Accumulation and Concentration of Agricultural Land: A Case Study in Gia Binh District, Bac Ninh Province, Vietnam

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ABSTRACT

The study aimed to point out the advantages and limitations in the process of agricultural land accumulation and concentration and propose some solutions to expand them in the future. The study investigated households and officials and civil servants involved in the accumulation and concentration of agricultural land in Gia Binh district from 2008 to 2022. Accumulation and concentration of agricultural land were concerned and directed by the authorities at all levels. The average land plot area increased; the average number of land plots/households decreased. Production costs are reduced and high-tech production is facilitated. However, policies and laws on land, investment, and job creation for farmers still have shortcomings and limit the expansion of land accumulation and concentration. Proposed solutions include perfecting policies and laws on land and investment; Reforming administrative procedures; Supporting change careers for farmers and applying high technology in the production and consumption of products.

Keywords: Accumulation, Agricultural Land, Concentration, Gia Binh District, Vietnam.

INTRODUCTION

Up to now, there are many different interpretations of land accumulation and concentration. Some authors understand land accumulation and concentration as consolidation of land to create larger parcels of land that are convenient for land use [1,2]. Some other authors rely on the form of land use right transfer to separate land accumulation and land concentration. Specifically, land accumulation is the process of increasing the area of a parcel of land through purchase and sale, the contribution of land use rights, or donation or inheritance of land use rights [1,3–5]. In essence, this is a form of receiving permanent land use rights. The person transferring the land use right loses his/her land use right forever. In contrast, land consolidation is understood as increasing the land area of a parcel of land without losing the land use rights of the land user. Land concentration is implemented through various forms including land exchange, land lease, and cooperative production on the cooperative members' land [4,6–8]. Thus, in essence, the accumulation and concentration of agricultural land in particular and land, in general, is the process of linking land plots to create larger land plots suitable for mechanization and application. high technology. This contributes to reducing production costs and increasing land use efficiency. Agricultural land accumulation and agricultural land concentration both have the main purpose of creating large land plots that are convenient for their use. Even so, there are differences between them. Agricultural land accumulation is to increase the land area of land owners and create plots of land larger than the land plots before land accumulation. Agricultural land concentration is the process of reducing the number of scattered land plots of land users to increase the area of land plots [9,10]. Up to now, there have been many studies on land accumulation and

concentration in different aspects. Some studies have assessed the limitations of small land plots such as high production costs, leading to high product costs and low product competitiveness. Therefore, implementing land accumulation and concentration is necessary and important for producers [5,11,12,7]. Many studies on land accumulation and concentration have focused on evaluating the effectiveness of land accumulation and concentration models in specific research areas. Studies have shown the advantages, disadvantages, and causes of land accumulation and concentration [13–15]. Studies have also suggested policy implications and specific solutions facilitate more efficient land accumulation and concentration, contributing to socio-economic development and increasing the competitiveness of agricultural products in the world markets.

Like the whole of Vietnam, land accumulation and concentration in Gia Binh district, Bac Ninh province (Figure 1) has been started since 2018. Until now, many households have accumulated land with an area of from 2 to 10 ha for agricultural development with high economic value. Although the models of land accumulation bring certain socio-economic benefits to the parties involved, there are still many difficulties and obstacles in land accumulation, which are barriers to attracting individuals and investment in land accumulation and concentration [16]. However, there has been no in-depth study to comprehensively assess the accumulation and concentration of land in Gia Binh district. *Therefore, implementing the topic to answer the questions: What are the advantages and disadvantages of land accumulation and concentration in Gia Binh district? What solutions are needed to expand the accumulation and concentration of land for large-scale commodity production and high-tech application?*

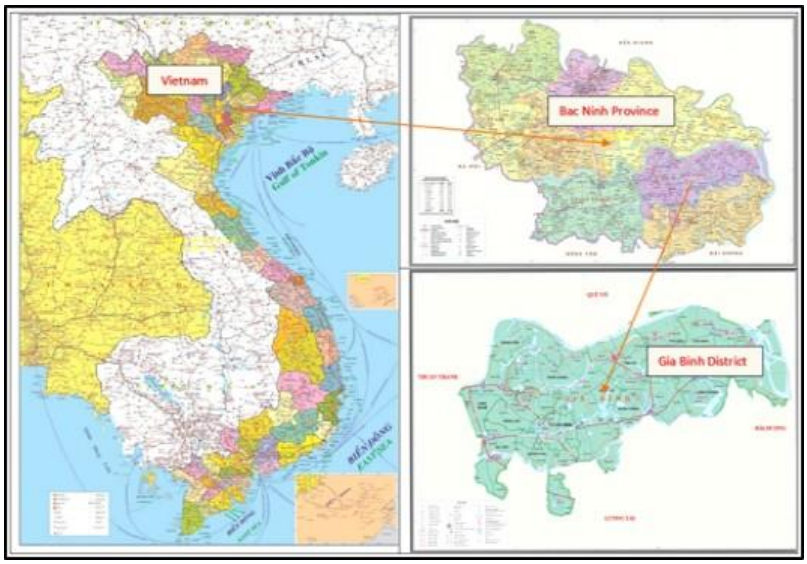

Fig. 1. Geographic location map of Gia Binh district, Bac Ninh province, Vietnam [17]

Gia Binh district in the southeast of Bac Ninh province, Vietnam has a natural area of 10759.02 ha. In 2022, it has a population of 106,259. It has a convenient transportation network. Its terrain is flat and suitable for agricultural production to develop, in which farming and animal husbandry are the two main industries. Production of meat and livestock products has reached high levels. Its agricultural land is 5,277.05 ha; Paddy land 4,223.02 ha; Land for perennial crops 180.15 ha; Aquaculture land 1,013.41 ha; Non-agricultural land group has 4,369.5 ha; Unused land 30.52 ha [18].

OVERVIEW

Accumulation and concentration of land in the world are often understood in many different ways and are often related to agricultural land. But all scientists consider land accumulation and concentration as the process of linking land plots to create larger land plots that are convenient for mechanization and reduce

production costs.

Scientists have also studied land accumulation and concentration in different aspects and levels of depth in different areas.

Research by Sergio & Manuel [19] shows that land consolidation is considered an important tool to help state agencies develop sustainable rural areas, especially in countries where land is fragmented. Zhou et al. [20] study the theoretical and practical issues of land accumulation toward poverty reduction for farmers. Land fragmentation has many negative effects on rural development leading to economic, social, and environmental damage such as reduced agricultural productivity, rural degradation, and soil erosion [21]. According to Sergio & Perujo-Villanueva [19], from an environmental perspective, land fragmentation is related to biodiversity and soil erosion.

In Europe, land consolidation projects are mainly implemented in Germany, the Netherlands, France, Belgium, Luxembourg, Austria, Switzerland, etc. It is a means of improving production practices, promoting shared land use, and rearranging agricultural land [19]. According to Przemys?aw [22], in Poland, Land Consolidation is provided for in a law of March 26, 1982, according to which the purpose of land consolidation is to create more favorable conditions for agriculture and forestry by how to improve the distribution of agricultural land. In the study by Juhana Hiironen and Kirsikka Riekkinen [23], based on 12 land consolidation projects in Finland, calculations on production costs and feasibility were made. The results show that this is an effective land management tool to improve the production structure, for the average production cost has been reduced by 15% compared to before.

According to Chunfa Wu et al. [24], in eastern countries like China, land accumulation has been an effective tool to improve rural infrastructure since 1999. Results of research on land accumulation and concentration by Xindong Du et al. [25] have shown that crop yields have improved mainly due to a reduction in area fragmentation. Some other authors have deeply studied the effect of land accumulation and concentration on farmers' lives, and production costs, and all affirmed that land accumulation and concentration are the right measures to effectively use land. more productive than agricultural land. In addition, they contribute to rural change [6,10,26].

In Vietnam, implementing Resolution No. 10 of the Politburo of Vietnam, on April 5, 1988, agricultural land was allocated to farm households directly engaged in agricultural production on the principle of equity " *Each household was assigned at the same time agricultural land of good quality and bad quality; near and far from residential areas*). This way of allocating land in the early stages has contributed to a breakthrough in agriculture, turning Vietnam from a food shortage to an exporter of a variety of agricultural products. However, the above-mentioned form of agricultural land division leads to the majority of farming households having a small agricultural land area. The group of households cultivating fields under 0.5 ha accounted for 69% of the total land area, the group with an area of 0.5-2 ha accounted for 25% of the total land area, and the group with an area larger than 2 ha only accounted for 6 % of the total land area. % of the total land area [27]. The fragmented land situation makes the efficiency of using agricultural machines low and is the biggest barrier to agricultural mechanization. This makes labor productivity low, the average agricultural output per worker in Vietnam is only 1/3 of that of Indonesia and less than half of that of Thailand and the Philippines [28]. Therefore, land accumulation and concentration are considered as one of the breakthrough solutions to create land plots with areas favorable for mechanization and application of high technology to help develop modern agriculture on a large scale, accelerating the process of industrialization and modernization of Vietnam's agriculture and rural areas.

In Vietnam, the main forms of land accumulation and concentration exist at the same time, including (i) Land accumulation by setting up farms through land allocation, lease, purchase, inheritance, and land donation; (ii) Accumulation of land through consolidation and exchange of plots to develop the household

economy to improve economic efficiency; (iii) Land accumulation through farmers' voluntary contribution of land, capital purchase of machines to form cooperative groups for production, processing, and consumption of products; (iv) land accumulation through association contracts with enterprises to form value chains of agricultural products. Up to now, many authors have also studied the accumulation and concentration of land in different areas such as in the Southwest region, the Mekong Delta, or the key economic regions of Vietnam [4,29,30], and pointed out the peculiarities of their land accumulation and concentration. However, there has been no research to evaluate and analyze the differences between land accumulation and concentration in Gia Binh district, Bac Ninh province compared with land accumulation and concentration in other localities. This issue is addressed in the authors' paper.

METHODOLOGY

Research scope

The study focused on assessing the situation of agricultural land accumulation and concentration in Gia Binh district, Bac Ninh province from the beginning of agricultural land concentration from 2008 to the end of 2022.

The method of data collection

Data on natural, socio-economic, management, and land use conditions were collected from Gia Binh District Statistics Office, Division of Natural Resources and Environment, and Division of Agriculture & Rural Development of Gia Binh district. In addition, the authors also used the secondary database of the General Statistics Office. The study deeply evaluated the accumulation and concentration of land in three communes representing three ecological regions of Gia Binh district, including Lang Ngam commune representing Region I, Van Ninh commune representing Region II; Van Ninh commune representing Region II; Binh Duong commune representing Region III. Each region has different topographical characteristics, different natural areas, and different systems of plants and animals (Figure 2). Region I includes the communes of Lang Ngam, Dai Bai, Dong Cuu and Giang Son; Region II includes Van Ninh, Cao Duc, Thai Bao, Dai Lai, and Song Giang; Region III includes Binh Duong, Quynh Phu, Xuan Lai, Nhan Thang and Gia Binh Town.

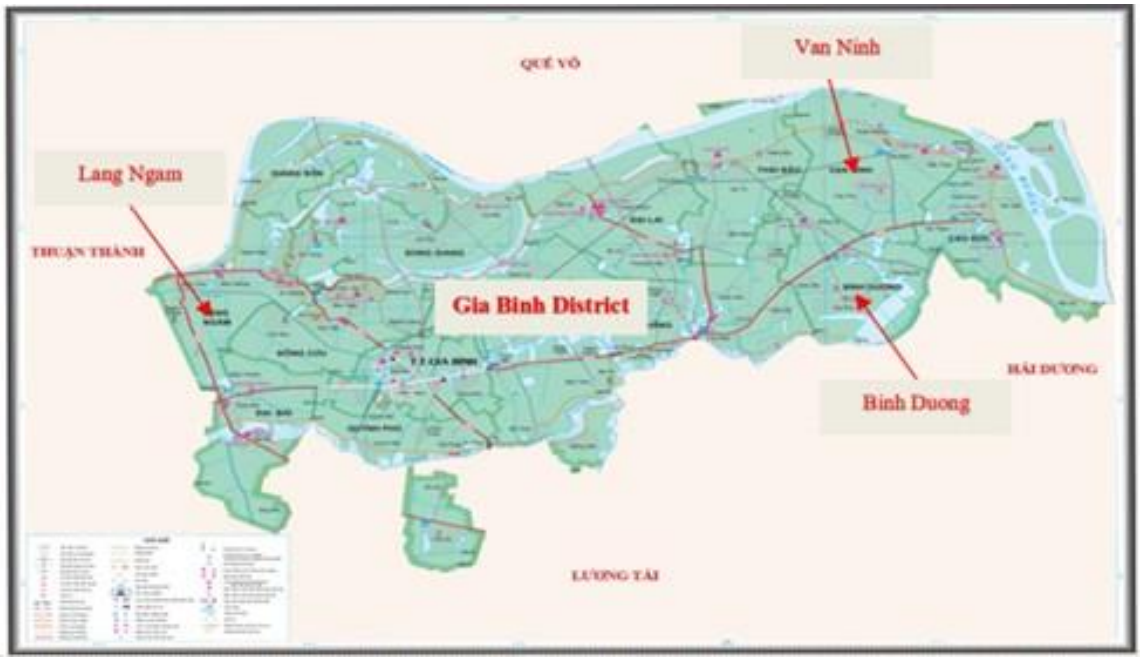

Figure 2. Study sites on accumulation and concentration of agricultural land in Gia Binh district

The study investigated 90 households in the 3 studied communes. In each commune, 30 households that had accumulated agricultural land were surveyed. The study also investigated 30 officials and civil servants directly related to the implementation of agricultural land accumulation in Gia Binh district. The number of questionnaires was determined according to Formula 1 [31].

$$n = Z^2 \times \frac{p \times (1-p)}{e^2} \quad (1)$$

Where: n: sample size to be determined; Z: the value of looking up the Z distribution table based on the selected reliability. Typically, the 95% confidence interval used corresponds to Z = 1.96; p: percentage of successful n sample size estimation. Usually, we choose p = 0.5 so that the product p(1-p) is the largest, this ensures safety for the sample n estimates; e: allowable error. The study chose e equal to 0.20 (20% error) and calculated the number of respondents (n) equal to 24. To increase the reliability of the survey results, the study investigated 30 people for each group of respondents.

Methods of processing, synthesizing, and analyzing data

The data was processed, synthesized, and analyzed using SPSS 25.0 software. Agricultural land accumulation and concentration are compared and evaluated according to the number of land plots, the average area of the land plot before and after the accumulation, and the concentration of land. The advantages, limitations, and causes affecting this process are also considered and evaluated, including policies, laws, finance, human resources, and farmers' experience in agricultural production.

RESULTS AND DISCUSSION

Accumulation and concentration of agricultural land in Gia Binh district

From 2008 to 2011, Gia Binh district mainly concentrated agricultural land under the Master Project in all 14 communes and towns. The main form of agricultural land concentration was the conversion of agricultural land between households to reduce the average number of land plots of households and increase the average area of land plots. 10 villages in communes did not implement agricultural land concentration because agricultural land according to land use planning would be converted into non-agricultural land (to build industrial parks and urban areas). The total area of agricultural land before land consolidation was 6088.52 ha; after consolidating and changing the plot was 5865.04 ha. The area of agricultural land was reduced by 274.05 ha for building transport systems, irrigation, and other public works.

According to Table 1, before the concentration of agricultural land, the average number of plots per household varied from 8 to 12 plots, with individual households having up to 16 plots. The largest percentage of households was with between 8 and 9 plots (77.70% of the total number of households). The land plots were scattered at many different locations, so the production cost was high. After completing land consolidation in 2011, the majority of households had 4-5 plots of land, accounting for the highest proportion (76.18% of total households), and the remaining 23.82% of households with 2-3 plots. This has contributed significantly to improving labor productivity and expanding the scale of specialized production of many households. Unlike Ha Nam province, where land consolidation was carried out twice, in Gia Binh district, land consolidation was carried out only once, but the area of the latter plot was still small [7]. Therefore, after land consolidation under the District General Project, households continued to exchange their land plots to increase the average land area of the parcels and reduce their number. At the same time, households have accumulated agricultural land through the main form of buying land use rights or renting land.

Table 1. Results of agricultural land concentration by a household group [16]

Households	Before land accumulation and concentration		After land accumulation and concentration	
	Số hộ (hộ) (households)	Tỷ lệ (%) Ratio(%)	Số hộ (hộ) (households)	Tỷ lệ (%) Ratio(%)
Households with 2-3 land plots	0	0.00	4840	23.82
Households with 4-5 land plots	0	0.00	15482	76.18
Households with 6-7 land plots	1244	6.47	0	0.00
Households with 8-9 land plots	14941	77.70	0	0.00
Households with 10-12 land plots	2125	11.05	0	0.00
Households with more than 12 land plots	919	4.78	0	0.00
Total	19229	100.00	20322	100.00

According to Table 2, the total number of land plots under 200 m^2 decreased the most (37500 plots), while the total number of land plots over 700 m^2 increased the most (10630 plots). The average area of the land plot decreased by 295 m^2. The land plot with the largest area after agricultural land concentration also increased by 1110 m^2. This was a favorable condition for households to invest in production, reduced labor costs, and transfer a part of their labor to join the trade and service sectors. This also proved that the concentration of land was effective for agricultural production as previous studies had shown [6,14,22,26].

Table 2. Results of land consolidation by area and number of land plots in Gia Binh district [16]

Grouping by size and area	Unit	Before land consolidation	After land consolidation	Compare increase (+), reduce (-)
Total number of parcels of land	Plot	129438	65885	63553
– Area under 200 m^2	Plot	50033	12533	37500
– From 200 to 500 m^2	Plot	48903	28738	20165
– From 500 to 700m^2	Plot	29365	12827	16538
– Over 700 m^2	Plot	1137	11767	-10630
Average area/plot	m^2	215	510	-295
Average land area allocated to 01 household	m^2	1775	1670	106
Largest plot area	m^2	775	1885	-1110
Minimum plot area	m^2	48	126	-78

Accumulation and concentration of agricultural land in the research communes

In the studied communes, the area of agricultural land after land concentration decreased. In Van Ninh commune, it decreased the most because it was there that the land area for construction of the transport system and the irrigation system was the largest (21.97 ha) (Table 3). The crops and livestock in the

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communes, including commercial rice, vegetable areas along the Duong River, and low-lying areas, had been converted into general farms and aquaculture. In the period 2016-2020, hundreds of farming households accumulated land and set up farms, applying the technology of closed cages, and bio-secure livestock, and located farms far from residential areas. The number of greenhouses, greenhouses, and greenhouses increased significantly, bringing high economic efficiency with the cultivation of cantaloupe, baby melons, and leafy vegetables. In 2022, the district applied unmanned aerial vehicles to perform planting and tending on an area of 180 hectares, reducing labor and increasing rice yield. Gia Binh district has established 11 concentrated cultivation areas with plants such as hydroponic vegetables, safe vegetables, Japanese rice, garlic, zucchini, pumpkin, and medicinal plants. Enterprises, cooperatives, and people have invested and applied science and technology in hydroponic flower and vegetable production in greenhouses, greenhouses, applied the VietGAP process and built cold storage to preserve agricultural products with high economic efficiency.

Table 3. Current status of the land before consolidating and exchanging plots in the studied communes

Evaluation Criteria	Unit	Before land consolidation			After land consolidation		
		Lang Ngam	Binh Duong	Van Ninh	Lang Ngam	Binh Duong	Van Ninh
The average number of plots per household	plot/household	7.6	9.6	6.7	1.7	3.1	2.9
Average area	m^2/plot	251.7	224.02	214.90	1284.50	711.90	551.71
The largest plot area	m^2	576.0	550.0	525.0	3.027.9	1645.5	1204.1
Minimum plot area	m^2	112.5	95.0	70.0	187.0	109.5	113.8
The total area of agricultural land	ha	387.84	428.37	496.60	387.16	425.50	474.63

Regarding the situation of land before consolidating and exchanging plots and the method of land accumulation and concentration of households, there are clear differences. According to Table 3, before land consolidation, land fragmentation was in different communes. In Lang Ngam commune, there is 7.6 plots/household, Binh Duong commune has 9.6 plots/household, and Van Ninh commune has 6.7 plots/household. The main reason is the characteristics of the topography and fields of each locality. After consolidating and exchanging plots, the average number of plots per household has decreased significantly. Lang Ngam commune decreased by 5.9 plots/household, Binh Duong commune decreased by 6.5 plots/household, and Van Ninh commune decreased by 3.8 plots/household. At the same time, the average area/land plot also increased significantly, specifically, Lang Ngam commune increased by 1,032.8 m^2/plot, Binh Duong commune increased by 487.88 m^2/plot and Van Ninh increased by 336.81m^2/plot. Lang Ngam represents area I which accumulates land to convert inefficient conventional rice cultivation to perennial crops and annual crops with higher economic efficiency, so the rate of accumulation is highest. in 3 communes. Van Ninh commune is the land along the Duong River with fertile alluvium, so after consolidating the land, the households still keep the cultivation form of rice cultivation, so the production efficiency is not high.

Regarding the method and scale of land accumulation and concentration of farmers. Farmers have many methods of land accumulation and concentration, but the two main methods are renting land (57 cases) and receiving transfer (20 cases) (Table 4).

Table 4. Modes of land accumulation and concentration of households

Commune	Number of households	Methods of accumulation and concentration of land					
		Land lease	Receive transfer	Receive capital contribution by land use rights	Land conversion	Receive gifts	Get Inheritance
Lang Ngam	30	14	7	4	7	3	6
Binh Duong	30	20	7	3	5	2	4
Van Ninh	30	23	6	6	3	2	4
Total	90	57	20	13	20	7	14

Unit: Household

Table 5. Accumulation scale in studied communes

Region	Commune	Number of households	Number of households with an area less than 0.5ha	Number of households with an area equal to or greater than 0.5ha	Largest parcel of land (ha)	Smallest plot of land (ha)	Average area of the plot (ha)
I	Lang Ngam	30	24	6	8	0.097	0.82
II	Van Ninh	30	13	17	6.6	0.11	2.03
III	Binh Duong	30	19	11	30	0.08	4.00
T?ng		90	56	34	44.6	0.287	6.85

The results in Table 5 show that 56/90 households (62.22% of surveyed households) have an accumulation area of less than 0.5 ha and 34/90 households (accounting for 37.78%) have an accumulation area of less than 0.5 ha, in which, number of households in Region I accounted for 42.86% of the total number of households with an accumulation area of less than 0.5 ha; Region III accounted for 33.93% and Region II had the least number of households (23.21%). At the same time, the accumulation area of households was not uniform. In Region I, the smallest area was 0.097 ha and the largest was 8.00 ha; in Region III, the smallest area was 0.08 ha and the largest was 30.0 ha; while in Region II, the smallest area was 0.11 ha and the largest was 6.6 ha. Households with an accumulated area of 0.5 ha or more mainly rent land. After the process of accumulation, households have formed concentrated, large-scale production areas as planned and suitable to local conditions in terms of soil and potential. The main source of farm households' market share capital is their capital (100%). Some farmers (24.44%) borrowed from banks, others (8.89%) sought credit funds, and a small percentage (2.22%) received support from organizations.

Assessment of accumulation and concentration of agricultural land

Assessment of staff

According to 60% of the total number of officials, the documents guiding the implementation of agricultural land accumulation and concentration are quite complete. However, the level of synchronization of these documents is still not high, only 16.67% think that it is very synchronous. All levels of government have

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been interested in land accumulation and concentration with an assessment rate of 73.33%. Propaganda, mobilization, and persuasion of people to accumulate and concentrate land are quite good (accounting for 70% of the total number of interview respondents) (Figure 3). The vast majority of households support accumulation (56.67%), especially 16.67% of the total households are very supportive because they can expand the production area and reduce the number of employees. engaged in production per unit area as assessed by 83.33% of the total survey respondents (Figure 4).

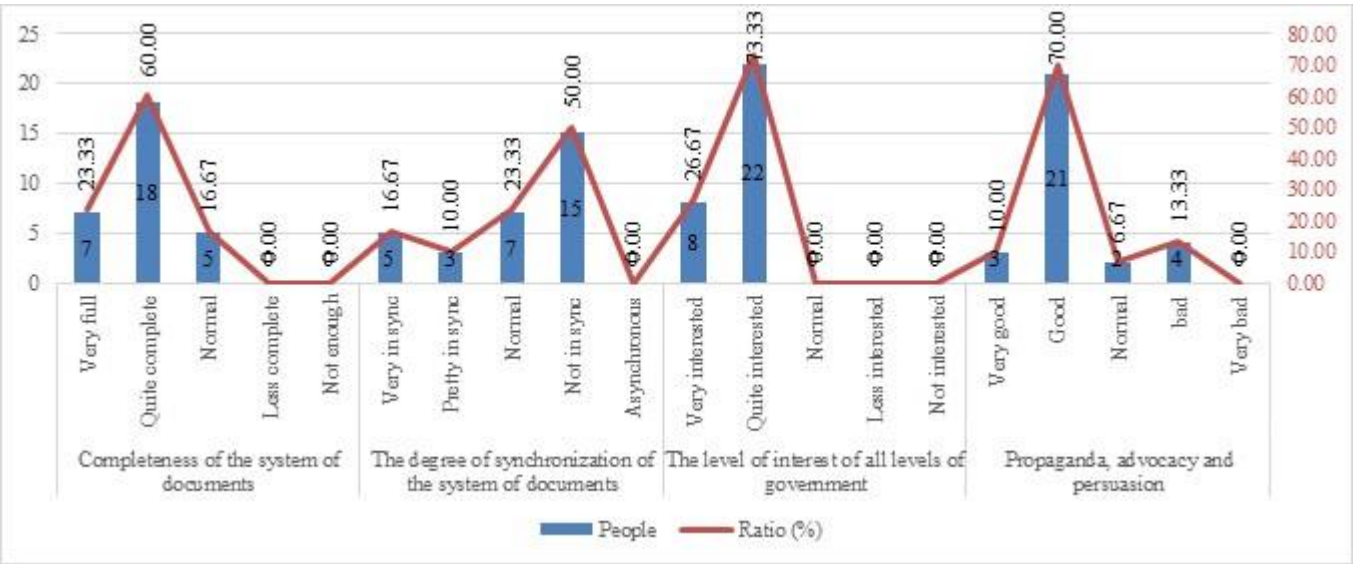

Figure 3. Evaluation of the system of documents and propaganda on land accumulation and concentration

The majority of people are quite supportive of land accumulation and concentration (accounting for 56.67% of the total respondents). Farmers participate in accumulation. Land concentration is quite active as assessed by 50.00% of the total respondents (Figure 4).

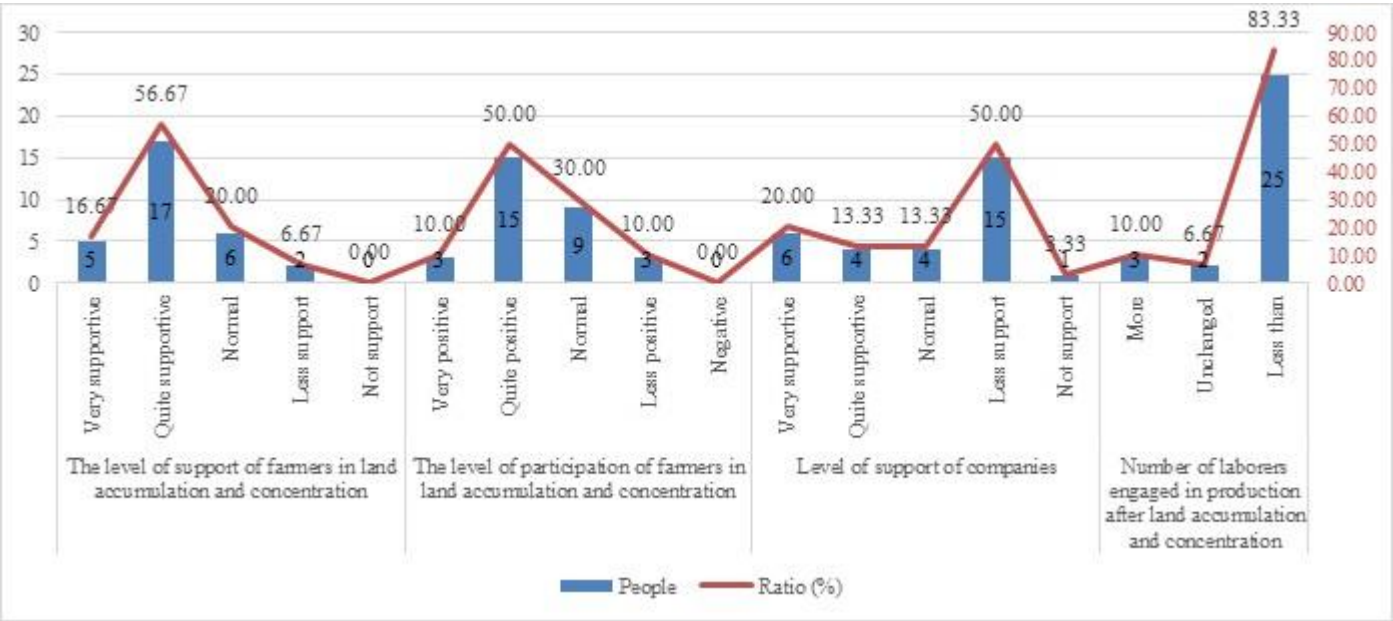

Figure 4. Assessment of households and businesses' participation in land accumulation and concentration

Issuing and renewing land certificates is quite complicated according to the assessment of 70.00% of the total respondents. Therefore, the renewal of certificates is still slow according to the assessment of 63.33%

of the total respondents. This limitation of land certification was also pointed out in Chung's study [7]. In addition, the administrative procedures for land accumulation and concentration are assessed by officials as quite complicated (accounting for 56.67%) (Figure 5).

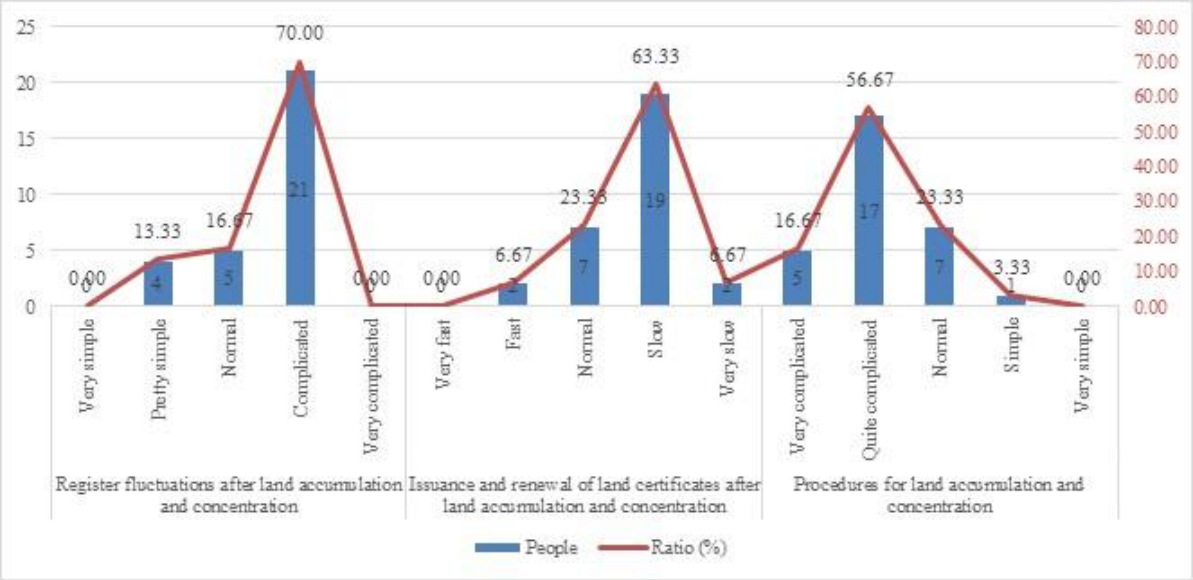

Figure 5. Assessment of land change registration

According to Figure 6, land accumulation and concentration have contributed to improving economic efficiency (93.33% of the total number of respondents), social efficiency, and environmental efficiency also increased. Restructuring crops and applying scientific and technological advances to post-accumulation production is also better.

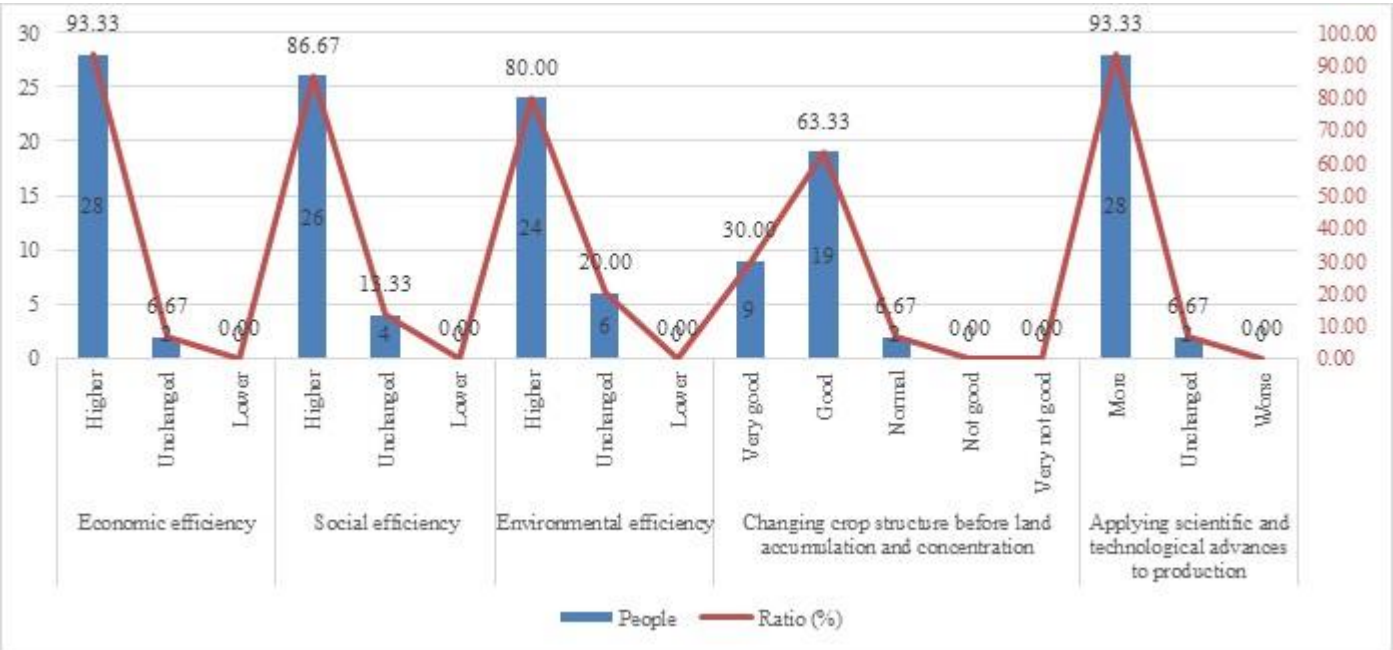

Figure 6. Evaluation of the effectiveness of the implementation of land accumulation and concentration

According to all farmers, the transport system, irrigation system, and drainage system have all been improved, contributing to expanding production and reducing production costs (Figure 7). Therefore, the income of households increased more than the income before land accumulation and concentration

(accounting for 95.6%). Economic efficiency also increased (accounting for 91.11%) (Figure 8).

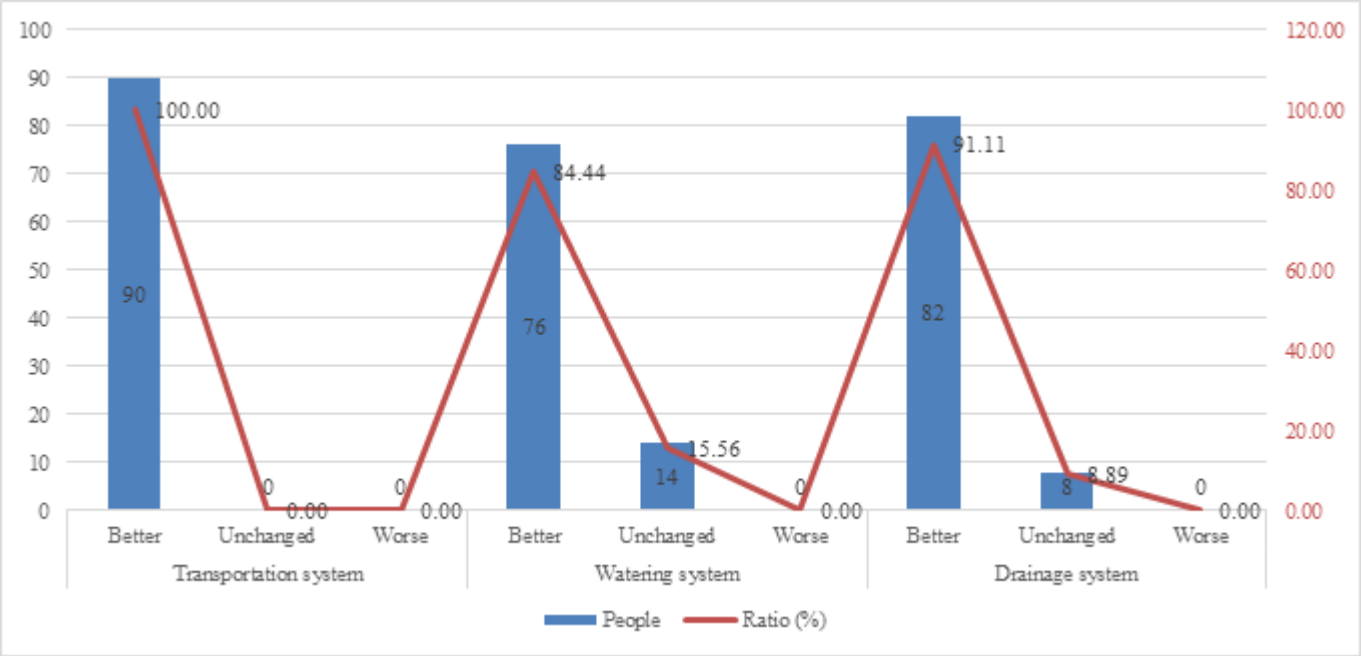

Figure 7. Investment capital and infrastructure system after accumulation and concentration of land

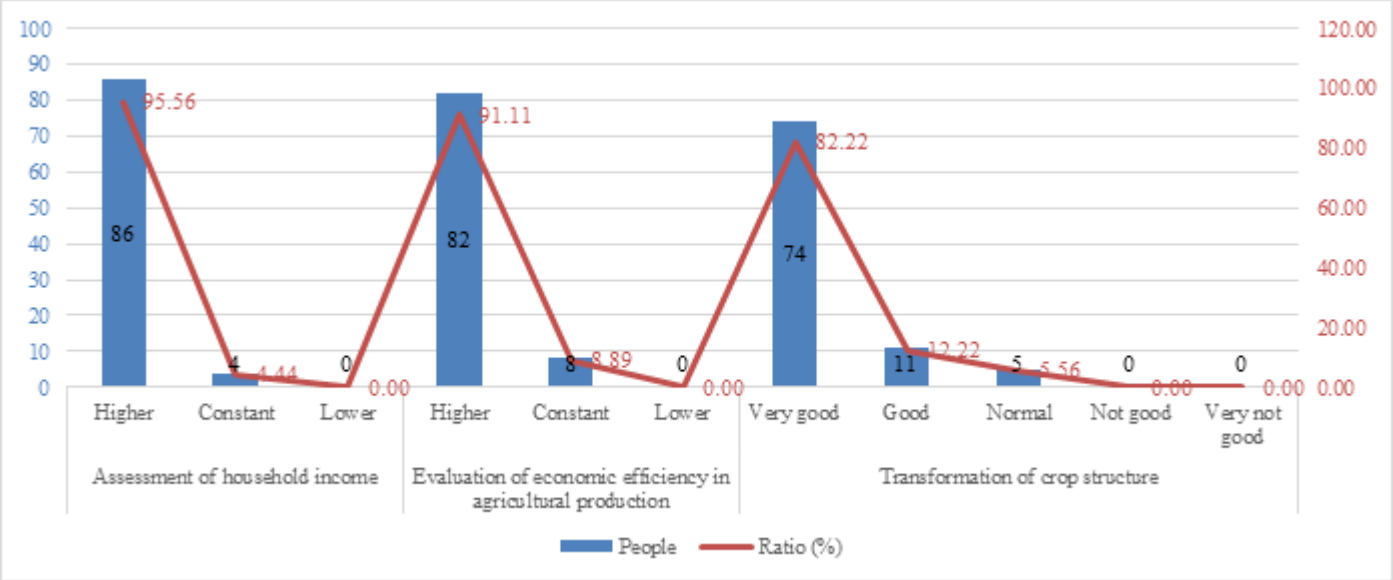

Figure 8. Income, economic efficiency, restructuring of crops after accumulation, and concentration of land

Assessment of households

According to Table 6, in the majority of households (accounting for 62.22%), land policies and laws are not specific and clear. However, gathering and concentrating farmland received timely attention and direction from all levels, authorities (accounting for 95.56%), and highly responsible officials (accounting for 85.56%). However, the completion of cadastral dossiers and issuance of certificates are not favorable (accounting for 64.44%).

In addition, the majority of farmers also reported that they received little support from the state (accounting for 62.2%) and organizations and businesses (95.56%). Moreover, the majority of people do not voluntarily

want to transfer land use rights (accounting for 74.44% of the total interview respondents).

Table 6. Farmers' assessment of favorable conditions for land accumulation and concentration

Criteria	Agree	Ratio (%)	Disagree	Ratio (%)
Specific and clear policies and laws on land	34	37.78	56	62.22
The timely attention and direction of the authorities at all levels	86	95.56	4	4.44
Enthusiastic and responsible staff	77	85.56	13	14.44
Completing cadastral dossiers, granting favorable land use right certificates	32	35.56	58	64.44
Get support from state policy	34	37.78	56	62.22
Get support from organizations and businesses	4	4.44	86	95.56
People voluntarily change their land use rights	23	25.56	67	74.44

Table 7. Farmers' assessment of production, life, socio-economic and environment after land accumulation and concentration

Criteria	Agree	Ratio (%)	Disagree	Ratio (%)
Convenient for the application of mechanization	90	100.00	0	0.00
Convenient for the transportation of goods	90	100.00	0	0.00
Convenient for irrigation	86	95.56	4	4.44
Attracting labor, solving employment problems	28	31.11	62	68.89
Attract businesses to invest in production and build infrastructure for the people	40	44.44	50	55.56
Minimizing fallow, vacant land and not putting it into use	90	100.00	0	0.00
Reduce the number of fertilizers and pesticides in production	88	97.78	2	2.22

Land accumulation and concentration bring many benefits, including convenience for the application of mechanization, transportation of goods, and reduction of fallow land, convenience for irrigation (accounting for 95.56%), and minimizing the use of fertilizers and pesticides in production (accounting for 97.78%). However, people still think that not enough businesses have been attracted to invest in and build infrastructure (accounting for 44.44%), as well as not solving enough problems of employment and attracting investment. labor (accounting for 68.89%).

Limitations and main reasons for the implementation of land accumulation and concentration

(1) The lack of synchronization between documents and policies related to land leads to conflict and ambiguity in regulations. Although the Government encourages the accumulation and concentration of land, it limits the amount of agricultural land that can be transferred by households, so those who want to accumulate land cannot buy land but can only rent it. land. In addition, agricultural land users within the quota are allocated land without paying land use fees and are exempt from agricultural land use tax, which leads to land waste because there is no incentive to liberate agricultural land from households who have no

need or are unable to produce agriculture but still want to keep the land. (2) The level of attraction and investment of enterprises in the agricultural sector is also very low. Investors are concerned about risks, including changes in land use planning, market fluctuations, and factors such as natural disasters and epidemics that could negatively affect agricultural production. (3) Procedures for land accumulation are also complicated and inconvenient. The land change registration process is cumbersome and the issuance and renewal of land use right certificates is not done quickly. (4) In addition, solving the problem of employment after the process of land accumulation is also ineffective. The number of workers engaged in production in the agricultural sector has decreased due to mechanization, leading to difficulties in transferring land from farmers to other industries. The job creation for workers withdrawing from the agricultural sector has not been done well. (5) Finally, the application of techniques and science to agricultural production is also limited, leading to no improvement in income and unchanged economic efficiency in this area.

Some solutions to expand land accumulation and concentration in Gia Binh district

Completing policies and laws on land accumulation and concentration

It is necessary to have a survey to assess the needs and potential of actual land accumulation and concentration to determine the appropriate increase in the quota for receiving agricultural land use rights so as not to become a barrier to agricultural development. Vietnam industry in the future. Implement progressive agricultural land use tax, a progressive tax rate with a higher differential tax on abandoned or inefficiently used land compared to adjacent land plots for efficient use by land users. There is an online agricultural information page that forecasts market demand, climate change as well as natural disasters and epidemics. The State needs to have a policy to ensure that the land accumulated for agricultural production purposes, such as regulations on the time limit for the vacant land to be unproductive, the decision on land allocation or land lease shall be revoked (if the State allocates it and for lease), it is compulsory to transfer land use rights (for purchased land) to assign them to those who need to use them and commit to using them more efficiently.

Encourage businesses to support production and open land accumulation and concentration

Ensuring that agricultural land use planning takes 20 – 50 years for businesses to feel secure to invest in agriculture. Expand the product consumption market by linking consumption between regions, linking businesses, and households. It is necessary to have policies and special incentive mechanisms for businesses that want to build large fields; businesses want to invest in agriculture and rural areas, especially in areas of specialized agriculture. Organize legal support for people to contribute capital with land use rights to enterprises; study preferential policies on land (exemption and reduction of land use fees, land rents, water surface rents, tax rates, and fees related to the transfer of agricultural land, etc) to attract private investment in agriculture and rural areas. The district needs to create a fund of agricultural land from abandoned, or inefficiently used agricultural land, or receive transfers from people who do not need to use agricultural land to be able to attract investment projects in agriculture. high-tech industry. Develop a mechanism to allow flexible conversion and decentralize authority for localities to appraise plans for the conversion of use purposes between land for rice cultivation, land for annual crops, land for perennial crops, land for livestock, and land for livestock grow aquatic products according to planning and ensure environmental conditions; ensure property rights on land of investors in agricultural and rural areas.

Administrative procedure reform creates favorable conditions for land accumulation and concentration

Build an electronic land management system to provide digitized information on real estate transactions, land use rights as well as carry out some cumbersome procedures that land users need to provide but are not required to do. use papers or go to the office to perform. Research and propose implementation

solutions to simplify administrative procedures, create favorable conditions for land accumulation and concentration, and quickly ensure the efficiency of land use transactions. Guide the legal procedures for purchase, sale, and transfer of land use rights; accelerate the issuance and exchange of land use certificates to create favorable conditions for enterprises and farm owners after the transfer to facilitate the mortgage of bank loans for production. Building a center to support agricultural land transactions, performing the function of providing information, assisting in valuation, designing contracts, and resolving disputes in the process of land transactions between individuals and business organizations. economic. This is the initial foundation for building a market for agricultural land use and promoting property rights to agricultural land in the future.

Job security for people moving from agriculture to non-agriculture

The State provides capital support, human resource training, and social insurance development to participate in non-agricultural sectors to transfer the right to use agricultural land for large-scale production. It is necessary to reform rural vocational training programs to the needs of the labor market. To focus on implementing the policy of developing and diversifying non-agricultural production industries in rural areas, strengthening rural industrialization, and promoting the development of several service industries, trade, and traditional handicrafts, etc. to have favorable conditions. to withdraw an agricultural labor force to work in these industries and occupations; avoid putting too much pressure on the demand for agricultural land to create a concentrated land fund to develop into commodity agricultural areas.

Developing agriculture by applying high technology in production

To encourage the development of hi-tech agriculture, to apply scientific and technological advances to production, to implement solutions to improve the thinking and capacity, production and business level of farmers to make The agricultural profession is gradually getting rid of “pure experience” without training, step by step bringing high technology to become not only the product of high-tech agricultural enterprises but also must become the production and business method of the agricultural enterprises. modern farming households in the Current 4.0 Era.

CONCLUSIONS

From 2008 to 2011, agricultural land was concentrated on land plot exchange between households. After that, land accumulation was mainly done in the form of buying land use rights, receiving capital contributions through land use rights, and exchanging land between households. Accumulation and concentration of agricultural land are concerns by authorities and sectors in directing and solving problems. After the accumulation and concentration of land, the average area of the land plot has increased; the average number of parcels of land per household has decreased. This is a crucial basis for contributing to high-tech agricultural production development. Even so, the land policy remains a barrier to land accumulation; enterprises have not invested much in agricultural production, so land accumulation is slow; job creation for farmers participating in the non-agricultural sector is limited. To overcome these inadequacies, it is necessary to perfect mechanisms, policies, and laws on land; Encourage enterprises to support production and open land accumulation and concentration; Administrative procedure reform creates favorable conditions for land accumulation and concentration; Job security for people moving from agriculture to non-agriculture; To develop agriculture to apply high technology in production.

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