# The Impact of Agricultural Growth on the Rural Development in Vietnam

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Rural development is a global relevant phenomenon that needs the particular attention of researchers as well as regulators to achieve the development goals it entails. Considering this, the present study investigates the impact of agriculture growth, agricultural employment and import and rural population growth on rural development in Vietnam. This study is conducted based on the secondary data extracted from World Development Indicators (WDI) from 1981 to 2018. This study executes the Autoregressive Distributed Lag (ARDL) model to investigate the nexus among the variables. The results show that agriculture growth, agricultural employment and import and rural population growth have a positive nexus with rural development in Vietnam. This study offers valuable insights for rural area development authorities and policy experts to help formulate effective and responsive policies to promote agricultural growth and develop rural societies.

**Keywords:** Agriculture growth, Agricultural employment, Agricultural import, Rural population growth, Rural development

## 1. INTRODUCTION

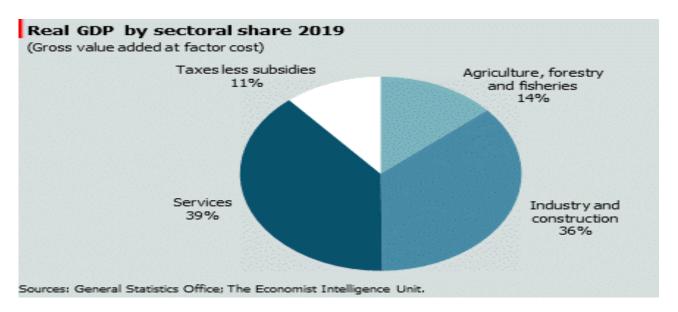
To improve living standard in rural areas, Vietnam built a new rural program that is being implemented since 2010 through 3 stages with distinct goals and standards designed for each region/period. By April 2019, Vietnam had 4,340 communes (48.68%) meeting the new rural standards. On average, communes across the country have reached the 15.26% criteria (Hoang Thanh, Ta Nhat, Nguyen Dang, Ho, & Lebailly, 2018). There are no more communes below five criteria and 69 district units in 34 provinces and cities are now recognized to meet standards/complete building a new rural. The appearance of villages is changing every day, as the criteria gradually improves. At the same time, the implementation of product development policies, programs and schemes has helped increase the income of rural people and contributed to a reduction in the poverty rate of rural households. After three years, several positive results are observed in these two villages. At the same time, from the pilot model, the leaders of Thai Nguyen province have drawn lessons, adjusted and customized policy plans to build a new rural area of the province in a ten year period from 2020 to 2030 (D. L. Nguyen, Grote, & Nguyen, 2017). This paper is interested in exploring the rural development progress, results & outcomes in Thai Nguyen province achieved during the period 1980 - 2019? The author is also interested in gaining valuable insights and lessons from the movement of Saemaul Undong in the new rural development period 2020 - 2030 for Vietnam.

The present study examines the impacts of agricultural growth, agriculture employment, agricultural import, and rural population growth rate on patterns of rural development in the rural regions of Vietnam. Vietnam is a lower-middle-income country located in Southeast Asia. Currently, it ranks as the 23<sup>rd</sup> largest country globally in terms of purchasing par parity, while in terms of nominal gross domestic product, it ranks at 36<sup>th</sup> largest in the world. As per the statistics of 2019, the Gross Domestic Product (GDP) of the country is \$369.494 billion, which counts for a 6.8 per cent GDP growth rate. Since the introduction of economic reforms in 1986, Vietnam has been recognized as one of the world's fastest emerging economies. The economy of Vietnam is divided into three major sectors: agriculture, industry, and services (H. Q. Nguyen, 2017).

The agriculture sector has a 15.3 % share in the annual GDP. It provides employment opportunities to 38.6% of the total labor force. The major agricultural products are coffee, rice, tea petals, maize, cassava, pepper, cashew nut, and sweet potato, which saves Vietnam a high rank among agricultural countries. The main agrarian items that Vietnam exports are pepper, rice, coffee. As per the statistics of 2019, 65.6% of Vietnam's population lives in rural areas. The high growth of agriculture enables the rural areas to develop at a faster rate. To steer rural development in Vietnam, there has been a Ministry of Agriculture and Rural Development (MARD) since 1945. Since its formation, MARD has been responsible for implementing the official government mandate for rural development, governance, and the protection and

promotion of agriculture and the agriculture sector in Vietnam (Kerkvliet & Porter, 2018).

The population in rural areas in Vietnam has been decreasing with time as individuals and families migrate to more urbanized centers of the country in pursuit of a better quality of life. Vietnam rural population by 2016 was 61,324,000, a 0.03 decline from 2015; Vietnam rural population by 2017 was 61,324,000, a 0.03 decline from 2016, Vietnam rural population by 2018 was 61,223,241, a 0.01 per cent decline from 2017, Vietnam rural population by 2019 was 61,129,966, a 0.15 per cent decline from 2018 (N. T. Long & Nguyen, 2018). Increasing urbanization however comes at the cost of depletion of human and capital resources, therefore, there is a dire need to guide the rural population on how social and economic life can be improved within rural areas to avoid migration. Under the consideration of this urgent need, this study makes an analysis of the contribution of agricultural growth to the development of rural areas in Vietnam. The agriculture sector contributes only 14 per cent to the country's GDP, which is less than the services sector and the industry sector. These figures are illustrated in Figure



**Figure 1:** Sectorial Share of GDP in Vietnam

The aim of the current study is to analyze agricultural growth in terms of development in agriculture, agriculture employment, agriculture import, and rural population growth and gauge their impact on the degree of rural development. As rural economies are mostly agro-based, many researchers and scholars have thrown light on the role of the agricultural industry in steering and facilitating higher rural development. The studies have addressed only the direct impacts of agriculture on the well-being of rural people. In comparison, the current research has addressed both direct and indirect impacts of the agricultural industry on rural development. Moreover, most existing literature focuses the role of agriculture in achieving high-quality rural life, however, the current study expands the scope of existing literature as it further analyzes different forms of agricultural growth on rural development.

#### 2. LITERATURE REVIEW

Most rural areas lack adequate facilities and amenities of life which exist in abundance in urban areas. For example, the availability of good quality infrastructure requires transportation facilities, education, medical clinics and stores, and recreation etc. To acquire these facilities, many rural people turn towards urban areas and put increased pressure on the urban environment and infrastructure. In order to cope up with these issues, rural areas need to develop at a higher rate (Dell, Lane, & Querubin, 2018). When the living standard of the rural population is high, and they have access to quality health and education services and have the capacity to invest in different socioeconomic ventures, that they can collectively improve their quality of life and modernize their lifestyles. As the health of general people and the growth of different economic sectors is somehow dependent on agricultural products, the growth of the agriculture sector brings development in rural society. The growth of the agriculture sector, agriculture employment, agriculture import, and rural population growth rate affect patterns of rural development (Bauer, 2016). The effects of the growth of the agriculture sector, agriculture employment, agriculture import, and rural population growth rate on rural development have been explored in numerous research studies in the past.

The current research on new rural areas mainly focuses on operation methods, identifying achievements vis-à-vis rural development, and analyzing challenges and limitations in the process of implementing development plans. From there, the authors propose appropriate solutions to complete the construction of new rural areas. The MISPA (2006) project with: "The theory and practice of building a new socialist rural" by translator Cu Ngoc had been translated into China's socialist new rural issue. In this work, the author introduces the concept and significance of socialist new rural construction (N. V. Long, 2019). According to the author, building a new socialist rural area is an integrated effort that includes stakeholders in the agriculture, rural development authorities and independent farmers into a long-term historical and communalistic mission. Key objectives and tasks of building a new socialist rural include, "development of production, prosperous life, civilized village, clean and beautiful appearance, democratic management" (Thao, Van Tu, Phuc, & Nguyen-Viet, 2018). The construction of a new socialist countryside must comply with a scientific plan which shall serve as a guiding document for implementing new rural construction. As the development of new rural areas is complicated and long-term, it is necessary to develop feasible, responsive, and effective scientific mechanisms and policies, ensuring that the new rural construction is conducted in a planned manner. Although these views are controversial, it is the basis for socialist countries to build and develop the agricultural sector and rural economies.

Giang and Nguyen (2016) evaluate the implementation of the national target program on rural development strategies. Developing new rural areas and pointing out some emerging shortcomings in this process enhances the effectiveness and efficiency of state and social investment in rural development. Besides, the article also proposes recommendations and solutions to complete the new rural development policy in Vietnam. Dung and Sharma (2017) points out the highlights in building a new countryside in Vietnam. Agricultural production must preserve the national traditional cultural identity and at the same time ensure the well-being of the ecological environment. In that study, the researchers assess the results of the implementation of the national target program on new rural development and pointing out some emerging shortcomings that may have reduced the effectiveness and efficiency of state and social investment efforts towards rural development, which was the basis for proposing solutions to complete the new rural construction policy in Vietnam. T. P. Nguyen (2018) assesses the role of agriculture and rural development in the industrialization and modernization of Vietnam and found there to be a close relationship between urban industry and rural agriculture, contributing to the overall growth and development. Therefore, building new rural areas of Vietnam is a key priority of development plans and has instrumental value for the overall growth and development of the country.

Agriculture is the most significant occupation of a rural area. Most of the rural population directly or indirectly belongs to the agriculture sector. An agriculture sector grows when there is special attention is given to the agricultural activities, needs, and production at different levels. When the agriculture sector grows, there is a higher

productivity (crops and livestock), better quality & a diverse variety of products, and increased employment opportunities. The growth of agriculture determines the social well-being of the rural people, their living style, the quality of natural environment, and the economic development of rural areas (Arif, 2019). When agriculture in a specific rural area grows, there is high productivity and more improvement in the quality of the agricultural product. The availability and use of sufficient and healthy agricultural products in casual food keep the rural population healthy and energized for their social and economic activities. A well-established agriculture sector enhances social interaction among the rural population during different agricultural processes like sowing seeds, irrigation of concerned land, harvesting, breeding animals, an inspection of good quality crops and livestock, and transfer of crops and livestock to the market. Moreover, the growth of the agriculture sector enhances household income and, thus, the living standard of the rural population improves (Cai & Xia, 2018).

The agriculture sector is a major source of employment for rural residents. Fast-growing agriculture system provides employment opportunities not only to those who are directly linked with the agricultural activities and but also those who have an indirect connection with the agriculture system as agricultural activity implies the need to provide different crops and livestock as a raw material to other economic sectors, say, sugarcane is a raw material for sugar mill which provides employment to hundreds of rural citizens. The provision of employment opportunities enables people to have the capacity to earn money and fulfil their financial needs (Dev, 2017). When the agriculture processes are operating smoothly and using upto-date resources and machinery, they yield more products for which they also need more efficient workers. These workers are employed on higher wages, raising the living standard of residents, and enhancing their purchasing powers. High incomes also improve their social well-being as they can engage in more communal welfare activities. In financial terms, a higher incomes also enables rural citizens to make an investment in rural development programs, which may be in the form of initiatives for education, medicine, and construction (Matthew et al.,

Agriculture import refers to the purchase of agricultural resources which are essential to agriculture survival and growth and agricultural products which are used to meet the needs of domestic and foreign populations. Products like fertilizers, pesticides, agricultural machinery, logistics, harvesting tools, and technology to be used for breeding livestock, can be imported to facilitate domestic agriculture. The import of high-quality fertilizers enables farmers to generate a higher crop yield that is better able to meet the social and economic needs of rural people. This helps generate impetus for rural development (Unay-Gailhard & Bojnec, 2019). The import of pesticides helps save crops from insects, pests, or diseases resulting from contact with these insects and pests. Use of these pesticides, seeds and skilled human resources can be exploited to the largest possible extent as in this way, it is possible to produce a larger amount of good quality crops like maize, rice, wheat, sugarcane, coffee, and useful weeds can be cultivated and harvested. These crops are used to meet domestic needs and for the growth of different commercial mills and medicine. Thus, agriculture import positively impacts the economic and social standing of rural people (D. L. Nguyen, Grote, & Nguyen, 2019).

Natural, residents of rural regions provide the labour force needed to perform different agricultural activities like the cultivation of crops, the breeding of livestock, and ensuring provision of these products for the benefit of rural society and economy. Thus, it is posited that the total strength of the rural population or rural population growth rate affects the survival and growth of the agriculture industry. When there is a large population in the rural areas, there is a large number of human resources which can facilitate the agricultural sector and ensure the growth of the agricultural sector which ultimately leads to the well-being and welfare of rural communities (Sohns & Diez, 2018). Similarly, rural areas where there is large population will garner more attention from government authorities as a larger portion of the electorate can lead to heightened pressure on official bodies to implement prodevelopment laws, policies, and programmatic interventions for the benefit of rural citizens. For example, in the most populous rural areas, the government undertake special efforts to provide medical and educational facilities to the residents so as to produce healthy and skilled human capital which can bring about positive outcomes across aspects of rural life (T. V. Nguyen & Tran, 2018).

### 3. METHODOLOGY

Table 1: Variables with Measurements

I able	able 1: Variables with Measurements							
S#	Variables	Measurement	Sources					
01	Rural Development	Assessment of Basic needs in rural area, (% of rural population)	World Development Indicators					
02	Agricultural Growth	Agriculture, forestry, and fishing, value added (annual % growth)	World Development Indicators					
03	Agricultural Employment	Employment in agriculture (% of total employment)	World Development Indicators					
04	Agricultural Import	Agricultural raw materials imports (% of merchandise imports)	World Development Indicators					
05	Rural Population Growth	Rural population growth (annual %)	World Development Indicators					

This article presents the descriptive statistics in the analysis that show the variables' minimum and maximum values and calculates the standard deviation and mean values of the variables. The analysis section also displays the correlation matrix that shows the multicollinearity issue. In addition, this study also checks the stationarity of the variables with the help of the Augmented Dickey-Fuller Test (ADF). The equation for ADF is given below:

This article investigates the impact of agriculture growth, agricultural employment and import and rural population growth on rural development patterns in Vietnam. This study uses secondary data sourced from the World Development Indicators for the years 1981 to 2018. For the purposes of the study, the author has executed the autoregressive distributed lag (ARDL) model to investigate the nexus among the variables. The estimation equation for the study is as follow:

$$RD_t = \alpha_0 + \beta_1 A G_t + \beta_2 A E_t + \beta_3 A I_t + \beta_4 R P G_t + e_t \tag{1}$$

Where RD

Rural Development

Time Period =

Agriculture Growth AG=AEAgriculture Employment AIAgriculture Import RPGRural Population Growth

This study identifies rural development (RD) as the dependent variable measured in terms of assessing basic needs, rural (% of rural population). In addition, the present research identifies three predictors i.e. agricultural growth (AG) that is measured in terms of the volume of agriculture, forestry, and fishing, value added (annual % growth), agricultural employment (AE) that is measured as the share of agriculture in overall employment (% of total employment) and agricultural import (EI) that is measured as the agricultural raw materials imports (% of merchandise imports). Finally, the present study also takes rural population growth (RPG) as the control variable measured in terms of the rate of rural population growth (annual %). These measurements of variables are outlined in Table 1 along with the corresponding sources of data.

$$d(Y_t) = \alpha_0 + \beta t + YY_{t-1} + d(Y_t(-1)) + \mathcal{E}_t$$
 (2)

The stationarity of individual variables has also been examined, and estimation equations of ADF for each variable are mentioned below:

$$d(RD_t) = \alpha_0 + \beta t + \gamma RD_{t-1} + d(RD_t(-1)) + \varepsilon_t$$
(3)

Agricultural growth

$$d(AG_t) = \alpha_0 + \beta t + \gamma AG_{t-1} + d(AG_t(-1)) + \varepsilon_t$$
 (4)

Agricultural employment

$$d(AE_t) = \alpha_0 + \beta t + \Upsilon A E_{t-1} + d(AE_t(-1)) + \mathcal{E}_t$$
 (5)

Agricultural import

$$d(AI_t) = \alpha_0 + \beta t + YAI_{t-1} + d(AI_t(-1)) + \mathcal{E}_t$$
 (6)

Rural population growth

$$d(RPG_t) = \alpha_0 + \beta t + \Upsilon RPG_{t-1} + d(RPG_t(-1)) + \varepsilon_t \tag{7}$$

The stationarity of the variables has been selected as the suitable model for testing the hypotheses. The results indicate that the ARDL model is appropriate, and the equation for the ARDL model is provided as under:

$$\Delta RD_{t} = \alpha_{0} + \sum \delta_{1} \Delta RD_{t-1} + \sum \delta_{2} \Delta AG_{t-1} + \sum \delta_{3} \Delta AE_{t-1} + \sum \delta_{4} \Delta AI_{t-1} + \sum \delta_{5} \Delta RPG_{t-1} + + \varphi_{1}RD_{t-1} + \varphi_{2}AG_{t-1} + \varphi_{3}AE_{t-1} + \varphi_{4}AI_{t-1} + \varphi_{5}APG_{t-1} + E.$$
(8)

 $\varphi_4 A I_{t-1} + \varphi_5 R P G_{t-1} + \varepsilon_1$ 

In the equation above,  $\delta_1$ ,  $\delta_2$ ,  $\delta_3$ ,  $\delta_4$ , &  $\delta_5$  have been highlighted as the coefficients for short-term relations among the constructs; while  $\varphi_1, \varphi_2, \varphi_3, \varphi_4, \& \varphi_5$  have been mentioned as the coefficients of long-term nexus. The error correction model equation is as follows:

$$\begin{array}{lll} \Delta E D_t = \alpha_0 + \sum \delta_1 \Delta E D_{t-1} + \sum \varphi_2 \Delta A G_{t-1} + \sum \omega_3 \Delta A E_{t-1} + \\ \sum \theta_4 \Delta A I_{t-1} + \sum Y_5 \Delta R P G_{t-1} + \delta E C M_t + \upsilon_t & (9) \end{array}$$

#### 4. RESULTS

Firstly, this article presents the descriptive statistics from the analysis of data. These statistics show the variables' minimum and maximum values as well as the standard deviation and mean values of the variables. These descriptive statistics values are highlighted in Table 2.

**Table 2: Descriptive Statistics** 

Variable	Mean	Std. Dev.	Min	Max
RD	3.098	1.554	2.055	11.763
AG	1.294	1.125	1.102	3.663
AE	1.287	1.541	1.183	2.789
Al	2.225	1.852	2.189	3.504
RPG	1.265	1.514	1.145	3.310

Secondly, the analysis section also presents the correlation matrix that shows the multicollinearity issue. The outcomes indicate that the correlation matrix values are less than 0.90, showing no issue of multicollinearity. In addition, a positive association is found among the predictors and predictive variables. These figures are presented in Table 3.

**Table 3: Correlation Matrix** 

Variables	RD	AG	AE	Al	RPG	
RD	1.000					
AG	0.481	1.000				
AE	0.235	0.535	1.000			
Al	0.539	0.170	0.575	1.000		
RPG	0.293	0.314	0.443	0.219	1.000	

Thirdly, this study gauges the stationarity of the variables with the help of ADF. The stationarity of each individual variables has been examined. The values of ADF show that

some variables are stationary at a level such as AG, AE and RPG, while some of the variables are stationary at the first difference, such as RD and AI. These values have been presented in Table 4.

Table 4: Unit Root Test

Augmented Dickey-Fuller Test (ADF)	Level	t-statistics	p-values
RD	I(1)	-7.739	0.010
AG	I(0)	-4.013	0.043
AE	I(0)	-3.245	0.030
Al	I(1)	-7.699	0.000
RPG	I(0)	-6.285	0.000

The co-integration between the constructs has been examined with the help of the ARDL bound test. The outcomes indicate that the value of calculated f-statistics (5.68) is more than the critical values. These values have been shown in Table 5.

Table 5: ARDL Bound Test

Model	F-statistics	Lag	Level Significance	of	Bound test critical values	
					I(0)	I(1)
RD/ (AG, AE, AI, RPG)	5.68	4	1%		5.21	5.37
			5%		4.17	4.49
			10%		3.03	3.09

The ARDL model outcomes reveal that agriculture growth, agricultural employment and import and rural population growth have a positive nexus with rural development in Vietnam in the short run. In addition, the R square value (0.6466) has been indicated that 64.66 per cent of variations in rural development are due to agricultural growth, import and employment and rural population growth. These figures are highlighted in Table 6.

Table 6: Short Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(AG)	0.576452	0.141029	4.087471	0.0013
D(AE)	0.320860	0.160242	2.002346	0.0410
D(AI)	8.701202	1.391072	6.255034	0.0038
D(RPG)	0.090552	0.048634	1.861907	0.0031
CointEq(-1)*	-1.284823	0.243171	-5.283615	0.0000
R-squared 0.646651 Mean dependent var		r	-0.030852	
Adjusted R-squared	0.545255	S.D. dependent var		3.525322

Finally, the ARDL model results indicate that agriculture growth, agricultural import, and rural population growth positively and significantly affect rural development in

Vietnam. However, results also indicate that agriculture employment has a positive but insignificant nexus with rural development. These values are shown in Table 7.

**Table 7: Long Term Coefficients** 

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AG	2.992114	1.144177	2.615079	0.0432
AE	0.188623	0.219853	0.857951	0.3622
AI	0.185651	0.061687	3.009564	0.0021
RPG	2.262038	0.843211	2.682648	0.0325
С	0.855174	0.778095	1.099061	0.2855

## 5. DISCUSSIONS AND IMPLICATIONS

The study results indicate that agricultural growth has a significant and positive impact on rural development. The study implies that agriculture and its growth is one of the most important indicators of rural development. The fluency and stimulation in the agricultural activities provide almost all the necessary things required for the growth and development of rural areas from both, an economic and social perspective. These results are in line with a previous study by Hrabák and Konečný (2018), which indicates that in the rural areas where the agricultural growth rate is high, there is more attention given to the fertility of land, cultivation and productivity of crops, care and breeding of livestock. This increases the employment opportunities for the rural population and provides resources for the development of economic and social organizations within the rural area. These findings are also in line with findings from a previous study by Mausch et al. (2018), which shows that the high rate of agriculture in the rural areas causes positive interaction among the rural population during sowing seeds, irrigation of concerned land, harvesting, breeding of animals, an inspection of good quality crops and livestock, and transfer of crops and livestock to the market.

Moreover, developments in the agricultural sector improves the employment rate for the rural population, facilitates their lives, increases their purchasing power, and thus, enhances their overall social well-being. These

results are also in with the previous study of Bonfiglio et al. (2017). This study investigates the role of agricultural growth in the achievement of high rural development. The growth in agriculture through modern technology and resources ensures more productivity of crops used as food, fibers, fuels, and raw material of different sorts of industrial organizations. Thus, the growth in agriculture accelerates the rural development rate, domestic wellbeing of the rural population and the development of all economic organizations operating in the rural areas. The study results also indicate that agricultural employment has a positive relationship with rural development. These results suggest that the increase in the agricultural employment rate improves individual living standard, which improves the overall social well-being of the rural population, enabling and encouraging them to make more substantial investments in different sectors of the rural economy. Thus, the rise in employment in agriculture enhances rural development. These results are also in line with the previous study of AlZu'bi, Hawashin, Mujahed, Jararweh, and Gupta (2019), which states that the regions falling under the rural side of the country are more likely to experience fast development when the employment rate in the agriculture industry is high.

Rural development in the form of traditional, social, and economic sectors increases when people who belong to rural areas have high incomes, high purchasing power, and are leading a prosperous life which is only made possible when they have employment opportunities. These results are also in line with the previous study of Agyei-Okyere et al. (2019), which indicates that a high employment rate in agriculture indicates fluency in agricultural activities, effective consultancy, and high productivity of agricultural products. This leads to an increase in the capacity of the rural population to improve their living style and being in a better position to invest in the construction and operation of organizations and institutions which facilitate their social lives such as educational institutions, medical clinics, medical stores, general stores, and communitybased tourism. The study results also indicate that the import of essentials of agriculture is linked with rural development in a positive manner. These results are in line with a past study by Gebre and Gebremedhin (2019), which demonstrates that the opportunity to purchase up-todate technology and different agricultural tools assists in the preparation of land for cultivation and performance of different agricultural activities. It enhances agricultural growth, its share in rural income, and improves the overall rural development. These results are also supported by the past study of Duncombe (2016), which shows that the import of things essential for agriculture encourages agricultural activities, creates continuity in these activities, enhances agriculture productivity and employment opportunities for the rural population. Thus, a higher agriculture import enables the rural community to facilitate and expedite development in the rural area.

The study results also indicate that the rural population growth rate has a positive association with rural development. These results corroborate findings from a the past study conducted by Pelucha and Kveton (2017), which shows that as agriculture is the most significant rural occupation, the scope of agriculture and its development predominantly depends on the population. The high population growth rate ensures a larger labour force or employee base for the agriculture sector as well as other economic and social organizations. Thus, the high population growth rate drives higher rural development. These results are also supported by the previous study of Dax and Fischer (2018), which states that in rural areas where the population growth rate is high, there is high agricultural development and growth in other sectors of the economy such as tourism, education, medicine, and manufacturing operating in that area.

There are some criteria for ensuring a high level of satisfaction from citizens, including a sound transportation system serving the travel needs of people; An electrical system for production and living needs; Cultural and art activities; Security and social order. However, some indicators of satisfaction from households do not report to be high, especially in Phu Nam 1 Village. These include support for production and improvement in people's income; Results of environmental pollution treatment; Soliciting opinions of citizens when the government deploys construction projects to serve the needs of production and people; Reforms in administrative policies and procedures as well as the service attitude of officials and public servants. This research particularly focuses on analyzing the development of the NRD program in Vietnam. Future research may cover a wider range with the comparisons between the developments of the NRD program in different provinces in Vietnam. They could also focus on the cooperation between participations for sustainable development of rural in Vietnam.

The present study carries several theoretical and empirical implications. In strictly theoretical terms, this study contributes to the existing body of literature on agriculture studies, rural/urban studies, and in particular the study of rural development patterns. This study studies patterns of agricultural growth in detail and throws light on the influences of agricultural growth as categorized into further components i.e. development in agriculture, agriculture employment, agricultural import, and rural population growth on the rate of rural development. Although, in the past, many researchers and academics have paid attention to the growth of agriculture in rural areas and its impact on quality of rural life, they have understood, conceptualized, and operationalized agricultural growth as a whole and do not delve any deeper into the different forms and manifestations of agricultural growth when analyzing rural development. In contrast, the current study examines multiple related factors for determining high agricultural development and, thereby, rural development. This study has great practical

significance as it is an appropriate guideline for stakeholders in the government and rural development authorities on how to accelerate the rate of rural development in the short, medium, and long-term future. This study makes it clear that rural development can be accelerated by achieving higher agricultural growth and an increase in agricultural employment and agricultural import, as well as a steady rate of rural population growth.

## 6. CONCLUSION AND LIMITATIONS

The current study examines the development rate of rural areas in an emerging economy like Vietnam, a lowermiddle-income country in Southeast Asia. This study particularly examines the role of agricultural development growth, agriculture employment, agricultural import, and rural population growth in the achievement of a higher rate of rural development. The study demonstrates that an increase in agricultural growth improves the rate of rural development. In rural areas where the agricultural growth rate is high, there is more fertile land; correspondingly, there is more cultivation and higher productivity of crops, care, and breeding of livestock. All this leads to an increase in the employment opportunities for the rural people and provides the foundational material for the development of different economic and social organizations within the rural area. The study further elaborates on the fact that the provision of high employment opportunities in agriculture increases the rural development rate. As agriculture provides many rural populations with employment, there is an increase in the living standard, which improves overall social well-being and enables people to make an investment in different economic sectors and commercial ventures. Thus, the rise in employment in agriculture enhances rural development. The current study shows that the facility to import agricultural tools, seeds, technology, fertilizers, and antibiotics and agricultural products facilitates agriculture development and, thus, the development of rural areas and rural life. Moreover, the study also shows that an increase in the population in the rural areas determines higher growth for the social, traditional, and economic sectors, and for this reason, it is important for residents of rural areas to participate, and benefit from, development projects and programs being implemented in rural areas.

Like many other works of literature, the current study is also exposed to certain limitations. Future researchers and scholars are recommended to overcome these all limitations of research design and context. Only agricultural growth in the form of development in agriculture, agriculture employment, agricultural import, and rural population growth has been analyzed in the current study as the drivers of rural development. It bears to note that there are, in fact, numerous other factors like government policies, economic conditions, tourism, cultural, and geographical factors that also have strong effects on the rate of rural development. However, unfortunately, all these factors have been largely ignored in the current study, because of which, the ensuing analysis of the essential factors determining rural development, can only have limited scope & validity. Future scholars are recommended to pay attention to additional factors when variables affecting rural development. Moreover, the current study examines the contribution of development in agriculture, agriculture employment, agricultural import, and rural population growth in terms of achievement of high rural development for one country - context i.e., Vietnam. Vietnam is a developing, lowermiddle-income country having certain geographical characteristics and a specific agriculture system. The study conducted in Vietnam may not be valid for or generalizable to any other developing or developed countries. Thus, future studies should aim analyze the agricultural system and rural development in both developing and developed countries.

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