

A Critical Analysis of the Value Chain in the Rice Industry and Its Effects on the Export Rice Industry in Kien Giang Province, Vietnam

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Abstract

The study of a critical analysis of the value chain in the rice industry and its effects on the export rice industry in Kien Giang province, Vietnam conducted during the period from December 2012 to November 2015. The research result showed that there were 450 persons who are rice exporters and farmers (412 processed and 48 missed) who to be interviewed and answered nearly 27 questions. The researcher had analyzed KMO test, the result of KMO analysis used for multiple regression analysis. The person responses measured through an adapted questionnaire on a 5-point Likert scale. Hard copy and interview rice exporters and farmers by questionnaire distributed among rice exporters and farmers in Kien Giang province.

The regression analysis results showed that there were seven factors, which included of factors following: Development strategy; Control policy; Planning; Support policy; Rice seeds; Cultivation techniques and Post-harvest processing actually affected the export rice industry with 5 % significance level. The main objectives of this study were to to conduct a survey to find value chain that affecting the export rice industry in Kien Giang province, to identify value chain that affected on the export rice industry in Kien Giang province and to analyze and to test value chain that affected the export rice industry in Kien Giang province.

Keywords: Value chain, rice industry, effects, export rice industry, Kien Giang Province

1. Introduction

Agriculture plays a relatively important role in the economy of Vietnam. Agriculture contributes 24% of GDP and generates 20% of export revenues. Over 70% of the national labor force is employed in the agriculture sector, and a further 6% is employed in the agricultural postproduction sector. Vietnam exported some 7.5 million tons of rice in 2014 via both official and cross-border export transactions, said Vietnam Industry and Trade Center (VITIC) under the Ministry of Industry and Trade (MoIT) on Tuesday. According to VITIC, via official exports, Vietnam sold some 6.5 million tons of rice to world market, pocketing 2.84 billion U.S. dollars in 2014. The average export price of Vietnamese rice in 2014 was 436.92 U.S. dollars per ton. The year 2014 posted the third consecutive year when China has remained the largest consumer of Vietnamese rice, while importing 2.1 million tons of rice from Vietnam via official exports. The Philippines ranks the second, consuming 1.4 million tons of rice from Vietnam in 2014.

In addition to official exports, Vietnam sold around one million tons of rice to China via cross-border transactions in 2014, bringing total figure of Vietnamese rice export volume last year to 7.5 million tons, said VITIC. VITIC quoted a report by Vietnam Food Association as saying that in 2015, the country targeted to export 7-7.5 million tons of rice. Currently, Vietnamese rice has been present in 135 countries and regions worldwide, according to Import and Export Department under the MoIT. The price of rice for exports from Vietnam, the world's second largest rice exporter, in the international market has risen substantially in the first two months of this year, amid soaring rice exports, according to the country's food association. In the last two months, the price of Vietnam's rice has remained steady at US\$245 to US\$260 per ton, up US\$55 per ton from the same period last year, said Truong Thanh Phong, chairman of Vietnam Food Association (Vietfood), the country's rice export managing body. Rice prices will continue to stand at that height in the near future as demand is increasing. "The price won't fall because demand is very strong, and

also because farmers are facing high production costs for fertilizer and gasoline,” Phong said. Despite the start of the harvest season in the Mekong Delta region, high global demand continues to push prices of exportable rice higher in the local market. Most of Vietnam's rice for export is grown in the Mekong Delta region.

2. Literature Review

Often multinational enterprises (MNEs) developed global value chains, investing abroad and establishing affiliates that provided critical support to remaining activities at home. To enhance efficiency and to optimize profits, multinational enterprises locate "research, development, design, assembly, production of parts, marketing and branding" activities in different countries around the globe. MNEs offshore labor-intensive activities to China and Mexico, for example, where the cost of labor is the lowest (Gurría, 2012). The emergence of global value chains (GVCs) in the late 1990s provided a catalyst for accelerated change in the landscape of international investment and trade, with major, far-reaching consequences on governments as well as enterprises. (Gurría 2012)

Through global value chains, there has been growth in interconnectedness as MNEs play an increasingly larger role in the internationalization of business. In response, governments have cut corporate income tax (CIT) rates or introduced new incentives for research and development to compete in this changing geopolitical landscape. (LeBlanc et al). In an (industrial) development context, the concepts of Global Value Chain analysis were first introduced in the 1990s (Gereffi et al.) and have gradually been integrated into development policy by the World Bank, Unctad, the OECD and others. Value chain analysis has also been employed in the development sector as a means of identifying poverty reduction strategies by upgrading along the value chain. Although commonly associated with export-oriented trade, development practitioners have begun to highlight the importance of developing national and intra-regional chains in addition to international ones.

The value-chain concept has been extended beyond individual firms. It can apply to whole supply chains and distribution networks. The delivery of a mix of products and services to the end customer will mobilize different economic factors, each managing its own value chain. The industry wide synchronized interactions of those local value chains create an extended value chain, sometimes global in extent. Porter terms this larger interconnected system of value chains the "value system". A value system includes the value chains of a firm's supplier (and their suppliers all the way back), the firm itself, the firm distribution channels, and the firm's buyers (and presumably extended to the buyers of their products, and so on).

The agricultural value chain. It concept has been used since the beginning of the millennium, primarily by those working in agricultural development in developing countries. Although there is no universally accepted definition of the term, it normally refers to the whole range of goods and services necessary for an agricultural product to move from the farm to the final customer or consumer. The term value chain was first popularized in a book published in 1985 by Michael Porter, who used it to illustrate how companies could achieve what he called "competitive advantage" by adding value within their organization. Subsequently the term was adopted for agricultural development purposes and has now become very much in vogue among those working in this field, with an increasing number of bilateral and multilateral aid organizations using it to guide their development interventions.

The Rice Value Chain. The Bill & Melinda Gates Foundation are focusing on rice as a key crop in their fight to improve nutrition and increase smallholder farmer incomes. TechnoServe worked with the Gates Foundation to analyze the rice sector throughout India and Bangladesh, providing detailed studies of the rice value chains in selected states and identifying potential regions, partners and intervention models for future interventions on a large scale across India and Bangladesh. Besides, the rice value chain analysis was undertaken at the request of International Fund for Agriculture Development and Community Based Agriculture & Rural Development Project. The analysis looked how rice was produced, processed and ultimately marketed to the consumers. The objective was to see how the value chain could be enhanced for the primary benefit of the smallholder producers.

The analysis indicted the value chain was similar to the value chain of most commodities produced and marketed domestically in financially suppressed economies common to the developing world including Nigeria. That is the value chain was dominated by a multitude of small family enterprises, each vying for a limited market share. This includes the smallholder producers as family enterprises. The value chain could be conveniently divided between production which is mostly the farmers and support services, processing which is a combination of parboiling and milling, and marketing which is mostly bulk through the open air markets.

Enhancing the value chain for the benefit of the smallholder producers should start at the production end where the smallholder farmers have the most direct involvement. Here the initial need is to increase the rice area allocated to

each farmer, so the farmers will concentrate on riceproduction as their primary farm enterprise. With the present small allocations farmers have littleincentive to concentrate on rice cultivation.

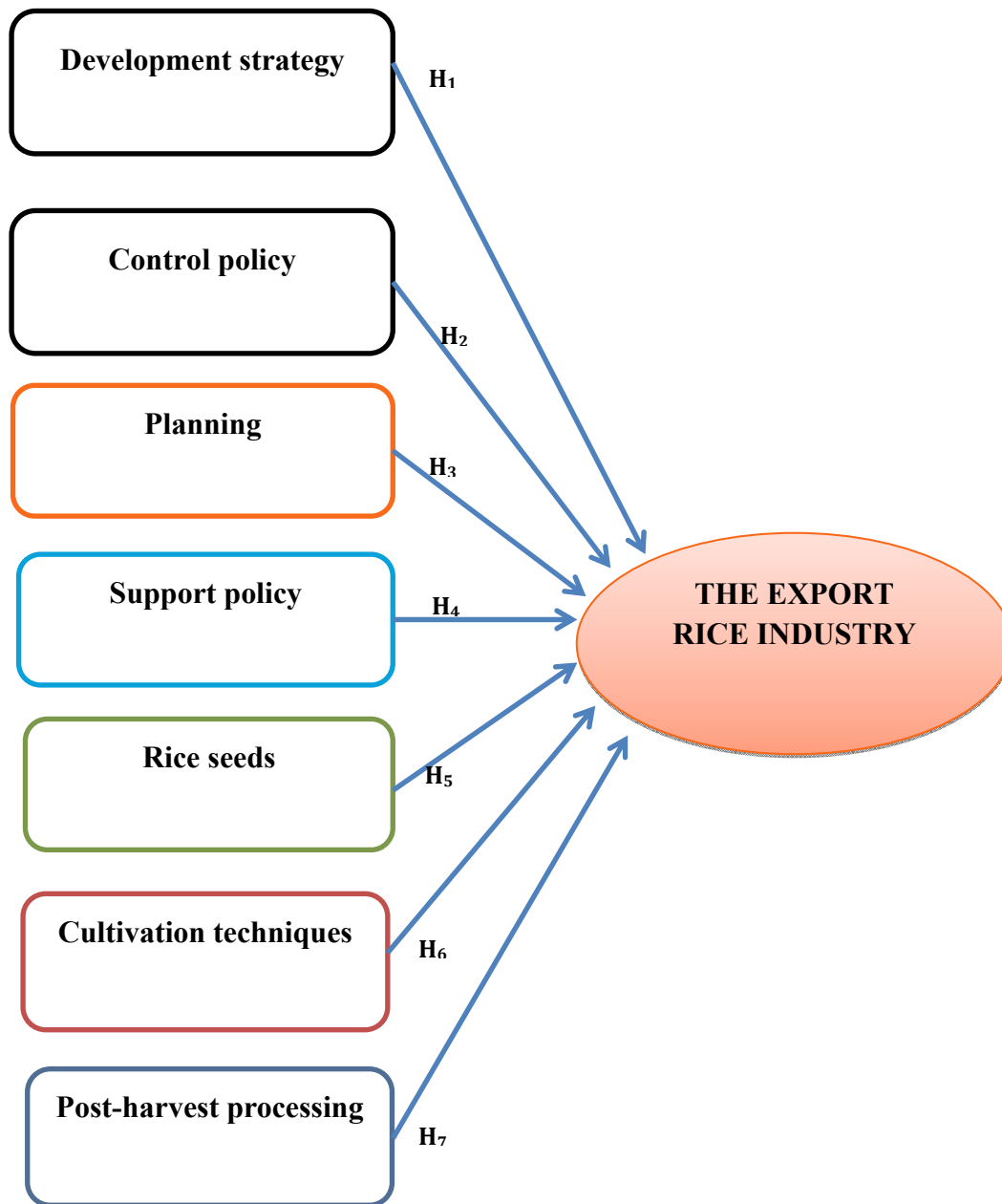


Figure 2. Proposed research model for the export rice industry

Based on the aforementioned research questions the following hypotheses used to investigate each question:

Hypothesis

- H₁:** There is a positive relationship between Development strategy and the export rice industry.
- H₂:** There is a positive relationship between Control policy and the export rice industry.
- H₃:** There is a positive relationship between Planning and the export rice industry.
- H₄:** There is a positive relationship between Support policy and the export rice industry.
- H₅:** There is a positive relationship between Rice seeds and the export rice industry.

H₆: There is a positive relationship between Cultivation techniques and the export rice industry.

H₇: There is a positive relationship between Post-harvest processing and the export rice industry.

3. Research Method

This study has not been fully considered all factors that influence sustainability. This dissertation focuses on considering the impacts of components. The researcher had surveyed 150 exporters and 300 farmers (450 persons who are rice exporters and farmers in KienGiang province). In this study, there are consists of two phases: First: it is a preliminary study and the second phase is a formal and more comprehensive study. This study is done by qualitative methods. The research is done by formal quantitative methods. Unit of analysis is a student. Study subjects are persons who are rice exporters and farmers in KienGiang province.

The preliminary study for exporters and farmers conducted in 10/2014, using qualitative methods to interview 30 persons who are rice exporters in KienGiang province to examine the content and meaning of the words used in the scale. Following this, the formal study conducted in May 2014, using qualitative methods to interview 450 persons who are rice exporters and farmers in KienGiang province. The researcher should select one of these methods of collecting the data taking into consideration the nature of investigation, objective and scope of the inquiry, financial resources, available time and the desired degree of accuracy. However, I should pay attention to all these factors but much depends upon the ability and experience of the researcher.

The population of this study was all 350 exporters and 3000 farmers in KienGiang province. The values of the random variable of interest could possibly be determined. This notion corresponds directly to the frame in sample survey literature. The difference between the attributes of interest in the study population and the corresponding attributes in the target population called the study error. This is a simple quantitative assessment for numerical attributes but can be challenging to define for graphical ones. The study population and the study units were very different from the target in this instance. The statistical method ensures consideration of the relevance of the study population to the target population by forcing investigators to deal directly with the study error. Criteria beyond the study error such as cost, convenience, and ethics is important in determining the study population.

After preliminary investigations, formal research done by using quantitative methods questionnaire survey of 150 exporters and 300 farmers (450 persons who are rice exporters and farmers in KienGiang province). The reason tested measurement models, model and test research hypotheses. Data collected were tested by the reliability index (excluding variables with correlation coefficients lower <0.30 and variable coefficient Cronbach's alpha <0.60), factor analysis explored (remove the variable low load factor <0.50). The hypothesis tested through multiple regression analysis with linear Enter method. The subjects of this survey are exporters and farmers and sample size 450 persons. The survey will be done by surveying exporters and farmers who have been treatment in KienGiang province. Now, Kien Giang province Administrative divisions: Kien Giang is divided into one city (Rach Gia), one town (Ha Tien), and 13 districts (Kien Luong, Hon Dat, Tan Hiep, Chau Thanh, Giong Rieng, Go Quao, An Bien, An Minh, Vinh Thuan, Phu Quoc, Kien Hai, U Minh Thuong, Giang Thanh).

4. Research Results

The researcher collected 150 exporters and 300 farmers (450 persons who are rice exporters and farmers in KienGiang province) to analyze multiple regressions. Data from questionnaires analyzed using the descriptive statistics with the help of data analysis software - Statistical Package for Social Sciences (SPSS 20.0) package. We can see the demographic characteristics of the exporters and farmers table 1 following.

Table 1. Descriptive Statistics for the demographic characteristics of the exporters and farmers

The demographic characteristics of exporters and farmers		Frequency	Percentage
Exporters and farmers	Exporters	150	36.4
	Farmers	262	63.6
	Total	412	100
Gender	Male	148	35.9
	Female	264	64.1
	Total	412	100.0

Age	Under 20 years old	26	6.3
	From 20 to 40 years old	90	21.8
	Over 40 years old	296	71.8
	Total	412	100.0
Family situation	Single	142	34.5
	Married	270	65.5
	Total	412	100.0
Experiences	Under 5 years	46	11.2
	From 5 to 10 years	289	70.1
	More than 10 years	77	18.7
	Total	412	100.0
Income	Under 5 million VND	39	9.5
	From 5 to 10 million VND	323	78.4
	More than 10 million VND	50	12.1
	Total	412	100.0

Source: The researcher's collecting data and SPSS

The Table 1 revealed that the result of the descriptive statistics from the demography following: we had 150 exporters and 300 farmers interviewed but 412 persons who are rice exporters and farmers in KienGiang province processed. 148 people are male with 35.9%, female with 64.1%. For persons interviewed, the age accounted for the largest percentage is over 40 years old accounting for 71.8%, followed by from 20 years old to 40 years old accounting for 21.8%. For persons interviewed, the family situation accounted for the married persons accounting for 65.5% followed the second the single persons accounting for 34.5%. Experiences: persons had experiences from 5 to 10 years with 70.1%. Finally, Income: Table 1 showed 412 persons processed, 323 persons' income are from 5 to 10 million VND with 78.4%.

Table 2. Questions for the value chain affecting the export rice industry

1. Development strategy (DS)	Level of Agreement
DS1: Development of rice into a commodity industry, with prestigious brands	①②③④⑤
DS2: Economic restructuring and labor structure along with the process of industrialization and modernization	①②③④⑤
DS3: Identify farmers and businesses are key actors of rice production and create linkages between farmers and benefit businesses	①②③④⑤
DS4: Rice Development towards quality and sustainability	①②③④⑤
2. Control policy	Level of Agreement
CP1: State study change control approach for food safety to conform with the Law on Food Safety in accordance with international practice	①②③④⑤
CP2: Compliance with WTO commitments	①②③④⑤
CP3: Increase the competitiveness of enterprises in the process of integration, reduced costs are incurred for business	①②③④⑤
3. Planing (PL)	Level of Agreement

PL1: State planning is closely rice, maximize comparative advantages and resources of each province , each locality	①②③④⑤
PL2: The Government should build the safe production of raw materials on a large scale and advanced technology as standard VietGap and international standard	①②③④⑤
PL3: State planning system enterprises exporting rice processing industry planning of rice processing	①②③④⑤
PL4: Application of modern processing technology to produce qualified products that meet the demanding markets	①②③④⑤
4. Support policy (SP)	Level of Agreement
SP1: The Government and relevant ministries need support policies as policies on preferential credit support to enterprises and farmers to grow rice	①②③④⑤
SP2: Policies to encourage scientific research activities to create rice varieties with high yield and good quality	①②③④⑤
SP3: Policies to attract foreign investment in order to boost investment process in depth	①②③④⑤
5. Rice seeds (RS)	Level of Agreement
RS1: Element manage quality rice varieties	①②③④⑤
RS2: Tight control element for rice disease	①②③④⑤
RS3: Elements of plant protection products for rice	①②③④⑤
6. Cultivation techniques (CT)	Level of Agreement
CT1: Investment factor for modern production technology	①②③④⑤
CT2: Building organizational models and associated manufacturing production consumes large scale	①②③④⑤
CT3: Cultivation techniques for producer knowledge level	①②③④⑤
7. Post-harvest processing (PH)	Level of Agreement
PH1: Capital investment for postharvest processing	①②③④⑤
PH2: Capital investment and technical factors harvesting technology	①②③④⑤
PH3: Capital investment element of highly qualified labor for processing	①②③④⑤
8. General assessment of export rice industry (GA)	Level of Agreement
GA1: Profits of exporters rose	①②③④⑤
GA2: farmers increase income	①②③④⑤
GA 3: Value added over 1 hectare of land to increase rice exports	①②③④⑤

Source: The researcher's collecting data and SPSS

Table 2 showed there were 26 questions for the value chain affecting the export rice industry. 26 questions following: Development strategy (DS) has 4 items, Control policy (CP) has 3 items, Planning (PL) has 4 items, Support policy (SP) has 3 items, Rice seeds (RS) has 3 items, Cultivation techniques (CT) has 3 items and Post-harvest processing (PH) has 3 items. The export rice industry has 3 items. We used scales 5 five score following: 1: Strongly disagree; 2: Disagree; 3: Normal; 4: Agree and 5: Strongly agree.

The researcher used descriptive and summary statistics has an extensive history and, indeed, the simple tabulation of populations and of economic data was the first way the topic of statistics appeared. More recently, a collection of summarization techniques has been formulated under the heading of exploratory data analysis: an example of such a technique is the box plot. Descriptive statistics is the discipline of quantitatively describing the main features of a collection of information, or the quantitative description itself. Descriptive statistics are distinguished from inferential statistics (or inductive statistics), in that descriptive statistics aim to summarize a sample, rather than use the data to learn about the population that the sample of data is thought to represent. This generally means that descriptive statistics, unlike inferential statistics, are not developed on the basis of probability theory. Even when a data analysis draws its main conclusions using inferential statistics, descriptive statistics are generally also presented the following of Table 3.

Table 3. Descriptive statistics for the export rice industry

Code	N	Minimum	Maximum	Mean	Std. Deviation
DS1	412	2.00	5.00	3.9442	.96372
DS2	412	1.00	5.00	3.3544	1.10546
DS3	412	2.00	5.00	3.6092	1.30513
DS4	412	1.00	5.00	3.2985	1.35650
CP1	412	1.00	5.00	3.5388	1.09008
CP2	412	1.00	5.00	3.5631	1.08894
CP3	412	1.00	5.00	3.5437	1.09879
PL1	412	1.00	5.00	3.1529	.92198
PL2	412	1.00	5.00	3.2816	.98324
PL3	412	1.00	5.00	3.3471	.90600
PL4	412	1.00	5.00	3.2621	.93028
SP1	412	1.00	5.00	2.9345	.86459
SP2	412	1.00	5.00	2.8325	1.58110
SP3	412	1.00	5.00	2.8325	1.45780
RS1	412	1.00	5.00	2.9029	.86020
RS2	412	1.00	5.00	2.9029	.72514
RS3	412	1.00	5.00	2.9296	.74638
CT1	412	1.00	5.00	3.3155	1.01926
CT2	412	1.00	5.00	3.3641	.91936
CT3	412	1.00	5.00	3.0583	.94186
PH1	412	1.00	5.00	2.8981	1.38967
PH2	412	1.00	5.00	3.0437	.97063
PH3	412	1.00	5.00	3.1990	1.24951
GA1	412	2.00	5.00	3.3204	.65756
GA2	412	2.00	5.00	3.2306	.74005
GA3	412	2.00	5.00	3.3617	.68191
Valid N	412				

Source: The researcher's collecting data and SPSS

Table 3 showed that there were 412 persons who are rice exporters and farmers in KienGiang province. They interviewed and processed from 10/2014 to 6/2015. The results showed that max value is 5, minimum is 1, mean is around 3.0 and Std. Deviation is around 1.0.

Table 4. Results of analysis of Cronbach Alpha coefficients

Indicators	Average scale if removal variables	Scale variance if the removal variables	The correlation coefficient of the total variations	Cronbach alpha coefficient if the removal variables

Development strategy (DS)	DS1	10.2621	11.736	.865	.891
	DS2	10.8519	11.528	.750	.918
	DS3	10.5971	9.755	.849	.886
	DS4	10.9078	9.432	.853	.887
Alpha = 0.920					
Control policy (CP)	CP1	7.1068	4.704	.976	.982
	CP2	7.0825	4.704	.978	.981
	CP3	7.1019	4.681	.971	.986
Alpha = 0.989					
Planning (PL)	PL1	9.8908	6.068	.740	.844
	PL2	9.7621	5.724	.763	.835
	PL3	9.6966	6.188	.726	.850
	PL4	9.7816	6.084	.726	.850
Alpha = 0.879					
Support policy (SP)	SP1	5.6650	8.184	.594	.870
	SP2	5.7670	4.077	.829	.591
	SP3	5.7670	4.982	.732	.696
Alpha = 0.821					
Rice seeds (RS)	RS1	5.8325	2.115	.590	.976
	RS2	5.8325	2.028	.861	.721
	RS3	5.8058	2.011	.833	.741
Alpha = 0.869					
Indicators		Average scale if removal variables	Scale variance if the removal variables	The correlation coefficient of the total variations	Cronbach alpha coefficient if the removal variables
Cultivation techniques (CT)	CT1	6.4223	2.429	.769	.574
	CT2	6.3738	2.945	.672	.692
	CT3	6.6796	3.308	.501	.861
Alpha = 0.797					
Post-harvest processing (PH)	PH1	6.2427	4.379	.571	.857
	PH2	6.0971	5.188	.792	.654
	PH3	5.9417	4.498	.674	.722
Alpha = 0.809					
General assessment of export rice (GA)	GA1	6.5922	1.595	.454	.730
	GA2	6.6820	1.234	.607	.546
	GA3	6.5510	1.396	.570	.596
Alpha = 0.720					

Source: The researcher's collecting data and SPSS

The Table 4 revealed that all Development strategy; Control policy; Planning; Support policy; Rice seeds; Cultivation techniques and Post-harvest processing (26 items) are very good for this research. The researcher continues to analyze the EFA to assess more accurately the scale, helping the uniform scale in research. Thus, based on EFA analysis, the researcher will evaluate the homogeneity of the observed variables and can be classified because of specific variables. Besides, Cronbach alpha coefficient if the removal variables is more than 0.6. In addition, the correlation coefficient of the total variations is more than 0.3.

KMO & Bartlett's Test of Sphericity is a measure of sampling adequacy that recommended checking the case to variable ratio for the analysis conducted. In most academic and business studies, KMO & Bartlett's test play an important role for accepting the sample adequacy. While the KMO ranges from 0 to 1, For Factor Analysis recommended suitable, the Bartlett's Test of Sphericity must be less than 0.05.

Table 5. KMO and Bartlett's Test for the value chain affecting the export rice industry

Com.	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.984	21.668	21.668	4.984	21.668	21.668	3.905
2	4.496	19.547	41.215	4.496	19.547	41.215	3.508
3	2.484	10.802	52.016	2.484	10.802	52.016	3.851
4	2.170	9.436	61.452	2.170	9.436	61.452	3.183
5	2.127	9.248	70.700	2.127	9.248	70.700	2.619
6	1.244	5.408	76.109	1.244	5.408	76.109	3.173
7	1.080	4.695	80.804	1.080	4.695	80.804	3.129
8	.708	3.080	83.884				
9	.553	2.406	86.290				
10	.505	2.197	88.488				
11	.457	1.988	90.476				
12	.383	1.664	92.140				
13	.336	1.461	93.600				
14	.295	1.282	94.882				
15	.269	1.168	96.050				
16	.213	.927	96.977				
17	.184	.801	97.778				
18	.166	.721	98.499				
19	.140	.611	99.110				
20	.102	.442	99.552				
21	.041	.180	99.731				
22	.035	.154	99.885				
23	.026	.115	100.000				

Source: The researcher's collecting data and SPSS

Table 5 showed that Kaiser-Meyer-Olkin Measure of Sampling Adequacy was statistically significant and high data reliability (KMO = 0.763 > 0.6). This result was very good for data analysis. Table 5 showed that Cumulative percent was statistically significant and high data reliability was 80.804 % (> 60 %). This is very good Data for next research.

Table 6. Structure Matrix for the value chain affecting the export rice industry

Code	Component						
	1	2	3	4	5	6	7
DS1	.971						

DS4	.944		
DS3	.852		
DS2	.828		
CP1	.988		
CP2	.983		
CP3	.982		
PL3		.916	
PL2		.881	
PL4		.812	
PL1		.774	
SP2		.960	
SP3		.901	
SP1		.765	
RS2			.965
RS3			.958
RS1			.753
CT1			.962
CT2			.835
CT3			.699
PH3			.993
PH2			.908
PH1			.508

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

Source: The researcher’s collecting data and SPSS

Table 6 showed that Structure Matrix for the factors affecting the export rice industry had seven Components. Component 1 was Development strategy (X1), Component 2 was Control policy (X2), Component 3 was Planning (X3), Component 4 is Support policy(X4), Component 5 was Rice seeds (X5), Component 6 was Cultivation techniques(X6) and Component 7 was Post-harvest processing (X7) affecting the export rice industry.

Table 7. KMO and Bartlett's Test for the export rice industry

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.649
Approx. Chi-Square	260.950
Bartlett's Test of Sphericity	df
	3
	Sig.
	.000

Source: The researcher’s collecting data and SPSS

Table 7 showed that KMO and Bartlett's Test for the sustainability showed that Kaiser-Meyer-Olkin Measure of Sampling Adequacy was statistically significant and high data reliability (KMO = 0.649 > 0.6).

Table 8. Total variance explained for the export rice industry

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.926	64.198	64.198	1.926	64.198	64.198
2	.655	21.846	86.044			
3	.419	13.956	100.000			

Source: The researcher’s collecting data and SPSS

Table 8 showed that the result was very good for data analysis. The export rice industry showed that cumulative percent was statistically significant and high data reliability was 63.198 % (> 60 %). Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization. Total variance explained for the export rice industry is 63.198 %. Besides, total of Initial Eigenvalues is 1.926 > 1.

5. Conclusion

This study investigated how the export rice industry could be measured following: First of all Development strategy (X1) affecting on the export rice industry with significance level of five percent. The secondly, the Control policy (X2) affecting on the export rice industry with significance level of five percent. Thirdly, the Planning (X3) affecting on the export rice industry with significance level of five percent. Fourthly, the Support policy (X4) affecting on the export rice industry with significance level of five percent. Fifthly, the Rice seeds (X5) affecting on the export rice industry with significance level of five percent. Sixthly, the Cultivation techniques (X6) affecting on the export rice industry with significance level of five percent. Finally, the Post-harvest processing (X7) affecting on the export rice industry with significance level of five percent.

Although rice productivity of KienGiang province is high, with yields averaging 5.3 tonnes per hectare, there are significant differences between regions. In some areas of the KienGiang province, we have some farmers achieving up to 10-12 tonnes per hectare.

Rice plays an important role in the export earnings of the KienGiang province. Among the agricultural products, the rice is one of the commodity, which is exported to many countries in the world and contributing considerable share in the export earnings of total agricultural products. The KienGiang province had export earnings realized from the export of the rice during the last years.

The results of data analysis revealed that respondents consider the following factors as the most influential factors:

1. Planning; standardized coefficients of beta is 0.352.
2. Support policy; standardized coefficients of beta is 0.346.
3. Development strategy; standardized coefficients of beta is 0.339.
4. Post-harvest processing; standardized coefficients of beta is 0.253.
5. Cultivation techniques; standardized coefficients of beta is 0.203.
6. Rice seeds; standardized coefficients of beta is 0.154.
7. Control policy; standardized coefficients of beta is 0.089.

The results of data analysis revealed that all seven components of the most influential factors related to the export rice industry with significance level of 5 %. This result confirmed what found in the Planning that was the most important factor to the export rice industry.

The results of data analysis revealed that all seven components of the most influential factors related to the export rice industry with significance level of 5 %. This result confirmed what found the Control policy that was the less important factor to the export rice industry.

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