The Management and Efficiency of Cropland Use in Thai Nguyen Province
Part 5 - Analyze the impact of Land Use Type on social life

Nguyen Thu Trang

Faculty of Civil and Environment - Thai Nguyen University of Technology, Vietnam
Corresponding Author: Nguyen Thu Trang

ABSTRACT: In this article, we refer to the management and efficiency of arable land in Thai Nguyen province, selected by the author as the object of analysis. The article's objective is to assess the current status of the management and efficiency of cropland use as a basis for orienting the management and use of the arable land fund in the future towards sustainable development. At the same time, determine the causes that change the arable land area. From there, propose solutions to improve the management efficiency and use of rice land in Thai Nguyen province. With the research objectives set out, the author organizes this research into five main parts as follows. Part 1: Some characteristics of land use type in Thai Nguyen province; Part 2: Methods to investigate the status of land use type efficiency; Part 3: Evaluation of Land Use Type efficiency; Part 4: Economic efficiency analysis of Land Use Type; Part 5: Analyze the impact of land use type on social life.

KEYWORDS: Cultivated land, rice land, land, crop

I. INTRODUCTION

The land is a precious national resource, a particular means of production, a great source of internal resources and capital of the country, an essential component of the living environment, and plays a significant role in agricultural production. In any country, the land is the primary means of agroforestry production and the territorial basis for the distribution of national economic sectors. Stabilizing the arable land area ensures food security and preserves the resource system, land value, and soil. If the arable land fund is fully exploited, there will be no more land for the development needs of future generations.

In recent years, along with the trend of globalization of the world economy, Vietnam's economy is developing more and more. Along with this movement and development, people increasingly use land resources to serve their interests. This leads to land degradation, reducing the sustainability of economic growth in general and in agriculture in particular. Facing the current situation, because the arable land area is decreasing, there is a risk of threatening national food security. The Ministry of Agriculture and Rural Development has proposed to apply the policy of tightening the management of the rice land fund. These policies have been mentioned in the rice development project to ensure national food security.

It minimized the conversion of currently used wet-rice land for non-agricultural purposes; encouraging the reclamation and expansion of rice-growing areas, and improved other rice-land into specialized wet-rice land. When making a plan, it is only allowed to transfer the currently used wet rice cultivation land for national defense, security, and public interest. A competent state agency must approve it. Rice land will be closely protected by the State and supported by many policies.

II. ANALYSIS OF THE EFFICIENCY OF AGRICULTURAL LAND-USE ON SOCIAL LIFE

The social efficiency of each type of land use is assessed through the following criteria: attracting labor, ensuring social life, reducing the poverty rate, investment capital requirements,
products consumed, on the market, by farming practices... Each type of land use has certain effects on local social life.

Table 4. Social effects of different types of rice land use
(Source: Farm household survey)

<table>
<thead>
<tr>
<th>Numerical order</th>
<th>LUT</th>
<th>Evaluation criteria</th>
<th>Requires investment capital</th>
<th>Reduce poverty rate</th>
<th>The needs of farmers.</th>
<th>Commodity products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2L - M</td>
<td>***</td>
<td>**</td>
<td>***</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>2</td>
<td>2L</td>
<td>***</td>
<td>**</td>
<td>***</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>3</td>
<td>1L - 2M</td>
<td>**</td>
<td>*</td>
<td>**</td>
<td>**</td>
<td>*</td>
</tr>
<tr>
<td>4</td>
<td>1L - 1M</td>
<td>**</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>5</td>
<td>1L</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

High: ***  medium: **  Low: *

The survey results show that the income from rice is too low, while the prices of consumer goods are increasing. People here easily find jobs with higher incomes, but they are not stable. As a result, many areas of rice land are abandoned and not regularly cultivated. When finding a job, people quit production, when there is no job, they return to the field, but the production mentality is not stable, so there is no investment in taking care and improving the land. Thus, agricultural production has not met the needs of farm laborers, agricultural production has low profits, not enough to cover living expenses, households have to do other jobs.

III. CONCLUSION

From the 2014 census until now, the total area of agricultural land has decreased by 2,497 hectares. From 2021 to 2025, agriculture is still an important production industry, providing market demand for food and foodstuffs, developing agriculture and rural areas associated with industrialization and modernization of the country, ensuring ensure jobs for rural areas, reducing the income gap between rural and urban areas, improve ecological environment quality, be ready to respond to climate change, build modern civilized countryside. The explosion of the 4th industrial revolution and the digital economy continues to bring many opportunities as well as difficulties and challenges for the development of the agricultural and rural economy.

In order to improve the efficiency of using and managing rice land from an ecological and sustainable point of view, it is necessary to organize the exploitation of the land's potential in the direction of increasing the production of commodity products and applying scientific and technical advances. To make planning, specialized plans for rice land. Clearly define the control target on the area of rice land that needs to be strictly protected, allocate and define the boundaries of the field, but the production mentality is not stable, public landmark planting to each land plot to ensure the strict management and protection of the rice land fund. Assign the commune-level People's Committee to take responsibility for direct management and at the same time have policies to support and encourage localities and farmers to feel

ACKNOWLEDGMENT

This work was supported by the Thai Nguyen University of Technology.

REFERENCES

[1]. Dang Kim Son, Tran Cong Thang, Do Lien Huong, Vo Thi Thanh Tam, Pham Thi Kim Dung; Vietnam's Agricultural Policy Innovation – Background, Needs and Prospects; National Political Publishing House; 2014.
[3]. Dr. Le Dang Lang, Assoc.Prof.Dr. Nguyen Tien Dung, Assoc.Prof.Dr. Le Tan Bui, Dr. Duong Nhu Hung, Dr. Nguyen Trung Dong, Dr. Tran Thanh Long, Assoc.Prof.Dr. Bui Duc Khand; Planning

[4]. Assoc.Prof.Dr. Nguyen The Dang, Assoc.Prof.Dr. Dang Van Minh, Dr. Nguyen The Hung, Dr. Hoang Hai, Dr. Do Thi Lan; Farmyard; Hanoi Agricultural Publishing House; 2008.

[5]. Assoc.Prof.Dr. Nguyen The Dang, Assoc.Prof.Dr. Dang Van Minh, Assoc.Prof.Dr. Nguyen The Hung, Assoc.Prof.Dr. Hoang Van Hung, Dr. Nguyen Duc Nhuan, Dr. Nguyen Thu Thuy; Land, Thai Nguyen University Publishing House; 2008.

[6]. Dr. Le Thanh Bon; Pedology; Agricultural publisher; 2004.

[7]. Professor. Do Anh; Soil fertility and Plant nutrition; Agricultural publisher; 2003

[8]. Professor. Nguyen The Dang; Soil and Plant nutrition, Agricultural publisher, 2011.

[9]. Rural newspaper today, Dan Viet electronics; The topic Agricultural panorama 4.0 Vietnam; Hong Duc Publishing House; 2018.

[10]. Pham Binh Quyen; Agro-ecosystems and sustainable development; Hanoi National University Publishing House; 2005.