



The Evolution of Migration: The Case of Coastal Sandy Zone in Thua Thien Hue Province, Vietnam

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ABSTRACT

By using the baseline data of Hao (2009) with 110 households, this study aimed to evaluate migration tendencies, reasons for migrations, contributions of migration and the factors affecting immigration waves. Two types of models were used, the difference and differences method applied to carry out the change of total income caused by the decision to migrate; the logistic models applied to identify the factors affecting on migration decision of household. The results showed that migration had a vital role in livelihood outcome and the positive trends in migration issues included diversification of jobs, higher level of education and higher wage for migrants. From the research findings and the problem statements, some well-orientated policies need to be focused on taking advantage of migration issues and reducing its negative impacts in the long term (Deshingkar, 2006; Herrera et al., 2018).

Keywords: Income Distribution, Wage, Migration

JEL Classifications: D30, O15

1. INTRODUCTION

The issues of migration in relation with economic development have been taken into account during the period from the 1950s and 1960s, to neo-Marxist pessimism over the 1970s and 1980s, towards a more optimistic dimension in the 1990s and 2000s (De Haas, 2010). This field of study contained two sides of arguments, some studies argue the positive impacts of migration on the economy and others support the negative issues (Zhang et al., 2006). So, whether this process should be encouraged or rejected is currently hotly argued (Mendola, 2006).

There are various appropriate reasons to implement migration strategies. Basically, the migration waves could be caused from or influenced by the risky nature of rural production and the difficulties of self-insurance in low-income rural settings (Rosenzweig, 1986; Morduch, 1994; Mendola, 2006; Jaimovich et al., 2015). Some reasons are caused by the shortage of capital

resources: Human, natural, physical, social and financial capitals (De Brauw, 2010). The fact that a majority of migrants are living in rural areas and standing on the high-pressure position of having a large family with low land use per capital leads to the difficulty to satisfy the basic needs. Frankly, the emerged problems in rural areas should be taken into account in relation to the lack of job opportunities. The agri-based activities do not consume more labor force in comparison with the last term. New trends as the use of machines and technology in almost farming harvesting activities reasoned in lower demand for labor force (Phan and Coxhead, 2010; Zhang et al., 2006).

The push and pull approach is recognized as a basic tool to analyze the cause and effect of migration (Barrett et al., 2001; Démurger et al., 2010). The fact is that this approach might support to determine the possible push factors from the homeland (Wouterse and Taylor, 2007). Push factors come from the pressure of the living conditions, a large family size with a lack of natural

capital as well as from migration policies of the multi-level from governments. Regarding pull dimensions, it might be involved various phenomenon (Ellis, 1998). The fact is that some regions issued the policies to attract skilled labors which some promotions such as a high salary, welfare, and housing. In the case of Vietnam, some developed cities such as Ha Noi, Da Nang and Ho Chi Minh implemented the policies to attract skilled labor by a contract around 7-10 years coupled with various priorities to ensure that migrants and their family will stay to work and establish a new family. Besides, some internal factors contribute to the decision to migrate such as the demography of households (household scale, education level, gender...), the motives of themselves (Chen et al., 2019), the invitation for working from relatives or countryman.

Migration and related outputs have various benefit for migrants and their family and this strategy is as a potential exit strategy for the family members of agricultural households who remain at subsistence (Chen et al., 2019). Migration could be contributed in, creating job opportunities and reducing pressure for households (Nguyen and Minh, 2016). Moreover, this strategy was also counted as a factor to reach the efficient allocation of labor and increase total productivity (Wouterse and Taylor, 2007; Hadijah et al., 2012). The remittance of migrants has been an important aid to households by increasing living conditions, upgrading income level and re-claiming this amount to invest for livelihood activities can diversify the income sources (Mendola, 2006; De Brauw, 2010; Nguyen and Minh, 2016). Hence, working at developed destinations could build up the skills of labors. These skills and knowhows benefit to their homeland by modifying and transforming the technology. The fact is that this innovation might raise the agricultural productivity in the long term which leads to a retrenchment of the gap between rural and urban areas (Stark and Lucas, 1988; Mendola, 2006; De Brauw, 2010). Especially when migrants worked overseas with various advantages such as working environment, skills and technology, this advance to the home country when they return (Deshingkar, 2006; Lanati and Thiele, 2018).

Migration was a key factor in the historical evolution of Vietnam's economy (Nguyen and Minh, 2016). The decision to migrate in Vietnam transpired clearly not only related to personal life but also presented a rural households' strategy (Hoang, 2011). Zhang et al., 2006 and Nguyen et al., 2018 stated that migration indicated the complication and multi-dimensional impacts on rural households. An important question needs to be answered: Why do inhabitants of rural areas have to choose migration strategy? First, in the position of a developing country, Vietnam is chartered by high density, young population, low capital source per capital leading to pressure in economic and social development, especially in rural areas with low job opportunities and low payment for labor. Second, although the agricultural sector still has a crucial role in food security and foundation of economic development strategy, it is now facing numerous drawbacks especially in the case of traditional models of productions (Thanh et al., 2015; Van Huong et al., 2018; Ngo et al., 2018). The given consequence is an impact of the progress of globalization. As the completion of agricultural products of developed countries have higher quality and productivity as well as to adapt to upcoming issues, Vietnam

is promoting a large scale production combined with technology to increase the productivity gain by reducing marginal cost in order to upgrade the ability to compete with imported products from those industrial economies (Thanh et al., 2015). Manual work is replaced by modern machines leading the majority of the labor force to lose agricultural work and its income. This incentivizes them to discover new strategies (Stark and Lucas, 1988). Last but not least, some developed cities such as Ho Chi Minh or Ha Noi were a dream destination for immigrants to change their life (Zhang et al., 2006; De Brauw, 2010; Nguyen and Minh, 2016). Those cities with large scale population, vast industrial zones and 70% of Vietnam enterprises (Zhang et al., 2006) have been considered as a pull factor for migration performance.

Various recent studies conducted in the field of migration issues and its contributions to the economic development of Vietnam. Thanh et al. (2015) carried out the topic of micro-level impacts of remittances on the behavior of households in Vietnam by using the data from the Vietnamese Household Living Standard survey to identify directions of spontaneous rural-urban migration during and after the *doi moi*. The study contributed to build the system of related theoretical studies and indicate the micro-level impacts of domestic and overseas remittances on the behavior of households such as consumption- investment expenditure patterns and propensity. Phan and Coxhead (2010) implemented the topic of Inter-provincial migration and inequality during Vietnam's transition. By using census data, this study identified the migration patterns and determinants. The main contribution was a theoretical framework that gives a model with a solid structural interpretation to evaluate the impact of remittance on the homeland province. It also took into account the relationship between international migration and regional level of income inequality. In the study of Seasonal Migration and Agricultural Production in Vietnam, De Brauw (2010) applied instrumental variables techniques to understand how migration can affect agricultural production.

The main point of the given studies is the use of census data to carry out the related migration issues. Although the results of the given studies proposed rich conclusions in this fields, it lacked insight information about the relation of migration and income contribution, wage and education level, and diversification of wage by typical work as well as the factors affecting migration behavior. In overall, those studies could not reach the double difference among households with migration and without migration, and the status of households before and after migration mainly because of the deficit of primary data collection. In addition, indicated studies did not meet the deeply well-explained for straights, reasons and solutions for migration pathway due to the lack of quantitative methods such as focus group discussion, key information interview by authors themselves.

This study aims to evaluate tendencies, straights, reasons for straights in migration. In addition, related issues were studied through a classification of wage by educational level, type of work and host destinations. Hence, double differences of total income by migration were approved by using the difference and differences approach, particularly, in the case of with and without - before and after migration respectively (2007-

2008 compared 2017-2018). In another dimension, this study contributed to the analysis of factors affecting the decision to migrate. It has also taken into account some recommendations for a sustainable pathway of migration. For the research questions, our study went throughout to deal with several points: (i) What are the current tendency, the straights and reasons for migration? (ii) Are there any dynamic changes in salary with different classifications of educational level, type of work and host destination? (iii) How is the contribution of remittances into the total income of the households? (iv) What solutions should be developed for a sustainable pathway of migration strategy? The structure of the study, without the background, included: (i) The method of analysis presenting data collection and data analysis (ii) the results and discussion presenting the change in percentage of household with migrants, remittance and its contribution to the total income, some information of destination, wage, work classification and also the analysis of factors influencing the decision to migrate; (iii) the conclusions and recommendations.

2. METHODS

2.1. Research Site Description

Thua Thien Hue (TTH) is currently approved at the poor province, with 70% of households living in rural areas and mainly base on agricultural activities (Provincial Committee, 2018). As in other rural areas, migration is considered as the key orientation for households that can bring more opportunities for diversification and upgrading income (VUSTA, 2011; Malik et al., 2013; Nguyen et al., 2015). In other aspects, there have been still existed various adverse issues of migration that need to be addressed including the scarcity of job opportunities, hard working conditions, low wage/salary for labor as well as the shortage of social networks. The given issues caused by various reasons such as low education, limited professional knowledge and skills, lack of labor contract, lack of information, lack of networks for migrants.

Based on the empirical study of Hao (2009), this study implemented the survey in the coastal sandy zone with 4 districts including Quang Dien, Phong Dien, Phu Vang anh Phu Loc districts, which are representative for the coastal sandy zone in TTH (Map 1). This area goes alongside with the sea extends on the total length of 105km. The Coastal Sandy Zone represents over 18% of the total provincial area, occupied approximately 50% of the total population of the province. The average population per district varies considerably and ranges from 92,000 inhabitants in Quang Dien to 179,000 inhabitants in Phu Vang (Statistical yearbook, 2017).

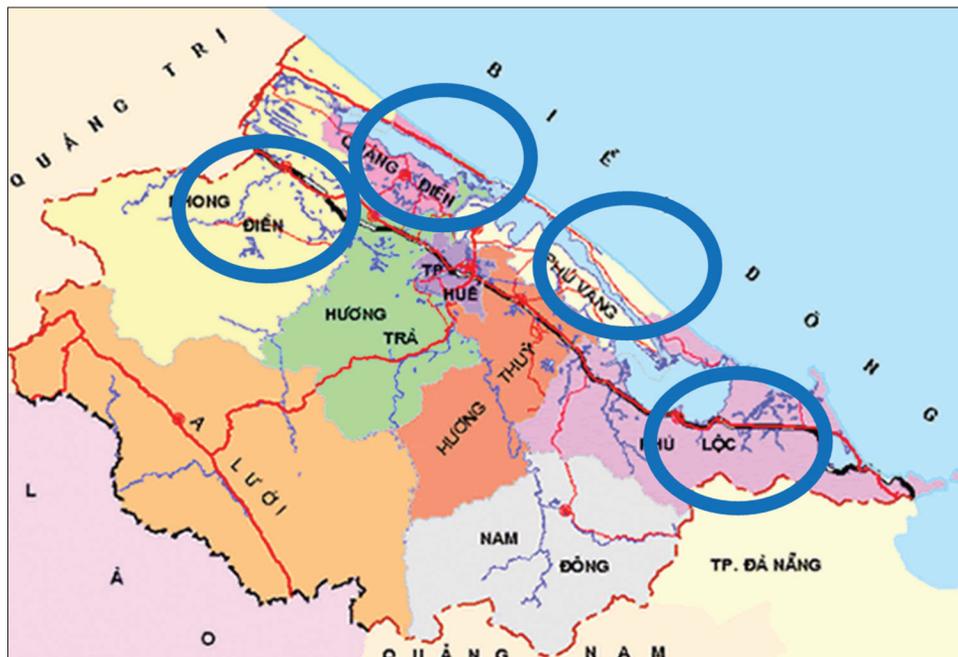
2.2. Data Collection

2.2.1. Data source

Reviewing related theories and studies for the basic definition, impacted factors and contributions of immigration on multiple levels. Data for the study was combined with secondary data including annual reports at different local levels, statistic yearbooks and related studies about migration strategy. Primary data was collected by taking many different approaches. The participatory rural appraisal was firstly endorsed to use for fast understanding of practical bases at the research site. Secondly, participatory rapid assessment continued to use that enable individuals to share and assess their local knowledge, thereby allowing them to plan and to act and more advanced of migration in research site (Chambers, 1994). Historical profile, focus group discussion, key informant interview was also applied to collect information in advance that allows us to capture an overall picture of the history of migration as well as the current trends, drawbacks at the research site.

This study reused the constructed questionnaire of the baseline data of Hao (2009) for 110 households on the research site. Related to the research design in 2009 that was carried out in 2007-2008 in four districts representing for the coastal sandy zone in TTH (Figure 1). In the baseline study, a total of sample size included 136 households distributed to the four districts in the province. For sample selection method, due to the limitation of time and

Map 1: Thua Thien Hue province and its districts



budget, the study selected a quota of 136 households. To identify the study site in the province, various conversations with the key informant interview at multi-level were firstly organized. Likewise, the relevant documents such as maps, the annual report was selected accurately. Some key criteria had to be strictly observed that includes the study site should meet the requirements of a representative of the rural context about the diverse agro-ecological and socio-economic conditions; the study site must be consisted multi-level of infrastructural access; it also considers the inclusion of diversification about livelihood activities. For the targeted households, a two-stage design method was applied.

At the first stage of the household survey, a list of households was used to check the number of households willing to join in the survey. At this stage, an assembled procedure aims to collect information on the main livelihood activities, land use areas, the ratio of poor households, family-scale and migration status. This step helps to determine a cross-check with information from households. Following this, a structured questionnaire was used to collect information on social and economic demography of households, livelihood capital, livelihood strategy and its output based on the Sustainable Livelihood Framework proposed by Department for International Development (DFID) in 2000. The survey focused mainly on the dimension of migration. According to the baseline study, 110 households on a total of 136 were on the list for the survey procedure. The rest of the households were missing because some households moved to other places; in some cases, the head of the household passed away and, some members of the household were not willing to join the survey. Following, the questionnaires were cleaned and inputted to the SPSS software in order to prepare for analyzing process.

2.3. Data Analysis

The study applied basic indicators for data analysis, calculating family scale, labor source, land use area and source of income. Some of the related issues took into account the percentage of households that have at least one migrant and compared the income of the two groups with and without migrants.

This study used the approach of impact evaluation to evaluate the role of migration in total household income. The Difference and differences method has been widely applied to impact evaluation in the rural study field. The decision of households to migrate was considered as an incentivized factor to the total income; it was used to compare the two dimensions of total income before and after (compared 2007-2008 and 2017-2018) and household with and without migration to recognize the gap in total income between the two groups in two periods. This study focused on proving the effect of migration on the total household income, the simple linear of regression including the dependent variable was the total income, the control variables are: (i) M: Migration (1: Household with at least migrant; 0: without migrant); (ii) T: Year (1: 2017-2018; 0: 2007-2008) and (iii) DID equal M * D. The DID variable played the role of total impact of migration toward total income households before and after two periods and, household with and without migration. The detailed information of the DID approach is presented in Table 1. The practical model of running a regression analysis with the ordinary least squares method (OLS) as following.

$$Y = \beta_0 + \beta_1 M + \beta_2 T + \beta_3 (X * M) + \epsilon \tag{1}$$

The change of total income of household can be classified as the Table 1 below.

The logistic model was applied to analyze the factor affecting migration. The criteria of variables in the model were based on related literature of previous studies. The practical model is below.

$$\text{Log} [P/(1-P)] = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \dots + \beta_9 X_9 \tag{2}$$

Of which, the ratio (P/1-P) denotes the possibility for one household to have at least one migrant. The X1...X9 variable has taken into account the model to analyze the independent factors on the dependent variable. For selecting the appropriate variable, the study used some relevant references from the literature review process (Table 2).

3. RESULTS AND DISCUSSIONS

3.1. Information about the Surveyed Household

The general information of the surveyed households was presented in Table 3. The average age of the head of the household thus far

Table 1: Identification of the change of total income by migration

Y_{MT}	M=1	M=0	Difference
T=1	Y_{11}	Y_{01}	$Y_{11} - Y_{10}$
T=0	Y_{01}	Y_{00}	$Y_{01} - Y_{00}$
Change	$Y_{11} - Y_{01}$	$Y_{01} - Y_{00}$	$(Y_{11} - Y_{10}) + (Y_{01} - Y_{00})$

Source: Adapted from World Bank, (2010)

Table 2: Information of variable for the logistic model

No	Relevant references
Age of head of the household	(Wouterse and Taylor, 2007; Brünjes and Diez, 2016; Thanh et al., 2015)
Education level of head of the household	(Wouterse and Taylor, 2007; Brünjes and Diez, 2016; Thanh et al., 2015)
Household depends on	(Brünjes and Diez, 2016)
Agriculture	
Family-scale	(Wouterse and Taylor, 2007; Brünjes and Diez, 2016; Thanh et al., 2015)
Land scale	(Wouterse and Taylor, 2007; Démurger et al., 2010; Brünjes and Diez, 2016)
No of livelihood activity	(Brünjes and Diez, 2016)
Household head with training courses	(Brünjes and Diez, 2016)
Household with members of mass organizations	(Brünjes and Diez, 2016)
Household has saving cash	(Brünjes and Diez, 2016)

Table 3: General information of household

No	Unit	2007-2008	2017-2018
Age of HHH	Age	51.9	61.9
Education level of HHH	Year	6.6	6.6
Family scale	Person	5.9	4.6
Land scale	Sao	22.3	22.5
No of livelihood activity	Activity	3.2	3.4

Source: Surveyed household

Figure 1: Research design framework

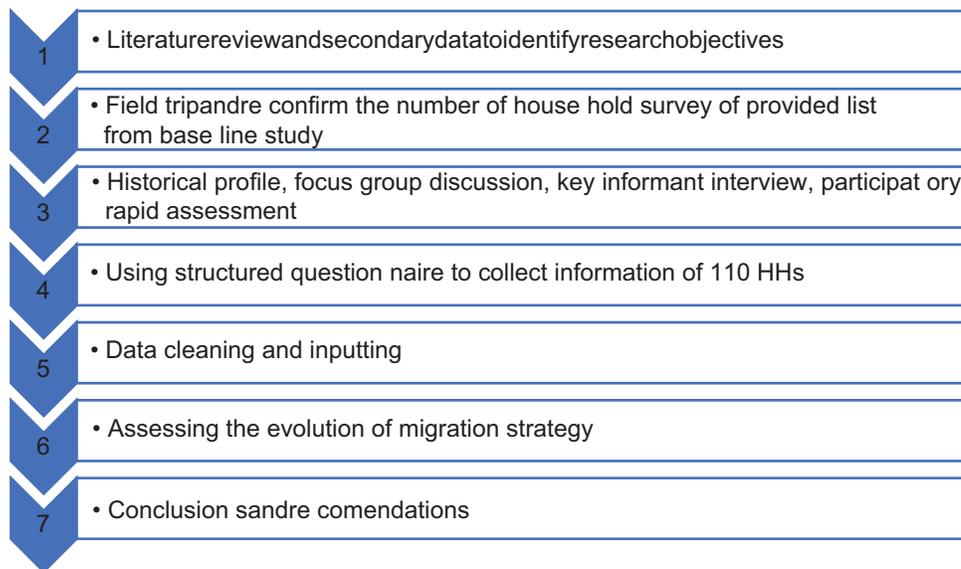
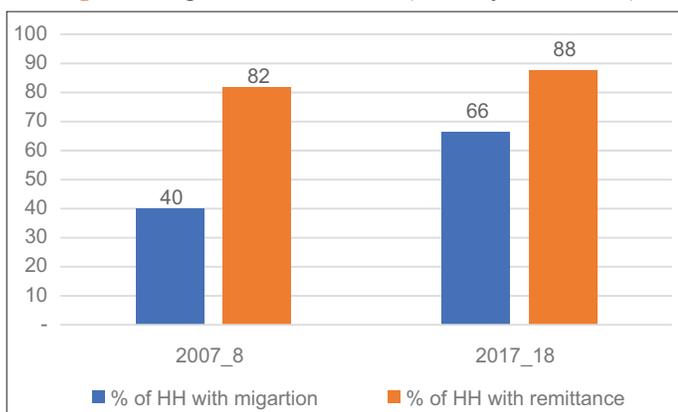


Figure 2: Migration and remittance (% surveyed household)



Source: Surveyed household

Table 4: Salary of migrants

Year	Min.	Max.	Mean
2007-2008	300	3,000	1,283.9
2017-2018	2000	63,000	7,734.6

Source: surveyed household

was over 61, which is an important negative challenge for the rural households because of the heavy work required by fresh labor source. After a 10 year - period, a reduction in the household size was noted, reduced from 5.9 to 4.6 members per household. First, this result caused by the wave of out-migration of young people to attractive cities such as Da Nang, Ho Chi Minh and new developing cities sharing a close border with Ho Chi Minh. Usually, people who migrate for more than 5 years that they try to settle a new family in the new destination. This has been a popular and positive trend in the coastal areas, especially in the case of households with a large size family and small- scale land use, for whom migration is the optimal solution. According to KIIs interview, some people have been achieving success and tried to generate jobs for hometown citizens. Furthermore, in some case, family member separates to new family when the get married that causes the reduction of family scale. After 10 years, the total land

use increased by 0.2 Sao/household. This increase caused by the exploitation of the previous non used land. In the dimension of livelihood activity, to reduce vulnerability, households participated in many activities to raise income. The average livelihood activities had a greater increase from 3.2 to 3.4 in 2007-2008 and 2017-2018, respectively.

Agricultural income has an important role in the livelihood of households. Diversifying livelihood activities contributed to reducing pressure on household living. The results pointed out that households diversify in more activities to generate income. Remittance from immigration occupied a high percentage of the total income. The percentage of households that have at least one migrant increased greatly from 40% to 66% respectively in 2007-2008 and 2017-2018 (Figure 2). Regarding remittance, a majority of households have received money from their migrants: 82% and 88% respectively in 2007-2008 and 2017-2018. For the migrants who stayed outside the province, frequency of return to their homeland fluctuated around 3 to 4 times per year. It depends on the distance between their homeland and destination and the aims to save time and costs of living. More flexible public transport conditions made their return to home easier than before.

Single migrants tend to send more money to their parent than those who already got married. This behavior is also an indicator of the valuable culture of Vietnam.

3.2. Destination of Migration

A majority of inhabitants has chosen Ho Chi Minh city as a good solution for migration strategy. Ho Chi Minh city represents over 53% in 2007-2008 and 45% in 2017-2018 of the host destinations (Figure 3). This slight decrease is caused by the development of some provinces, which therefore attract rural labor. For example, Binh Duong or Dong Nai Long An, as well as some other border provinces of Ho Chi Minh. Migrant diverted its strategy by working in Da Nang or the central highland region. This provided them with more options and that depended on the demographic background of migrants they make a appropriate

Table 5: Salary of migrants by work classification

Type of working	2007-2008			2017-2018		
	Mean	Maximum	Minimum	Mean	Maximum	Minimum
Administrative	1,233	1,500	1,000	11,042	30,000	6,000
Accounting	1,125	1,500	1,000	7,667	15,000	4,000
Trading	1,408	3,000	600	16,222	50,000	5,000
Mechanic	1,650	2,100	1,000	5,750	10,000	2,000
Tailor	1,268	2,400	300	4,872	8,000	2,000
Shoe worker	1,283	2,000	300	5,520	7,000	3,000
Builder	1,486	3,000	300	5,731	9,000	4,000
House keeper	600	1,000	300	4,000	5,000	3,000
Other	781	1,200	300	6,000	9,000	3,000

Source: Surveyed households

Table 6: The contribution of remittance in the total income of households

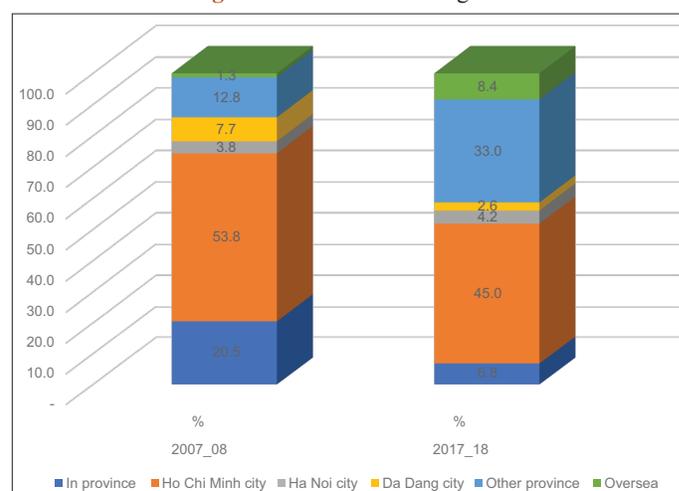
Source of income	2007-2008		2017-2018		Compare 1000VND
	1000VND	%	1000VND	%	
Remittance	3,640.9	9.4	20,368.2	21.0	16,727.3
Total	38,605.0	100.0	97,102.0	100.0	58,497.1

Source: Surveyed household

decision for the sustainable destination. Migration tends to work more in the South than in the North, according to the type of work and wage level for each work.

Working overseas is another trend of migration. It is normally classified by two types of salaries at the destination. In reality, it takes into account the host countries with higher requirements of skills or educational levels such as Korea and Japan or countries like Malaysia, Indonesia, China and Taiwan where manual labor is mainly required. To work overseas, migrants need to get in touch with a middleman usually from companies supplying labor export services. The huge cost of traveling is a huge barrier to work overseas. To match with financial conditions, migrants generally borrow money from credit providers, which implies that the local government considers this strategy as a good approach for household livelihood. The salary of the first choice fluctuated around 10-12 million dong per month in comparison with 30-32 million dong per month. The duration of the migration everywhere was of 3-5 years. After completing their working term, migrants could save a large amount of money to run a business in their homeland, which would contribute to the economic growth in rural areas as well.

Regarding the salary per month, there was a gap among two periods of time: Around 1.3 million and 7.7 million per month respectively in 2007-2008 and 2017-2018 (Table 4). Most importantly, a wider range of salaries in 2017-2018 than 2007-2008 showed a positive trend for migration from 2 to 63 million that differ on work characteristic and payment levels (Table 5). Manual work is paid less than skilled labor work, which show the importance of education and training on migrant's wage inflow. In some cases, migrants were hired and paid year salary: A fixed amount excluding house rent and food expenses. Remittance from new families is thus lower because of the expenses linked to family activities. Significantly, new migrants can receive various supports from the old migrants which benefit them in

Figure 3: Destination of migrants


Source: Surveyed household

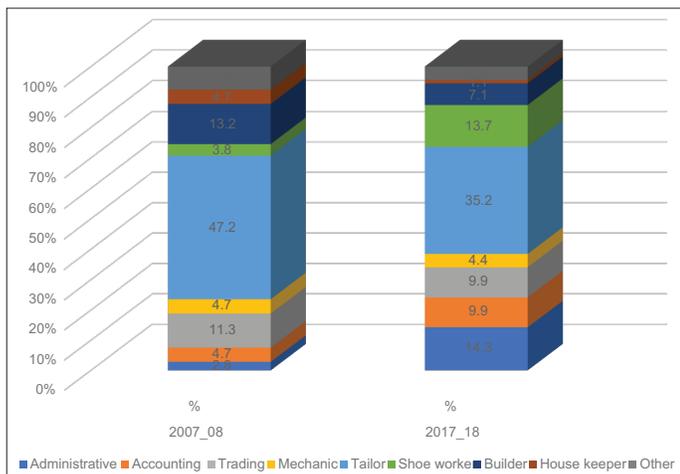
finding sustainable work, a higher salary, stable accommodation and a rich social network. Female migrants tend to send back their money to their family more than male. Such results are highly coincide with those of related studies of this field (Zhu, 2002; Bélanger and Linh, 2011).

3.3. Work Classification

Work is classified by labor quality, company's requirements and training activities; migrants engaged mainly in manual activities such as in textile sector, the building sector or at temporary works with a high possibility of risks (Figure 4). A majority of inhabitants migrated after finishing secondary school without a job training course leading to a low salary per month (Figure 5). This strategy showed the efficiency of migrants by themselves and their families in the short term. Just a small percentage of migrants got a university degree to get a better job. The study documented that migrants have been working with diversification of job with different level of salary. Some of the migrants founded new companies and signed contracts with migrants from their hometowns, which is an efficiency pathway with dual benefits. Migrants are now working in various sectors requiring highly skilled workers.

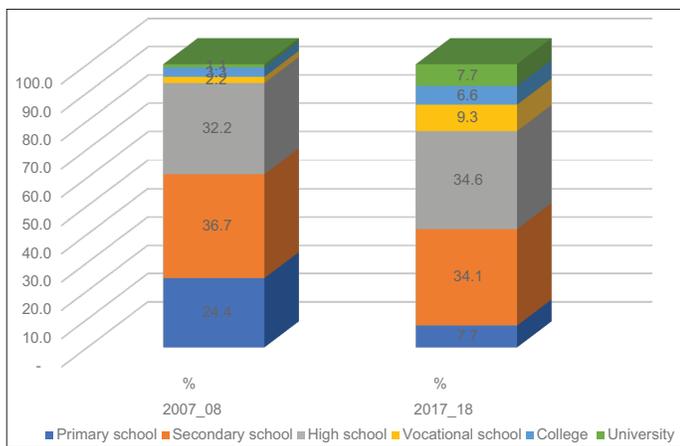
Temporary migration contributed greatly to total income. Some labors joined this work after finishing agricultural activities as the solution to diversify the livelihood strategies. Manual labors tend

Figure 4: Work diversification



Source: Surveyed household

Figure 5: Educational level of migrants



Source: Surveyed households

to engage in the building sector in some provinces neighboring their hometown. After expending their costs of living, migrants could gain up to 4 or 5 million dong per month. The limits of this strategy are weather condition and the fact it requires migrants with good health conditions. Almost every male chose this strategy, leaving work at their households to females.

3.4. Migration and Total Income

In the dimension of income contribution, migration receipts have shown a drastic rise in the income contribution: From 3,640.9 million dong (9.4%) to 20,368.2 million dong (21%), from 2007-2008 to 2017-2018 (Table 6). This amount increased significantly by approximately 6 times. This was partly a combination in the nexus relation of the increase of the total income of households from 38.6 to 97.1 million with a divergence of 58.5 million from 2007-2008 to 2017-2018. According to the result, money has been used towards consumption rather than investment. In some cases, households invested money was sent from migrant to change the livelihood strategies from farming activities toward providing business services bring a stable income source for households. Consequently, natural resources from the given households could be transferred to other households with a fee, causing an increase in the land use scale.

This study took into account the effect of migration on the total income, by using a linear regression as an additional method to evaluate the impact of migration on the total income. The results from the difference in differences method provided that the change in total income is partly due to migration (Table 7). Two-tail P-values test the hypothesis that the coefficient is different from 0. The fact that the P-value of DID is 0.066, lower than 0.1, implying that the migration has a significant influence on the total income.

The logistic model results presenting two periods were highly significant, the coefficient of Cox and Snell R square presenting for given arguments. It means that the independent variables selected in both models can absolutely explain the effects of the behavior nexus of the migration issue.

The 2007-2008 logistic model has four variables explaining the migration inflow of households at the sites (Table 8). It especially included a number of livelihood activities, the age of the household head and participation in mass associations. There were three control variables illustrated the positive impacts of the decision to migrate. The variable of age of the household affected the positive toward migration decision. It may be explained by the fact that households did not recognize the essential role of education in the search of a good job. With low income and the high pressure of their living conditions, family members were compelled to complete their studies as soon as possible to work and earn money to meet their needs and support other family members who still study. Household heads were members of social organizations who tend to access and assimilate information more easily, leading to a change of mind in impelling family members to join the migration. The results identified that the diversification of livelihood activities may enhance the possibility of migrating.

Turning to the logistic model of 2017-2018, a majority of input variables have been well-explained regarding migration issues. It seems to be likely the same with the model of 2007-08, there were five variables in the model having statistically significant in explaining the effects of socio-economic and demographic of the household to making decision of migration (Table 8). Age of household heads had a positive impact on migration. This is appropriate in the current context, the generated income from household heads decreased and higher the dependence on other sources of income. Remittance also varies when there is a high rate of birth. Household heads who have authority may encourage family members to work outside their province to optimize their chances for a better life. It is easy to understand those following farming activities could not meet up with the quality of life expectations of young labors. Households depend on agricultural activities affected by the negative dimension of immigration. Frankly, a majority of households who have a large scale of land use are still in need of labor to engage in agricultural activities. Crop and animal breeding can bring a high value of income. This leads to the low motivation of migration in some cases of family having the large scale of land use.

The households having a larger family size had a trend to migrate to diver and increase the income. As presented previous, with the limitation of natural capital per capita, the households get more motivation to follow the migration strategy.

Table 7: The result of the regression to analyze the migration toward a total income

Source	SS	df	MS		Number of OBS	220
Model	2.31E+11	3	7.70E+10		F (3, 216)	24.9
Residual	6.68E+11	216	3.09E+09		Prob. > F	0.0000
Total	8.99E+11	219	4.10E+09		R-squared	0.2570
					Adj. R-squared	0.2467
					Root MSE	55598

Total income	Coef.	Std. Err.	t	P>t	(95% conf. Interval)	
Migration	11,206.6	10820.8	1.04	0.302	-10121.3	32534.4
Year**	36,397.6	11418.4	3.19	0.002	13891.8	58903.4
DID*	28,848.7	15587.8	1.85	0.066	-1875.0	59572.3
_cons	34,122.3	6843.7	4.99	0.000	20633.4	47611.2

Source: Manipulated the by author from surveyed households

Table 8: The results of the logistic model

Independent variable	2007-2008			2017-2018		
	B	Sig.	Exp(B)	Sig.	B	Exp(B)
Age of HHH	0.081**	0.029	1.085	0.068**	0.047	1.071
Education of HHH	-0.015	0.850	0.985	0.001	0.991	1.001
HH depenon Agr	-0.710	0.312	0.491	-2.649***	0.000	0.071
Fammily scale	0.161	0.376	1.175	0.281*	0.092	1.325
Land scale	0.110	0.907	1.116	-0.238	0.719	0.788
No Livehood ST	1.477***	0.000	4.381	1.058**	0.003	2.880
Trainning course	-0.409	0.427	0.664	0.697	0.268	2.008
Member of organization	2.911*	0.069	18.368	3.805**	0.023	44.939
Saving cash	1.525	0.112	4.597	1.710*	0.097	5.528
Constant	-13.653	0.001	0.000	-12.322	0.003	0.000
-2 Log likelihood		105.979 ^a			96.030 ^a	
Cox and Snell R square		0.318			0.332	
Nagelkerke R square		0.430			0.461	
Omnibus tests of model coefficients		0.037			0.001	

Table 9: Identify the straights, reasons and solutions by group discussion

Straights	Reasons	Solutions
Limit of job opportunities	Low education, limited professional knowledge and skills	Improving the policies encouraging the development of the labor market
Heavy work conditions	Lack of labor contract	Providing job training for migrants
Low wage	Lack of information	Providing valuable information on work opportunities
Lack of access to social safe nets	Lack of networks for migrants	Building social networks

Source: Focus group discussion

From a positive point of view on the migration wave, evaluated by the efficiency strategy, the migration inflow at the research site contributed to diversify livelihoods and reduce the vulnerability of households. The result from our study indicated that a number of livelihood activities have a strong link with migration issues.

A position of member in mass organizations can provide households with an easier access to information, including on migration issues. There may be a strong relation of migration and saving cash, households received remittances from migrants that they can save money, use money for consumption or reinvest for farming activities. Far more, an investment for the studying of another family member could improve the quality of labor force in the future.

By joining training courses, family members upgrade their household vision by orientating family labor to appropriate jobs under new changing contexts, which imply a transition in the quality of work of migrants: From manual labor to skilled work with a higher salary.

In this and upcoming term, with the competition from the imported products of the developed countries, agricultural sector in Vietnam needs to pay attentions on applying new technology in producing process. To implement those ideal, there is a need to consider to merge small-scale fields to the larger one.

As a result, the redundant labor force is standing under the pressure of transformation into other jobs, and migration may be an appropriate strategy, especially national migration with a high promotion from the local government.

4. CONCLUSIONS AND RECOMMENDATIONS

By using baseline data, this study provided a wealth of results related to tendencies of migration at the research site. In conclusion, remittance receipt has been playing an essential role in the household livelihood. After 10 years, the total income

and remittance inflow witness a greater increase as well as a distribution of sent back money of migrants to their families. In a similar vein, it shows the positive impacts in the long run of the growth rate of migrants, quality of work for migrants and diversification of salary with a high range. This is mainly caused by the upgraded level of education of migrants as well as the impact of the process of migration in the long run. Migration generated widespread effects on the phenomenon of local economic development. Money sent back by migrants does not only support household expenses but is also used to reinvest back on another livelihood strategy for the purposes of income diversification to raise the household income and standard living conditions. From the standpoint of economic development, domestic and overseas return migrants can utilize their knowhows, capital and practical investment experiences to take an active part in entrepreneurship and make contributions in direct ways. Other migrants in families can receive various benefits to study and work with the supports from the migrants. The fact is that in some cases migrants operated the companies, so they needed to hire a lot of labors. This is considered a good change to create job and raise the income for the labors in rural areas.

The logistic model indicated that have many factors effect on the migration decision of the household. For the positive impacts, it includes the educational level of household heads, the participation in mass organizations, the diversification of livelihood activities and the scale of the households. The variable of the dependence of the household on agriculture effects the decision making of migration in the negative side.

In other aspects, migration causes various drawbacks. The fact is that a majority of the labor force engaged in manual work because of its low level of work skills. The given issue will lead the shortage of labor in the agricultural sector in the upcoming years. The reason comes from young labors are not willing to join in agricultural activities, and the question of “how can we use the arable land to produce food?” is still an important point. Furthermore, migrants have been still facing some additional issues including the limit of job opportunities, heavy work conditions, low wage and lack of access to social safety nets (Table 9).

From the research findings and the problem statements, some well-orientated policies need to be focused on taking advantage of migration issues and reducing its negative impacts in the long term (Deshingkar, 2006; Herrera et al., 2018). First, local governments should especially collaborate with universities, institutions and enterprises to support and supply training courses for young labors. Second, it is needed to consider the policies or programs to tackle the problem of the lack of labor force on agriculture. In this case, consider merging small-scale fields to the larger one could be increased the productivity of land use as well as contributed to tackling the problem of labor shortage. Third, there is a must to pay attention to the efficiency of mass organizations that should focus on the precise training could support for the households and their family member increase the knowledge and working skills. Four, it is quite high for the current status of family scale, as a consequence that is a need to continue the population policy to reduce the family scale to ensure that the households having

better living conditions. Five, opening the working festival that can support for the citizens and companies meeting the supply and demand and hence, the local government should have the responsibility in finding new overseas labor market and helping in doing the procedures to work at oversea for the citizens. Last but not least, it is essential to build up social networks to provide the related information of work, facility and wage for the migrant. (Démurger et al., 2010).

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