

AGRICULTURE GROWTH AFTER 30 YEARS OF RENOVATION – NECESSITY FOR A NEW THOUGHT ON RICE CULTIVATED LAND FOR EXPORTS AND FOOD SECURITY

Over the past 30 years of renovation, Vietnam's agriculture has grown sharply in the first phase, agro-product exports have brought about a substantial source of foreign currencies and the agricultural sector has become an important basis for the industrialization economy. However, the agricultural economic structure has been slowed down gradually and there have been signals of slowdown in both speed and growth sustainability, the quality of agricultural development has exposed more shortcomings regarding the structure, competitive capacity and product quality. Over the past 30 years, the rice sector has grown sharply in quantity and has become a pillar not only for the agriculture and rural sector, but also for the whole economy to be secured for the industrialization and integration. The growth in rice production has enabled Vietnam to become a rice export power. However, the perspective on sustaining a constant rice production to ensure the food security or bulk exports may have to pay a price regarding the more expensive opportunity cost when a large area of land needs to be used for rice production. The calculation on transferring a part of the land resource as well as an open policy on the rural land will create a new motivation for agriculture and rural development. Nonetheless, there must be strategic calculation on the emerging of food demand from China as well as unofficial trade forms (gray-trade forms) to work out effective policies and institutions.

JEL: O13

1. Agriculture growth and economic restructuring

Agriculture plays the role of supplying resources for the industrialization, stable growth to be the fundamental for the economy in the wake of the internal fluctuations and negative external impacts.

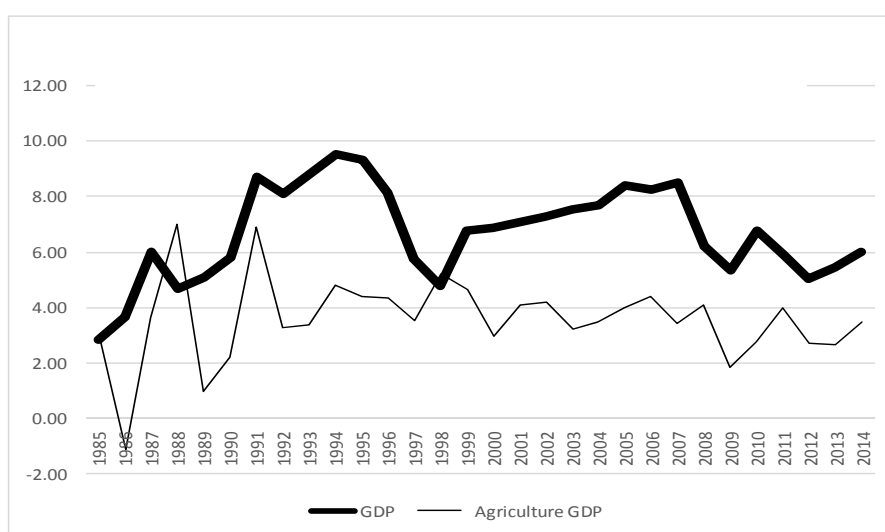
In the first period of renovation in late 1990s the farmer empowering policy and the market mechanism started to be adapted, which helped raise prices of agro-products, profit for farmers and boost the agricultural sector to obtain a high growth rate. Also in this period, the policies on sharp domestic currency devaluation as well as agriculture tax reduction, soaring agro-product trades and high general growth of the whole economy created

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motivation for speeding up the agriculture growth. From 1995 to date, although the conditions for agriculture development have not been completely favorable, such as over-valued domestic currency, the investment in agriculture has been low, the competition on the market has been fierce, but the agricultural sector has been still able to sustain a relatively high growth rate thanks to the fact that the advantages of Vietnam's agro-products have continued to be exploited and exchanged. However, since 2010 to present, the profit margin has showed a downward trend and the growth has also slowed down.

Figure 1

GDP growth rate of agriculture and the economy



Source: Data from General Statistics Office.

Meanwhile, the economic liberation and the strong devaluation of the domestic currency has pushed the industrial sector, which used to be subsidized and has not adapted to the market economy, into a crisis. The traditional heavy industry, which is less effective, uses high amount of capital & few laborers, largely depends on imported materials, has fallen into a recession. Meanwhile, the light industry and the private economic sector, which use little capital and are labor-intensive, have been able to compete with imported products and developed rapidly after strong devaluation spells. From 1991 to date, the speed of foreign direct investment and the State capital investment has been accelerated, creating a strong developing pace of the industrial and construction sectors. The service sector has attained a quick developing pace since the adaptation of renovation policies, especially in the commercial sector. From 1998 to date, the growth rate in the service sector has tended to slow down.

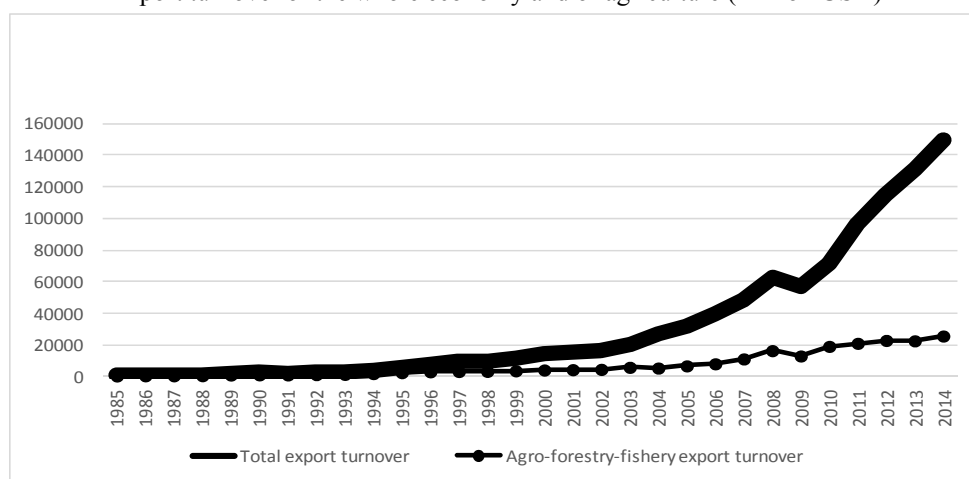
While the contribution of the agricultural sector into the general GDP has declined gradually, the growth rate of the agricultural production has been still sustained stably at a high rate. This trend is differentiated from many developing countries when Vietnam

maintains a fast and stable growth rate of the agricultural sector, creating all the necessary prerequisites regarding laborer, capital, food and materials for the industrialization; then, gradually cutting down the growth speed of the agricultural sector, in parallel with the reduction process of the agricultural sector proportion in the economy.

One of the important contributions of the agricultural sector is the continuous growth in agro-product exports over the past 30 years. The agro-product exports have surpassed the threshold of VND 20 billion and the agricultural sector is assessed as generating trade surplus, bringing about an important source of foreign currencies for importing technology and equipment to serve the industrialization.

Figure 2

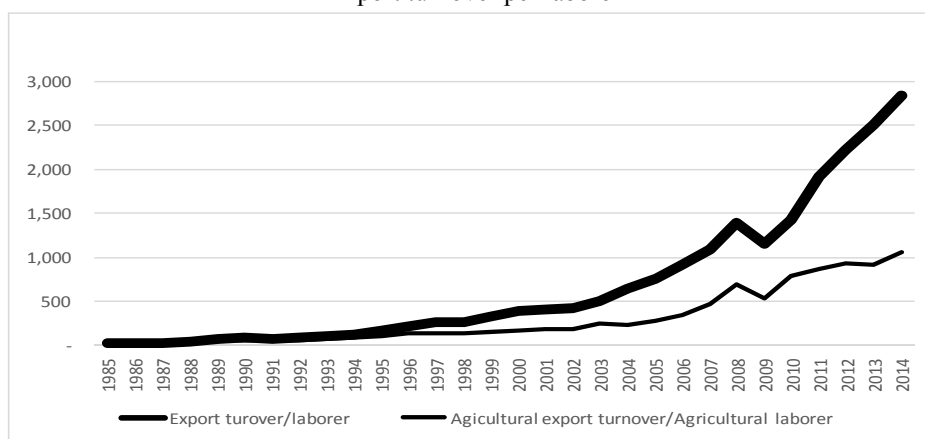
Export turnover of the whole economy and of agriculture (million USD)



Source: Data from General Statistics Office.

Figure 3

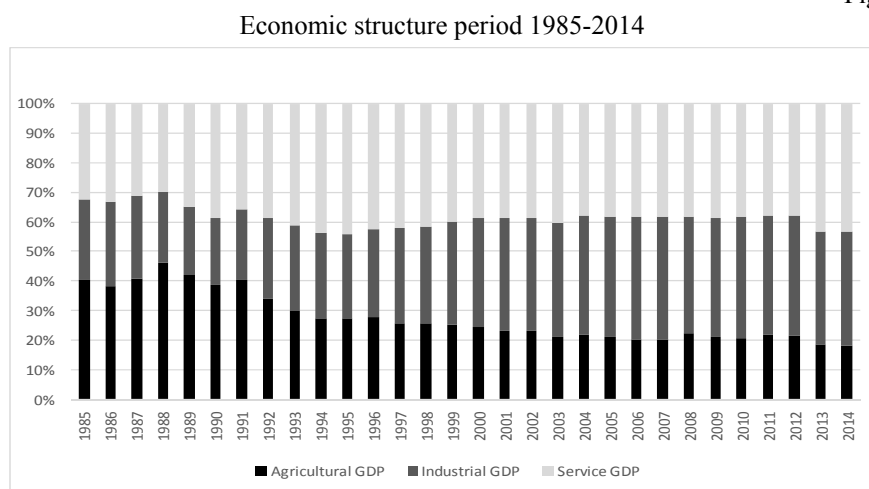
Export turnover per laborer



Source: Data from General Statistics Office.

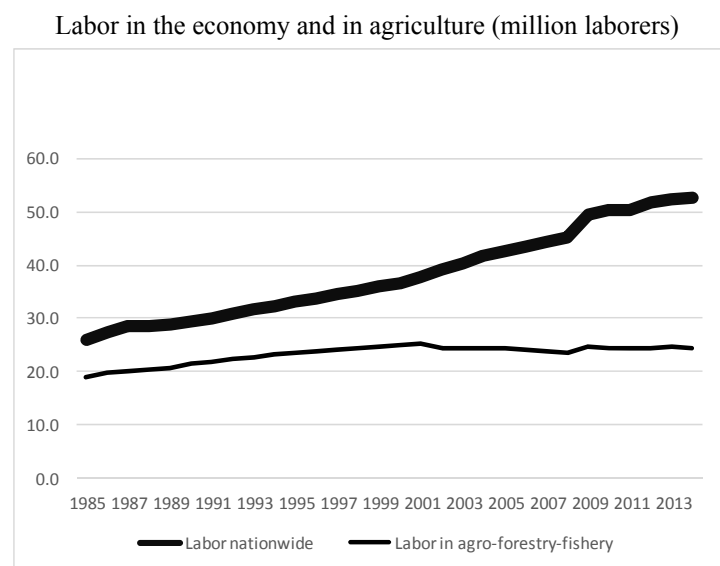
The steady growth of the agricultural sector plays a preeminent role in stabilizing the general growth rate of the whole economy during the renovation process. In the difficult period of the world or domestic economy, Vietnam's agricultural sector has still sustained a stable growth, creating the general balance for the growth of the whole economy. The economic crisis due to the mechanism shift in 1989 or even during the monetary and financial crisis in 1997-1998, when the growth rate of the industrial sector collapsed, the agriculture and service sectors have been a salvage for the common economic growth.

Figure 4



Source: Data from General Statistics Office.

Figure 5



Source: Data from General Statistics Office.

Reflecting the gradual transformation trend from the agricultural economy into the industrialization and the important role of the agricultural sector in the initial stage of the renovation stage, the proportion of the industrial sector in GDP after falling from 28.9% in 1986 to 22.7% during the crisis in 1990 rebounded to 28.8% in 1995; nearly 40% in 2003; approximately 40% in 2003; and nearly 40% in 2014. In contrast, the proportion of the agricultural sector rose from 38.1% year in 1986 to 46.3% in 1988 while having fallen continuously from 1989 to present to just approximately 18% in 2014. The sharp growth of the industrial sector is an inevitable trend in the industrialization and modernization of the country, making a healthy contribution to the economic restructuring of Vietnam's economy.

2. Agro-forestry-fishery restructuring

In the agricultural sector, there has been a diversification toward sub-sectors with added value such as fishery or industrial crops. However, the agricultural growth is unsustainable, has weak competitiveness, is heavily-dependent on cultivation and is stagnant in husbandry.

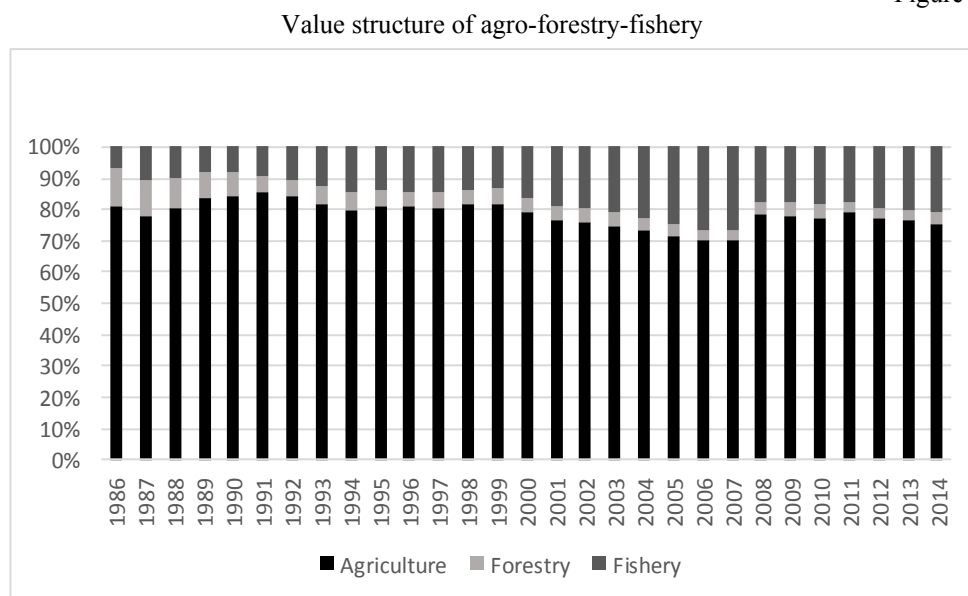
In the agro-forestry-fishery field, the fishery sector has attained the sharpest growth over 30 years of renovation. The access to the international market has enabled the fishery sector to achieve a skyrocketing growth, making contribution to maintain a high growth rate of the fishery sector. Thanks to those active changes, the proportion of the fishery sector in the GDP has tended to grow continuously over the past nearly 20 years, from 5.6% in 1986 to above 18% in 2003.

Although the growth rate of the agricultural production is not as high as the growth rate of the fishery sector, it happens on a large scale of rural areas nationwide, creating a great outcome for a large proportion of the residents. Compared to the fishery and agricultural sector, the production characteristics of the forestry sector are more difficult regarding both production cycle, risk level, dependence on the nature and the market's weakness. In addition, the policy orientation for the forestry sector from the resource management to the organization of enterprises contains numerous difficulties. Therefore, the effects of the economic renovation on this sector have come slower and the production developing pace of this sector is much slower than the two above-mentioned sectors. At the start of the economic renovation, while the fishery and agricultural sectors obtained extraordinary growths, the forestry sector still faced serious recession. The transformation process from the centrally-planned economy to the market economy has created the sense of possession and ownership on vessels, fields, but this motivation has not appeared on forests. The forest coverage rate nationwide has grown very slowly.

The stable development of agriculture has tackled the food security, employment for over one million of laborers supplemented per year, allowing the national economy to put all resources into other development goals. During the economic crisis in the initial renovation stage or during the financial crisis in Asian when both industry and service receded, the stable growth of the agricultural sector has become the decisive factor for the general

growth of Vietnam. This is also a common conclusion of countries that experienced the 1997-1998 crisis. This supplementation is presented in the ability to attract surplus laborers in the society, ensure food security, general price level, import-export balance and other impacts on the macro-economy.

Figure 6



Source: GSO.

In the agricultural sector, some sub-sectors have made giant growth such as the sharp growth of perennial crops such as coffee, rubber, tea, cashew, pepper; the fast developments of some types of fruit; intensification of diversification on the rice cultivated land, especially the successful lesson of the fishery sector, which makes a large number of farmers who work in the field of agriculture or fishing into aquaculture. Despite a lot of efforts for growth, the husbandry sector has not exceeded the limit of 20% GDP in the whole agricultural sector to really become a “major sector.”

Unsustainable agricultural growth and slow restructuring

The exchange rate of Vietnam is rated by many experts as being higher than the true value; therefore, the disadvantage “price salvage” trend for the agricultural production sector has persistent for many years. The agricultural production has to cope with countless risks regarding diseases and natural disasters. The competition on the market was tough and farmers always bear disadvantageous position. Therefore, the GDP growth in the agricultural sector have tended to fall. The GDP growth of the agricultural sector has dropped from 4% in 1995-2000 period to 3.7% in 2000-2007 period and just above 3%/year from 2010. In 2008 alone, in the world’s agro-product price spiral, the growth of

the agricultural sector of Vietnam recovered to above 4.1%. The disadvantages in the natural macro-economy and the impact of international economic crisis such as inflation, changes in oil prices, agro-product prices, impacts of monetary tightening policies, exchange rate fluctuations, etc., have caused a lot of impacts on employment and income of rural residents over the past time.

The agricultural sector still accounts for a large proportion (Over 50%) in the internal structure of the agricultural sector; of which, the food crops, especially rice still makes up the key proportion. Over the past years, the husbandry and fishery sectors have developed quickly, but still unsustainably. The quality of some raised animals has not been high; the industrial farming scale has not really developed and the disease control remains unstable. Some big husbandry areas with high intensity level have not been treated well, causing environmental pollution. The contribution of the forestry sector in the economic growth has not lived up to its potentiality. The income from the forestry sector has just made a very small contribution into the total GDP and the income structure of rural households. Wooden product exports have grown sharply, but materials still have to be imported.

The rural economic structure of Vietnam in general and the structure of the agricultural sector in particular is still out-dated. To date, rice still plays a key role, accounting for over 60% of the planted area, supplying 75% of the nutritional energy, contributing 23-27% for agro-product exports and being an important livelihood of 80% of households. Despite a lot of efforts for growth, the husbandry sector has not exceeded the limit of 20% GDP in the whole agricultural sector to really become a “major sector.” The forestry sector is still sluggish, has gradually narrowed down its structure and only accounts for 5% GDP of the whole field. The forest coverage ratio is low and the quality of forest is poor, so the Vietnam’s agricultural sector still falls short of its target to become an ecological agricultural sector with sustainable and harmonious development.

Owing to the outdated production structure, although the agro-product exports have grown sharply over the past years, the components of goods have only changed very little. Rice and fishery have accounted for 20-30% in the agro-product exports and have not changed much over the past decade. Coffee and pepper exports have risen while rubber and vegetable exports decrease, which does not vividly show the diversification trend. Two raw product items – rice and coffee remain the key export agro-products (except for fishery).

3. Rice production and food security

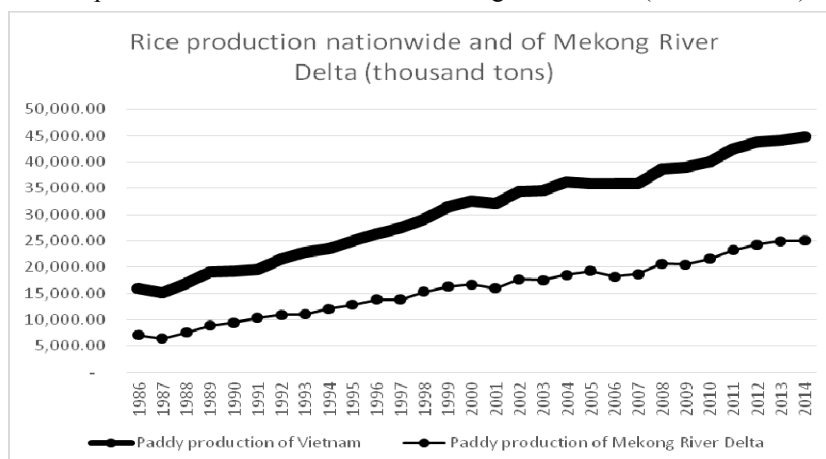
Rice production booms, making Vietnam from a country with hunger become a leading rice exporter.

Rice is the most important crop in the crop production sector with a long tradition and a large impact on rural people's lives in Vietnam. Rice production accounts for 50% of agricultural GDP (excluding GDP of forestry and fishery) in 2003. The developed rice production has created a breakthrough in the early stage of the renovation process and at present, rice production continues to play a decisive role in ensuring food security, hunger

eradication and poverty reduction, generating income for farmers and contributing to boosting exports to have increased foreign exchange earnings.

Figure 7

Rice production nationwide and of Mekong River Delta (thousand tons)

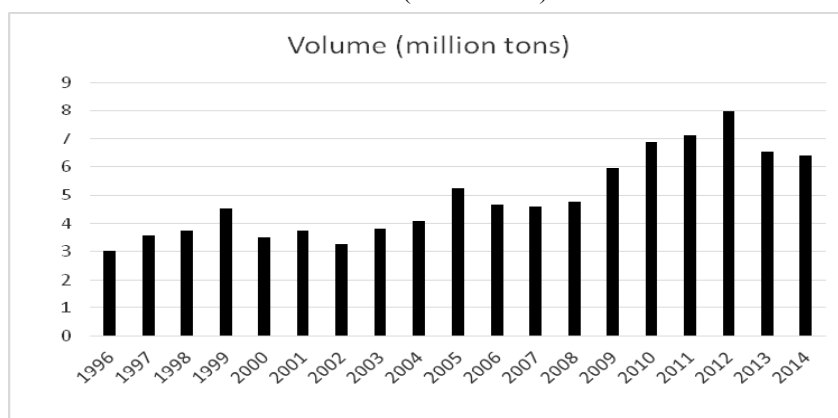


Source: GSO.

Rice production nationwide surpassed 45 million tons. Meanwhile, food consumption decreased (rice consumption per capita was revised down from 12 kg/person/month in 2012 to 11.4 kg/person/month in 2006). In contrast, foodstuff consumption was raised. Given the development of food and foodstuff production, food consumption per capita increased from 445 kg in 2000 to 501 kg in 2008 and this figure tends to fall. Vietnam has ensured the rice supply to meet the domestic demand and become the world's third biggest rice exports after Thailand and India.

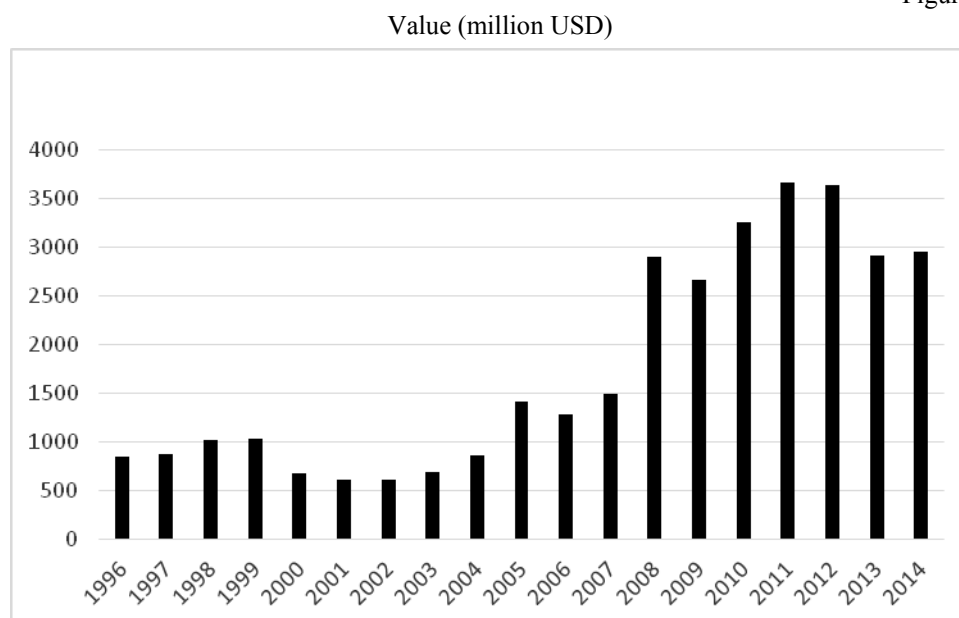
Figure 8

Volume (million tons)



Source: GSO.

Figure 9



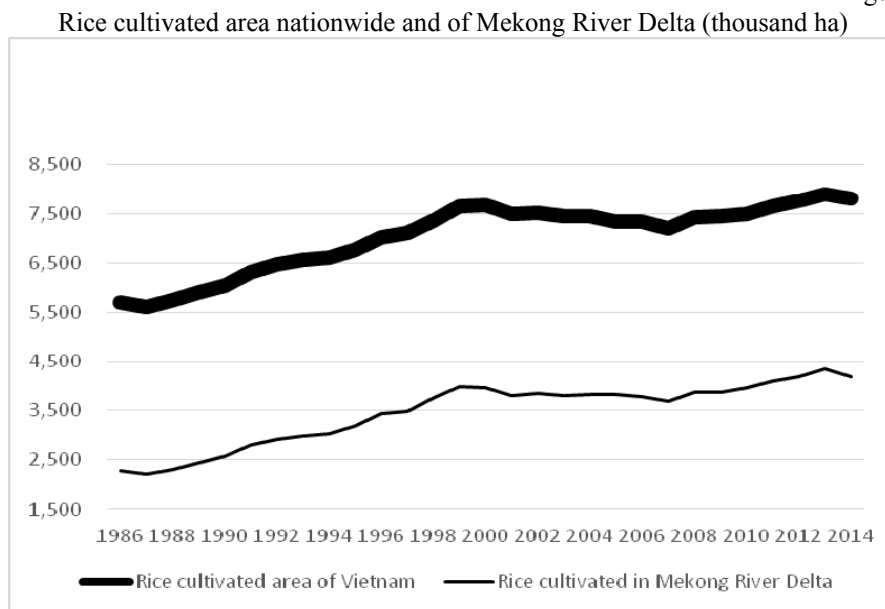
Source: GSO.

Maintaining a large rice area reflects that the thinking of food security is rigid or incompetent shift to the new production systems is an obstacle to the release of resources of rural agriculture to open a new development mechanism.

While rice production has become redundant and food security on the national level has been no longer a permanent concern, rice exports of Vietnam tend to be accelerate more because rice exports bringing in Vietnam about US\$ 3 billion per year have become a significant achievement in terms of symbols as well as a source of precious foreign currency to finance the export-import balance, so, there has been a political impetus to promote rice production over the past many years. Rice planted area nationwide climbed from 5.5 million ha to over 7.5 million ha. On another aspect, the transformation of rice area to be planted with other crops or used with another purposes is not easy, limiting the ability to diversify the rice-excluding production. Does this reflect that there are still concerns over food security or concerns over a broken planning of agricultural land?

There are two ways to increase rice yield. Firstly, it is an intensive farming, raising rice yield by investing more input materials and labors in rice cultivation. In narrow areas where many people live such as Red River Delta, in the context of narrowed rice area, this approach may easily become a trap, forcing farmers to maintain food security towards self sufficiency, without regarding to the market demand, undermining the competitiveness of households and this approach soon will surpass the threshold of economic efficiency. Therefore, although rice yield continues rising, production profit will fall or rice yield will reach the maximum level and the production development path will be congested.

Figure 10



Source: GSO.

Even if there are technological breakthroughs in the future, opening up a new rice production system with a higher rice yield or better economic efficiency, it is not easy to change a workforce and an infrastructure system closely tied with a low-efficiency intensive farming to adapt rapidly with strong and fast competitiveness of the market.

Since 2008, the competition in the world rice market has become more aggressive. The old business approach, mainly based on corporations that sign G2 contracts and depend on big cheap rice tenders, has proved ineffective. The decrease in rice export value is sharper compared to the decrease in rice export volume. Enterprises, from seeking export markets, have turned to maintain the stable supply of rice with reasonable prices. Farmers' incomes are improved if domestic rice prices are close to world rice prices, resulting in lower profits for enterprises and deficiencies in business management. Is it more effective if Vietnam reduces rice exports, focusing on increasing business efficiency, increasing the value of rice and implementing a new milestone in the agricultural development strategy?

Most of the rice farmers in Vietnam are still tied with a small-scale rice production. Specially, farmers in Red River Delta cultivate rice on a fragmented land without calculating interest and considering market demand.

Many researches in Mekong River Delta show that it is required to expand the rice production scale of households to achieve high efficiency and increased labor productivity. The efficiency of a rice household with a rice area of over 3 ha will be about 5-6 times higher compared to other households with a rice area of below 1 ha. The difference here is not simply the width of the production area, it is two different farming systems (a manual

system with intensive farming by investment in materials and labors and a mechanized system with intensive farming by technology and management.

The growth in agriculture based on the cultivated area and land turnaround sooner or later reaches the limits of land, it is "horizontal growth". Most crops in Vietnam as vegetables, industrial crops, fruit trees, forest trees, etc still grow mainly due to the expanded area. The productivity of most crops in Vietnam is significantly lower compared to the world average, reflecting the weakness in the application of science and technology and intensive investment.

Food security with an emerging factor that is import demand of China

The strategic significance of food security for Vietnam is more likely to be originated from another aspect which very few analysts have mentioned. Many decades ago, there was a famous article entitled "Who will feed China" (Brown, 1995) written by a western scholar. Over the past 5 years, China has emerged as a leading rice importer and the emerge has raised a question "How will the above trend affect the food security of Vietnam?"

Table 1

Rice imports of China and rice exports of Vietnam to China

Year	Imports of China (1)	Exports of Vietnam to China (2)
2010	366	123
2011	578	301
2012	2345	1980
2013	2244	2231
2014	2557	1938
2015	2314	1541

Source: Data (1) – General Administration of Customs of the People's Republic of China; data for 2015 are data for the first 9 months of the year; Data (2) – General Department of Vietnam Customs; data for 2015 are data for the first 8 months of the year.

The data from the General Administration of Customs of the People's Republic of China (GACC) show that rice imports of China have soared since 2010. However, according to an estimate from the USDA, the actual rice imports of China from 2015 are much higher compared to the figure released by China. According to the General Department of Vietnam Customs, Vietnam has exported approximately 2 million tons of rice per year to China since 2012. The export figure has been sustained for 4 years. Actual rice exports of Vietnam to China must be much higher. Estimates from VFA leaders or Ministry of Industry and Trade's officials show that Vietnam annually exports about 1.5 million tons of rice to China through unofficial channel.²The estimate of the author is also quite similar to the figure released by leaders from VFA and Ministry of Industry and Trade.

² Thanhnienonline newspaper Tuesday, 18/10/2013, "Gray-trade" rice exodus to China. <http://www.thanhnien.com.vn/kinh-te/gao-tieu-ngach-o-at-chay-sang-trung-quoc-464805.html>; <http://nongnghiep.vn/xk-gao-van-can-tieu-ngach-post119987.html>; <http://tapchitaichinh.vn/nghien-cuu-trao-doi/trao-doi---binh-luan/xuat-khau-tieu-ngach-nhieu-rui-ro-67984.html>.

The emerge of China can be seen as a business opportunity for Vietnam rice export industry. However, it also poses a number of challenges as follows:

- The majority of rice to be exported to China especially gray-trade rice is low-grade rice with no strict quality assessment. This is a trap for Vietnam's rice industry in the medium and long term.
- China has never published the actual demand on concerns that the market will react/respond, resulting in increased prices, causing losses to rice imports of China. Therefore, it seems that China is using a gray-trade mechanism with Vietnam and Burma to have the rice supply which is most beneficial to them in terms of prices as well as the flexibility of the supply.
- Gray trade with China is rapid and broad. It is hard to correctly predict the gray trade developments; the policy/business response of Vietnam is slow, resulting in a lot of risks for enterprises engaging the gray trade channel. China does not import rice on a normal channel like the Philippines, Cuba, Iraq or other countries. Normally, foreign enterprises sign import contracts with Vietnam exporting enterprises. The enterprises will procure rice from the people through small traders/collectors. For China, in addition to rice imports from Vietnam through official channel, it is very likely that Chinese enterprises can buy rice from Vietnam people directly through a network of collectors only.
- If China sharply increases its rice imports, the impact will be very fast and unpredictable. A large rice imports in a short time will be an opportunity raising prices, bringing in income for a few enterprises and farmers. However, this trend will cause fluctuations in the market price, raising business risks to many enterprises. That China imports rice from Vietnam with extensive purchasing channels and very fast movements is also a challenge for Vietnam's rice exporting enterprises, forcing them to actively prepare the rice supply for their contracts.
- If China suddenly raises its rice imports to a very high amount (China's rice imports are raised to 1 million tons for one month and rice imports of the country are raised to 3-4 million tons for the whole year), the changes in Vietnam's domestic rice prices are likely to affect the general price level, causing inflation, a part of the poor to be unable to access to food and food insecurity.
- There is a challenge in terms of the policy of the Government, that is, Vietnam has not had any effective gray trade rice export control mechanism so that Vietnam can grasp the rice supply-demand developments to have timely policy-related solutions.

4. A number of policy direction-related implications

- Over 30 years of renovation, agricultural sector has completed an important role as a buffer, helping Vietnam cope with external crises and a supply of finance for industrialization. However, the growth dynamics of the agricultural sector has been due;

weaknesses in capacity and levels of development of the agricultural sector are being shown owing to fiercer competition of the modern competitive environment and globalization. These challenges will require breakthroughs in terms of institution and investment, focusing on improving the business environment in the area of equality between state enterprises and private ones, increasing investment in science and technology applications, and especially freeing the land resource that is “tied” with rice.

- The clearance of a large area of rice land will create new resources to help diversify rural business fields which bringing in higher incomes to farmers. However, the orientation of the excess rice land use should be considered carefully in terms of planning by area and infrastructure as well as selecting appropriate development priorities.
- Regarding remaining rice area, serving the production of commodity rice and rice for exports, it is necessary to promote export markets, accumulating rice land to develop medium-scale and large-scale rice fields to improve the rice quality and rice purity, directing to high-grade rice, bringing in high added value in the premium market segment.
- If food security and performance of rice exports are not an important priority, this will help Vietnam free the rice land for new development opportunities. However, it is necessary to mention the food demand of China. Vietnam needs to develop mechanisms for monitoring and regulating gray-trade rice exports effectively which not only helping increase business interests but also dealing with the risks of market and instability of food security.
- In such a current changeable environment, the State does not play the role in/is unable to provide market forecasts. Only enterprises are able to transmit the best signals regulating the production of the farmers. Vietnam should have programs to support the training and consultancy as well as trade promotion to develop its capable enterprises that effectively exploiting the Chinese market.

Reference

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