Vegetables Export & Import

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Abstract

China remains one of the largest exporters of the vegetable in the world. The present research paper aims to scrutinize ELG or GLE hypothesis and examine the relationship between economic growth, vegetable exports and vegetable imports in China economy from 1988 to 2018 by using annual time series data and econometrics models. The empirical findings confirmed that there is a significant long-run relationship survives between selected variables in China economy. The FMOLS results show that vegetable export has a positive and statistically significant effect on economic growth. There is a long-run causality running from vegetable export to economic growth but there is no short-run causality and bidirectional relationship between economic growth to vegetable import in the short run and long run. The study confirms that the growth in Chinese economy is strongly led by vegetables export. The study suggests China invests more and more capital in vegetable production, vegetable exports and its related industries rather than other agriculture crops. It enhances employment opportunities and augments economic growth at a faster rate through foreign exchange reserves.

Keywords: *Vegetable Exports, Vegetable Imports, Export-Led Growth, Growth-Led Export, Economic Growth*

JEL Classifications: C33, Q17, F14, F43

1. Introduction

In the World, almost three-fourths of the production of vegetables occurs in Asia, mostly in China, which produces over half of the world's vegetables (Silva Dias, J 2011). China is the largest producer of vegetables in the world followed by India (Kondal, K 2014, 2015, 2016, 2017, 2018, 2020). It is participating significantly in the global trade with international market standards through the adoption of modern technology in the production of vegetables (Anam and Muhammad, 2018). These crops are the cash and commercial crops, which are also generating more employment opportunities for the rural and semi-urban youth and young age people because most of the crops are labour-intensive from starting to ending (cultivation to marketing stage) (Silva Dias, J 2011). For vegetables, there is huge demand and consumption has been increasing over some time in the World, due to high and rich sources of vitamins and nutrition are available in the vegetables. However, vegetables are playing a pivotal role in exports. The role of exports for economic growth has been widely acknowledged in international trade. Generally, exports encourage economic growth in multiple ways, such as; productivity, economies of scale and demand in the international market through the adoption of efficient modern technology (Maureen Were et al 2002; Kondal, 2014, 2015, 2016, 2017, 2018, 2020). Furthermore, in the World, China is producing more vegetables and it has the highest population country. However, its economic growth has been increasing rapidly through international trade and investment (Anam and Muhammad, 2018).

The classical economists (Adam Smith and David Ricardo) assumed that the role of trade is predicted to achieve economic growth through the specialisation of goods. In trade, exports contribution is often substantial in developing nations (Rajwant, K & Amarji, S, 2015; Shah et al, 2015). Thus, in the Keynesian argument, during a short time, export leads to income growth through the foreign exchange multiplier. The developing countries are extended their exports for economic growth in the long run as well as short run. The exports are having a capable to curtail the impact of market explosive nature in the world because all the countries become an exporter to the world (Bakari, S and Mabrouki, M 2017; Bakari, S 2018). In

literature, exports have played an imperative role in the economic growth of a country by utilizing all the resources (Shah et al, 2015; Bakari, S 2017 & 2018; Raju, G 2018).

In literature, the eminent personalities (Theoretically, Adam Smith and Ricardo and Empirically, Balassa 1978 and 1985; Salvatore, D, 1983; Jung and Marshal, 1985; Chow, 1987; Bhagwati, 1988 etc.,) stated the basic relationship between the exports, imports and economic growth. Later, there was a drastic change in the international trade policies to boost the economies in the world. Most of the nations have given their priority to export-oriented products to get more foreign exchange through trade in the World. In international trade, some hypotheses are related to growth led and export-led. Export-Led Growth (ELG) and Growth Led Export (GLE) hypothesis state that exports can lead to economic growth and economic growth lead to the exports in the country respectively. Moreover, there are numerous theoretical and empirical studies are available in the literature. Based on empirical results, most of the nations have adopted export-led growth and growth led export models in the world. In addition, the empirical analysis concluded that Export-Led Growth (ELG) and Growth Led Export (GLE) may be and may not be universal in the world. Export-Led Growth (ELG) and Growth Led Export (GLE) hypotheses have been proved and disproved also. To achieve economic growth and sustainable development, nations are trying to increase their exports rapidly to the world. In general, theoretical and empirical analysis, economic growth does not only depend upon exports but also other macro variables such as; imports, capital, exchange rate, demand in the international market, output, trade policies and other factors (Raghutla and Chittedi, 2020).

Given this background, it fetches us, to the point of interest that China is playing a vital role in the production of vegetables in the World. The present study is to verify whether vegetable export leads to economic growth or not in China country. And there is a need to verify the relationship between economic growth and export in the long run and short run. This research paper has been attempted to address the above queries. Keeping in view, the research paper aims to examine the relationship between vegetable exports, vegetable imports and economic growth in China by using the annual time series data from 1988 to 2018. This research paper contributes to the existing literature and also fills some following gaps. Most of the earlier studies focused on the relationship between agriculture exports, agriculture import and economic growth in different nations, regional blocks and trading partners. To the researchers best of knowledge, there is no single study on the relationship between vegetable exports, vegetable imports and economic growth in China by using annual time series data from 1988

to 2018. Therefore, the present study looks over and presents some policy implications for economic growth in China country.

The present study is organized structurally as follows; section 2 discusses the review of the literature. Section 3 explains the data and methodology aspects. Section 4 provides the empirical results and discussion. Finally, section 5 gives the conclusion and policy implications.

2. Review of Literature

A vast literature is available on exports, imports and economic growth. From the last few decades, most of the studies concentrated empirically to examine the relationship between exports, imports and economic growth in the World.

Author(s)	Time	Country	Econometric Models	Conclusion
Raju, G, 2018	2005-2017	India	a. Cointegration b. Granger Causality	Ex <=> GDP Im <=> GDP

Bakari, S 2018	1970-2016	Tunisia	a. Cointegration
			b. Granger Causality
				Ex # GDP: LR
				Ex => GDP: SR

Aslan and Topcu, 2018	2000-2015	Turkey	a. Panel Cointegration b. Granger Causality	Ex => GDP
Simasiku and Sheefeni, 2017	1990-2014	Namibia	a. Cointegration b. ECM	Ex => GDP: SR
Bakari, S and Mabrouki, M 2017	1980-2015	Panama	a. Cointegration b. Granger Causality c. VAR	Ex => GDP
Bakari, S 2017	1970-2015	Tunisia	a. Cointegration b. VAR	Ex => GDP: LR & SR
Rajwant and Amarjit, 2014	1970-71 to 2010-11	India	a. Cointegration b. Granger Causality	Ex => AGDP
Vardari. L, 2015	2004-2014	Kosova	a. Cointegration b. Granger Causality	Ex<=>GDP Im =>Ex Ex =>Im: SR
Shah et al, 2015	1972-2008		a. Cointegration b. VECM c. Granger Causality	AEx=>GDP: LR (-Ve effect) AEx # GDP: SR
Ijirshar, V.U 2015	1970-2012	Nigeria	a. Cointegration b. ECM c. Granger Causality	AEx=>GDP: LR AEx<=>GDP: SR

Sachin N. Mehta et al 2015	1976-2014	India	a. Cointegration
			b. VECM
			c. Granger Causality
				GDP => Ex
				GDP # Im
				Ex => Im

Rai and Jhala, 2015	2000-2013	India	a. Cointegration b. Granger Causality	Ex<=>GDP
Hussaini et al, 2015	1980-2013	India	a. Cointegration b. VECM	Ex<=>GDP
Ronit and Divya, 2014	1969-2012	India	a. Cointegration b. Granger Causality c. VAR	EG (GDP) =>Ex
Auro Kumar Sahoo et al 2014	1981-2010	India	a. Cointegration b. VECM	GDP => Ex

			c. Granger Causality	
Ojo et al, 2014	1980-2012	Nigeria	a. Cointegration b. VECM	AEx=>GDP: LR

Gilbert et al 2013	1975-2009	Cameroon	a. Cointegration
			b. VECM
			c. Granger Causality
				AEx (Banana)=>GDP: LR
				AEx(Coffee) =>GDP: LR
				AEx(Cocoa) =>GDP: LR (-Ve Effect)
				AEx # GDP: SR
				GDP=>AEx (Banana): SR

Dilawa Khan et al, 2012	1972-2009	Pakistan	a. Cointegration b. VECM c. Granger Causality	Ex <=> GDP Im <=> GDP
Khaled R.M et al 2010	1980-2007	Libya	a. Cointegration b. VECM a. Granger Causality	Ex => GDP
Balaguer and Jordá, 2004	1961-2000	Spain	b. Cointegration c. Granger Causality	Ex<=>GDP
Chemeda, 2001	1950-1986	Ethiopian	a. Cobb-Douglas Production Function b. Cointegration	Ex=>GDP: LR Ex=>GDP: SR

In the above review of literature, studies focused mainly on the relationship between exports, imports and economic growth. The results differ from each other. Among them, few studies concluded that there is bidirectional causality; few of them concluded unidirectional causality and some of them concluded that there is no causality. The results of past studies show that ELG and GLE hypotheses have been proved and disproved in the earlier literature. And, many of them concentrated on total exports and agriculture exports as a source of economic growth in the past studies. The literature show that vegetable export has been ignored except for one scholar, which also plays a key role in total exports.

3. Data and Methodology

3.1 Data:

This study aims is to examine the relationship between economic growth (EG), vegetable exports (EX) and vegetable imports (IM) in China during the period from 1988 to 2018. To attain this objective, the study used annual time series secondary data which has collected from World Development Indicators, online database-WDI, 2020 (World Bank). Gross Domestic Product (GDP) is the proxy variable to economic growth (EG) and its value is in constant 2010 US$. Vegetable exports and vegetable imports values are in US$ Thousand.

3.2 Methodology:

3.2.1. Model Specification: The model Specification are as follows;

$$EG = f(EX) \qquad (1)$$

$$EG = f(IM) \qquad (2)$$

$$EG = f(EX, IM) \qquad (3)$$

To maintain the uniformity in the data, all the variables data has converted into natural logarithms (ln) to avoid the problem of heteroscedasticity. This technique has been applied widely in the earlier literature (Raghutla and Chittedi, 2020ab; Raghutla, 2020; Raghutla et al, 2019; Raghutla et al., 2018a; Raghutla et al., 2018b; Ummalla and Raghutla, 2015; Rajwant, K & Amarji, S 2015; Ronit and Divya, 2014). Therefore, the model's specification is as follows;

$$lnEG_t = ln\beta_0 + \beta_1 lnEX_t + u_t \qquad (4)$$

$$lnEG_t = ln\alpha_0 + \alpha_1 lnIM_{2t} + v_t \qquad (5)$$

$$lnEG_t = ln\varphi_0 + \varphi_1 lnEX_t + \varphi_2 lnIM_{2t} + e_t \qquad (6)$$

Whereas

EG= Economic Growth

EX= Vegetable Exports

IM= Vegetable Imports

β_0, α_0 and φ_0 are constant

β_1, α_1, φ_1 *and* φ_2 *are the parameters of explanatory variables to be estimated.*

u, v and e are stochastic terms (or) disturbance terms

t= it represents time (t=1, 2, 3.....t)

3.2.2 Unit Root Test

In general, prior to the application of any econometric models, we need to check the properties of stationary of the series. The first step is to test the stationary of the selected variables to elude the misleading and spurious results. Non-stationary variables will provide biased and inconsistent results which will give false information. Therefore, the present study applied Phillips Perron (PP) unit root test. The null hypothesis state that the series has a unit root which is against to alternative hypothesis of series does not have a unit root. PP unit root test equation as follows;

$$\Delta Yt = \alpha + \beta Yt - 1 \sum_{k=1}^{n} \gamma k \, \Delta Yt - k + \varepsilon t \qquad (7)$$

Here, Y is the variable, α is the intercept, y_{t-1} is the lag of the Y variable. K is the lag and ε is the error term. If the selected variables are having the same order of integration, i.e., I (1),

then the PP test indicates that all selected variables are not stationary at level, but stationary after taking the first difference I (1).

3.2.3 Johansen-Juselius (JJ) Cointegration Test

After the confirmations of the selected variables are stationary in first difference I(1), the next step is to examine the long-run relationship. To explore the long relationship, the present study employed a cointegration test, which was proposed by Johansen-Juselius (1990). Johansen-Juselius suggested two (Trace and Max.Eigen) test statistics, based on them, we can easily understand whether there is a long-run relationship that exists or not. Johansen's Trace and Max.Eigen tests statistics are as follows;

$$\boldsymbol{\lambda \text{trace}\ (\mathrm{r}) = -T \sum_{i=r+1}^{n} \ln\ (1 - \lambda \mathrm{i})} \qquad \textbf{(8)}$$

$$\boldsymbol{\lambda \text{max. eigen}\ (\mathrm{r}, \mathrm{r}+1) = -T ln(1 - \lambda \mathrm{i})} \qquad \textbf{(9)}$$

Where λi the estimated characteristic (Trace and Max.Eigen) and T is the number of observations in the study. The null hypothesis of $\lambda trace$ is r = 0, which is against the alternative of $r > 0$ and λmax is $r = 0$, which is against the alternative of $r = 1$.

3.2.4 Long Run Coefficient

Cointegration analysis doesn't reveal the cause and effect relationship. Therefore, the present study applied the Fully Modified Ordinary Least Square (FMOLS) test to the estimation of long-run coefficients. FMOLS test was proposed by Phillips and Hansen (1990) and employed by Pedroni (2001a & 2001b) and Pedroni (2004). The advantage of this model is to accounts for both serial correlation and endogeneity problems. The FMOLS equation is as follows;

$$\mathbf{Yt} = \boldsymbol{\beta 0 + \beta 1 Xt + \varepsilon t} \qquad \textbf{(10)}$$

Whereas, Y is the dependent variable and X is the corresponding vector of the independent variables.

3.2.5 Vector Error Correction Model (VECM)

There is a possibility to have disequilibrium in the short-run (Gujarati, 2004). The Vector Error Correction Model is used to study the short-run dynamics between the variables. It confirms the disequilibrium converge to the long-run equilibrium or not. To estimate the Vector Error Correction Model, need to be selected the lag length. The lag length criterion will be decided based on Akaike Information Criterion (AIC) and Schwarz Information Criterion (SIC). Based on AIC and SIC values, the lag length is selected i.e., two (2). If the estimated coefficient of a cointegrating model of error correction value is negative and the probability value is significant at 5 per cent. It shows that there is a speed of adjustment towards long-run equilibrium. If their coefficient of a cointegrating model of error correction is positive and P-value is insignificant at 5 per cent. It shows that speed of adjustment does not take place toward long-run equilibrium.

3.2.6 Granger Causality Test

Finally, the Granger Causality test has been used to verify the short-run causal relationship between the selected variables. Granger causality test was proposed by Granger, C.W.J (1969). Granger causality test formula is as follows;

$$Y_t = \sum_{i=1}^{n} \alpha_i Y_{t-i} + \sum_{j=1}^{n} \beta_j X_{t-j} + u_{1t}$$

$$X_t = \sum_{i=1}^{n} \lambda_i Y_{t-i} + \sum_{j=1}^{n} \sigma_j X_{t-j} + u_{2t} \qquad \textbf{(11)} \quad \textbf{(12)}$$

To test the null hypotheses, each variable under consideration that does not granger cause other variables. Based on F-statistics, the hypothesis is to be tested. If the F-Statistic value is more than its critical value at 5 per cent, reject the null hypothesis and accept the alternative hypothesis.

4. Empirical Results and Discussion

4.1 Introductory Analysis

4.1.1 Figures

The graphical presentation of China's economic growth, vegetables exports and imports from 1988 to 2018 is reported in 4.1 Figure. These three graphs seem to be having unit root or non-stationary.

Table 1: Descriptive Statistics (1988 to 2018)

Descriptive Statistics	EG	EX	IM
Mean	28.72366	15.99449	16.30937
Median	28.69710	15.72793	16.15061
Maximum	30.01031	17.09536	18.09492
Minimum	27.36262	15.30156	14.39921
Std. Dev.	0.845702	0.655073	1.315422
Skewness	-0.068228	0.483437	0.137055
Kurtosis	1.738969	1.623987	1.462937
Jarque-Bera	2.078060	3.653166	3.148694
Probability	0.353798	0.160963	0.207143
CV in (%)	2.944	4.095	8.065
Source: *Author's calculations based on natural logarithm data*			

Table 1 shows the descriptive statistics of the variables. On average the economic growth (28.72), vegetable export (15.99) and vegetable imports (16.30). During the study period, vegetable imports are highly deviating from their mean compared to other variables. Among three variables, economic growth has maintained more stability. Economic growth's skewness value is negative (-0.06). It indicates that the frequency distribution has a long left tail. The remaining two variables are positively skewed. The Jarque-Bera test's probability value indicates the rejection of the null hypothesis. All the series are normally distributed.

4.2 Unit root test

Probably, we will get spurious results when we use non-stationary variables in the models. To avoid the spurious results in time series analysis, we need to check the properties of stationary. For this purpose, the present study applied Phillips Perron (PP) unit root test, to know statistically whether the variables have unit root or not. The PP unit root test results are

presented in Table 2. The results confirmed that all three variables (economic growth, vegetable exports and vegetable imports) are not stationary at level but stationary at the first difference I (1). Economic growth is statistically significant at 10 and vegetable exports and vegetable imports are statistically significant at 1 per cent.

Table: 2 PP Unit root Test results

Variables	At Level		At First Difference	
	Statistic	P-Value	Statistic	P-Value
EG	-0.78712	0.8084	-2.63002	0.0987*
EX	0.756042	0.9914	-6.72074	0.0000***
IM	-0.19844	0.9283	-5.06522	0.0003***

Note: *** and * Indicate the rejection of the null hypothesis of a unit root test at 1 and 10% significance level.

4.3 The Long Run Equilibrium

Since all the variables are considered to be stationary in the first difference I (1), the present study employed Johansen-Juselius (JJ) cointegration test to explore the long-run equilibrium relationship between selected variables in China country. Before the JJ test, we need to select the lag length. The lag length is two (2) based on Schwarz Information Criteria (SIC). The results of the JJ cointegration test are reported in table 3. In the JJ test, both the test statistics (trace and max.eigen) values revealed that rejection of the null hypothesis of no cointegration among the selected variables in the equations (4), (5) and (6) at different levels of significance. Therefore, the JJ cointegration test confirmed that there is long-run equilibrium relationships exist between economic growth, vegetable exports and vegetable imports in China economy.

Table: 3 Johansen-Juselius Cointegration Test Results

Equations	Hypothesized: no. of CE(s)	Trace Value	Trace Critical Value	Max. Eigen Value	Max. Eigen Critical Value
Eq. (4)	None	28.33483***	15.49471	27.17671***	14.26460
	At Most 1	1.158123	3.841466	1.158123	3.841466
Eq. (5)	None	16.49109**	15.49471	13.95493*	14.26460
	At Most 1	2.536155	3.841466	2.536155	3.841466
Eq. (6)	None	42.54911***	29.79707	28.99633***	21.13162
	At Most 1	13.55279*	15.49471	11.84933	14.2646
	At Most 2	1.703455	3.841466	1.703455	3.841466

Note: ***,** and * indicate the rejection of the null hypothesis of a unit root test at 1, 5 and 10% significance levels respectively.

4.3The Long Run Coefficients through FMOLS

In the JJ cointegration test, there is the existence of a long-run relationship among the selected variables. It doesn't reveal a causal relationship. Therefore, the present study used the FMOLS model, to estimate the cause and effect of independent variables on the dependent variable in the China country. The long-run coefficient of results is presented in Table 4. The results confirm that vegetable export is a positive and significant effect on the economic growth of China economy in the eq. (4). This result shows that a 1 per cent increase in vegetable export, lead to an increase in economic growth by 1.79 per cent in China economy. In this case, the present study accepted the ELG hypothesis. In the eq. (5), vegetable imports also have a positive and significant effect on China's economy. It means a 1 per cent increase in vegetable imports, lead to an increase in economic growth by 1.75 per cent. In this case, the present study accepted the ILG hypothesis. Whereas in the eq. (6), vegetable exports and vegetable imports are positive and negative affect significantly at 1 and 5 per cent respectively. These results show that a 1 per cent increase in vegetable exports and vegetable imports, leads to an increase and decrease the China's economy by 2.18 and 0.38 percentages respectively. Therefore, the present study declares that vegetable exports-led growth (ELG) in China economy. As we know that China's rank is one (1) in terms of vegetable production in the World. However, it also imports more vegetables from the world, due to international market conditions and the overcrowded population in the nation. Present study result (concerning to Export-Led Growth) is very close to the (Bakari, S 2017) results.

Table: 4 Fully Modified Least Squares (FMOLS) Results

Model	Independent Variable	Coefficient	t- statistic
Eq. (4)	EX	1.796968*** (0.010061)	178.603
Eq. (5)	IM	1.754318*** (0.031364)	55.933
Eq. (6)	EX	2.181788*** (0.180555)	12.08382
	IM	-0.381914** (0.176322)	-2.166002

Note: Standard Error is within the brackets
: *** and ** Indicates the at 1and 5 % significance levels respectively.

4.4 Granger Causality

After confirmation of the long-run relationship between the selected variables, we need to estimate the direction of the short-run causal relationship between selected variables. The present study employed the Granger causality test and Error Correction Model to estimate the

short-run and long-run causality tests. The short-run and long-run causality results are reported in Table 5. In case of eq. (4), the results show that there is a long-run causality running from vegetable exports to economic growth but there is no short-run causality. In the case of eq. (5 & 6), there is a significant bidirectional relationship between economic growth to vegetable imports in the short-run and long-run. In the case of eq. (6), there is no short-run relationship between economic growth and vegetable exports; vegetable exports and vegetable imports in the short-run, but there is a long-run causality running from vegetable exports and vegetable imports to economic growth.

Table: 5 Short run and Long run Causality Results

Model	Null Hypothesis	F-Statistic	Long run Causality ECM (-1)	Short run causality decision	Long run causality decision
Eq. (4)	EX does not Granger Cause EG	1.13573 (0.3385)	-0.01481** (0.0337)	No	Yes
	EG does not Granger Cause EX	0.30608 (0.7393)			
Eq. (5)	EG does not Granger Cause IM	5.56451** (0.0358)	-0.027036** (0.0111)	Yes	Yes
	IM does not Granger Cause EG	9.82807*** (-0.0093)			
Eq. (6)	EX does not Granger Cause EG	1.13573 (0.3385)	-0.006405*** (0.0045)	No, in case of EX & EG and EX & IM.	Yes
	EG does not Granger Cause EX	0.30608 (0.7393)			
	IM does not Granger Cause EG	9.82807*** (0.0093)			
	EG does not Granger Cause IM	5.56451** (0.0358)		Yes, in the case of IM and EG	
	IM does not Granger Cause EX	0.13366 (0.8771)			
	EX does not Granger Cause IM	0.51338 (0.6194)			

Note: ***, ** and * indicates the at 1, 5 and 10 % significance levels respectively. : The parenthesis ( ) is p-values

5 *Conclusion and policy Suggestion*

The main intention of this paper is to investigate ELG or GLE hypothesis and examine the relationship between economic growth, vegetable exports and vegetable imports in China economy from 1988 to 2018 by using annual time series econometric models.

Descriptive statistics showed that vegetable imports are highly deviating from their mean value compared to vegetable exports and economic growth. China's economic growth has maintained more stability during the study period. The empirical findings are confirmed that

there is a significant long-run equilibrium relationship exists between economic growth, vegetable exports and vegetable imports in China economy. The FMOLS results shown that vegetable exports variable is a positive and significant effect on economic growth in the eq. (4). It means a 1 per cent increase in vegetable exports, lead to an increase in economic growth by 1.79 per cent in China economy. Therefore, the present study confirmed that ELG is valid and accepted the ELG hypothesis. In the case of eq. (5), vegetable imports also have a positive and significant effect on China's economy. It means a 1 per cent increase in vegetable imports, lead to an increase in economic growth by 1.75 per cent. In this case, the present study confirmed the ILG hypothesis and accepted the ILG hypothesis also. In general, economic growth does not only depend upon exports but also other macroeconomic variables. The present study has considered imports also play an important role in determining economic growth. Whereas in the case of eq. (6), vegetable exports and vegetable imports are having a positive and negative effect on the economic growth significantly at 1 and 5 per cent respectively. It means a 1 per cent increase in vegetable exports and vegetable imports, leads to an increase and decrease in China's economy by 2.18 and 0.38 percentages respectively. There is a long-run causality running from vegetable exports to economic growth but there is no short-run causality in the case of eq. (4). Whereas, in the case of eq. (5 & 6), there is a significant bidirectional relationship between economic growth to vegetable imports in the short-run and long-run.

By and large, the present study strongly confirmed that vegetable exports-led growth is existing in the China economy. Since it is number one in the World in terms of the production of vegetables, there is a wider scope for the production of more quality vegetables by adopting modern technology. It has fetched out to export-led growth in the economy. Present study results are similar to the (Bakari, S 2017) results, which has conducted a study in Tunisia (Concerning Export-Led Growth). In the World, China has the highest share of production of vegetables. In addition, it is also importing vegetables from the World, due to having international trade restrictions and a high population. If China invests more and more capital on vegetable production and exports rather than other agriculture crops, its economic growth increases at a faster rate and touches the peak level through foreign exchange reserves.

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