



## Article

# Leaving the Village but Not the Rice Field: Role of Female Migrants in Agricultural Production and Household Autonomy in Red River Delta, Vietnam

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**Abstract:** The research investigates the impacts of female migrants on household's farming and its implications on rural household autonomy under the context of economic reform in Vietnam. The different forms of internal and external household arrangements related to the production and distribution processes of turning land to livelihood are designed to understand the land tenure change under the context of migration. This research focuses on the migration patterns, the volume and usages of remittance to understand the ways in which the different households allocate their resources on farm and non-farm sectors. The findings suggest that female migrants have a greater contribution in agriculture production both in remittance investment and time spending on agricultural maintenance while male migrants increase household earnings by accumulating capital from non-farm business. Migration, therefore, rather than creating agricultural regression, amplifies the autonomy of peasant families and their units of production as they respond to the modernization process.

**Keywords:** migration; agricultural production; rural household autonomy

## 1. Introduction

Vietnam agriculture has recently experienced the remarkable changes under the policies of economic reform and modernization. The Vietnamese Government has recently issued the program of building “new countryside” and “restructuring agriculture” to enhance the peasants’ income, the rural scenario and the agricultural development. Rural households often adopt more than one strategy to diversify their livelihood such as intensifying agricultural production and diversifying their economic activities in non-farm business. Among these off-farm jobs, the largest flow of voluntary labor migration was emerged as the new forms of labor allocation within farm households with various patterns and dynamics (UNDP Vietnam 2010). On the surface, the migrant labor regime in Vietnam is not too different from the labor market in many developing countries, where a cheap and unskilled labor force fosters labor-intensive industrialization. What makes Vietnam before economic reform stand out is the central role of the state in channeling and constraining peasant migrants to specific sectors and jobs—construction, garment factories, domestic work, and other jobs shunned by urbanites—through control instruments in connection with the *hokhau* system. Temporary migrants in Vietnamese cities are not spillovers from the primary sector; rather, they are blocked by state

institutions from entering the primary sector. The migrant labor regime is, in essence, the product of a system that defines opportunities by *hokhau* status and locality and that fosters a deep divide between rural and urban Vietnam. Despite *hokhau* reforms that have taken place since the late 1980s, the vast majority of peasant migrants continue to be in inferior institutional, economic, and social positions compared to urban residents.

Currently, a wave of internal and external migration has increasing and acts as a key livelihood diversification strategy for many rural households and communities—especially those vulnerable households have less access to resources. The migration decision in Vietnam is clearly not only related to personal life, but also presented the rural households' strategy (Hoang 2011a), therefore, migration has complicated and multi-dimensional impacts on rural households. Remittance is clearly the important source of enhancing both rural households' on-farm or off-farm economic activities (Asis 2004; Bélanger and Li 2009; De Haas 2005, 2010). However, migration until now has not received supported by the policy, especially when it emerged the feminization trend in Vietnam. Moreover, some scholars perceive it as a regression that negatively affects agricultural production, which implies food security and household autonomy reduction. In addition, there is limited research on the gender differentiation in migration and its influences on farming despite its clear potential impacts on the rural areas. This research aims to explore role of female migrants in agricultural production and household autonomy through investigating the shift of land tenure, labor allocation, and investment behavior of different migrant households bases on the new political economy approach (Razavi 2009) which integrates the traditional political economy.

## 2. Methodology

### 2.1. Research Sites

The Red River Delta is the flat low-lying plain created by the Red River and the Thai Binh River in Northern Vietnam. Being the second most important rice production area, the Red River Delta accounts for 20 percent of national annual crops and is mostly comprised of small-holder producers. The Red River Delta historically is also the densest populated of all Vietnamese regions with an average 0.04 hectares per head<sup>1</sup>. Under the agrarian transition generated by economic reform, a large amount of agricultural land in this areas has been converted into industrialization and other market-oriented purpose. According to the recent National Survey on Land, in a decade from 2000 to 2010, the non-agricultural land increased 89,000 hectares while the land for rice production decreased more than 34,000 hectares annually (Công 2012). The landless farmer households increased from 3.3 percent in 1999 up to 28 percent in 2016 (General Statistics Office 2018). The Red River Delta has good infrastructure and transportation services which allow its residents to seek employment in the capital of Hanoi, and/or local urban centers without the need of leaving their hometown permanently. Therefore, there has been a significant increase of off-farm business and migration flow in this region since the late 1990s.

Bac Ninh province which is typical for Red River Delta region in demography, agricultural production characteristics (Gourou 2003) and the remarkable change due to Doimoi is selected as the research site. Bac Ninh is the tiniest province of the delta with 823 km<sup>2</sup> area and around 1.038 million populations. However, the province has been represented for the prominent features of modernization and industrialization process in the delta. Due to it geography, it is one of the top provinces which attracted the highest investment in industrialization. Bac Ninh province has started the industrialization process since 2001 with the large agricultural land converted for the

<sup>1</sup> Even though a large share of land (29%) is devoted to production agriculture, the farming land in Vietnam is very fragmented. In general, each farmer has currently accessed to only 0.11 hectares of agricultural land. Moreover, this agricultural land is unevenly distributed across regions. In the Red River Delta, land area for farming is 0.04 hectares per head. In Mekong Delta, the average people have enough land for 0.14 hectares of agricultural land (Bui Minh and Phuong 2012).

industrialization zones such as Que Vo and Tien Son. Currently, Bac Ninh has already transferred 9400 ha agricultural land to set up 15 industrial zones and more than 35 industrial clusters (People Committee of Bac Ninh Province 2013). The decline of agricultural land associated with the growing opportunities to find a job outside agriculture lead to the mass labor migration. So, this acquisition of agricultural land to develop industry is supposed to initiate a precarious influence on agrarian change, including labor migration and land tenure for agricultural production. Nevertheless, even though devoting to industrial zone development, Bac Ninh has been the fifth agricultural production province in Vietnam since 2006 and its total produce was 62,000,000 tons in 2016 (General Statistics Office 2018). These varied and multifaceted pattern of migration flows make Bac Ninh an appropriate place for investigating the interlink between migration and agriculture.

## 2.2. Data Source

Secondary data: statistical data from different administrative levels of Bac Ninh province and the local reports on land use plan, agricultural production, demographic features, economic development are gathered to have an overview of land use and labor forces of Bac Ninh. The relevant research and documents on land use, migration, gender relations, and social differentiation are also useful secondary information and data for this project.

Primary data: The fieldwork for this research was carried out from August 2014 to August 2015 in Bac Ninh province, Red River Delta of Vietnam. Among eight administrative units of Bac Ninh (seven districts and one city), Que Vo district and Yen Phong district are selected for research sites. This selection is based on the proportion of the acquisition of agricultural land which have significant effected on proportion of population mobility including inter- and intra-province (Bacninh-Industrial-Zones 2014).

The sample size will be calculated according to the simplified formula of (Yamane 1967).

$$n = \frac{N}{1 + N(e)^2}$$

The overall information about Que Vo and Yen Phong districts sample size is described in Table 1.

**Table 1.** Overview of research site selection. Source: Bac Ninh.gov.vn. (Bacninh-Industrial-Zones 2010).

District	Que Vo	Yen Phong
<b>Number of the Industrial zones</b>	4 (Que Vo 1, Que Vo 2, Que Vo 3, Nam Son)	2 (Yen Phong 1, Yen Phong 2)
<b>Land converted for the Industrial zones (2013)</b>	2431.7 ha	1551 ha
<b>Number of households (2013)</b>	34,073	99.7
<b>Sample size</b>	34,326	99.6

Source: Bac Ninh.gov.vn.

Therefore, the needed sample size was 202 households, and to accumulate enough number of households for analyzed groups, the sample survey increased up to 215 households.

Data analysis: In order to facilitate comparison male and female migrants' impacts on farming and household autonomy, 215 surveyed households were classified into four groups.

Group 1: Non-migration households: None of the household's member has been migrating during the last six months.

Group 2: Male migration households: Only male member in the household is the migrant.

Group 3: Female migration households: Only female member in the household is the migrant.

Group 4: Both sex migration households: Both female and male members in the household are the migrant.

There is a notice concerned with the definition of migration using in this research. Migration is normally explained as a type of spatial or geographical mobility that involves a semi-permanent or permanent change of usual habitation between geographical units. However, due to the local

characteristics where commuting constitutes a large proportion of migration movement, and the complicated mixed type of migrant mobility, commuting has been defined in this research as one type of seasonal labor migration type which would be inter-village or inter-municipal migration but they does not change their living place and take daily-shift movement. Besides, it is noteworthy that Bac Ninh province is just 30 km from Hanoi, and in the center of Red River Delta, therefore the inhabitants are easy to commute to Hanoi and other provinces, so commuting form in Bac Ninh is diversified.

### 3. Findings and Discussion

#### 3.1. Main Features of the Surveyed Households

Table 2 describes the main features of surveyed households in which focused on the agricultural tenure change and demographic characteristics of households. The overall trend of the agricultural land holdings was observed downward from 1993 to 2014 which was mostly rooted from land conversion for industrialization. There were limited personal land exchanges among population since the Land Law implemented in 1993 did not allow an agricultural land market in Red River Delta in general and in Bac Ninh in particular. According to article 129 of the Land Contract Law, the right to use the land may be circulated by subcontracting, leasing, exchanging, transferring, or other means. Especially, the peasants have to return land to the state for public interests, and selling or converting agricultural land to other purposes is strictly restricted according to the related regulations. However, Southern peasants in their everyday language continue to talk of “selling lands” or “purchasing lands” instead of “transferring land-use right” as legally and officially specified. Moreover, regarding cultivation, if the peasant does not cultivate their land for two seasons, the farm land would be withdrawn to the committee.

There was an exception of increasing landholdings among the Group 1. Without migrating members, this group of non-migration households concentrates on agricultural production; therefore, they usually borrowed or rented agricultural land from their relatives or neighborhood who could not cultivate under the agreement of the village carder or commune. These farms were normally devoted for commercial agricultural production which served the demand of processing food production in the industrial zones.

**Table 2.** Socio-economic characteristics of surveyed households. Source: Household survey, 2015. (Nguyen and Nguyen 2015).

Indicators	Group 1 Non Migration (n = 38)	Group 2 Male Migration (n = 40)	Group 3 Female Migration (n = 38)	Group 4 Both Sex Migration (n = 99)	Total (N = 215)
Family size (mean, pers.)	4.3	4.3	5.0	5.7	5.1
Labor size (mean, pers.)	2.8	3.3	3.5	3.8	3.5
Male labor (mean, pers.)	1.2	2.0	1.5	1.9	1.7
Female labor (mean, pers.)	1.6	1.4	2.1	2.0	1.8
Migration labor (mean, pers.)	0.0	1.2	1.4	2.6	1.6
Male migration labor (mean, pers.)	0.0	1.2	0.0	1.3	0.8
Female migration labor (mean, pers.)	0.0	0.0	1.4	1.3	0.8
Agricultural land (annual, 1993, m <sup>2</sup> )	2909.7	2805.8	3350.5	3120.3	3065.2
Agricultural land (annual, 2014, m <sup>2</sup> )	7037.9	2422.5	2840.8	2241.3	3228.7

Migration labor also shares an important part in family labor size, which is accounted for 1.6 jobs on average, meanwhile the labor size of household is 3.5 jobs. Group 4 has a higher labor size (3.8) and this explains also the higher migrant members of this group. The mean of men and women participating in the migration was balanced at 0.8. Even though the proportion is now equal, it showed an important trend in current migration flows is the growing number of independent female migrants (Bélanger and Li 2009; Coxhead et al. 2015; General Statistics Office 2010). This finding is opposite with the studies on migration before which claimed that although reasons vary, women are found to be less likely to migrate for work than men in many developing countries (Dreby 2006). In Vietnam (Pfau and Giang 2008; General Statistics Office 2010) women’s overall participation in migrant labor

markets has lagged behind men's, even in the last decade. The lagging female migration is also due in part to women's occupational options as migrants tending to be inferior to men's (Asis 2006; Nguyen et al. 2015). In addition, the gender traditional norm still considers migration as men's work (Vaddhanaphuti and Wittayapak 2011). Besides, there are various constraints on opportunities that stem from market and governmental failures that are more binding for women (Khuat and Le 2008; Yamanaka and Piper 2005).

The impacts of the female labor withdraw out of agriculture and rural areas on agricultural production and household autonomy will be discussed through two scopes, from in their investment of their earnings and by returning home during the most labor-intensive periods of cultivation. The next section will explore the differences in remittance characteristics and the incomes among the researched groups.

### 3.2. Migration and Remittance Behaviors

Table 3 showed that the annual turnover of the Group 1 was categorized as the lowest level among targeted groups. Earnings from agricultural production contributes 36.6% of the Group 1 incomes and reaches the highest portion in annual income among groups. Off-farm income of the Group 1 shares a dominant segment in their annual income (63.7%) including house for rent, running a small shop, provision of an agricultural service, or taking care of children of migrants. The off-farm activities are diversified and play an essential part in income generation for majority of small-holder farm households in Bac Ninh and the Red River Delta. This result is cohesive with the findings of (Hoang Xuan Thanh et al. 2013; Loc and Grote 2015) that emphasize on the roles of non-farm business in Vietnam rural areas.

**Table 3.** Income indicators of surveyed households. Source: Household survey, 2015.

Indicators	Unit	Groups of Households				Total	P Values
		Group 1 Non Migration (n = 38)	Group 2 Male Migration (n = 40)	Group 3 Female Migration (n = 38)	Group 4 Both Sex Migration (n = 99)		
Annual income	Mean	87.3 <sup>a</sup>	121.2 <sup>a</sup>	114.2 <sup>a</sup>	162.1 <sup>b</sup>	132.8	0.00 ***
	SD <sup>1</sup>	59.5	100.3	53.2	120.1	102.2	
Farm income	Mean	32.7 <sup>a</sup>	23.0 <sup>a,b</sup>	28.5 <sup>a,b</sup>	19.0 <sup>b</sup>	24.0	0.13 *
	SD	30	20.1	25.4	15.0	20.0	
Off-farm income	Mean	54.5 <sup>a</sup>	98.2 <sup>b</sup>	85.6 <sup>a,b</sup>	143.1 <sup>c</sup>	109.0	0.00 ***
	SD	48.2	87.1	50.2	122.5	102.5	
Proportion of farm income (%)	Mean	36.3 <sup>a</sup>	21.3 <sup>b,c</sup>	25.0 <sup>b</sup>	14.6 <sup>c</sup>	22.0	0.00 ***
	SD	20.0	19.0	20.4	10.9	19.5	
Proportion of off-farm income (%)	Mean	63.7 <sup>a</sup>	78.8 <sup>b</sup>	75.0 <sup>b,c</sup>	85.4 <sup>c</sup>	78.0	0.00 ***
	SD	31.7	20.0	26.4	19.0	24.5	
Monthly income per household	Mean	7.2 <sup>a</sup>	10.1 <sup>a</sup>	9.5 <sup>a</sup>	13.5 <sup>b</sup>	11.0	0.00 ***
	SD	4.9	8.3	4.4	10.0	8.5	
	SD	1.1	2.5	1.6	1.8	1.8	

Note: \*, and, \*\*\*, are significant levels at 10% and 1%, respectively; <sup>a,b,c</sup> Means in the same row without common letter are different at  $P < 10\%$  by Duncan test. SD<sup>1</sup>: standard deviation.

Overall, the annual income of Group 2 is higher than those of Group 1 and Group 3. The off-farm earnings of Group 2 stands for 78.8% of the annual earnings while farm income occupies only 21.3%. Data from survey reveals that the male labors of the group 2 prefer to migrate to other provinces to work as daily hired labors or to run small business meanwhile their wives stay at home and are bond with agricultural production. Therefore, male labor's absence and female labor's responsibility for farming alone can clarify the lower farm income of the Group 2. However, off-farm income of Group 2 share higher proportion of households' income thanks to the higher salary or wage of male migrants and the possibilities to run beneficial off-farm business of this group.

Ranking at the third highest level of annual income, Group 3 generates farm income and off-farm income by both male workers and female workers. The male labors in this groups do not migrate



out; even though besides engaging in agricultural production for their own family they also provide agricultural services for other households in their communes. Meanwhile, most of the female laborers work in the industrialized zones located near their commune, or to be daily hired laborers. They commute daily from working place to their home after finishing non-farm activities and spend their time for crop cultivation and livestock production. The interesting point is observed that the Group 3 also borrow and/or rent land from relatives and other neighbors to inflate their crop cultivation. The farm income of Group 3 therefore accounts for the highest proportion. It implies that female migrants of Group 3 play an important role in generation of both farm income and off-farm income in comparison with male migrants; and female migration comes along with agricultural development.

In comparison between male and female migrants work, the data reveals the female migrants surveyed prefer the stability of these jobs rather than high-earning jobs; and their actual frequency of movement as well as their need to return home due to family obligations is higher than that of the male respondents. Male migrants tend to seek higher income more than employment stability. Therefore, the number of female migrants who chose to work in the IZs around hometown is much higher than their male counterpart, this reflects the continuity of the traditional gender-based division of rural household labor. “Women inside and men outside” is the traditional culture in Vietnam. The migration phenomenon also reflected the same cultural norm when there were large male migration before Doimoi. Nguyen Thi Dien’s research also highlights the duality in the nature of migrants’ lives which generate the reality that male and female migrants take the roles of their counterparts (Nguyen et al. 2015). Recently, there has been a new trend of feminization in migration (Hoang 2011b; Hoang and Yeoh 2011), however, in terms of migrating distance, when there are opportunities to work outside, the male labor force has the priority in migrating for working further and longer, taking care of earning duty. The women continue to represent their traditional division in household labor by choosing to work nearer and take care of the children and do the farming work for the household.

The highest annual income (162.1 million VND) falls into Group 4 in which both male and female migrate out for work. Both male and female laborers of this group migrate to other provinces (such as Lang Son, Quang Ninh, Hanoi . . . ) to run business. Off-farm income accounted for 85.4% of the Group 4 annual income while farm income only is 14.6% in total. They have kept agricultural land, but their land was mainly cultivated by their parents or lent to other relatives. It implies the purpose of keeping their agricultural land is more important than generating revenue from agricultural production. Agricultural land on one hand can ensure the food subsistence of the family that remains in the village. In the context of food safety issues, home produced food is also considered an everyday practice of rural households to ensure their food quality. Moreover, agricultural land assures people a job, a livelihood, and somehow it serves as a safety net. Whatever they do outside, if they fail they can always go back to their own land. Li (1996) also pointed out that Vietnamese migrants maintain their agricultural land use right as an insurance for their life because of the fear of unstable jobs in the cities as well.

In terms of monthly income indicators, all indicators of Group 1 are lowest compared to those of the remaining groups. It indicates that migration has positive effect on income generation for farm households in the Red River Delta. All indicators of monthly income of Group 2 are higher than those of Group 3, showing that the coloration of male migration contributed a higher income to farm households than migration of female workers. Moreover the income indicators of Group 2 and of Group 4 is higher than those of remaining groups however there is a considerable income disparity among households of Group 2 and among households of Group 4, reflected by standard variation (SD), which discloses the differentiation between low and high income groups.

#### 4. Remittance and Rural Household Autonomy

Even though the amount of remittance depends on volume of migrants’ earnings at the destination and the commitment within households, nearly 100 percent of migrant households report that they received remittance. Migration and its remittance is no doubt contribute a remarkable proportion

in rural household income. Table 4 shows that the households which have both male and female migrants received a significantly higher amount of remittance in mean.

**Table 4.** Remittance of surveyed households. Source: Household survey, 2015.

Groups of Surveyed Households	Remittance (Mean, Million VND)
Group 1: Non-migrant households	0
Group 2: Male-migrant households	51.9 <sup>a,b</sup>
Group 3: Female-migrant households	66.3 <sup>a,b</sup>
Group 4: Both male and female migrant households	120.8 <sup>c</sup>

Note: <sup>a,b,c</sup> Means in the same row without common letter are different at  $P < 10\%$  by Duncan test.

Higher remittance directly helps to increase cash amount in the rural household which is essential to spend for education, health and/or social events. Therefore, female migrants are likely to reduce the need to sell agricultural production for cash needs. Instead of selling the agricultural product, they could keep that for their own family food's consumption. This could strengthen rural household food sovereignty and then their autonomy. These agricultural foods are also provided for other migrating members. This reduces the daily expenses of living costs in the cities and helps them generate additional savings, then in turn, higher remittances.

How remittance is invested is always in the heart of all migration debates. Yet, despite local differences, there are general patterns of investment that have been widely reported in migration research (Hull 2007; Dean 2008; Hugo 2009). The popular trend is that a majority of the remittance income is first used to cover basic needs such as food, health care, and education, while the remaining is invested in land, livestock, housing, business ventures, and savings (Seddon 2004; De Haas 2005). Better outcomes appear when remittance contributes to saving up through households investments in land, agriculture inputs, education or non-farm business (Ellis 2003) in which the latter allows them to have better quality of living and household autonomy. However, while spending patterns of remittances are similar for many developing countries (Clark 2007; Hull 2007), the specific implications of remittances for agriculture are doubtful.

The survey data shows that the share of households which use part of their remittance for productive investments, especially in agricultural production, is relatively small, 38.6 percent of the surveyed households. Table 5 reveals that Group 3 invested remittance in agricultural production in the the highest proportion (60.5%) while Group 4 occupied the lowest level (42.4%). It is mainly explained that the female-migrant households can manage better in combination migrating with doing agriculture due to their occupation as partly describe in the previous part. In case female migrants migrate around their commune and can come back home daily, they are certainly taking care of farming in their free time and on weekends. In case women migrate for further distance, they continuously maintain their household's agricultural production by coming home for transplanting rice seedlings or to harvesting regardless how busy they are. If not, their husband would easily abundant rice production as they used to cease the vegetable growing in their backyards. Paris et al. (2009) and Kabeer and Anh (2002) share the same view that women still continue to dominate in rice production, owing to the deeply embedded tradition that rice farming is the woman's responsibility in North Viet Nam. Even though they recently undertook multiple jobs, including off-farm businesses, women made up some 60 per cent of the agricultural labor force and were the key source of labor in rice production—the major crop in the agriculture sector (Kabeer and Anh 2002; Paris et al. 2009). While the living cost is high, food prices have fluctuated according to national and international markets; while the share of food has still remained the main part of household expenses, the female maintenances of local traditional agricultural activities shows the significant contribution to food security. Opposite with this findings, McCarthy find out in Mekong River Delta, out-migration negatively affects traditional agricultural activities but positively affects livestock activities (McCarthy et al. 2006).

**Table 5.** Households' agricultural investment. Source: Household survey, 2015.

Households	Agricultural Investment				Total
	Yes		No		
	N	N %	N	N %	
Non-migrant households	17	94.4	1	5.6	18
Male-migrant households	25	65.8	13	34.2	38
Female-migrant households	29	74.4	10	25.6	39
Both male and female migrant households	55	45.8	65	54.2	120
Total	126	58.6	89	41.4	215

In contrast, the households which released more than two members migrate out constrain more or less the labor deficit at the season peak time; therefore, they are likely to reduce in investing in agriculture activities. Even though the large-scale commercial agriculture is supported by the Government as the way of boosting food security (De Brauw 2010), the interesting point was that this research area did not follow the trend of many other northern villages in Vietnam where an increasing number of households are diversifying their agricultural activities<sup>2</sup> beyond the previously predominant rice production. Rather, the rural household in research areas keeps rice production<sup>3</sup> as the fundamental agricultural activities, combining with some subsistence agricultural activities such as backyard cultivation and poultry raising rather than develop commercial crop production, especially with the female-migrant households. From the women peasants' perspective, the reason is not because they lack inputs to invest in other agricultural activities, but it is because they consider on one hand animal raising or cash-crop cultivation is time and labor consuming compared to rice production. On the other hand, the profits from growing cash crops or animal raising are lower than migration and other non-farm businesses. Therefore, by far the best combination strategy is practicing rice production at the suitable level while they are free from working outside.

Regarding to harvesting, peasants in the Red River Delta recently can choose doing manual or/and renting combine harvester. Renting a machine for harvesting is even cheaper and faster than renting laborers for manual harvesting. Harvesting machines cost around 150,000 VND per day while renting a laborer for manual harvesting ranges from 250,000 VND to 300,000 per day and the harvesting machine can finish one ha in a day while manual harvesting need three days. However, harvesting machine only can used in dry and large area paddy field; combine with the given condition that rice needs to be ripen evenly. Besides, if a storm or monsoon happened in the harvesting time, the machine could not be used as well. Moreover, Bac Ninh peasants usually choose manual harvesting in the winter-spring season, because following this season they will grow some cash-crops. If the paddy is harvested by machine, it would create deep field trenches which make water drainage vegetable grow difficult. Therefore, they normally rent harvesting machine in the summer-autumn rice season.

It is also interesting that the labor exchange is traditional important way for the farmer to adapt with labor shortage in the season time, mainly taken by women. Most households in the village got help during harvest from their neighbors and relatives. All these people are farmers in Bac Ninh and this reflects the important role of reciprocity. In Vietnam reciprocity is expressed as “*đổi công*”, which means human feelings and is seen as a form of ethical and expressive exchange. Owing and returning labor are important elements in Vietnam social life. In sum, migrant rural households in Red River Delta respond to labor shortage at the peak time by keeping rice production as main agricultural activities, women migrants come back home and labor exchange/mutual help, rather than investing in machinery.

<sup>2</sup> The popular trend in Vietnamese rural in agricultural diversification is to raise large stocks of pigs and/or large flocks of poultry for sale, with intensive use of industrial animal feed.

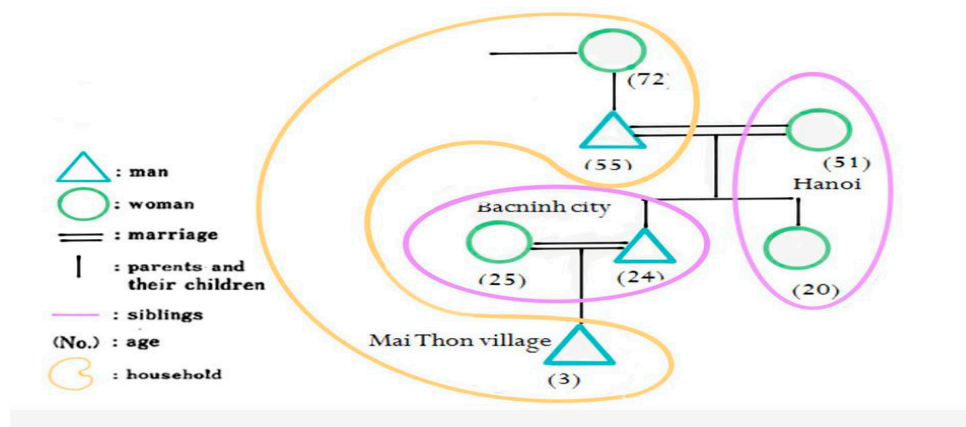
<sup>3</sup> In Vietnam, traditionally the same term is used to designate both “Rice” and “Agriculture” (Lebailly 2015).



Besides, another important contribution of migration is to relieve the cash need of rural households, so that small-holder farmers do not need to grow high yield breed to sell. Instead they could grow high-quality breed for their own consumption. [Khue et al. \(2016\)](#) claimed that from the peasant's perspective the traditional local variables are much more preferred than the few high-yielding variety of rice that has been grown for the past few years. According to the peasants interviewed, there were traditionally more types of rice, which had low yields, but were much more resistant to pests than the current predominating varieties. It was reported that the high yielding rice has remarkably changed the quantity of output, but at the cost of the increases in the inputs such as fertilizers, insecticides, and pesticides. Besides, these high yielding rice variables have not given the peasants the chance to sell their surplus rice in the market as before because of its low quality and consumer preferences. It is also noteworthy that unlike before when 100 percent of the sampled households were found to sell surplus rice in the market at a mean of around 48 percent of their output, recent households in Group 1 said that they keep their rice for their daily consumption up until the next planting season or sell/share it with their relatives who cannot cultivate. At the same time these intensive high-yield rice productions are mostly used for commercial purpose. Thus, through enhancing agricultural production, migration is important pathways for rural household to improve their own choice and autonomy.

## 5. Migration and Multi-Spatial Household

Even though migration has obviously positive impacts on income accumulation, migration is the household decision making which need the suitable arrangement among their members' possibility and profit. Household membership is usually defined as living 'under the same roof', however, under the context of Vietnam industrialization recently, this concept is gradually changing into a multi-spatial household. The typical strategy of rural households in Bac Ninh province to increase their autonomy is practicing rice production at the suitable level to keep their own land while releasing some of their family members for off-village and off-farm business as description of Figure 1.



**Figure 1.** Model of labor division in a typical Bac Ninh's household. Source: Household survey, 2015.

The head of this household is the husband who is 55 years old who is now mainly stay at home and take responsibility of rice cultivation, included spraying fertilizer or pesticides. He also manages to work as a construction worker 15 days per month which would bring him 3,000,000 VND every month. The wife is migrating in Hanoi as a house cleaner (and collecting junk for sale when she was free) while taking care of their daughter who is pursuing diploma in Hanoi University. She often goes home to transplant rice seedlings or to harvest. Their son is working in Que Vo industrial zone which permit him to go back and forth. He also helps his father in agricultural production on weekends. The husband's mother takes care of their house, and she would do votive weaving in free time. The strong commitments and obligations between family members show that this household model is

well-functioning with mutual support divided across space. Multifunctional farms that emerge from processes of repeasantization, as Van der Ploeg suggests are in essence, a modern expression of the fight for autonomy and survival in a context of deprivation and dependency”.

## 6. Conclusions

Rural-out migration and remittance flows play as an important role in the diversification strategy for many rural households and communities—especially those vulnerable households which have less access to resources in Vietnam (Oxfam and AAV 2012). Migration permits rural households to amplify their family revenues and increase their resilience with the risks allocating the household labor into many diverse spaces (Nguyen et al. 2008). The paper determined that migration is an essential diversification strategy in enhancing rural households’ livelihoods, rather than deteriorating their position. The migration process has transformed labor structures and supply in rural households, leading to changes in household across three main dimensions. Firstly, the research found that rural households keeps their possession of farm land even if they are less likely in using it as a mean of production. Renting or exchanging agricultural land has become common between households in Bac Ninh province rather than selling. This renting/exchanging of agricultural land helps to re-distribute land among households which have different labor capitals. Besides, in comparison to male migration, the female migration has positive impacts on agricultural land use for agricultural production because the traditional gender norms associated with their choices related to the pattern of migration allow female migrants to combine the migrating job and agricultural production. Maintenance farming is an imperative step to keep households’ land, which it implies the important role of female migrants in raising rural household autonomy.

Second, migration leads to the feminizing agricultural production with higher participation of and female labors in agricultural works. However, there are the less evidences of labor shortages at both a household and community level because of the participation of female migrants on agricultural production and hiring labors. Various forms of labor exchanges and labor arrangement have been practiced by female migrants rather than dependence on labor market. This research argued that feminization trend in migration does not associated with de-agrarianization. Rather, it shows the resilience of females for their extra earning chances and their households under rapid global change.

Third, although the income of the female migration households is lower than that of male migration households, they have higher interest in using their remittance for agricultural investment. Remittance helps to improve household income, as well as reduce the need for peasants to sell their agricultural production for cash, which would increase their own food sovereignty. This implies that although migration would be considered as the supplement strategy for agriculture production to increase household security and autonomy. Given these opportunities, the economic potential of internal remittances needs to be recognized by policymakers and service providers to maximize the development of internal migrants, their families and their communities.

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