



Role of agricultural value chain in sustainable agricultural development in Vietnam

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Abstract

The article presents the contribution of economic linkage models, especially agricultural value chain models to the sustainable agricultural development of Vietnam. Through the statistical method of descriptive and document analysis, the author presents the theory of economic linkages and the theory of sustainable agricultural development. Since then, it has been applied to study the role of agricultural value chain in sustainable agricultural development in Vietnam. The results of the study point to the positive contributions of agricultural value chain to sustainable agricultural development in Viet Nam such as increasing economic efficiency, promoting the production of large commodities, promoting the specialization of production, enhancing the application of science and technology, protecting environmental resources and so on. The study also pointed out the limitations of agricultural value chain in Vietnam include: some value chains are small and unsustainable, businesses invest in chains with few contracts, the role of the participants in the chain has not been effective, and it is difficult to access capital for the chains. Therefore, author proposed solutions to overcome the main limitations like strengthening relationship of participants, reinforcing for recommendation and popularization effectively value chain models to society, focusing on education high quality human resource for value chain models, etc. In addition, article also recommended effective agricultural value chain models that need to be replicated in Vietnam.

Keywords: role, agricultural value chain, sustainable agricultural development, Vietnam

1. Introduction

Sustainable agricultural development is a common trend of the world. Vietnam is also developing a strategy to achieve the sustainable development goal. In particular, the emergence and development of economic linkage models, especially the value chain linkage model in agriculture is one of the factors contributing to promoting Vietnam's agriculture in a sustainable way.

So far, there have been many studies on agricultural value chains in the world and in Vietnam, studies including Porter (1985), Gereffi and Korzenniewicz (1994), Kaplinsky and Morris (2001), Jonh Humphrey (2005), Nguyen Quoc Thinh (2009), Rozhan Abu Dardak (2015), Nguyen Viet Long and Tran Duc Vien (2016), Vo Thi Thanh Loc (2016), Vo Thanh Danh et al. (2016), Nguyen Trung Kien et al. (2019),... Studies have shown both the theory and



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practice of value chains in agriculture in the world and in Vietnam. However, there have been no studies in Vietnam pointing to the role of agricultural value chains in sustainable agricultural development in recent years. To fill the research gap, the article would like to present the contents of the role of agricultural value chains in sustainable agricultural development in Vietnam, and point out a number of solutions to overcome limitations in the agricultural value chain to promote the development of agricultural value chains in the coming time to contribute to promoting the development of agricultural value chains in the coming time to contribute to promoting the development of agricultural products. Sustainable agricultural development.

2. Body of paper

2.1. Introduction value chain models

2.1.1. *Frame theory of value chain models and sustainable agricultural development*

Theory of value chain models

The concept of a "value chain" was first mentioned by Porter (1985) when analyzing the competitive advantage of a business. Porter's value chain (1985) is the process of making and sustaining the life of a product from: manufacturing design, purchase of inputs, logistics, marketing, sales, and support services. However, Porter's value chain is limited to the level of a business. To Gereffi and Korzenniewicz (1994), Kaplinsky and Morris (2001) came up with a global approach to the value chain. In addition to measurement, the World Food and Agriculture Organization (FAO, 2004) offers a value chain analysis framework focusing on two main contents: Financial Analysis and Economic Analysis. In 2007, the German GTZ also launched a value chain approach called "Valuelinks". In conjunction with GTZ's ValueLinks approach (2007), the Asian Development Bank introduced a value chain analysis practice handbook titled "Making value chains more efficient for the poor" or "Improving market efficiency for the poor" (M4P, 2007).

Thus, the agricultural value chain can be understood as a set of value creation activities in a certain sequence to convert raw materials into final products; The parts in the chain join together through taking on different stages of production to create complete agricultural products. The value chain is an important part of society's food production system, which is key to growth, employment settlement and income growth for the components involved in the chain (Ericksen, P.J., 2008). According to Adi Djoko Guritno (2017), value chains are the links that create value for consumers. In particular, the productivity, efficiency and depth of the agricultural value chain are important factors promoting commercial agriculture development.

The value chain plays a huge role in creating the quantity and quality of food to meet essential human needs (Tendall, D.M. and the authors, 2015)," as well as increasing incomes for households participating in the chain; in fact, economic efficiency and sustainability of chain agricultural production are often better than in parallel systems. created in agricultural production (Irwin, B.; Campbell, R.; 2015).



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In Vietnam, there is a lot of research on the value chain such as, Le Thi Thanh Thuy et al. (2018), the value chain was formed by the links between the groups of manufacturers, traders, processors and service providers, who are involved to improve the productivity and added value of their activities. By participating together, participants in the value chain increase competitiveness and can maintain this competitiveness better through innovation. The limitations of each participant in the chain are overcome by establishing support and governance rules to create higher value.

According to the Ministry of Agriculture and Rural Development (2017), the agricultural value chain can be considered as a collection of related production, processing and consumption activities, carried out by different individuals/units (e.g. suppliers of supplies, farmers, buyers, traders, transporters, processors, retailers, consumers,...).

According to the Government (2018), the agricultural value chain is understood as a form of linkage from the supply of inputs, services, production, preliminary processing or processing associated with the consumption of agricultural products. There are seven forms of linking indicated:

- 1) Linking from supply of input supplies and services, production, harvesting, preliminary or processing organization associated with consumption of agricultural products;
- 2) Linking the provision of input supplies and services associated with the consumption of agricultural products;
- 3) Linking production and harvesting organizations associated with the consumption of agricultural products;
- 4) Linking the provision of input supplies and services, organizing production and harvest associated with the consumption of agricultural products;
- 5) Linking production, harvesting, preliminary or processing organizations associated with the consumption of agricultural products;
- 6) Linking the provision of input, preliminary or processing supplies and services associated with the consumption of agricultural products;
- 7) Preliminary processing or processing associated with consumption of agricultural products.

Theory of value sustainable agricultural development

According to FAO (1992), sustainable agricultural development is the process of managing and maintaining organizational, technical and institutional changes for agricultural development to ensure the satisfaction of the growing human demand for agricultural products and services while meeting the needs of the future. According to Do Kim Chung et al. (2009), sustainable agricultural development is the process of ensuring the harmony of three groups of economic, social and environmental goals, satisfying the current agricultural needs without



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harming the ability to meet the needs of the future. Author Pham Doan (2005) argues that sustainable agricultural development is a multidim process, including: (1) the sustainability of the food chain (from producers to consumers, directly related to input supply, processing and markets); (2) sustainability in the use of land and water resources in space and time; (3) the ability to interact commercially in the process of agricultural and rural development to ensure adequate life and food security in the region and between regions. Thus, sustainable agricultural development is understood as the development of the agricultural sector in different ways to achieve the economic and social goals of the present and without harming the interests of future generations.

The objectives of sustainable agricultural development are defined as policies and measures for *sustainable agricultural development* that need to simultaneously aim at three main objectives: (1) Economic sustainable development; (2) Socially sustainable development and (3) Sustainable development of natural resources and the environment. The technologies and techniques of cultivation with great potential for *sustainable agricultural development* are intermingling, crop rotation, agroforestry combined, the use of compost, disease control by biotechnology and integrated pest management (IPM) (Conway and Barrier, 1990).

Content of sustainable agricultural development: Agricultural development by types of economic organization, Agricultural development by sector, Agricultural development by region, Agricultural development including economic, social and environmental development (Serey Mardy et al., 2013)

The method of assessing sustainable agricultural development based on assessment indicators includes: On economic indicators, Markus and Werner (2008) argue that the economic sustainability of *sustainable agricultural development* includes profitability, liquidity, stability and value-added; In terms of social indicators, according to Markus and Werner (2008), the social sustainability criteria includes areas related to labor inputs, farm structure, employment indicators (level of work location supply, distribution of working age, female participation in labor, training), and the level of participation in social activities (for example, the proportion of employees who are owners of production and business establishments); About the environment Markus and Werner (2008) it is the balance of minerals (usable indicators such as the balance of protein, phosphate, potassium; the content of phosphate, potassium and lime in the soil; balance of humus), use of insecticides (frequency of use of insecticides, reduction in risks due to drug use), soil protection (potential soil erosion, hazardous soil hardening), biodiversity (field size, proportion of area of ecological areas of great value and diversity of crops) and energy balance (energy use in agricultural production)

2.1.2. Introduction formation process of value chain models in Vietnam

In order to encourage linkage development, the Ministry of Agriculture and Rural Development has advised the Prime Minister to issue decision No. 62/2013/QĐ-TTg dated October 19, 2013 on policies to encourage linking production with agricultural consumption and labor construction. In 2018, in order to further promote the implementation of product



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production and consumption links, the Ministry of Agriculture and Rural Development has advised the Government to issue Decree No. 98/2018/ND-CP dated August 5, 2018 on policies to encourage production development associated with the consumption of agricultural products.

The Ministry of Agriculture and Rural Development has advised the Central Steering Committee to organize a national conference to implement the OCOP Program (July 13-14, 2018 in Bac Giang); Promulgate the Plan No. 01/KH-BCDTW dated August 22, 2018 of the Central Steering Committee on the plan to implement the OCOP Program in the period of 2018 - 2020. Up to now, 09 ministries have issued plans to implement and guide the implementation of the OCOP program. "One Commune One Product".

The results achieved in the construction of the agricultural value chain are as follows:

For participation in the linkage of production, processing and consumption of agricultural products along the value chain. As of 2020, the country has implemented chains of linkage - processing - consumption of agricultural products with 4 participating actors having 271 scientific organizations, 586,585 farmer households, 4,028 agricultural cooperatives participating in linking with 1,867 enterprises in the production, harvesting and consumption of agricultural products. there are 1,621 certified chains with 2,346 products (mainly products focusing on vegetables, tubers, fruits of all kinds; rice, coffee, pepper, cashews, tea, chicken, beef, pork, shrimp, pangasius, sea fish, fruits, eggs, fish sauce ...); 2,989 points of sale of agricultural products along the value chain, of which 983 business addresses have been issued certificates of safe food supply chain. Currently, there are 841 agricultural cooperatives owning OCOP products.

Provinces and cities have allocated many funding sources to support and build chain linkage models, linking 4 houses. Since 2017, localities have supported: Consulting to build 74 chains (VND 3,160 million); support training and training of 2,048 classes (VND 22,492 million); supporting the construction of 357 extension models (VND 67,928 million); supports the transfer of scientific and technical applications, application of technical processes and synchronous quality management in chains for 93 chains (VND 19,944 million); supporting varieties, supplies and label packaging for 150,311 products (VND 197,397 million); supporting the certification and certification of safe products, branding and promotion of 257 products (VND 14,118 million); support 665 machinery and equipment (VND 253,459 million); support 168 infrastructure works for linkage (VND 110,626 million); Other support of \$57,244 million.



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Table . Results of implementation of linking consumption of key products under Decree 98 of 2020

Order	Product	Whole country	Red River Delta	Northern midlands and mountain areas	North Central and Central coastal areas	Central Highlands	South East	Mekong River Delta
1	Rice	8,8%	4,6%	4,5%	9,3%	2,0%	10,0%	10,4%
2	coffee	16,3%	24,9%	4,5%	0%	16,5%	3,4%	0%
3	Rubber	6,6%	35,4%	0%	8,2%	4,2%	7,1%	0%
4	Cashew	6,3%	0%	0%	0%	25,0%	1,4%	0%
5	Pepper	13,1%	0%	0%	0%	2,8%	0%	7,3%
6	Tea	18,2%	18,8%	23,4%	0%	3,5%	0%	0%
7	Vegetable	9,6%	7,0%	8,1%	0%	8,4%	33,0%	5,9%
8	Cassava	10,5%	1,7%	22,2%	22,4%	6,4%	0%	0%
9	Pork	17,1%	12,3%	20,9%	24,8%	25,3%	12,4%	6,6%
10	Meat and egg of poultry	12,8%	9,3%	99,9%	14,6%	2,4%	56,7%	3,5%
11	Catfish	49,3%	0%	0%	0%	0%	33,4%	50,4%
12	Shrimp	6,2%	13,2%	0%	9,1%	0%	48,8%	4,3%
13	Wood	6,4%	28,2%	9,4%	2,3%	0%	5,0%	0%
14	Other products	53,6%	21,8%	36,1%	94,3%	39,7%	67,5%	51,9%

Source: Author's calculations from data from the Ministry of Agriculture and Rural Development of Vietnam

For key agricultural value chains, key agricultural value chains have been built for commodity sectors, including: three-tier pangasius value chain, coffee chain, rice chain, and forest products chain.

For the value chain under the OCOP Program: the number of OCOP-standardized products by the end of 2020 is 3,850 products (nearly 1.6 times more than the target of 2,400 products in Decision 490/QD-TTg). Of which the Food group has 2,225 products, the Beverage group has 397 products, the Herbal group has 264 products, the garment fabric group has 100 products, the Souvenir group, the decorative interior has 666 products and the Service, Tourism and Sales group has 198 products. There have been 40 provinces and cities evaluated, classified and have decided to recognize 1,882 OCOP products (reaching 78.4% compared to the plan of 2,400 products) of 1,096 participants in the OCOP Program, of which 25 products proposed 5



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stars; 651 products reached 4 stars and 1206 products reached 3 stars. The provinces directed the point surveyed and made a list to build 10 Tourism Culture Villages. (Ministry of Agriculture and Rural Development, 2020).

2.2. Method of research

This study investigates available documents and research reports related to economic linkage models in agriculture of management policies from Ministry of Agriculture and Rural Development of Vietnam. Besides, this study used figures which are collected from document of Ministry of Agriculture and Rural Development Viet Nam through the statistical method of descriptive.

2.3. Results and Discussion

2.3.1. *Role of agricultural value chain in sustainable agricultural development in Vietnam*

Increasing economic efficiency.

Economic linkage models in agriculture built for the product chain in the country according to each sector have enhanced the added value for each different sector, thereby improving the economic efficiency for each product. The country has key industries that are bringing high economic efficiency such as: three-level pangasius value chain, coffee industry linkage chain, rice industry linkage chain, main forest products industry linkage chain, etc. In addition, the country has implemented a program of one product per commune (OCOP for short), applied to all 63 provinces and cities in the country that have brought high economic efficiency. OCOP products are developed in a variety of 6 groups (food; beverage; herbs; fabric-garments; souvenir-interior-decoration; tourism) is not only the livelihood of the people but also the path of diverse economic development, promoting the advantages, characteristics and culture of each locality from the commune, to the district, to the province.

Promoting the production of large-scale commodities.

Value chain linking models facilitate many agents to join the chain of goods in two directions of vertical and horizontal linkage, expanding the scale of production, towards the production of large goods.

For the main value chain of 3-level pangasius, including: Level 1: The meat fish supplier is the Aquaculture Research Institute II. Level 2: Tra Do fish production unit is An Giang Fishery Breeding Center and 04 pangasius production facilities associated with the Center. Level 3: AFA Fish Production Association; Chau Phu Fish Production Association; Phu Thuan Fish Production Association.

For the coffee value chain, there are many agents participating in the chain: Coffee growers: The country has about 600,000 coffee farmers with an average area of about 1 hectare; Cooperatives: Households participating in cooperatives buy high-discount supplies, benefit from programs, support projects, support for harvesting, coffee processing and finally receive technical training. Agricultural agents: These agents can be divided into two groups: (i)



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purchasing coffee from farmers and (ii) coffee purchased from farmers through intermediaries. Agricultural agents now mainly register their business in the form of agri-products in general and coffee in particular. Processing and exporting enterprises: There are 97 coffee processing facilities with a total designed capacity of 1.50 million tons, total actual capacity of 1.26 million tons (reaching 83.6%); 160 establishments and factories processing roasted coffee with a total design capacity of 51.66 thousand tons of products/ year, actual capacity of 26.10 thousand tons (in fact, operation only reached 50.5% of the design capacity); 08 large-scale factories with a total designed capacity of 36,480 tons/year (actual capacity reached 97.9%); 11 blended instant coffee processing plants (coffee "3 in 1", "2 in 1",...) large scale, total design capacity of 139,850 tons / year, actual capacity reached 81.6%.

For the rice value chain, with the project "Developing value chain for small market-oriented production households (MSVC)" to improve the livelihoods of 10,000 rice farmers in the Mekong Delta, there are 28 cooperatives of 4 provinces participating in the project.

For the main forest product value chain: the country has 154 forestry cooperatives (of which, Red River Delta: 7 cooperatives, Mountainous Midlands: 76 cooperatives, North Central region and Central Coast: 57 cooperatives, Central Highlands: 4 cooperatives, Southeast Region: 3 cooperatives) in many forms, methods and diversification of cooperation content.

For the OCOF affiliate program, 63 out of 63 provinces and cities have approved the project/plan, nearly 3,350 economic organizations registered to participate in the OCOF Program, increasing nearly 200 economic organizations. There were 1,096 economic organizations proposing and being ranked products with certificates of 3 stars or more, including: 437 cooperatives (39.9%), 336 enterprises (30.7%), 307 production/business households (28%) and 16 cooperatives (1.4%).

Promoting the specialization of production.

Participating in agricultural value chains, the agents in the value chain will focus production efforts on one type of their professional activities. For farmers: focus on producing agricultural products according to standards, quality and efficiency without worrying about input, output because there are other agents involved and supported. For processing and exporting enterprises: enterprises will be assured when there are available raw materials for production from farmers, stable supply of raw materials. For the state: the management will become easier in setting out the strategy of planning large raw materials areas or propagating, mobilizing and proposing new policies and policies. For scientists: easy to transfer, apply modern science and technology to production for a large number of farmers or businesses.

Enhancing the application of science and technology.

Value chains facilitate the strengthening of the application of science and technology to the production, processing and consumption of agricultural products. Science and technology are applied to cultivation and processing. For example, for the coconut value chain in Ben Tre province, applying science and technology most successfully in the field of processing,



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researched the coconut peel separator yielding 800-1000 fruits per hour, mechanization in the coconut peeling stage; researching technology, designing and manufacturing equipment systems to cut, separate apples and clean coconut brown shells. from manual production to partial mechanization is applied with fresh coconut peeler, 8-axis coconut fiber astringent machine along the vertical direction, coconut fiber drying system capacity of 5 tons / day; transfer and mastery of automatic coconut mask shaping line technology, automatic coconut mask bag packing machine; production line of coconut milk, canned coconut water; Tetra-Pak processing and packaging technology for coconut water products; extract pure coconut oil using non-heating technology; Crunchy coconut milk candy production technology makes productivity, quality of coconut products increasing.

Protecting environmental resources

Besides the development of production, environmental industry factors include activities: Providing environmental technologies, equipment, services and products to serve environmental protection requirements to handle, control pollution, overcome degradation, limit the level of pollution increase and improve environmental quality is one of the very important factors. The stages of seed selection, production (planting), harvesting are always focused on the following factors: Disease-resistant varieties, low use of water, high quality, associated with the programs "1 right, 5 reduction", "3 decrease, 3 increase", take advantage of straw by-products to produce mushrooms ... with the role of scientists, consulting services, investment in technology equipment – all aim to reduce the amount of water, drug fertilizer use, reduce production costs, improve product value (chain) ... Thereby minimizing harm to the environment.

2.3.2. Limitations of agricultural value chain models in sustainable agricultural development in Vietnam

Some value chains are small and unsustainable. The linkage between businesses and farmers is not sustainable, mainly still a purchase agreement. The consumption of products through many intermediaries makes the selling price when reaching consumers much higher than the purchase price at the production facility. Connections in the chain are easy to break.

Businesses invest in agricultural value chains with few contracts. Link breakers are frequent, while it is rare for farmers and businesses to use legal tools to protect their rights. This leads to the non-negotiable price, not high economic efficiency, and sustainability in agricultural production.

The role of several participants in the agricultural value chain has not been effective. The leading role of businesses in building, maintaining and sustainable development of value chain links is limited. Farmers are still passive and weak in the linkage, spontaneous production, so it has not created a concentrated production area to create a large and stable enough volume of products. More than 75% of agricultural cooperatives are not currently involved in the consumption of agricultural products, not serving as a bridge between farmers and businesses. Some cooperatives are involved but also to a limited extent. The role of scientists in the link is



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not clear in most chains, the stages of the production process. Scientific organizations cannot participate in signing contracts with farmers, cooperatives and enterprises in agriculture but only consult contracts.

It is difficult to access capital for the chains. The participants in value chain models are very difficult to access loans supporting, preferential of credit institutions, complicated loan procedures, difficult to borrow. This easily leads to psychological depression for these subjects.

2.3.3. Solutions of development value chain models in Vietnam and proposed replication of effective models

Solutions of development value chain models

Strengthening relationship of participants. The organization closely links between the facilities in the chain to better meet market needs through the form of nests, groups, especially cooperatives, linked to enterprises. Support partners in trade promotion programs through website building, logo, branding, branding, market access skills, QRCode stamp application; promote products and brands of supply chains, especially certified safety products. Select reputable and effective businesses to participate in the link.

Reinforcing for recommendation and popularization effectively value chain models to society. By disseminating effective models to society, enabling agents in the chain to easily access capital from banks and other organizations in society.

Planning production areas, building and completing the dossiers of planting areas, areas and locations, conditions for import to the accepted market.

Encourage investment in processing to improve the value of products, effectively implement the policies issued. Localities issued guiding documents, concretized policies; formulated plans; proactively allocated resources to support cooperative development, attract enterprises to participate in linking production with consumption of agricultural products, encouraging investment in modern technology, deep processing.

Focusing on education high quality human resource for value chain models. Priority is given to training skills of executive management, production management, market development for participants in chain linkage and human resource training to manage cooperatives, meeting the needs of collective economic development. Priority is given to allocating resources to implement policies to encourage linkage and support collective economic development. Focus on supporting the construction of high-tech cooperatives associated with linkages along the value chain, safe product standards, branding, trade promotion of product consumption.

Proposing replication of effective models

The proposed models replicated are effective chain linkage models such as the three-level pangasius value chain model or the value chain rice production model. Because these models bring high economic efficiency, attract a large number of people to participate and its method of organizing activities is highly effective.



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3. Conclusion

This paper is an output of the science project on economic linkage models in agriculture in the Mekong Delta. The value chain model is one of four models studied in this project. The paper focuses on the role of value chain models in sustainable agricultural development in order to find solutions to further improve these models in the coming time. Thereby contributing to the sustainable development of agriculture in Vietnam. However, the paper only analyzes the role of value chain models in general, not the impact of each value chain on sustainable agricultural development. This is also the biggest limitation of the article and it is necessary to have studies in this direction in the near future.

References

- Adi Djoko Guritno. (2017). *Agriculture Value Chain as an Alternative to Increase Better Income's Distribution: The Case of Indonesia*. [Online]. Available: <https://www.intechopen.com/books/agricultural-value-chain/agriculture-value-chain-as-an-alternative-to-increase-better-income-s-distribution-the-case-of-indon>
- Do Kim Chung et al. (2009). *Curriculum The Principles of Agricultural Economics*. Agricultural Publishing House, Hanoi.
- Ericksen, P.J. (2008). "What is the vulnerability of a food system to global environmental change". *Ecol. Soc.* 2008. 13, 14. [CrossRef].
- Gereffi and Korzeniewicz (1994). "The Organisation of Buyer-driven Global Commodity Chains: How U.S. Retailers Shape Overseas Production Networks". In G. Gereffi and M. Korzeniewicz (Editors), *Commodity Chains and Global Capitalism*, Westport, CT: Praeger: 95-122.
- Government (2018). *Decree No. 98/20 18/ND-CP, Decree on policies to encourage the development of cooperation and linkage in the production and consumption of agricultural products*, dated July 5, 2018.
- FAO. (1992). *World Food Dry*. Food and Agriculture Organization, Rome, Italy.
- GTZ Eschborn (2007). *Methodology and Global Capitalism, W*, Handbook Valuelinks.
- Irwin, B. and Campbell, R. (2015). *Market Systems for Resilience*; LEO Report #6; U.S. Agency for International Development: Washington, DC, USA.
- Kaplinsky, R. and M. Morris. (2001). *A Handbook for Value Chain Research*. Brighton, United Kingdom, Institute of Development Studies, University of Sussex.
- Le Thi Thanh Thuy et al. (2018). "Study the factors affecting the value chain of acacia wood chips in Thanh Hoa province." *Scientific Journal of Hong Duc University*, No. 37/2018.



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Markus Ehrmann and Werner Kleinhanss (2008). *Review of concepts for the evaluation of sustainable agriculture in Germany and comparison of measurement schemes for farm sustainability*, Institute of Farm Economics, Braunschweig.

Ministry of Agriculture and Rural Development (2017). *Decision No. 4781/QĐ-BNN-VPĐP, Decision on Promulgation of production development manual in the national target program on building new rural areas in the period of 2016-2020*, November 21, 2017.

M4P. (2007). *Marking value chains work better for the poor: A toolbox for practitioners of value chain analysis*. A publication financed by the UK department for international development (DFID).

Pham Doan (2005) Sustainable agricultural and rural development of poverty alleviation and environmental protection solutions. [Online], Available: <http://www.ttvnol.com/ttx/571456.ttvn>.

Porter, M. E. (1985). *Competitive Advantage*. New York: The Free Press.

Serey Mardy và cộng sự (2013), Some theoretical and practical issues on sustainable agricultural development and lessons for sustainable agricultural development in Cambodia, *J. Sci. & Devel.*, Vol. 11, No. 3, pp. 439-446

Tendall, D.M et al (2015). "Food system resilience: Defining the concept". *Glob. Food Secur.* 2015, 6, 17-23. [CrossRef]