

# Effects of the Acquisition and Conversion of Agricultural Land Use Purposes on the Livelihoods of Household at the Extended BAC Son Road Project, Thai Nguyen city, Thai Nguyen province

Thi Bich Lien Nguyen<sup>1</sup>, Thi Ngoc Ha Tran<sup>2</sup>, Thanh Huy Chu<sup>3</sup>, Thuy Linh Vi<sup>4</sup>, Thu Huong Nguyen<sup>5</sup>

<sup>1,2,3,4,5</sup> Thai Nguyen University of Science, Vietnam

**ABSTRACT:** The study focuses on assessing the economic risks of the acquisition and conversion of agricultural land use purposes of the extended Bac Son road project in Thai Nguyen city. Research using methods such as: document synthesis; statistical analysis and comparison of changes in indicators (employment and income) before and after the acquisition and conversion of agricultural land use purposes in the study area; investigation and survey. The results show that the acquisition and conversion of agricultural land use purposes have changed the structure of occupation, income and housing of Thai Nguyen city people. This is the basis for proposing necessary solutions to rationally use urban land in the context of strong urbanization today.

**KEYWORDS:** Agricultural land, land acquisition, livelihood, households, Thai Nguyen city

## I. INTRODUCTION

Land recovery is the state's decision to reclaim land use rights from people who have been granted land use rights by the State or to reclaim land from land users who violate land laws. Land acquisition is an important and inevitable issue that occurs in the socio-economic development process of countries. In Vietnam, land acquisition is one of the biggest obstacles for large projects (Thu Hang, 2017) [1]. In 2019, the number of complaints related to land accounted for 67.7% (an increase of 5.9% compared to 2018) and focused mainly on issues such as: land recovery, compensation, support, resettlement, etc. (Huong, 2019). Difficulties in land acquisition are not only a problem unique to Vietnam but also a common problem in many countries around the world [1].

Thai Nguyen city is a class I urban area. Its urbanization and industrialization speed is the largest in Thai Nguyen province. In 2018, Thai Nguyen city's economic growth rate reached 16%, attracting 27 investment projects with a capital of 37 trillion VND (Thai Nguyen city portal, 2019). Therefore, the need for land funds to serve development projects is increasing. Land acquisition and site clearance work in Thai Nguyen city faces many difficulties because consensus cannot be reached with the people. Specifically, some projects have been implemented for quite a long time such as: Bac Son road project (from 1994 to 2020), Viet Bac road project (20 years), Thai Nguyen University South residential area project ( from 2007 to present).

The extended Bac Son road project was started in July 2018, with a total length of 9.5 km, connecting from Luong Ngoc Quyen street, Quang Trung ward to Cao Trang hamlet, Phuc

Xuan commune. The total investment of the project is over 2,000 billion VND. According to plan, the project will be completed in early 2020. However, up to now the project has not been completed, the construction volume has reached over 90% of the contract value. There are still some problems related to site clearance at some locations, affecting the progress of project implementation. This significantly affects the labor, employment, income of people in the project area, other stakeholders and the investment efficiency of the project.

There have been a number of related studies conducted in some areas such as: Hanoi [2,3], Binh Dinh [4], Ha Nam [5], Hue [6]. In Thai Nguyen, studies on the effects of land acquisition have also been conducted [7,8]. However, no research has been conducted on the extended Bac Son road project of Thai Nguyen City.

Thus, land acquisition and conversion of land use purposes in general and agricultural land in particular pose many potential risks for related parties. The study was conducted with the purpose of evaluating the impact of recovery and conversion of agricultural land use purposes on the livelihoods of farming households at the extended Bac Son road project.

## II. METHODOLOGY

*Collect, analyze data:* The study collected documents and data from the district's statistics department; Thai Nguyen City People's Committee, Department of Natural Resources and Environment and scientific journals, related articles... Collected data includes documents on recovery and conversion of agricultural land use purposes. Industry, data

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on labor, employment, income... of farming households in the study area.

*Fieldwork, survey:* The study conducted a survey of households whose agricultural land was recovered in Thai Nguyen city area in two forms:

+ People's participatory rapid rural assessment (PRA) technique: This technique aims to collect information on income, consumption, production, and experience. Thereby analyzing the difficulties that households encounter when agricultural land is recovered and re-examining existing research results.

+ Investigation techniques for interviewing each household head:

According to the report of the People's Committee of Thai Nguyen City, to implement the extended Bac Son Road Project in the area, Thai Nguyen City must compensate 58 households.

The number of households was selected for interview according to Slovin's formula [9]:

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

Note: n: Number of household to be surveyed

N: Total number of households whose agricultural land was recovered (58 households)

e: Allowed error. Choose e = 5% (95% confidence level).

From the Slovin's formula, the study randomly selected 50 households to conduct the survey.

*Data processing:* Collected data is classified and arranged systematically through grouping and put into tables. Processing and calculating data and research indicators are conducted on computers using Excel software and SPSS 20.0 software.

### III. RESULT AND DISCUSSION

#### 3.1. Impact of recovery and conversion of agricultural land use purposes on people's livelihoods

##### *Characteristics of surveyed households*

The basic characteristics of the surveyed households are shown in Table 1.

**Table1. Characteristics of surveyed households**

Targets	Unit	Amount
<b>Number of households surveyed</b>	Household	50
<b>Number of people</b>	People	407
- Male	People	229
- Female	People	178
<b>Proportion of people in a household</b>	People	8,14
<b>Percentage of workers in a household</b>	People	2.06
<b>Educational level of the head of household</b>		
- Level I	%	31,84
- Level II	%	41,34
- Level III	%	26,85
<b>Average Age</b>		42,25
<b>Household group</b>		
- Rich group	%	9,85
- Group of well-off households	%	28,07
- Group of average economic households	%	43,18
- Poor household group	%	18,94

(Source: Survey data)

A survey of 50 households (407 people) showed that, on average, each household has about 8 people and 2 workers. The rate of men is 1.28 times higher than that of women. The percentage of household heads with a high level of education (level III) is still low (26.85%), so there are still many limitations in absorbing and applying new scientific and technical advances in production. Therefore, to improve the efficiency of land use in particular and the agricultural sector in general, it is necessary to have measures to raise people's awareness level.

The average age of those surveyed was 42.25 years old. People at this age have good health and can easily accept job changes after recovering agricultural land.

The survey results also show that the poor household group and the average economic household group account for a large proportion (62.12%), the well-off household group (accounts for 28.07%), and the rich household group accounts for the lowest proportion ( 9.85%). According to actual surveys, households participating in production in fields such as trade - services and industry - handicrafts have a good economic situation, while agricultural households are often a group of poor households. This is also the group of people

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who are greatly affected when agricultural land is confiscated.

**Impact of agricultural land recovery on land use situation of households**

The scale and land use situation of households before and after agricultural land was recovered is shown in Table 2.

**Table 2. Impact of agricultural land recovery on land use situation of households**

Items	Before agricultural land was recovered		After agricultural land was recovered		Comparison	
	Acreage (m <sup>2</sup> )	%	Acreage (m <sup>2</sup> )	%	+/-	%
<b>Total area</b>	<b>51.365,76</b>	<b>100</b>	<b>31.990</b>	<b>100</b>	<b>- 9.375,76</b>	<b>18,25</b>
- Landscape	22.505	43,81	16.490	51,55	- 6.015	26,73
- Agricultural land	16.135	31,41	6.310	19,73	- 9.825	60,89
- Non-agricultural land	12.725,76	24,78	9.190	28,72	- 3.535,76	27,78

(Source: Survey data)

Note: +/-: Increase or decrease in area between before and after agricultural land is recovered

Table 2 shows that all three types of households' land decreased after being confiscated. Of which, the total area of agricultural land decreased by 60.89% and non-agricultural land decreased by 27.78% compared to before.

**Impact of agricultural land recovery on people's jobs**

The labor situation of households is shown in table 3.

**Table 3. Labor characteristics of the surveyed households**

Targets	Number (people)	Percentage (%)
Total number of employees	103	
Percentage of workers in a household	2,06	
<b>* Divided by gender</b>		
Male	52	50,46
Female	51	49,54
<b>* Divided by age</b>		
15-25	17	16,5
26-35	21	20,39
36-45	32	31,07
46-60	33	32,04
<b>* Educational level</b>		
Levels I, II, III	62	60,2
College and university degree	12	11,65
Intermediate and vocational level	29	28,15

(Source: Survey data)

Table 3 shows that on average each household has about 2 workers. The proportion of men is higher than that of women. People aged 15 - 35 (accounting for 36.7%) are young and adaptable. Therefore, creating favorable conditions for households to change careers and stabilize their lives after their land is recovered. The group of people aged 36 - 45 (31.07%) and the group of people aged 46 - 60 (32.04%) face many difficulties when agricultural land is recovered. Because, the ability of this group to change careers is very low. Research also shows that the level of high-quality labor

is still low. The proportion of people with university or college degrees is only 11.65%. This is also one of the difficulties for people to change careers, increase income, and stabilize their lives after their land is recovered. Therefore, it is necessary to have policies to help people stabilize their lives.

Agricultural land recovery greatly affects the employment of local people. The distribution of labor among occupations has changed after agricultural land was recovered here (Table 4).

**Table 4. Changes in labor distribution among occupations after agricultural land was recovered**

Targets	Before agricultural land was recovered		After agricultural land was recovered		Comparison	
	Number (people)	Percentage (%)	Number (people)	Percentage (%)	Number (people)	Percentage (%)
Total number of employees	103	100	103	100		
Labor in the field:	91	88.35	80	76.67	-11	-12.09
- Agriculture	12	11.65	2	1.94	-10	-83.3
- Agriculture - services	31	30.1	24	23.3	-7	-22.58
- Industry - service	16	15.53	25	24.27	9	56.25
- Other jobs	32	31.07	39	37.86	7	21.88

(Source: Survey data)

Note: +/-: Increase or decrease the number of workers in occupations between before and after agricultural land is recovered

Table 4 shows that the total number of employed workers after land recovery decreased by 12.09%. In particular, the number of people working in the agricultural sector decreased sharply (17 people). Thus, the acquisition of agricultural land has affected people's jobs. A group of workers previously had a stable income from agriculture, but due to the land recovery process, they were forced to participate in service occupations but the income was not high.

However, the recovery of agricultural land also has a positive influence on the transformation of industry structure towards gradually separating from agriculture. People are less dependent on agriculture.

**Impact of agricultural land recovery on people's income**

The recovery of agricultural land has affected the employment of workers, thereby affecting people's income (Table 5).

**Table 5. Impact of agricultural land recovery on people's income**

Income	Before agricultural land was recovered		After agricultural land was recovered	
	Số tiền (triệu đồng)	Percentage (%)	Số tiền (triệu đồng)	Percentage (%)
<b>Average household income</b>	<b>51.21</b>	<b>100</b>	<b>56.29</b>	<b>100</b>
Agriculture	18.66	<b>36.44</b>	8.52	<b>15.14</b>
Industry and handicrafts	10.34	<b>20.19</b>	15.32	<b>27.22</b>
Trade in Services	11.64	<b>27.73</b>	18.57	<b>32.99</b>
Others	10.57	<b>20.64</b>	13.88	<b>24.66</b>

(Source: Survey data)

Table 5 shows that the average household income after agricultural land was recovered increased. However, income from agricultural production decreased by a large amount. Household income increased mainly from revenues from trade - services and industry - handicrafts.

In general, the income of households has increased, but is potentially unstable, so local authorities need to soon have

policies to stabilize the lives of households whose agricultural land is recovered.

**How people use compensation money from agricultural land recovery**

During the process of recovering agricultural land, people are compensated with a sum of money. Households used this compensation money for many different things (table 6).

**Table 6. How households use compensation money**

How to use compensation money	Choice of households (households)	Percentage (%)
Shopping for daily necessities	47/50	94
Search for new jobs	22/50	44
Share with relatives	34/50	68
Invest in your children's education	46/50	92
Build and repair houses (buy residential land)	35/50	70
Buy land for agricultural production	27/50	54
Purchasing production equipment	21/50	42
Investment in production and business (non-agricultural)	22/50	44
Financial investments (stocks, bonds) and buying gold	21/50	42

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Bank deposits and loans	35/50	70
Pay off debts	45/50	90
Other consumption	3/50	6

(Source: Survey data)

Table 6 shows that households prioritize using compensation money on: purchasing furniture (94%), investing in their children's education (92%), paying off debt (90%), and construction and repair the house (70%), deposit the remaining amount in the bank or lend it (70%). The number of households buying land for agricultural production (54%) and purchasing production equipment (42%) is not much. Therefore, using money to compensate people still has many shortcomings. Some households also used compensation money for incorrect purposes. Therefore, local authorities need to orient and closely monitor the appropriate use of

compensation money to comply with the State's compensation goals.

**Difficulties of households after agricultural land is recovered**

When converting to non-agricultural occupations, workers encounter difficulties such as lack of capital, experience, or factors such as age, health... Difficulties people encounter after recovering agricultural land industry is shown in Table 7.

**Table 7. Difficulties of surveyed households after agricultural land was recovered**

People's opinions	Level		
	Percentage of households agreeing	Percentage of households unknown	Percentage of households disagree
Lack of agricultural land	64.86	13.51	21.63
The compensation amount is not enough to buy back the recovered agricultural land area	78.38	0	21.62
Lack of production and business premises	70.27	5.41	24.32
Lack of capital for production conversion	43.24	10.81	45.95
Lack of workers	24.32	10.81	64.87
Lack of experience and technique	35.16	8.1	56.76
Lack of financial management skills	37.84	8.1	45.95

(Source: Survey data)

Research results show that 78.38% of households believe that the compensation amount is not enough to buy back the corresponding land area. When land was recovered, more than 70% of households lacked production and business premises. Some other difficulties such as lack of capital to convert production, lack of workers, lack of experience... are also mentioned quite a lot by people.

In short, in the process of finding new livelihoods to stabilize people's lives, people still face many difficulties... Therefore, local authorities need to have better measures to create stable conditions for people in the area.

**IV. CONCLUSIONS**

The labor structure of households after agricultural land is recovered tends to gradually shift to non-agricultural occupations. Labor quality and the number of professionally trained workers tend to increase.

People's jobs after land recovery are quite diverse. Labor in the agricultural sector decreased sharply while labor in non-agricultural sectors increased.

After having their land confiscated, households soon stabilized their lives and found a better livelihood strategy, so

most of their incomes increased and their lives gradually stabilized.

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