discussions are yet taking place about the degree to which a partial recuperation of public funds is possible through land transfer taxes, which are important as a local tax source in other countries. The positive indirect effects of supporting the social and political sustainability of the intervention include relatively egalitarian land ownership and the rapid growth of off-farm opportunities (Deininger and Jin 2008). Off-farm opportunities form the basis of a broad rural development process. There is, however, a feedback mechanism reinforcing the impact of tenure reforms: Nonagricultural employment will be an additional trigger for further development of land rental markets as those leaving agriculture will contribute to the total supply of land. Land-tenure reforms have triggered a sustaining process that will relieve the country from food insecurity, combat hunger, and improve the nutritional status of the rural and urban population. Due to the improved health status and the decreased vulnerability of households in this specific field, the conditions for forming human capital and better education for youth have become more favorable.

However, besides these many positive outcomes, new obstacles have arisen that may undermine the reform process' sustainability. How vulnerable does the poor remain, how vulnerable will they be in future amidst the challenges of global change, climate change in particular, and to what degree have the tenure reforms contributed to cushioning negative effects? Even if landlessness is not a key problem in Vietnam, other risks endangering sustainability arise: Although devolution is on its way in Vietnam, local governments still lack incentives to balance private and public interests and, together with landowners and users, to manage the lands in a sustainable way. This may refer, for example, to local land-use plans.

Empirical evidence shows that secured land tenure fosters investment in agroforestry and perennial systems, even in soil conservation measures. LUCs encourage higher adoption of land conservation attempts, like ditches and other anti-erosion practices. However, the distribution of LUCs and resulting effects on land conservation measures should be closely monitored. Accessing secured land rights must not imply an accelerated conversion of forests, pastures, or wetlands into the private domain, which might not only lead to unsustainable production that endangers the delivery of ecosystem services and biodiversity but also to delinking the rural poor from income streams arising from common pool resources such as non-timber products or fodder.

Although several negative feedback mechanisms can be expected as secondary effects of land reform, particularly related to equity and income distribution as well as environmental issues, the positive

effects on economic, social, and ecological sustainability dominate. This success makes the reform project a crucial step in attacking the roots of rural poverty; transforming the Vietnamese rural economy; and as people react to economic incentives, generating new backward and forward linkages in rural sectors.

5. LESSONS LEARNED FROM LAND-TENURE REFORM IN VIETNAM

Land-tenure reforms that enable a peaceful transition from a centrally planned economy to a market economy will never achieve their objectives if they are not interlinked with other components such as reforming agricultural product markets, the factor input supply, and complementary rural factor markets, including labor and credit.

Within the land-tenure reform package, generating stronger economic incentives for rural producers is critical, as is illustrated in Vietnam's household responsibility model based on the decollectivization of cooperatives, the distribution of land-use rights, and market liberalization.

These incentives will never materialize as long as complementary agricultural policy reforms are not successfully implemented. These complementary policies imply accepting the price as an indicator of scarcity and liberalizing marketing channels such as input delivery and support service systems. This process is often accompanied by, at least temporarily, government intervention into these markets, as demonstrated by the example of the rice export quota.

As for land-based incentives, strong instruments and clear signals for enhanced tenure security are critically important, especially regarding the duration of leaseholder rights for annual and perennial crops. High investment in sustainable agriculture, particularly in soil conservation and agroforestry systems, will happen only if long-term, inheritable tenure rights are accorded to the families. Vietnam's trial-and-error approach with adjustments made for leasehold periods is understandable from a political point of view, but it might have caused delays in the successful implementation of reform in the villages.

However, a flexible, incremental approach to designing, sequencing, and implementing the reform has advantages as all different steps have to be legitimized not only at a national political level but also for the local administration in districts and communes. A lot of information and communication are necessary to break resistance against reforms and to win over various stakeholders.

Land-tenure reforms have to go hand in hand with organizational reforms at lower levels, including a decentralized land allocation and registration system as well as conflict resolution mechanisms that the rural population can address. Many case study results show that a local administration can either play a very supportive or a negative role in reform implementation. Lower-level administration is generally only as good as its financial backing for the delivery of local to regional public goods. It is therefore necessary to also interpret decentralization and devolution in terms of cost recovery mechanisms to limit fiscal burdens and align decisionmaking with financial sources. As such, a constructive discussion on the merits and limitations of land taxes must be initiated, even if such a tax may create distributional problems and burdens for the rural poor.

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