

Journal of Undergraduate Ethnography
Vol. 7 No. 1 25-46
ISSN 2369-8721

**Exchanging Land,
Explaining Power:
Land Consolidation
in Peri-urban Hanoi**

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Abstract

How do economic growth and the spread of housing and facilities affect cities' peri-urban land and peoples? In many cases around the world, agricultural land is being converted and repurposed rapidly for urban uses through the process of land consolidation. However, how does land consolidation actually affect farmers and communities? What role do they have in the process? How do they evaluate results? Using participant observation and semi-structured interviews with thirteen local farmers in Soc Son, a peri-urban district of Vietnam undergoing land consolidation in 2010, this article illuminates four major conflicts that affect the outcome of land consolidation. These conflicts are (1) between the state's strategy of decentralization and the disparate human resources on the ground, (2) between the ideology of equity and the efficiency of land redistribution, (3) between the promise of mechanization and unequal access to machines, and (4) between infrastructural improvements and actual needs. I argue that the failure of policymakers to account for existing inequalities and local context in Soc Son villages has led to unfulfilled promises of land consolidation and further stratification within the farmer community.

The Contested Nature Of Land Consolidation

Land consolidation, the rearrangement of small plots of land into larger holdings, is a highly contested issue worldwide. Existing literature on the topic underscores both negative and positive impacts on local agriculture. One school of thought claims that land consolidation contributes to better agricultural production because it mitigates fragmentation and encourages intensification and mechanization (Carter 1984, Bonner 1987, Markusen et al. 2012, Monke, Avillez, and Ferro 1992). Another school of thought, however, argues that land consolidation leads to a loss of farmland, promoting livelihood trajectories away from agriculture to non-agricultural activities and thus reducing production and productive households (Deng et al. 2006 and Fazal 2001). At the same time, studies of land consolidation often focus on quantitative large-scale agricultural impacts of land consolidation as a more abstract process. Less research has been done about how farmers experience land consolidation on the ground.

This article contributes to the on-going debate over land consolidation by analyzing the consolidation process from the viewpoints of policymakers, local leaders and farmers in Soc Son, a district on the outskirts of Hanoi, Vietnam. Reviewing land consolidation in Soc Son, a report suggests that by 2012, 9,000 hectares of farmland in Soc Son had been consolidated and the average number of parcels of land per household had de-

creased from 10 to 2.5 (Dao 2015). Two years later, the 2014 census indicated an associated increase of 3.48% in Soc Son's agricultural production (ibid.). However, news articles on the media have reported cases of resistance to land consolidation in the form of protests by many farmers against the changes in and loss of farmland. In one case, farmers in Tri Thuy village, Phu Xuyen, refused to cooperate with higher authorities and abandoned fields for extended periods in order to protest against land consolidation (Minh Tuan and Thuy Linh 2014). Thus, while production outcome may show better productivity and higher yields, the decreased area of farmland has adverse meanings to farmers. Linking such impacts to the observed benefits speaks to the contested nature of land consolidation.

Using government documents, ethnographic observation and interview data, I focus on land consolidation as a process. The paper starts with an overview of theories and literature, which is followed by a description of my data and methodology, including an introduction to my case study. Then, I will juxtapose official documents regarding land consolidation to the narratives of villagers themselves to identify four major conflicts in leadership, ideology, resource and infrastructure. I argue that the failure of policymakers to account for existing inequalities and local context in Soc Son villages left promises of land consolidation unrealized, both in its ideology as a decentralized, democratic and equity-driven program and in its goal of improving farm infrastructures.

In fact, land consolidation magnified existing inequalities in both human and financial capital within the farmer community.

Theory and Methods: A Qualitative Study

Adverse impacts of land consolidation worldwide have been noted in many quantitative studies on decreased ownership and access to land as well as the consequent loss of a stable source of income. First, land consolidation often has resulted in the loss of productive arable farmland for agriculture. In a study of different drivers of land consolidation across three country groups – less developed, developing and developed – Azadi, Ho and Hasfiati (2011) found that productive agricultural land is more likely to be converted to urban uses than to less productive land. Azadi points out that well-drained, flat land close to water sources and urban amenities is desirable for both agricultural production and urban development. In a case study of land consolidation in West Java, Indonesia, Firman (1997) concludes that lands that are flat and well-drained, usually close to a city and major highways, are more attractive for housing development. As such, these studies show that the tension between urban development and farming activities on the same type of land has led to the loss of farmland around the world.

Second, the loss of fertile agricultural land to urban expansion has resulted in disruption of farming activities and farmers' traditional livelihoods. In Viet-

nam, agricultural land use rights have always been important assets for farmers. Since a major economic reform in 1986, however, the Vietnamese land tenure system has not recognized an adequate level of private property in relation to land. Agricultural land conversion has therefore often disrupted farmers' traditional livelihoods (Nguyen 2009). In Hung Yen, a province in Northern Vietnam, for example, land consolidation had clear negative impacts on former peasant households: state and market interventions usually benefited rich farmers who were able to expand production; and the bulk of farmers were excluded from their previous agricultural livelihood, becoming increasingly dependent on wage labor and forced into survival strategies of the rural poor (Nguyen, Ton and Lebailly 2011). Similarly, in an ethnographic study of Phu Dien village in Hai Duong, a large portion of farmers had fewer stable jobs after consolidation (Nguyen 2009). While some farmers enjoyed temporarily higher standards of living by leasing the commercial land they received as compensation or engaging in informal retailing and selling basic foodstuffs, household goods and services, many other farmers had no work to do after their land was appropriated.

Nonetheless, despite its sometimes negative impact on land accessibility and agricultural employment, land consolidation has proven effective in several aspects of crop production. One quantitative study of 227 Chinese households' crop production after land consolidation

identified an increase in productivity, raising total output and proving the policy cost-effective (Wu, Liu and Davis 2005). Other research has looked at whether land consolidation can reduce farm fragmentation – a constraint to agricultural production in many developing countries. Smaller lots of land are generally inefficient due to an inverse relationship between farm size and productivity (Carter 1984); in Vietnam, the smallest farm requires five times the labor input of the largest. This implies that there is inefficiency in agricultural labor use, and that land consolidation can help release significant amounts of labor. In addition, consolidation also facilitates mechanization and intensification of cultivation, which can increase productivity and output (Markussen 2012). Again, these studies draw their conclusion on the benefits of land consolidation from a quantitative analysis of agricultural production in the context of general land reform, yet questions remain regarding how farmers perceive and experience such apparently positive outcomes.

Moreover, effective impacts of land consolidation also manifest themselves in the connection between land consolidation and poverty. A micro-econometric analysis of household surveys (Tran 2013) finds no negative correlation between land loss and income/expenditure per capita. The study points out an indirect positive impact on household welfare, via its positive impact on the choice of non-farm based-livelihoods. Another study points out that rising landlessness in

Vietnam is a positive factor in the process of poverty reduction, as members of farm households take up new opportunities, notably in the labor market (Ravallion 2008). This study shows how land consolidation leads to increasing diversification away from farming and farming intensification. However, it does not examine the choices, values and experiences of farmers in such contexts and leaves out farmers who continue farming after consolidation.

Overall, most studies use quantitative methods to analyze the agricultural outcome of land consolidation in different cities and countries, creating a large-scale picture of peri-urban agriculture. Less research has examined the issue from an ethnographic perspective and elucidated the meaning of land consolidation that farmers perceive and experience. Even such qualitative research, moreover, tends to focus on the group of farmers who has moved away from agriculture toward non-agricultural livelihoods. It leaves out farmers who have been affected by land consolidation yet still remain engaged in agricultural production. Theoretically, my research is informed by works of James Scott, a political scientist and anthropologist. In *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia* (1976), Scott demonstrates ways in which peasants resist authority via the moral economy, and in *Weapons of the Weak* (1985) he discusses forms of everyday resistance that explain the rarity of open revolts in the context of the peasant economy. Scott's works suggest that many

of the arguments about the positive and negative impacts of land consolidation are products of the state's top-down interventions and people's bottom-up responses. Yet, I also aim to go beyond this bifurcation and examine the microprocesses involved in the process of land consolidation, and the multiplicity of actors and factors involved.

This article seeks to contribute to the ongoing debate about land consolidation by emphasizing the complexity of the reform and its perceived results. It identifies multiple agents and layers of meanings that would not otherwise be addressed by a quantitative approach. Specifically, it draws on primary data from participant observation, semi-structured interviews and follow-ups with thirteen local farmers in Nam Son village, Dong Ha commune, Soc Son, over a period of two months between June and July 2015. I recruited interviewees through a snowball sample starting with Bloom Microventures, a Hanoi-based NGO focusing on microcredit for poor female farmers in rural Vietnam. While this was a small pool of interviewees within a limited social network, I gained diverse perspectives on land consolidation that were built upon varying experiences, ranging from those who are entitled to highly fertile and productive farmland to those with land loss and/or low quality land. All interviewees are semi-subsistence farmers who practice wet rice cultivation¹ both for family consumption and commercial purposes, and also grow other crops and raise livestock. My interview questions

focused on processes and stages of consolidating and redistributing farmland, land holdings, production, choice of crops, and land and water usage before and after land consolidation. Interviews lasted 45 to 75 minutes and were conducted in Vietnamese. For participant observation, I worked on the field with some of the farmers I interviewed to transplant rice and harvest other crops and at their homes to help with household chores and livestock tending. Farmers also took me on "tours" to their fields and explained the spatial and structural differences that land consolidation created.

Being a Vietnamese native allowed me to communicate easily with local farmers without any language barrier and little cultural difference. Yet my background growing up in the city and educated in the U.S. could have influenced how local farmers perceived and interacted with me as a researcher. Indeed, in multiple cases, informants asked why I chose land consolidation as a research topic, or why I cared about agriculture and the peasant community, after having studied in such a developed country as the U.S. I took that as an opportunity to express my personal passion and to partially mediate our different social backgrounds.

Another source of primary data for this study was official government documents, from both the state and local levels, on land consolidation in the Vietnamese language. These documents are official instructions for and reports on processes of land consolidation in Hanoi in general and Soc Son in particular. They

shape my understanding of the goals and policies of land consolidation as a government reform, and my comparative understanding of farmers' experiences.

Soc Son as Case Study

Situated 60 km from the center of Hanoi, Soc Son is the district furthest from the city center and has the most complex topography. Located between the plain of the urban core and the mountains of the rural area, it has a complex mountainous landscape and consequently a wide range of soil types. Soc Son covers an area with low-lying, flat valleys and hilly land (figure 1). Terraces and slopes therefore characterize its paddy fields (figure 2). While a river that runs through the district provides the area with alluvial soil, many of the plots, especially those closer to the mountains, have Acrisol soil with



Figure 2 Terraces on the field. Photo by author.

poor fertility and a high percentage of rock material. In this area, low-lying land is lower in productivity since it is prone to flooding (Anh et al. 2004, 5).

Soc Son's complex topographic condition creates a high level of land fragmentation. Over 40% of Soc Son's natural land is arable land dedicated to agriculture - 13,200 hectares in total. However, this was fragmented into many small plots. The village head and members of the leadership team confirmed that the

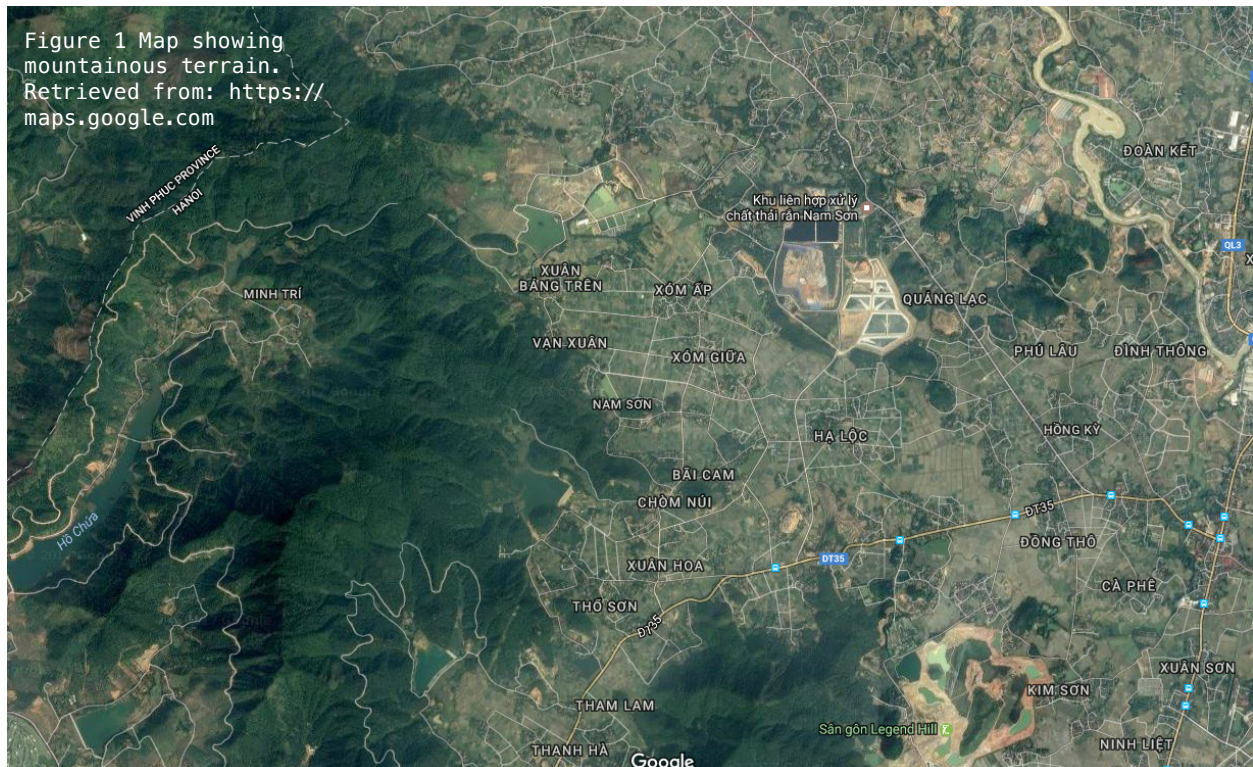


Figure 1 Map showing mountainous terrain. Retrieved from: <https://maps.google.com>

average number of plots per household ranged from 10 to 18.² According to one informant, Mr. Linh, this fragmentation, in addition to the distance from the center city, had been impeding agricultural production and economic growth in the district for many years.³ While Soc Son has a significant area of arable land, its agricultural productivity is the lowest in Hanoi.

Land consolidation is a way to address fragmentation. Land consolidation is defined in this paper as the rearrangement of land among holders on one paddy field. In Vietnamese, the phrase “đồn điền, đổi thửa” or “land consolidation”, literally translates to “exchanging plots, accumulating field”. This reflects the central idea of land consolidation, emphasizing the rearrangement of the small plots of land so that each family retains approximately the same amount of land but in a more concentrated area. This article primarily deals with the 2010 land consolidation program in Soc Son, which emerged as a part of Hanoi’s New Rural Development, a national target program to improve the economy and living standards of Vietnam’s rural areas and develop infrastructures to meet the requirements of industrialization and modernization. It was followed by the construction of new irrigation and transportation systems (Decision No.03/2010/NQ-HDND). With this foundation, let me turn to the conflicts that arose in and after consolidation in terms of leadership, ideology, mechanization and infrastructure.

Leadership Conflict: Decentralization Vs. Lack Of Capacity

Official documents, including plans and instructions for land consolidation from the national and municipal governments, showed that land consolidation in 2010 was a top-down intervention implemented in a decentralized fashion. The People’s Committee (PC) of Hanoi, which is an equivalent of a cabinet and as such the executive arm of a provincial government, took charge of the program with the support of the departments of Agriculture and Rural Development Department, Resources and Environment, and Finance as well as PCs at the District and Commune levels. These departments were responsible for providing structural guidelines and financial support while the PC at the Commune level directly planned and implemented land consolidation in their communes under the District PC’s supervision. Units of implementation were the PCs of communes, villages, households and individuals. Specifically, each commune was required to form a land consolidation leadership team, comprised of the commune’s and villages’ leaders as well as locally nominated people. The leadership team was responsible for proposing a plan for consolidating farmland according to the local context and implementing it (Instruction 68/KH-UBND). The division of responsibility among different levels of administration with a central control from the municipality embodies the government’s decentralized approach to consolidating land.

As these instructions indicate, land consolidation was hierarchical. Yet it was also decentralized and loosely structured at the municipal level. The top-down guidelines set a framework of tasks and requirements, yet they did not specify any detail or method to achieve these tasks. There were few details about the tasks for which each level of administration was responsible. This decentralized approach to programming and implementation allowed communes and villages to come up with strategies to consolidate land that best fit their local context.

Yet when villagers formed a land consolidation team at the commune level, local leaders proved lacking. Local villagers nominated and voted among the chiefs of villages and trustworthy local intellectuals to choose fifteen people for the leadership team. While this appeared to be a democratic process, the outcome was constrained by limited options. Villagers indicated that the implementation of land consolidation and redistribution involved reading and making maps as well as measuring and calculating land; not many people in Soc Son were thus literate enough to qualify. Indeed, according to Mr. Linh, a member of the leadership team, only two out of fifteen members, including himself, were actually capable of the entire job and were thus in charge of the whole process. The remaining members, Mr. Linh said, including village chiefs, lacked the skills and knowledge to perform the tasks. They were not actively engaged during the processes of measurement and redistribution. Mr. Linh saw

the rest of the leadership team as incapable and unhelpful, confirming the villagers' view that there was a lack of human capital in the process.

While villagers acknowledged their own lack of capacity, they also expressed doubts and distrust toward their leaders. Farmers expressed doubts about the process of measurement and calculation precisely because only two people of the leadership team could understand their work. The rest of the residents thus had no means to make sure these "experts" did not manipulate their position. Several informants said that they had had no choice but accepting whatever Mr. Linh said, mingling distrust with a lack of alternatives.

This lack of human capital embodied and magnified existing inequalities within the peasant community. Villagers with adequate training and skills were the only ones capable of performing and understanding the jobs of the leadership team. As such, the rest of the community had no choice but to vote for very few people, whom they could not completely trust. Inequalities in training and skills thus became a source of complaint and subsequent tension.

Decentralization in land consolidation could have given local leaders the autonomy to take into account local context and adapt state and municipal guidelines to fit their villages. Yet, the case of Soc Son shows that the failure of the higher-level government to take into account the capacities of lower levels had weakened such potential checks. Existing

inequality in knowledge and skills within the community came to the forefront as control and power over the consolidation and redistribution of land rested in the hands of a few. As a consequence, non-elites developed doubts and distrust, yet remained powerless.

Ideological Conflict: Equity Vs. Efficiency

Government documents regarding land consolidation in Hanoi and Soc Son also emphasize equity as an ideology. They repeat, especially in the Implementation Requirement section, that the process of consolidating land was to be “just, democratic, transparent and in accordance with citizens’ agreement” (Instruction 68/KH-UBND, Instruction 171/KH-UBND). Under French colonization, French colonizers and Vietnamese supporters of the French government held the bulk of the farmland, while the majority of local people did not have enough land to support their families. Given this history of extreme inequalities in land distribution during the colonial period, both the government and the people sought to ensure economic, social and political stability of the country through equity.

In practice, such an ideology translated to equality in both quality and quantity of farmland. Anyone who was a resident in the village was entitled to two units of farmland of 360 square meters each. Ten units of land made up a block. Land was allocated on a household basis, adding up the total units according to a family’s head count. In terms of quality,

each household would receive land of all different levels of productivity. Moreover, to account for the complex topography of the region and the diversity of land types, for each unit of more productive land, three square meters were deducted. Likewise, three square meters were added to each unit of the less-productive land.

While the equity-driven approach to land distribution ensured that every household had the same access to land for production, it worked against the market system that had been established since the 1993 Land Law. Until 1993, land had always been under the ownership of the central government. According to that law, farmers became legal holders with titles that could be exchanged and inherited, even though land still technically belonged to the state. The issuance of land use certificates and land titles marked a turning point; as a consequence, the exchange of land had already led to inequalities on the basis of labor, luck and other means. Yet, following land consolidation, the amount of land that household would receive depended only on the size of the family at that time. This process disregarded any exchange that had taken place prior to consolidation.

An equal distribution of land without factoring in the functions of the market in the exchange and trade of land use rights led to a sense of loss for several households. One exemplary case was the family of Mr. An. In 2003, in an effort to expand production, Mr. An’s family purchased two extra units of land from the neighboring field. They were farming on

a total of seven units before land consolidation took place. However, as Soc Son carried out land consolidation, all land regardless of title was to be given in for reallocation. Mr. An and his family thus relinquished all of the seven units in order to be assigned new ones. As it turned out, by the end of land consolidation, the family of three was allocated only six units. To them, land consolidation caused a loss of land that they had purchased with their own money. Their sense of the policy's inefficiency was exacerbated by the fact that the previously seven units of land were divided into four plots, while their post-consolidation units also covered a total of four fragmented plots. Land consolidation, in the view of Mr. An and his family, caused more problems than it solved.

Moreover, the wish to divide land equally in both quantity and quality constrained the outcomes of land consolidation. The top-down processes of land consolidation took into account the complex local topographic condition yet sought to achieve equity in an inefficient way. The leaders wanted every household to have a share of all types of land, because of their wish to provide equal access to production. Since farmland in the area varied in quality, for everyone to have a share of all levels of land meant new fragmentation of ownership.

While the goal of land consolidation, as stated in the municipal instruction document, was for each household to have two consolidated plots of land at most, this aim was not met for anyone

except for one family in Soc Son. My informants reported owning from four to seven plots of land after land consolidation. While this may signify a decrease from the original average of ten to eleven plots, it demonstrates the constraints of the equity-driven approach to land distribution.

As an outcome, land consolidation driven by equity not only failed to end the spatial dispersal of land plots but also led to internal fragmentation, or the fragmentation of land caused by terraces within one plot. During our conversations, all informants mentioned that while their land plots were closer to each other after consolidation instead of being spatially dispersed, not all attached units of land could be considered a single plot due to uneven terraces (figure 3). Ms. Nhan, a farmer whose number of land plots decreased from twelve to four, said that the uneven terraces made it harder to move up and down the fields when she had to carry plants or tools. As such, internal fragmentation continued to pose difficulties on the farmers as they made their way from one plot to another.



Figure 3: Internal fragmentation.
Photo by author.

Mechanization Conflict: Promise Vs. Access

Industrializing and commercializing agricultural production have been at the center of the agrarian question in many societies, including Vietnam, especially in the wake of urbanization when the ever-rising pressures on land for the ever-growing urban population became critical. In this context, land consolidation promised increasing automatization and mechanization of farm work, introducing machineries into this traditionally labor-heavy sector and increasing productivity and production.

Instruction documents from the government themselves suggested mechanization as a rationale for land consolidation. The consolidation of land was supposed to reduce farm fragmentation, increase the size of land plots and thus allow the application of technological advances, decrease labor intensity and reduce production input (Instruction 68/KH-UBND, Instruction 171/KH-UBND). This promise of mechanization was explained to the residents during the very first village meetings, when the leadership team announced the consolidation work plan and its benefits.

In practice, farmers did find that the use of machineries could help release the demanding labor involved in rice farming. They agreed that farming became much easier thanks to harvesters, tillers and tractors that replaced buffalos and manual labor. Ms Hoa said:

Nowadays we can hire someone to till our land before a crop and harvest at the

end of the season with a machine thanks to land consolidation. Before, the plots were not only spread out but also so small and in such weird shapes and sizes that no machine could really work. A machine cannot turn when the width of the plot is barely its size.

Other interviewees also shared the same comments on machine usage in rice cultivation. Specifically, Ms. Lai, who started hiring machines following consolidation to till and harvest on her consolidated fields, noted:

We used to use machines for tilling on one of our paddy fields before land consolidation took place. However, bringing the tilling machine to the field was always a struggle. The path leading to our plot was so small that we had to ride the machine through others' fields, which was also only possible when they had not planted yet. Farm work was hard because we depended so much on others before land consolidation. Now it is much more convenient thanks to the big fields. Harvesting with a machine takes one tenth of the time it used to. It is so good!

These cases demonstrate how land consolidation has encouraged automatization of farm work and reduced the burden of heavy labor on farming households. My conversations with these farmers have made me realize that automatization really is the future of farm work. Not only does it promise higher efficiency than manual labor but it also stabilizes farm income by helping farmers cope with the fluctuating and unpredictable weather condition.



Figure 4: Large land plot enabling the use of tiller. Photo by author.

Despite the appeal of mechanizing farm work, many farmers could not benefit from this promise of land consolidation, due to their lack of access to machinery. First, in order to automatize farm work and take advantage of harvesters and tillers, internal fragmentation would need to be solved. A common way to solve internal fragmentation was to flatten farmland using a tractor. Families that could afford to pay for the flattening service or buy a tractor could make this investment and have terraces flattened into one. However, there were families who could afford neither the machine nor the service.

Moreover, even though flattening realized the potentials of mechanization, it cost more than just paying for someone to drive a tractor. Explaining why her family hesitated to flatten their units of land across three terraces, Ms. Hoa said that farmland flattening involved removing soil on the surface of the higher terrace and evening it out on the lower terrace. In this process, the soil lost its nutrition and richness. Farmers who had their land flattened would have to make up for this loss by applying a larger quantity of fertilizer than normal. Depending on the quality of the soil below the surface, different land plots needed different amount of care after flattening. Extra expenses needed to go into tilling the land after flattening as well as after fertilizing to ensure that it was ready for the next crop. Similarly, Ms. Nhan indicated that she had found flattening land to be costly and inefficient because of the care that was required to

achieve the desired outcome. Therefore, internal fragmentation and the high costs associated with addressing internal fragmentation constrained the goal of land consolidation in terms of automatization. Unless a family could afford a tractor to flatten land or flattening service from other providers as well as subsequent care, that family could not use any machine on their fragmented fields.

Second, even in the cases where land had been flattened and made ready for cultivation, machines such as tillers and harvesters were not always within a farmer's reach and therefore did not therefore benefit every household. Indeed, in Dong Ha village, there was only one tiller and in Nam Son commune, there were only three harvesters. Such machines were not accessible to many farmers due to high prices. On average, a household earns 500,000 Vietnamese Dong (approximately \$25 US) per crop per unit of land, which is the result of three months of hard labor. A tiller or harvester, on average, costs approximately forty million Vietnamese Dong (\$2000 US). Talking about this gap, Ms. Lai joked to me at the end of our interview: "When you graduate and earn money, give me a loan to buy a harvester and we will pay you in rice."

Due to the high costs of machines, farmers in this village hired machines or used services provided by people from a neighboring village, if they preferred to pay for the service instead of doing the labor. Of my thirteen informants, ten used the service for all their fields, two people used the service for half of their

fields to save some money and one specifically indicated that the price was too high for the family. Yet even among the ten service users, there were complaints that the high costs of automatizing farm work decreased farm income to a significant extent.

Nonetheless, households that could afford a machine would benefit in the long term. In the wake of land consolidation, Ms. Khoa's family decided to purchase a tiller at the price of forty million VND, or approximately US\$2000, with a business plan in mind. At the beginning of each crop, her husband stayed at home to run the tiller, both on her farm and for others. Since he was the only one in the village to own a tiller, everyone else who wanted to automatize had to rely on his service. Tilling with the machine took much less time than with a buffalo, thus Mr. Trung was able to till for many families. Three crop cycles after investing in the tiller, the family started making a profit. They were considering buying another tiller so that their son could help out and earn extra income for the family.

The farmers' experiences of automatization spoke to a false promise of both mechanization and equity. While farmers recognized the meaning of machinery and desired to automatize farm work, the reality of poverty and unequal access to machines brought the constraints of land consolidation to the fore. The promise of automatization remained unfulfilled for many households who could afford neither a machine nor service providers. As such, whether a household could really

benefit from the technological advances supposedly afforded by land consolidation depended not only on concentrated and enlarged plots of land but also, and more critically, on the availability of machinery. Land consolidation thus amplified capital inequalities within the village. Land consolidation brought out the differences in access to machines among households of different levels of capital.

Infrastructure Conflict: Governmental Initiative Vs. Local Needs

Land consolidation promised not only mechanization in farm work but also improvement in infrastructures. This included the construction of new road and irrigation systems in the fields to improve farm productivity and farmers' working conditions. Official documents emphasized the importance of following the master plan of the city and national land laws and gaining the approval of higher-level PCs. Local leadership teams were to work out a proposal that included a plan of implementation as well as a design proposal for new transportation and irrigation systems. Many details, including the name and purpose of project, its location, technical scope, timeline, investment sources, funding methods, design, renderings and budget, were required (Instruction 68/KH-UBND, Instruction 171/KH-UBND and Instruction 4791/STC-NSQH).

In Soc Son, after every household had given in their land plots, the land consolidation leadership team came up with a

Figure 5: Enlarged irrigation channel.
Photo by author.



plan to redesign the irrigation and transportation systems. Their design included enlarged and asphalted roads as well as a system of concrete irrigation channels, which connected every land plot in the field to the main road and the water source. After the commune's PC had approved the plan, the PC sent a team of workers to the village to implement the constructions accordingly. Villagers, however, indicated that they were not consulted and as a result the goal of improving infrastructures was not fully satisfied, as the following paragraphs explain.

The changes in farm infrastructures that followed land consolidation received mixed reviews. On one hand, all farmers showed satisfaction with the new irrigation channels (figure 5). They no longer had to manually fetch or release water, since the channels provided water to

every field. In our conversation, Ms. Nhan said that prior to land consolidation, getting water to flood their fragmented plots of land had been highly labor-intensive. It involved manually fetching water from the irrigation channel that flowed far from her plots through other people's fields before finally reaching hers. Thanks to the new irrigation system, water was directly channeled to her field, and she could independently decide when to flood her field without relying on the surrounding plots. Apparently, the newly built irrigation system relieved a significant amount of labor from farm work and improved the farmers' experience in the field. Similarly, farmers also found the asphalted and enlarged road system (figure 6) to be convenient and beneficial. The renovated roads made transporting production materials and harvests much

Figure 6: Asphalted road.
Photo by author.



easier than the old small and muddy paths. Moreover, the increase in road size within the field allowed farmers to dry harvested rice on the field before transporting it home, reducing the weight and consequently the difficulty of the transportation.

On the other hand, the newly improved infrastructures did not meet all the needs of local villagers due to a perceived lack of communication. While bigger roads and irrigation channels helped farmers travel and irrigate with ease, some claimed that these roads and channels were unnecessarily large. Mr. An, Ms. Nhan and Ms. Hoa shared this view as they indicated that irrigation channels became three times bigger and roads up to seven times bigger. “Big roads are good, but not really when they eat up arable farmland. There are still house-

holds that have not yet received all the land they are entitled to,” said Ms. Hoa. In agreement, Mr. An complained, “they did not consult us when they built, and they built such big irrigation channels that it has now become harder for us to cross with buffalos and machines.” As such, it appears that while the newly built systems of transportation and irrigation improved farmers’ work, they also limited it. In the farmers’ view, the limitations of land consolidation in the end were the result of a lack of meaningful and effective communication between the people and the leaders. Specific needs of local villagers were neither communicated nor addressed during land consolidation.

Moreover, not only did the new constructions seem unnecessarily large, they also lacked desirable features. Regarding irrigation, the promise of concrete chan-

nels remains unfulfilled, as Mr. An said:

Those channels are great as they provide water directly and consistently, but they are not stable at all. The land consolidation team said in public meetings that they would build concrete channels, but concrete is nowhere to be found yet. All irrigation channels were built of dirt, and remain dirt until now. Unlike neighboring communes, where concrete channels look much more stable, ours are leaking water. The first few crops after land consolidation, everything was fine. But starting last year, some parts are cracking already. Unless they reinforce these channels with concrete, they will soon be useless.

“The failure of land consolidation to fully meet its goals created a vacuum where unequal educational levels and access to capital and goods among the villagers came to the forefront.”

Ms. Hoa also believed that the size of irrigation channels received too much attention before basic infrastructural needs were met. What should have come with irrigation channels, according to her, were overpasses on which people and buffalo could cross to get to work on the fields. Unfortunately, after constructing these channels with dirt, neither the leadership team nor the local government has built an overpass.

Farmers’ views of the new transportations and irrigation systems illustrate the perception of misalignment between the needs of local constituents and the actual implementation of land consol-

idation. The government called for the construction of new farm infrastructures to help farmers improve their working condition, yet still imposed further constraints, causing concerns in the end. Roads were too big while arable land was lacking; irrigation channels were unstable and passes were missing. This points towards the inability of land consolidation in Soc Son to meet and adapt to the local conditions.

Yet, it would be incomplete to view the outcomes of infrastructural changes solely from the perspective of non-elite farmers. Land consolidation leaders spoke of their efforts to abide by instruc-

tions from above. They perceived that the limited capacities and abilities of the people to participate brought the ideology of being “democratic, trans-

parent and in accordance with citizens’ agreement” into question. Mr. Linh indicated that villagers were ill-equipped to make judgments and decisions regarding land consolidation planning. According to him, the design proposal that the leaders came up with, after having been approved by the whole leadership team, was presented publicly for consultation with villagers. While the team was open to comments from villagers, the proposal passed “quickly and easily”. On one hand, the absence of any public feedback or comment from the people was due to social norms and a lack of knowledge. After centuries of living under the top-down

central government, it had become a norm that people followed the command and guidance of the authority without question; to raise a question or a different opinion had rarely been a possibility. On the other hand, illiterate and uneducated villagers were not knowledgeable and critical enough to foresee the limitations of the infrastructural changes based on the design proposal only.

Underlying the gap of promise and reality are, again, the existing inequalities that have permeated many aspects of life in Soc Son. Inequalities in education and knowledge influenced the communication between leaders and villagers during the design and construction of farm infrastructures. The same farmers who indicated that they could not comprehend technical procedures also attributed the constraints of land consolidation to a lack of consultation with the locals. Moreover, as a consequence of these limitations, inequalities in capital became augmented. Better-off households could mobilize their resources to mitigate the inconvenience of the new infrastructures, such as by building their own overpasses. Unfortunately, this left out those who were not as well-to-do.

As such, the promise of improved infrastructure through land consolidation remained unrealized due to the authority's failure to take into account existing inequalities within the peasant community. Unequal levels of education and training prevented local farmers to have a say in the designing of road and irrigation systems, thus reducing the efficiency of

the decentralized approach to land consolidation. As farmers channeled their own resources to respond accordingly to the constraints of the new systems, existing inequalities were broadened and the have-nots became excluded from the potential benefits of land consolidation. The outcome of land consolidation, as anyone visiting Soc Son villages can see, is an embodiment of unequal social, physical and human capital that has been further materialized through a policy that sought to achieve equity through equality.

Conclusion

In this paper, I have examined land consolidation from the political position of reformers and from the perspective of the peasant community. I have also identified four main conflicts that permeated the processes of land consolidation: between the state's strategy of decentralization and the lack of human resources on the ground, between the ideology of equity and the efficiency of distribution, between the promise of mechanization and a lack of access to machines, and between infrastructural improvements and actual needs. These conflicts illustrate the wish of the state to identify with the peasantry and improve agricultural production at the same time as they show the failure of a top-down intervention that does not effectively account for local context. The failure of land consolidation to fully meet its goals created a vacuum where unequal educational levels and access to capital and goods among the villagers came to the forefront.

Land consolidation did have promises that were appealing to the farmers. The use of machines on the field, the enlargement of roads and irrigation channels and a sense of equality among the people were perceived as beneficial and important by local villagers. Yet the top-down approach to achieving such goals without practical knowledge of local needs and conditions ultimately constrained success. Furthermore, the need to flatten land, to pay for the cost of a machine or a service provider, as well as to construct the missing features of irrigation that resulted from the limitations of land consolidation differentiated people within the community. In order to make full advantage of and benefit from land consolidation, each household would have to mobilize their own resources to fill in the vacuum. The limitations of land consolidation thus became a source of exclusion. The gap in capital and goods denied the promises of land consolidation to a number of families who could not afford machineries and new construction. Yet exclusion is also a double-edged sword. Not only were some people excluded but the gap also continued to grow as those who benefited did so in the long term. Having access to a harvester, for example, increased the income of a household in each crop, contributing to the growth of their wealth and capital.

Guided by the works of James Scott on the peasantry, this paper frames land consolidation by the interaction of forces from top down and responses from bottom up. However, by looking at land consolidation from the perspectives of the

people who were directly involved in and influenced by the reform, the thesis also goes beyond this distinct bifurcation of power. I have examined land consolidation from three perspectives: one of a decentralizing top-down government, from the political position of reformers, and from the perspective of the peasant community. The paper examines micro-processes in which the people, both elites and non-elites, were neither motivated by a single economic or political rationale nor equal in terms of physical, social and financial capital. From the bottom up, farmers at different socio-economic positions had varying responses to the forces from the top down. Future land policies and processes should address such complexity by empowering and engaging the peasant community including both local leaders and non-elites.

In order for reformers to carry out changes in the most efficient way, taking into account local context and constituents, leaders need to be trained properly and comprehensively. As land consolidation in Soc Son has shown, the lack of trained personnel to carry out land consolidation not only impeded the quality of the process but also brought about tension and distrust within the community. Higher levels of government should work to increase local educational level and provide public workshops and technical assistance to local communities so that both leaders and non-elites have a thorough understanding of policies and procedures. More importantly, taking local context into account involves more

community engagement and participation in the planning process from the outset. Leaders and farmers should develop and maintain consistent two-way communication so that local knowledge is fully utilized and concerns are addressed in time.

Furthermore, the goals of land consolidation to improve agricultural production and reduce its labor intensity can only be achieved when the reform goes beyond redistribution of land. Inequality in physical and financial capital prevents a certain population of the peasant community from benefitting from land consolidation and thus needs to be addressed. Appropriate legislation and programs can increase access to machines and incentivize the adoption of mechanization.

While this research sought to understand land consolidation from the viewpoint of people on the ground (or in the fields), it is also important to note that it was conducted only after the land consolidation and therefore is based more on people's accounts of the process than on observation of how it unfolded. It would be useful to better understand the relationship between narratives and reality, or between what actually happened and what people say happened. Future research could probe this by examining in more depth how land was reallocated and whether the claims of local leaders and villagers reflect the reality of land consolidation. Spatial analysis of land ownership before and after land consolidation would provide an important dimension to

the understanding of land consolidation as a process, shedding light on residents' values and cultures that would not otherwise be expressed in narratives. Furthermore, the reality of land consolidation should also be considered against the background of Vietnam as a late socialist country and the characteristics of local governance in a historical continuum.

¹The method of rice cultivation, in which the rice paddy field is flooded throughout the crop to kill pests, is the most widely adopted practice in Vietnam.

²There are multiple causes of fragmentation, including both the natural topographic setting and social processes during Vietnamese history.

³All names of interviewees have been changed to ensure anonymity.

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