Agricultural Restructure Policy in Vietnam and Practical Application for Sustainable Development in Agriculture

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Recently, effective agricultural policies necessitate sustainable development in the agricultural sector, which necessitates frequent research and the attention of policymakers. Consequently, this study investigates the effect of agricultural restructuring policies on agricultural import, agricultural export, agricultural employment, agricultural irrigation land, and agricultural land on the sustainable development of agriculture in Vietnam. From 1991 to 2021, the researchers extracted secondary data from secondary sources such as World Development Indicators (WDI). The researchers also used the non-linear autoregressive distributed lag (NARDL) method to examine the relationships between the variables. The results revealed that agricultural restructuring policies regarding agricultural import, agricultural exports, agricultural employment, agricultural irrigation land, and agricultural land have a positive correlation with Vietnam's agriculture's sustainable development. The research assists policymakers in formulating regulations for achieving sustainable agricultural development by implementing effective agricultural restructuring policies.

Key words: Agricultural restructure policies, agricultural import, agricultural exports, agricultural employment, agricultural irrigation land, sustainable development in agriculture.

1. INTRODUCTION

Agriculture is no longer one of the most significant sectors of the Vietnamese economy. However, the sector accounts for only 8% of total employment in the country. Agriculture still employs more than fifty percent of the country's workforce, but in terms of production value, agriculture was outperformed by both services and agriculture in the early 1990s. To this day, in the late 1980s, agriculture remains one of the primary sources of basic materials for the processing industries and a significant contributor to the nation's overall exports. Following years of rice shortages, Vietnam resumed exporting rice. Most of the nation's lowlands and a smaller portion of its highlands are perpetually devoted to agriculture. The Mekong River Delta, the southern terrace region, and the Red River Delta are principal agricultural regions. Low production may be observed in the typhoon-vulnerable coastal terrain of the central core. The formerly low-productivity central highlands region has been intensively cultivated with varying degrees of success since 1975.

In 2023, the agriculture industry achieved all predetermined goals, including a growth rate of 3.36 percent, a record for many recent years. Animal husbandry and farming increased by 2.88 percent, fisheries by 2.88 percent, and forestry by 6.13 percent. Vietnam's forests cover 42.02 percent of the country's land (Nawaz et al., 2019; Ngoc et al., 2021). Over 73% of the nation's communes met the requirements for rural regions. Exports of agriculture-forestry-fishery products reached a new high of 53.22 billion dollars, a 9.3 percent increase over 2021 (Linderhof et al., 2019). The production structure of the industry was continuously enhanced and made more efficient following the market. Vietnamese agricultural products are consumed in a growing number of categories and products. While the government and industry worked to eliminate trade barriers promptly, more emphasis was placed on the domestic market, increasing exports of agricultural, forestry, and fisheries products (Hanif et al., 2022; Tran et al., 2022).

Vietnam's economy will continue to encounter challenges and obstacles in 2023. These obstacles include inflationary pressure, a rapid and substantial increase in production costs, the adverse effects of the rapid changes in the climate around the world, changes in demand and new consumption habits, fewer rain issues, land cultivation as a result of adverse weather conditions, land irrigation due to water issues, and most notably the effects of the Russian-Ukrainian conflict (Loc et al., 2021; Vu & Goto, 2020). Considering the abovementioned issues, this study aimed to examine the Vietnam agriculture industry in light of these factors. In addition, the agriculture industry targets export sales of 54 billion USD and a growth rate of 3% in 2023. Nationally, at least 270 districts and 78% of communes are classified as rural communities. Figure 1 depicts the agricultural GDP of Vietnam.

There is much literature on sustainable agriculture development in Vietnam; however, this study seeks to fill several gaps. These gaps include: 1) even though sustainable development, particularly in the context of

agriculture, has been studied extensively from different perspectives, at different times, and in different economies.
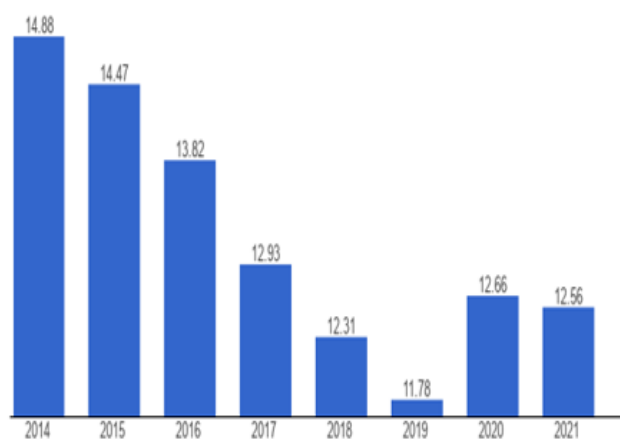

Figure 1: GDP from agriculture in Vietnam

Source: The Global Economy

It has not yet reached its full potential because there are numerous of its aspects, especially in the context of agribusiness. 3) Jerzak and milk-Krajewska (2020) and Smol et al. (2020) investigated whether there is a connection between agriculture imports and the achievement of sustainable development of the agriculture industry; however, the current study will also investigate this issue alongside other variables agriculture raw material exports, agriculture employment, agriculture irrigated land, and agriculture land in Vietnam with a new sample set. 4) Mancini et al. (2019) and Villers (2013) investigated whether or not there is a relationship between agriculture raw material exports and agriculture sustainable development. The current study will also investigate this question and other variables such as raw material imports, agriculture employment, agriculture irrigated land, and agriculture land with a new sample set. 5) Yurui et al. (2021) and Boto-Alvarez and Garca-Fernández (2020) investigated whether there is a relationship between agriculture employment and sustainable agriculture development; however, the current study will also investigate this relationship, along with other variables such as agriculture raw material imports, agriculture raw material exports, agriculture irrigated land, and agriculture land in Vietnam with a new sample set. 6) Alcamo (2019) and Duan et al. (2019) investigated whether there is a connection between agriculture-sustainable development and agriculture-irrigated land; however, the current study will also focus on this variable in addition to others. Imports of agriculture raw materials, exports of agriculture raw materials, employment in agriculture, and agricultural land with a new sample set. 7) Jurjevi et al. (2019) and Arora et al. (2019) investigated whether there is a connection between agriculture land and sustainable agriculture development; however, the current investigation will also work on it alongside other variables such as agriculture raw material imports, agriculture raw material exports, agriculture employment, and agriculture irrigated land with a new sample set. The current

investigation is of considerable importance. 1) agriculture sustainable development is one of the most significant topics of the modern era; This study will emphasize the need to investigate it, especially in Vietnam. 2) Although there is a great deal of literature on agriculture sustainable development, the present study will add to the literature on the subject in the context of Vietnam; 3) It will provide a guideline and assistance to agriculture sustainable development-related professionals to review and upgrade policies to provide more logical solutions for achieving agriculture-related sustainable development in Vietnam.

2. LITERATURE REVIEW

Globalization has impacted nearly every aspect of society, including the business sector (Hanif et al., 2022). Each economic sector is responding to globalization in its unique fashion. Some sections, such as agriculture, are associated with the need for existence and are crucial for survival and long-term development. The same holds for agriculture. Almost every nation imports agricultural products (Nawaz et al., 2021; Yuan et al., 2022). In this context, Jerzak and Miglak-Krajewska (2020) investigated whether importing vegetable protein feed influences the sustainable development of the nation's agriculture. The population of EU economies was examined in this investigation.

The research is empirical. As a sample, the study utilized information from 180 selected properties. The sample data span the years 2010 through 2018. The data sample is derived from direct interviews. According to the analysis, agriculture is the country's backbone with the most verdant territory. In addition, the importation of vegetable protein-based animal feed results in an increase in production capacity, impacting the countries' agricultural sustainability. Minerals are an essential component of the agricultural process. The ecological concept has shifted the global emphasis toward minerals. Sustainable development is central to the green concept. In this context, Smol et al. (2020) investigated whether mineral resources management in the context of export or import results impacts the country's sustainable agricultural development. According to the analysis results, minerals play a crucial role in agriculture. The proper or improper administration of the minerals would impact the nation's circular economy, thereby affecting sustainable development. A nation like Turkey has an abundance of verdant land. Such a natural gift can significantly aid the nation's transition to sustainable development through the prudent use of agricultural resources. In this context, Yilmaz et al. (2019) investigated the economic aspects of manure management. The investigation was conducted on the Turkish populace. The research is empirical. The focus of the research was on the livestock of Turkey. According to the analysis results, livestock and agriculture are interconnected. In addition, the correct management of manure imports affects the country's economy, which contributes to the country's sustainable development.

Every human-made product in the world depends on

various factors, including basic material, packaging, and finishing. The raw material is the foundation of the complete production process. It is essential as the basic material results in the beginning of the production process. In terms of sustainable development, the country that exports basic materials, especially agricultural products, has a more significant impact. In this context, Mancini et al. (2019) investigated whether basic materials play any role in agriculture's sustainable development. The study evaluated the raw materials using the raw material scoreboard. The analysis results suggested that essential materials are the foundation of agriculture. In addition, they are exporting agricultural raw materials, resulting in financial support for the country's economy and sustainable development. Human health is one of nature's greatest gifts. A healthier existence is superior. The agriculture industry is the foundation of the country's public health system. Countries periodically restructure their agriculture policies to ensure the sustainability of the Agri-market, which leads to sustainable development. In this context, Villers (2013) investigated whether the restructuring of Agri markets in terms of policies and accordance with the era's needs influences the country's sustainable agriculture development. According to the findings, restructuring Agri markets in terms of exports or imports affects the country's economy, which benefits the agriculture industry.

The agriculture industry's long-term viability is determined by the overall performance of the companies that engage in agricultural products. The appropriate accounting system is a crucial component of the company. With an eye toward the economy, Zakirova et al. (2020) labored on the accounting system of the agricultural organization. According to the investigation findings, an agricultural organization's appropriate accounting system improves the agriculture industry's overall performance. In addition, Karwacka et al. (2020) worked on Agri-food sector sustainable development. Any enterprise's long-term viability is contingent on several factors, including industry import, export, and other factors. The greater the Agri industry's export of agricultural products, the more significant its contribution to the economy, which fostered the industry's sustainable growth.

Employment is one of the most prevalent problems in the current era. Countries throughout the world continue to prioritize initiatives that result in the creation of employment. Employment creation is one of the primary drivers of foreign direct investment. Governments are responsible for the employment creation of their respective populations. The higher the standard of living in a country, the greater its employment opportunities. The industries operating in the country are ultimately responsible for creating jobs. Agriculture is one of the industries that involve its proprietors and creates employment opportunities for the less educated members of society. The creation of jobs is a component of sustainable development. According to the literature, the agriculture industry creates jobs. Yurui et al. (2021) investigated sustainable development from an ecological perspective in this context. The agriculture industry degrades the environment in numerous ways, including using chemicals.

The implementation of these new ideas would lead to the creation of new jobs as a consequence of the agricultural industry's progress. Similarly, the adoption of green concepts to reduce environmental degradation would not only benefit the environment, but it would also generate employment opportunities. Numerous nations have formulated their plans with sustainable development in mind. Boto-Alvarez et al. (2020) worked on implementing the 2030 agenda for sustainable development in this context. The investigation took place in Spain. According to the investigation's findings, agriculture plays a crucial role in achieving sustainable development by mitigating environmental degradation and bolstering the economy by creating more employment opportunities. The world's countries should give special attention to achieving sustainable development because it will create jobs. The animal industry is one of the most important facets of society that agriculture affects. The animal industry would be affected by any change in the agriculture industry. Introducing new initiatives in the agriculture industry would also cause a shift in the animal industry and generate more employment opportunities. Keeling et al. (2019) examined the relationship between animal welfare and sustainable development in this context. According to the study's findings, the development of the agriculture industry would impact the animal industry and lead to employment opportunities. Further, the study suggested that countries should prioritize the improvement of the agriculture industry because it will lead to more jobs and help the economy achieve sustainable development.

The agriculture industry is a significant contributor to the country's economy for various reasons, including its contribution to the production of human necessities, i.e., food, and economic growth through exports. The irrigated land portion of the country is where the agriculture industry is based. Every nation consists of a mixture of irrigated and unirrigated land. Over the past decade, the world has introduced more real estate ventures on non-irrigated land. In less developed nations, irrigated land is being ignored for the development of housing communities. The action would negatively impact the country's sustainable development. A correlation exists between the attainment of sustainable development objectives and irrigated agricultural land.

There are several reasons for the non-irrigated land, including the absence of modern technology and natural resources such as water. In this context, Alcamo (2019) investigated whether the agriculture industry in the form of irrigated land has any relationship with sustainable development. One of the most important sources of irrigation is water. In developing economies, the lack of available water resources is one of the primary factors for

the absence of irrigated land. The increasing proportion of unirrigated land signals that sustainable development objectives are not being met. The world should prioritize appropriate water utilization to prevent its misuse and achieve sustainable development in the agriculture industry. Proper management is the only way to protect a country's natural resources. The absence of management would result in the depletion of natural resources and impede the realization of sustainable development. In this context, Duan et al. (2019) examined the agricultural industry from water, climate, and food perspectives to determine if they are associated with sustainable development. The investigation revealed that all factors, including water, food, and climate, are interconnected. These are the primary pillars of the agricultural sector. With water availability, the batter is the ultimate indicator of agricultural prosperity through increasing output.

As a consequence of these factors, irrigated land is improved, affecting sustainable development by enhancing the agriculture industry. In addition, Isayev et al. (2022) examined whether the availability of sufficient resources coupled with the implementation of modern irrigation technologies results in practical, sustainable development in the context of agricultural prosperity. The results revealed that both the availability of abundant natural resources and the adoption of modern technologies result in increased agricultural production, contributing to sustainable development in the agriculture industry.

The agricultural industry revolves around land and its optimal utilization. Land utilization for agricultural purposes is among the most significant distinctions between developed and developing economies. In developing economies, ancient methods of agriculture are still used, resulting in decreased output. In contrast, adopting modern tools and techniques in developed economies results in a sustainable agriculture industry. In this context, Jurjevi et al. (2019) examined whether the appropriate implementation of information technology in the agriculture sector contributes to sustainable development. The investigation took place in Serbia. According to the investigation findings, globalization has allowed the globe to adopt modern agricultural technology. The agricultural industries of nations that incorporate technologies from the modern era are sustainable.

In contrast, the agriculture industry struggled in the countries that failed. Moreover et al. (2019) focused on achieving Agenda 2030's sustainable development objectives. According to the study, agriculture is one of the sectors influencing numerous other aspects of the nation, including food, natural resources, land, the environment, and the economy. To achieve sustainable development objectives, countries should emphasize the proper administration of the agriculture sector and the proper use of agricultural land. The correct use of agricultural land would safeguard natural resources, the environment, and the agricultural land itself. In addition, Mehrabi et al. (2020) examined the agriculture industry from the perspective of the livestock industry and concluded that improvements in the agriculture industry would have an impact on the livestock industry. Countries should place a greater emphasis on agricultural land because it provides sustenance for livestock, resulting in increased production and industry sustainability.

3. RESEARCH METHODS

This study investigates the effect of agricultural restructuring policies on agricultural imports, agricultural exports, agricultural employment, agricultural irrigation land, and agricultural land on Vietnam's agriculture's sustainable development. From 1991 to 2021, the researchers extracted secondary data from secondary sources such as WDI. The researcher developed the following study equation:

$$SDA_t = \alpha_0 + \beta_1 ARMI_t + \beta_2 ARME_t + \beta_3 EAG_{it} + \beta_4 AIL_t + \beta_5 AGL_t + e_t \qquad (1)$$

Where;

SDA	=	Sustainable Development in Agriculture
t	=	Time Period
ARMI	=	Agricultural Raw Material Import
ARME	=	Agricultural Raw Material Export
EAG	=	Employment in Agriculture
AIL	=	Agricultural Irrigated Land
AGL	=	Agricultural Land

Sustainable development in agriculture served as the study's primary variable, with the crop production index as a proxy. In addition, agricultural restructure policies were used as independent variable proxies for agricultural raw material import (percentage of merchandise import), agricultural raw material export (percentage of merchandise export), employment in Agriculture (percentage of total employment), agricultural irrigated land (percentage of total agricultural land), and Agricultural land (percentage of land area). These proxy servers are listed in Table 1.

Table 1: Variables with Measurements

S#	Variables	Measurement	Sources
01	Sustainable Development in Agriculture	Crops production index	WDI
02	Agricultural Restructure Policy	Agricultural raw material import (% of merchandises import)	WDI
		Agricultural raw material export (% of merchandises export)	WDI
		Employment in Agriculture (% of total employment)	WDI
		Agricultural irrigated land (% of total agricultural land)	WDI
		Agricultural land (% of land area)	WDI

The researchers examine the minutiae of the variables using descriptive statistics. In addition, researchers use a correlation matrix to examine the correlation between the constructs. In addition, using the augmentedDickey–Fuller test (ADF) and the Phillips–Perron (PP) tests, the researchers examine the unit root among variables required to deploy a suitable model. The equation is given as follows:

$$d(Y_t) = \alpha_0 + \beta t + YY_{t-1} + d(Y_t(-1)) + \varepsilon_t \qquad (2)$$

In addition, the researchers examine the model's co-integration using the ARDL bound test co-integration method. The researchers then utilized the ARDL model to examine the association between variables. It is the most suitable method when some variables are stationary at I (0) and others at I(1) (Sohail et al., 2021). In addition, the researchers utilized this method because it controls the severe impacts of heteroscedasticity and autocorrelation on estimations and yields accurate results (Qamruzzaman & Jianguo, 2018). The following expression describes the method:

$$\Delta SDA_t = \alpha_0 + \sum \delta_1 \Delta SDA_{t-1} + \sum \delta_2 \Delta ARMI_{t-1} + \sum \delta_3 \Delta ARME_{t-1} + \sum \delta_4 \Delta EAG_{t-1} + \sum \delta_5 \Delta AIL_{t-1} + \sum \delta_6 \Delta AGL_{t-1} + \varphi_1 SDA_{t-1} + \varphi_2 ARMI_{t-1} + \varphi_3 ARME_{t-1} + \varphi_4 EAG_{t-1} + \varphi_5 AIL_{t-1} + \varphi_6 AGL_{t-1} + \varepsilon_t \qquad (3)$$

The researchers also applied the NARDL approach to check the linkages among the variables due to the study's purpose of examining the asymmetric linkage among AIL, AGL, and SDA. The asymmetric function is given below:

$$SDA = f(ARMI, ARME, EAG, AIL^+, AIL^-, AGL^+, AGL^-) \qquad (4)$$

So, the empirical approach to the asymmetric association is established below:

$$SDA_t = \alpha_0 + \beta_1 ARMI_t + \beta_2 ARME_t + \beta_3 EAG_t + \beta_4 AIL_t{}^+ + \beta_5 AIL_t{}^- + \beta_6 AGL_t{}^+ + \beta_7 AGL_t{}^- + e_t \qquad (5)$$

Hence, the asymmetric linkages investigation among AIL, AGL, and SDA also demands a partial sum of positive and negative changes among constructs. These changes are mentioned below:

$$AIL^+ = \sum_{i=1}^t \Delta AIL_i^+ = \sum_{i=1}^t \max(\Delta AIL_i \, 0) \qquad (6)$$

$$AIL^- = \sum_{i=1}^t \Delta AIL_i^- = \sum_{i=1}^t \min(\Delta AIL_i \, 0) \qquad (7)$$

$$AGL = \sum_{i=1}^t \Delta AGL_i^+ = \sum_{i=1}^t \max(\Delta AGL_i \, 0) \qquad (8)$$

$$AGL^- = \sum_{i=1}^t \Delta AGL_i^- = \sum_{i=1}^t \min(\Delta AGL_i \, 0) \qquad (9)$$

Therefore, asymmetric linkages among AIL, AGL, and SDA joined with the other association among variables and established the equation for the non-linear ARDL model given below:

$$\Delta SDA_t = \alpha_0 + \sum \delta_1 \Delta SDA_{t-1} + \sum \delta_2 \Delta ARMI_{t-1} + \sum \delta_3 \Delta ARME_{t-1} + \sum \delta_4 \Delta EAG + \sum \delta_5 \Delta AIL_{t-1}^+ + \sum \delta_6 \Delta AIL_{t-1}^- + \sum \delta_7 \Delta AGL_{t-1}^+ + \sum \delta_8 \Delta AGL_{t-1}^- + \varphi_1 SDA_{t-1} + \varphi_2 ARMI_{t-1} + \varphi_3 ARME_{t-1} + \varphi_4 EAG_{t-1} + \varphi_5 AIL_{t-1}^+ + \varphi_6 AIL_{t-1}^- + \varphi_7 AGL_{t-1}^+ + \varphi_8 AGL_{t-1}^- + \varepsilon_t \qquad (10)$$

4. RESEARCH FINDINGS

The researchers examine the minutiae of the variables using descriptive statistics. According to the results, SDA averaged 74.436 percent, ARMI was 3.150 percent, and ARME was 2.683 percent. In addition, the results revealed that the average percentages of EAG, AIL, and AGL were 54.178 percent, 56.942 percent, and 31.208 percent, respectively. These numbers are presented in Table 2.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
SDA	31	74.436	23.439	35.01	108.741
ARMI	31	3.150	0.358	2.398	3.879
ARME	31	2.683	0.746	1.752	4.357
EAG	31	54.178	11.292	36.244	70.880
AIL	31	56.942	0.355	56.382	57.527
AGL	31	31.208	6.275	20.741	41.010

In addition, researchers use a correlation matrix to examine the correlation between the constructs. The results revealed that agricultural restructuring policies regarding agricultural import, agricultural exports, agricultural employment, agricultural irrigation land, and agricultural land have a positive correlation with Vietnam's agriculture's sustainable development. These numbers are presented in Table 3.

Table 3: Matrix of Correlations

Variables	SDA	ARMI	ARME	EAG	AIL	AGL
SDA	1.000					
ARMI	0.034	1.000				
ARME	0.189	0.543	1.000			
EAG	0.977	0.011	0.126	1.000		
AIL	0.995	-0.013	-0.211	-0.986	1.000	
AGL	0.981	0.051	-0.218	-0.960	0.981	1.000

In addition, the researchers examine the unit root among variables, which is required to deploy an appropriate model using ADF and PP tests. According to the results, the SDA, ARMI, AIL, and AGL are stationary at level, while the ARME and EAG are stationary at first difference. These numbers are shown in Table 4.

Table 4: Unit Root Test

	ADF		PP	
Series	Level	First difference	Level	First difference
SDA	-2.901***	----	-3.102***	----
ARMI	-2.377***	----	-3.009***	----
ARME	----	-4.392***	----	-5.393***
EAG	----	-4.869***	----	-5.677***
AIL	-3.029***	----	-3.218***	----
AGL	-3.104***	----	-3.282***	----

In addition, the researchers examine the model's co-integration using the ARDL bound test co-integration method. The results demonstrated that the calculated t-statistics value of 5.49 is greater than the critical values. These results suggest that co-integration exists. These numbers are shown in Table 5.

Table 5: Bound Test of Non-linear ARDL

	F-statistics	Lower Bound	Upper Bound	Decision
Linear ARDL	0.564	1.765	2.464	No Co-integration
Asymmetric ARDL	5.493	1.373	3.291	Co-integration

The researchers also utilized the NARDL method to examine the relationships between the variables. The results revealed that agricultural restructuring policies

regarding agricultural import, agricultural exports, agricultural employment, agricultural irrigation land, and agricultural land have a positive correlation with Vietnam's agriculture's sustainable development. These relationships

are listed in Table 6.

Table 6: Non-linear ARDL results

Variables	Coefficients	Std. Err.	t-statistics
C	0.784	0.210	3.733
SDA (-1)	1.021	0.432	2.363
ARMI (-1)	2.392	0.477	5.015
ARME (-1)	2.101	0.476	4.414
EAG (-1)	0.786	0.192	4.094
AIL-P (-1)	2.101	0.474	4.432
AIL-N (-1)	3.775	0.657	5.746
AGL-P (-1)	3.657	1.009	3.624
AGL-N (-1)	3.211	1.091	2.943
Adj. R Square	0.622		
F-statistics	45.437		
Prob.(F-statistics)	0.001		

5. DISCUSSIONS

The results indicated that agricultural raw material imports are positively associated with agricultural sustainability. According to Gil et al. (2019), if a nation has effective business ties with other nations and producers can import agricultural raw materials, its agricultural resources can be replenished at any time, and its productivity can be maintained. Agriculture's sustainable development is contingent on the steady expansion of agricultural yields. These findings are consistent with Linser and Lier's (2020) conclusion that the ability to import agricultural raw materials when required enables farmers to complete agricultural resources and implement agricultural production plans effectively. Consequently, agricultural production and agricultural development are on the rise and sustainable.

The results indicated that agricultural raw material export positively correlates with sustainable agricultural development. These results concur with Xu et al. (2022), which suggests that if a country has abundant agricultural raw material resources and international demand for raw materials, it can prevent the loss of agricultural raw materials. In this scenario, the nation can also earn foreign currency and invest it in agricultural development. Thus, higher profitable crop production leads to agricultural sustainability. These results are consistent with Duan et al. (2019), who examine the function of agricultural raw material exports in agriculture's sustainable development. It asserts that exporting agricultural raw materials increases the demand for domestic agricultural production and motivates farmers and ranchers. Therefore, an increase in agricultural raw material imports facilitates sustainable agricultural development.

The results indicated that agricultural employment is positively associated with agricultural sustainability. These findings concur with Loizou et al. (2019), who assert that when the agricultural HR policy is designed to ensure the employment of a more significant number of workers and to retain agricultural experts, there is consistency in agricultural operations and an increase in agricultural efficiency. Consequently, agricultural development is sustainable, and the agricultural sector produces more crops. These findings are consistent with Ronzon et al.'s (2020) assertion that agricultural development is more productive and sustainable when

more people are employed to perform agricultural functions and pertain to the agricultural sector.

The results indicated that irrigated agricultural land positively correlates with agricultural sustainability. These results are consistent with Komilova et al. (2019), who note that if there is a larger area of land where crops can be watered through pipes, canals, sprinklers, or artificial sources, there is a shorter wait for rain or a decrease in crop loss due to lack of rain. Therefore, sustainable agricultural development is feasible. These findings are consistent with Wang et al.'s (2020) conclusion that the increased use of irrigated land for agricultural purposes safeguards agricultural production and promotes the growth of the agricultural industry at a sustainable rate.

The results indicated that agricultural land is positively associated with agricultural sustainability. These findings concur with Hamidov and Helming's (2020) conclusion that an increase in the land area owned by agricultural enterprises increases agricultural productivity and sustains agricultural development. These findings are supported by Angelaks et al. (2020), who note that the agriculture industry develops at a sustainable rate of firms involved in agriculture owning a larger land area and the right to use that land for agricultural purposes.

6. POLICY IMPLICATIONS

This study provides guidelines on how the government or farmers can accomplish sustainable agricultural development. The study recommends policies promoting importing basic agricultural materials for the agricultural industry to achieve sustainable development. To ensure agriculture's sustainable development, there is also a guideline mandating that authoritative entities promote agricultural raw material exports. The study also suggests that the agriculture employment rate should be increased to accomplish agriculture's sustainable development. The research assists policymakers in formulating regulations for achieving sustainable agricultural development by implementing effective agricultural restructuring policies. To achieve agriculture's sustainable development, the study suggests that an agricultural policy to expand irrigated agricultural land must be implemented. In addition, the study indicates that there should be an increase in the area of irrigated agricultural land. It would result in agricultural sustainability.

7. CONCLUSION

This study aims to analyze the role of agricultural structural policies such as import and export of primary raw materials, agricultural employment, agricultural irrigated land, and agricultural land in agriculture's sustainable development. Vietnam's data were utilized for the empirical analysis. Agricultural raw material import and export, agricultural employment, agricultural irrigated land, and agricultural land were found to positively correlate with agriculture's sustainable development, as deduced by the research's findings and analysis. Suppose agricultural raw material imports are permitted in a country

and farmers are able to take advantage of this facility. In that case, the results indicate that farmers can replenish agricultural raw materials and maintain agricultural production, leading to the sustainable development of agriculture. The results indicated that exporting agricultural raw materials increases the demand for domestic agricultural products and that increasing agricultural production contributes to agriculture's sustainable development. According to the research, when more individuals are employed in the agricultural sector, agricultural production and development are more sustainable. The results demonstrated that an increase in irrigated land for agricultural purposes improves agricultural functions' efficiency and contributes to agricultural development's sustainability. The study also concluded that the greater the area of agricultural land, the greater the likelihood of agricultural sustainability.

8. LIMITATIONS AND FUTURE RECOMMENDATIONS

Limitations are associated with the current research, which should be eliminated in future publications. First, this study examines only agricultural structural policies, such as agricultural raw material import and export, agricultural employment, agricultural irrigated land, and agricultural land's role in agriculture's sustainable development. Future researchers should also investigate the impact of economic conditions, the natural resource price index, domestic demand, etc., on agriculture's sustainable development. Vietnam, a developing nation with distinctive agricultural policies, was the data source for the current study. For generic results, researchers should acquire data from multiple countries.

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