

ACTUAL SITUATION AND THE PROBLEMS OF VIETNAMESE AGRICULTURAL SECTOR

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ABSTRACT

Based on secondary data collected from the General Statistics Office of Viet Nam, this article presents the actual situation of Vietnamese agricultural sector about the contribution of agriculture to the economic growth and GDP of Vietnam, the export value of the agricultural sector in total export value of Vietnam, the labor productivity of the agricultural sector and investment in the agricultural sector. Besides many achievements, the agricultural sector is currently facing challenging issues: (a) labor productivity is still low, (b) the use of funds is inefficient although the capital investment in agriculture has increased rapidly over the years, (c) the growth rate of agricultural sector is still low due to small-scale production, (e) disease issues, sanitary and phytosanitary safety, (f) food safety, and (g) environmental pollution from cultivation and livestock farming have not been strictly controlled. From these facts, this article proposes recommendations which can limit the problems and develop the agricultural sector in the future.

Keywords: agricultural sector; actual situation, challenging issues

TÓM TẮT

Thực trạng và những vấn đề đặt ra đối với ngành nông nghiệp Việt Nam

Bài viết sử dụng nguồn số liệu thứ cấp thu thập được từ Tổng cục Thống kê nhằm nêu lên thực trạng ngành nông nghiệp Việt Nam, cụ thể là đóng góp của ngành nông nghiệp vào tăng trưởng kinh tế và GDP của Việt Nam, giá trị kim ngạch xuất khẩu của lĩnh vực nông nghiệp trong tổng giá trị kim ngạch xuất khẩu của Việt Nam, năng suất lao động của ngành nông nghiệp và vốn đầu tư vào lĩnh vực nông nghiệp. Bên cạnh những kết quả đã đạt được, ngành nông nghiệp hiện đang gặp nhiều vấn đề thách thức như (a) năng suất lao động của ngành thấp, (b) vốn đầu tư vào lĩnh vực nông nghiệp tuy tăng nhanh qua các năm nhưng hiệu quả sử dụng vốn chưa cao, (c) tốc độ tăng trưởng của ngành còn thấp, (d) quy mô sản xuất nhỏ lẻ, (e) vấn đề về dịch bệnh, an toàn vệ sinh dịch tễ, (f) an toàn thực phẩm, (g) ô nhiễm môi trường trong trồng trọt và chăn nuôi vẫn chưa được kiểm soát... Trên cơ sở đó, bài viết đề xuất một số kiến nghị góp phần hạn chế những thách thức và phát triển ngành nông nghiệp trong thời gian tới.

Từ khóa: ngành nông nghiệp, thực trạng, vấn đề thách thức

1. Introduction

Since the implementation of a comprehensive renovation policy for economy in 1986, Vietnam's agriculture has made great achievements, confirming its important role and strategies for the development of the country. Especially when the economy was in trouble, Vietnam has maintained high growth rates and stability for a long time by changing the structure of plant cultivation and animal farming in positive directions (Binh, 2017). Basically, the farming industry,

livestock, forestry and fisheries have significant developments with diverse production both in product type and organization structure. Production systems for medium and large scale have been formed, notably in livestock farming, rice cultivation, aquaculture and perennial crops. In 2014 the agricultural sector contributed 18.12% of GDP to the economy, and 22.57% of the export value (GSO, 2017). Although affected by economic downturn, the agricultural sector was the only sector that had export surplus during

2010-2014. In 2014, the export value of the riculture - forestry - fishery sector reached 30.86 billion dollars, increasing 11.2% over 2013. It continues to be the sector that creates high added value with 9.5 billion dollars. (GSO, 2017)

According to published data by General Department of Vietnam Customs, the agricultural sector has 10 commodity lines with more than 1 billion dollars of total turnovers, including: rice, coffee, rubber, cashew, pepper, cassava, vegetables, shrimp, fish and forestry products. While other industries are heavily influenced by economic slowdown, the agricultural sector has overcome many difficulties, achieving a comprehensive, high growth rate. Despite these achievements, our agricultural sector has some restrictions and weaknesses. We need additional assessment of the situation to identify problems in the agricultural sector.

2. Research methods

This research analyzed the actual situations and challenges of Vietnam agricultural in sector years 1986 – 2015.

The current study used secondary sources from the General Statistics Office for analysis and evaluation. They are specific data sources on the growth rate of the agricultural sector, the contribution of agricultural sector to the eco-

nomical growth and the GDP of Vietnam, value structure, namely agricultural farming, livestock and services agriculture, data about exports of the agricultural sector, the export structure of farming, livestock, and services contributing to the export value of Vietnam's agricultural sector, the employment structure, value structure, and labor productivity of agriculture, investment in agricultural development, and efficient uses of capital.

3. Result and Discussion

3.1. Current status of Vietnam's agricultural sector

The contribution of agriculture to economic growth and Vietnam's GDP:

During the 1991-1995 period, Vietnam had an average economic growth rate of 8.18%, when the growth rate of the industrial sector was 12%, services 8.6% and agriculture 4.09%. At this time, achievements and innovations in economic thinking opened the economy to external investment flows for economic development. In the period 1996-2000, the agricultural sector had only 4.3% growth, yet contributed 25.7% GDP growth to the economy. Growth of the agricultural sector in 2005-2014 tended to decrease and contribution to GDP was between 18 and 19.21%. (GSO, 2017)

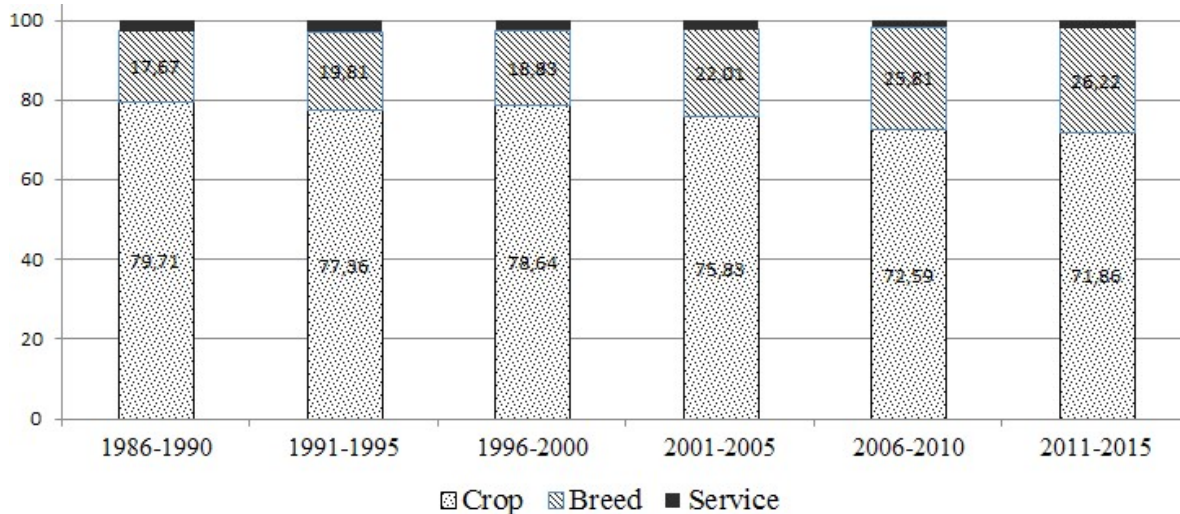
Table 1. Agricultural contribution to Vietnam economic growth and GDP 1986-2015

No.	Target	1986-1994	1991-1995	1996-2000	2001-2005	2006-2010	2011-2015	2015
1.	Growth rate of overall GDP (%)	8.01	8.18	6.94	7.51	7.01	5.91	6.68
1.1	Industrial sectors	11.94	12.00	10.60	10.25	7.94	7.22	9.64
1.2	Service sectors	8.24	8.60	5.75	6.96	7.73	6.68	6.33
1.3	Agriculture sectors	4.25	4.09	4.30	3.83	3.34	3.12	3.41
2.	The structure of GDP (%)	100	100	100	100	100	100	100
2.1	Industrial sectors	29.01	28.06	33.49	38.90	37.89	35.98	33.25
2.2	Service sectors	40.27	41.78	40.81	39.45	42.90	45.62	49.76
2.3	Agriculture sectors	30.72	30.16	25.70	21.66	19.21	18.40	16.99

Source: GSO and calculation by the author

In 2005 - 2015, the agricultural sector growth was not high, lacking stability and sustainability. The rate of growth reached 4.19% in 2005, fell in 2006 and 2007, rose to a peak of 4.69% in 2008 and then fell sharply to 1.91% in 2009.

It recovered in 2010 – 2011, but again sharply declined to 2.64% in 2012 and 2013, then rose to 3.41% in 2015. The structure of the agricultural sector as farming, livestock, and services is shown for 1986-2015 in Figure 1



Source: GSO and calculation by the author

Figure 1. Structure of agriculture, Vietnam, 1986-2015

In the agricultural sector value structure, the farming sector (labelled Crop in Figure 1) keeps a high level, though decreasing from 79.71% to 71.96% in 1986 to 1990. In contrast, the livestock sector rises from 17.67% to 26.20%. The livestock industry is growing its value contribution to the agricultural sector. In addition, the structure of the agricultural service sector tends to decrease structurally in agriculture value chains at around 2%.

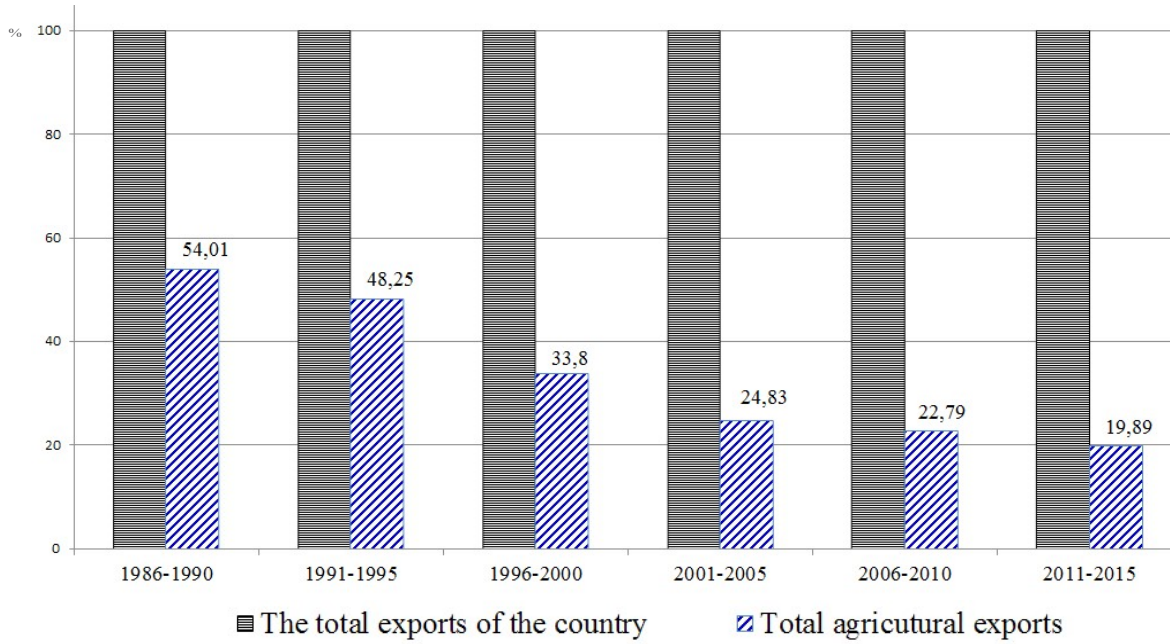
3.2. The relative value of agricultural exports

Agriculture not only helps national food security and supports domestic consumption, but also exports Vietnamese branded rice, coffee, rubber, and seafood, pulling in foreign currency for the country. In 1986, the exported value of agricultural, forestry and fisheries reached only \$ 486.2 million USD; but by 2000, it amounted to \$4.2 billion, and then reached \$ 30.86 billion USD by 2014, almost 60 times higher than in 1986.

The statistics about the export value of Vie

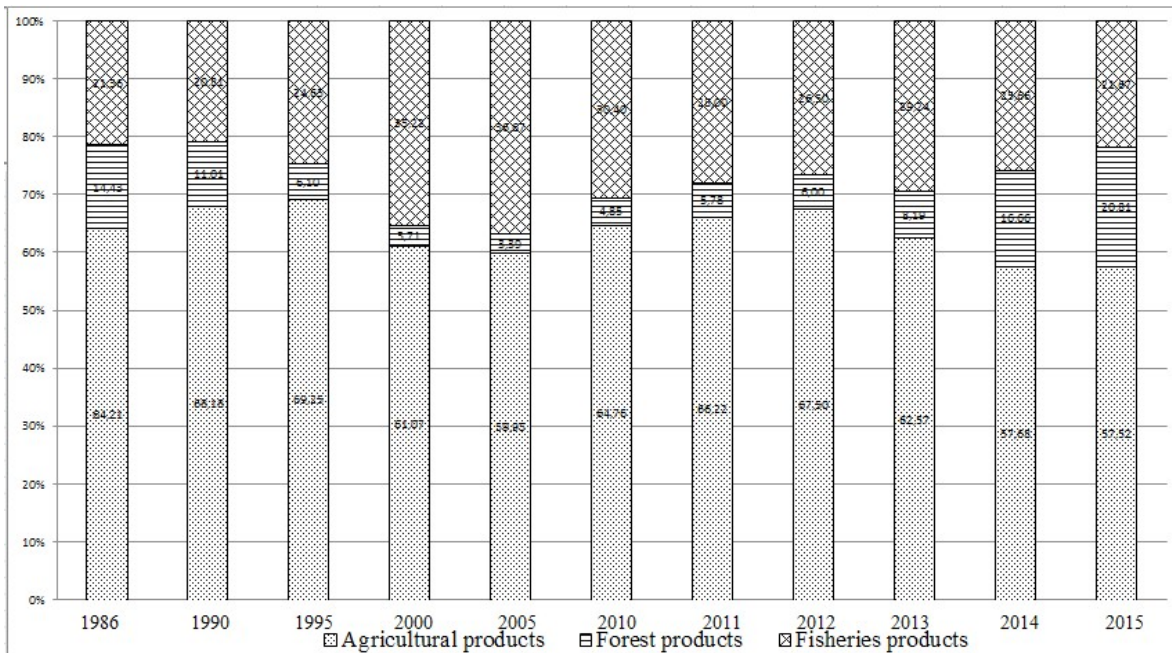
nam's Agriculture in the 1986-2015 period (Figure.2) showed that the sector's share accounted for 54.01% in 1986 - 1990, then trended downward to 19.89% of export value in 2011 - 2015. Despite the dramatic rise of the sector's export value from 1986 to 2015, its share of the country's total value of exports tends to decrease.

The growth rate of export turnover of agroforestry products reached an average 17.31% per year over the period 1986 - 2015. Particularly in 2015, the total export value reached 30.14 billion dollars nationwide, down 0.8% compared to 2014. Ten items reached export values of \$1 billion USD (rice, coffee, rubber, cashew, pepper, cassava, vegetables, shrimp, fish, and est products). Owing to great achievements in exporting, agriculture is the only sector that has always had a trade surplus, while Vietnam's overall trade is regularly in deficit. Export of agricultural products not only balances the national trade but also enhances the prestige and position of Vietnam in the international area.



Source: GSO and calculation by the author

Figure 2. The share of exports in total agricultural export value of Vietnam for the period 1986-2015



Source: GSO and calculation by the author

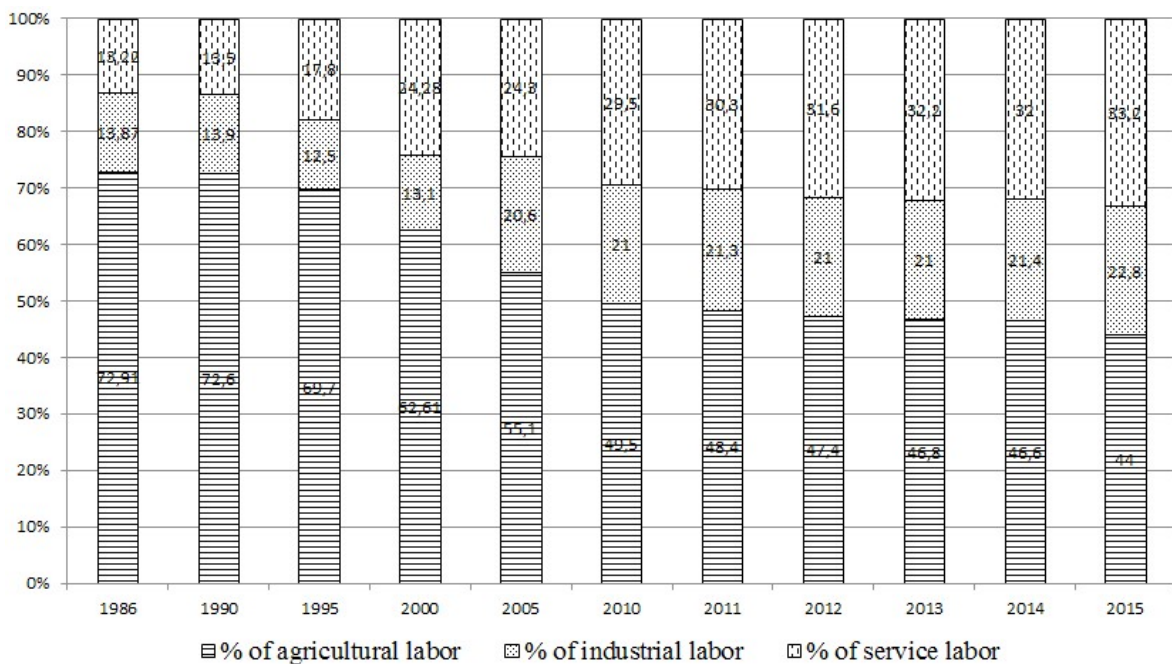
Figure 3. The structure of exports of agricultural, foresting and fisheries products in the value of agricultural exports Vietnam period 1986-2015

In the structure of the value of agricultural exports of Vietnam in the period 1986-2015, it can be noted that agricultural exports still play a key role, and although exports have decreased over the years, they are currently maintained at around 65%. By 2015, Vietnam ranked first in the export of black pepper (accounting for 14.3% of the world market), and coffee (40% of world market share), and ranks second in export of rice (up to 12% market share) and cashews (9.5% of the world market). The contribution of the fisheries sector in the value of agricultural

exports has grown rapidly over time, and exports 25-30% of total export value as frozen shrimp, catfish, etc.

3.3. Industrial labor structure and labor productivity in agriculture:

In 1986, the agricultural sector attracted 72.91% of Vietnamese workers (Figure 4). Vietnam labor tends to gradually shift to service industries because these industries have higher labor productivity compared to agriculture and this is an inevitable shift. By 2014, the agricultural sector settled at 46.3%.



Source: GSO and calculation by the author

Figure 4. Structure of the labor sector 1986-2015 period

Although the labor of the agricultural sector accounted for the largest proportion of total national employment (44% in 2015), the labor productivity of this sector was at very low levels (Table 3). Labor productivity in agriculture was estimated only 1/ 4.5 of the yield industry and about 1/ 3.4 of the service sector productivity. Low yields indicated that the effect of the use of labor was low and the application of modern science and technology was still limited. In 2014, the labor productivity of Vietnam (calculated at current prices) reached 74.3 million/ person, 3.8 times higher than in 2005. Employment in the agricultural sector accounted for the highest

proportion in 2015 at 44%, but the value contribution to GDP accounted for only 18.12%.

Social labor productivity in 2015 at current prices of the whole economy was estimated at \$79.3 million VND/ employee (equivalent to about \$ 3,515 USD/ laborer), in which labor productivity of agriculture, forestry and fisheries now reached \$ 28.9 million VND/ employee, accounting for 38.9% of the labor productivity of the whole economy; industrial areas and construction reached \$ 133.4 million VND/ laborer, 1.8 times higher, while the services sec-

Table 3. Structure of labor, value structure and labor productivity in agriculture Vietnam the period 1986-2015

Year	Labor structure of economic sectors (%)			Structure of the sector in GDP at current prices (%)			Labor productivity at current prices (million/ person)			
	Agri	Industry	Service	Agri	Industry	Service	Whole economy	Agri	Industry	Service
1986	72.91	13.87	13.22	38.06	28.88	33.06	2.43	1.26	5.04	6.06
1990	72.6	13.9	13.5	38.66	22.7	38.64	15.67	6.54	28.29	24.94
1995	69.7	12.5	17.8	27.18	28.76	44.06	16.86	6.82	31.48	26.73
2000	62.61	13.1	24.28	24.54	36.73	38.73	18.23	7.09	35.26	29.03
2005	55.1	20.6	24.3	21.58	38.12	40.31	19.5	7.4	39	30.7
2010	49.5	21	29.5	18.89	38.23	42.88	44	16.8	80.3	63.8
2011	48.4	21.3	30.3	18.5	38.39	43.12	55.2	22.9	98.3	76.5
2012	47.4	21	31.6	18.05	38.57	43.38	63.1	26.2	115	83.7
2013	46.8	21	32.2	17.57	38.57	43.86	68.7	27	124.1	92.9
2014	46.3	21.3	32.4	18.12	38.5	43.38	74.3	28.9	133.4	100.7
2015	44.0	22.8	33.2	17.0	33.3	49.7	79.3	31.1	133.6	106.6

Source: GSO and calculation by the author

tor reached 100.7 million/ laborer, 1.36 times higher. Calculated at constant prices for 2010, labor productivity across the economy in 2015 is estimated up 4.3% compared to 2013, while the labor productivity of agriculture, forestry and fisheries increased by 2.4%; industrial areas and construction increased by 4.3%; and the service sector increased by 4.4%. Labor productivity in agriculture is the lowest of the economy as a whole, and of all sectors. The growth rate of agricultural productivity stays low, making agricultural workers productivity lag behind.

3.4. Investment capital for development of agricultural sector

Social investment capital for the agricultural sector from 1995 to 2007 increased by 2.3% from 9 trillion to over 20 trillion. Nevertheless, the growth was very low compared to investment in the social services sector (increasing 4.4 times) and in industry (increasing 6.2 times). Looking at the ten year period from 2001 to 2010, the total investment of about 4336.6 trillion (calculated at current prices) was 7% invested in agriculture,

forestry and fisheries (304.8 trillion), compared to 41.4% invested in industrial areas and building (1792.9 trillion), and 51.6% invested in service areas (2238.9 trillion). In 2000, the total investment in agriculture accounted for about 13.8% of GDP, falling 7.5% by 2005, then 6.45% by 2008 and then 6.26% by 2010. By 2013, the proportion of capital allocated to the agricultural sector had fallen 5.6%, even though the amount (61.2 trillion) was 3 times more than in 2000. Thus, it can be seen that the agricultural investment was not commensurate with the potential development of the industry. Social investment failed to create new capacity in infrastructure required by the restructuring of the agricultural sector under its objectives. It did not invest intensively in high-quality agriculture, plant and animal breeding, plant pesticides, post-harvest technology, and so on. Agricultural products remain at low added value, and there is little impetus to improve or grow. Meanwhile, the proportion of investment rose in other industries, especially in services which accounted for 53.3% in 2015

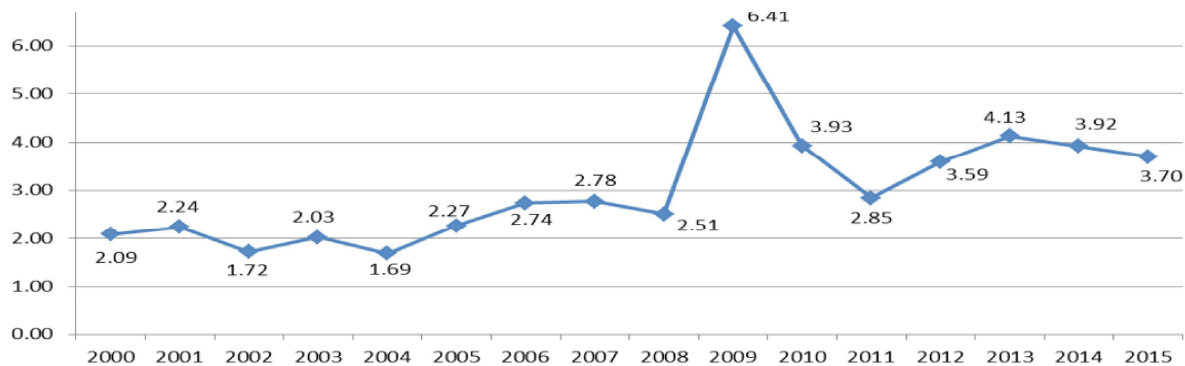
Table 4. Investment at current prices by sector 2000-2015 period

Year	Total investment (thousand billion dong)		The proportion of capital allocated to the sector (%)		
	All society	Investments in agriculture	Agriculture	Industry	Service
2000	151.2	20.9			
2005	343.1	25.7	7.5	42.6	49.9
2010	830.3	54.0	6.5	40.5	53.0
2011	924.5	55.3	6.0	40.4	53.6
2012	1,010.10	52.9	5.2	41.5	53.3
2013	1,094.50	61.2	5.6	41.8	52.6
2014	1,220.70	64.7	5.4	42.4	52.2
2015	1,367.20	71.1	5.2	41.5	53.3

Source: GSO and calculation by the author

In addition, although investments in the agricultural sector increased rapidly over the years and produced an average increase of over 10% in the period from 2000 to 2015, agricultural sector ICOR numbers, after increasing from 2.09 in 2000 to 6.4 in 2009, then fell to 3.7 in 2015, reflecting a decline in its efficient use of

capital. In the period 2000-2005, the average ICOR was at 2.1 to 1, meaning that Vietnam needed to invest 2.1 capital to get 1 capital of agricultural growth. In the period from 2006 to 2010, there was an average increase of ICOR to 3.8, and 3.7 in the period from 2011-2015.



Source: GSO and calculation by the author

Figure 5. ICOR agriculture during 2000-2015

From analysis of the current situation it can be seen that the agricultural sector has marked achievements after nearly 30 innovations, contributing to the overall development of the country. However, despite this remarkable development, the agricultural sector now faces many problems affecting its development. This is discussed in the next sections.

3.5. The problems of the Vietnamese ag -

cultural sector

First, labor productivity in agriculture is still low. Labor in the agricultural sector accounted for the largest proportion compared with other sectors of the economy. However, the productivity of labor in this sector was very low, estimated to be only 1/4.5 of the labor productivity yield in industry, and about 1/3.4 of productivity in the service sector. Such low yield suggests that the

effectiveness of employers in the sector is also low.

Second, investment in the agricultural sector had increased rapidly over the years, such that an average increase of over 10% was recorded through the period from 2000 to 2015, but the efficiency of capital use was not high, and the efficiency expressed through ICOR in agriculture decreased from 6.4 in 2009 to 3.7 in 2015, a serious decline (GSO, 2017).

Third, after joining the WTO in 2007 and signing the free trade agreement (FTA) with several countries, the growth rate of the agricultural sector in the 2005-2014 period was very low, less than 3% per year. The current in-depth integration trend and the country's agricultural sector continue to face many difficulties. The level of competition presented by imported products increases intensively, especially competition from countries in the ASEAN region after the ASEAN Economic Community (AEC) was established at the end of 2015. By the end of 2014, the level of trade liberalization in the ASEAN region was very high, with approximately 75% of the import tariffs reduced to 0%. Joining the AEC requires broader tariff reductions imposed at a faster pace. Only sensitive agricultural commodities remain protected by a low tax rate of 5%, and the meat import tax will be reduced to 0%. This is one significant challenge to the Vietnamese agricultural sector. Accordingly, the growth rate of Vietnam's agricultural sector has decreased, depressed by the negative impact of dropping world market prices for materials and products. Prices for production supply goods increase while prices for agricultural products flatline or even decrease, creating increasingly unfavorable terms of trade for agricultural production. The situation is made worse by new trade barriers on food safety, also suppressing the export of agricultural commodities from Vietnam.

Fourth, agricultural production remains small in scale and fragmented, and is heavily dependent on imported input factors such as seed, fertilizer, pesticides, veterinary drugs, animal feed, and so on. The high input cost is due to its dependence on imported inputs of materials for manufacturing and farming (number from UN commission on trade of Vietnam's import of agricultural products reached \$18.6 billion in 2015, while export turnover of agricultural products

reached \$24.6 billion). This has led to high-cost agricultural products and passive production. Moreover, post-harvest preservation and processing technology have received little attention, so the added value of the agricultural products remains low, with few products having national brands.

Fifth, output markets for Vietnam's agriculture have not been focused on and invested in. Competitive capacity of the agricultural sector is low because of low productivity and low quality of agricultural products. The consumption market is unstable, less diverse, and dependent on a few traditional markets. The main export channel is direct export through unofficial channels which leads to many potential risks.

Sixth, the tax reductions in joining AFTA, CPTPP, EAC, and so on will lead to the increase of import product volume from countries in the region leveraging industrial production. The products from these countries have a formidable competitive advantage over Vietnamese products. Therefore, the agricultural products from ASEAN countries such as China and South Korea can enter Vietnam with a cheap price, high quality, and wide varieties of attractive design. Agricultural products, businesses and farmers in Vietnam are facing stiff competition, and agricultural products and farmers are the most vulnerable subjects in this integration period.

Seventh, issues related to diseases, sanitary and phytosanitary safety, food safety, and environmental pollution in livestock farming and cultivation have not been controlled yet. If there are no or not enough technical solutions for effective sanitary and phytosanitary measurement, Vietnam will become a consuming market of low-quality products. This will affect the health of consumers and fail to protect domestic producers. Meanwhile, the present regulations about waste water from livestock farming are making difficulties for business. In Thailand and other advanced countries, composting and waste water only need to be incubated and filtered through biogas systems prior to being used for plant irrigation while Vietnam still requires wastewater treatment to meet Class A standards, leading to higher production costs for livestock enterprises.

Eighth, the research and application of science and technology in agricultural production, as well as investment funding for science and

technology in the field of agriculture remain limited. In the context of economic integration, the comprehensive quality enhancement of agricultural products has many challenges. The investment in high-technology and clean agriculture and genetic technology requires high investment costs and long periods but agriculture is still low in efficiency and has a slow payback time.

4. Conclusions and Recommendations

After 30 years of renovation, Vietnam's agriculture has contributed much to the development of the economy, the agricultural sector has contributed to Vietnam's GDP growth and growth of the agricultural sector tended to decrease and contribution to GDP was 19%. Notably, agricultural exports grew significantly. Owing to great achievements in exporting, agriculture is the only sector that has always had a trade surplus, while Vietnam's overall trade is regularly in deficit. Export of agricultural products not only balances the national trade but also enhances the prestige and position of Vietnam in the international area. Despite many achievements, the agriculture of Vietnam still faces many challenges. The local agricultural products are less competitive compared to other countries in the region and in the world. There are not many high value-added agricultural products. The agricultural production is small and fragmented. Although the capital investment in the sector has increased over years, it is not commensurate with the potential of the agriculture. The labor productivity of the sector is still low, so the lives of workers have not improved much. Epidemics and environmental pollution in livestock farming has not been strictly controlled. To support rapid and sustainable development of the agricultural sector in the coming period, the government should have more investment policies, so that the sector can develop commensurately with its advantages and available capability. Therefore, in the upcoming period, Vietnam should focus on implementing a number of key issues as follows:

Support for product sales and market development: The domestic market needs to be restructured. The wholesale and retail system need to be developed with more emphasis on market development in remote and minor ethnic areas to encourage the development of social enterprises and ensure the benefits of the direct producers. For export markets, traditional markets should

be maintained and new markets should be developed by focusing on building product brand name, improving quality, and reducing cost to increase competitiveness. Investigations, surveys, and market research of agricultural, forestry and aquatic products are needed to capture consumer preferences, and change product structure, pricing, and trading practices for different markets. A team of experts who are capable of analysis, research, and market forecasting needs to be established to give advice and propose effective policies. The role of industrial associations in providing information and uniform implementation of the development strategies for production, business collaboration, negotiation and contracting needs to be improved.

Support and improve the efficiency of capital use: Funding sources need to be diversified to continue to invest strongly in development of economic infrastructure and rural society. There must be policies for enterprises to participate in business-affiliation with farmers to get average long-term loans with preferential interest rates to implement the affiliate model. Establishment of a fund to support farmers in production and post-harvest technology (first in rice products) is needed to research and develop production yield and reduce post-harvest losses. Investment funds should be used effectively for the right objectives and right purposes.

Scientific and technological applications: Research and application of science and technology must be promoted; especially development of the research and transfer of science and technology to improve the quality of seed and livestock, the ability to prevent and overcome disease in plants and animals, and increase the productivity, efficiency and competitiveness of agricultural products. The application of biotechnology and the construction of high-tech agricultural zones are also essential. The encouragement and establishment of favorable conditions for enterprises and cooperative organizations need to be developed to invest in the preservation and processing of agricultural, forestal, and seafood products.

Training and development of human resources: There must be regimes, with sufficient remuneration policy to attract scientists in the field of high technology to work in the agriculture sector, and encourage young, high-qualified staff to work in rural areas. The training and retraining

of staff working on building a new countryside also need focus, especially for staff in the direct workforce implemented at a grassroots level. Vocational training for rural workers needs to be organized to be suitable for planning structure and making economic development plans for local regions and demands, and tied to job creation. The quality of vocational training needs to be improved, especially for remote areas, mountainous areas and areas with socio-economic difficulties and extremely difficult areas.

Development associated models: The summary, innovation and building of economic models and forms of efficient organizing production in rural areas need to be conducted. The links among four stakeholders and closed production chain from input to output need to be promoted. There are policies to encourage the development of collaborations between farmers and businesses, cooperatives, scientific organizations, industrial associations and product consuming markets in order to support the development of family farms, farms with appropriate scale, and large-scale commodity production. There is also a need to establish modern forms of production, trading and professional organization; to develop economic cooperations, vertical integration of production, processing and trading of agricultural products; to link agriculture with industry and urban economy.

In the longer term the agricultural sector requires a comprehensive development strategy to improve production, processing and consumption of products of the sector towards sustainable development, and especially to have the necessary preparation and activeness to face up to the demands of the international integration process.

Conflicts of Interest:

The author declare no conflict of interest

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