Edible Oil Imports in Pakistan

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ABSTRACT

Pakistan is the fourth largest edible oil importing country. Pakistan imports 75% of the total edible oil consumed in the country to meet its demand. The edible oil imports composed 94% of Palm Oil and the remaining portion comprises the imports of edible oil, coconut oil, olive oil etc. Pakistan imports 75% of its palm oil from Malaysia making it the biggest trade partner in terms of Palm Oil. The trend of oilseed crop cultivation is not very common in the country and the biggest hurdle in introducing the sunflower crop which is one of the best alternatives is that its sowing period overlaps the sowing period of wheat and most of the time its maturity period overlaps the sowing period of cotton which results in the lower productivity of cotton. Problems can be solved by taking serious steps which may utilize the unrealized potential of the country.

Keywords: Edible Oil, imports.

Introduction

In Pakistan, agriculture is central to economic growth and development. Being one of the most dominating sectors it contributes 21.4% to Gross Domestic Product of the country. Country is consumer based economy and to fulfill the need of its Population of 180 Million it heavily depends on this sector. Edible Oil is one of the most frequently used consumer good in the economy. There are different varieties of edible oil are available in the country. Despite being an agricultural country Pakistan is the 4th largest importer of Palm Oil after China, India and EU by importing around 75% of its Edible Oil requirement while domestic resources contribute only 25% of the total domestic need. Pakistan have a huge potential in agricultural sector but due to lack of research and adaptation of new technology Pakistan have not yet found a way to utilize its resources in a more productive manner. Domestic crops of cotton, mustard and sunflower contribute in the domestic production of edible oil but the share is not even enough to satisfy the half of the country's need. Palm Oil import

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*The material presented by the author does not necessarily portray the view point of the editors/ editorial board and the management of ORIC, Iqra University, Main Campus, Karachi-PAKISTAN.

contributes more than 90% to the total edible oil imports and the country imports around 75% of its Palm Oil from Malaysia. When it comes to edible Oil imports, Malaysia is the most important trading partner of Pakistan as it fulfills the 90% import requirements of Pakistan. The Trade with Malaysia has also been increased following the signing of FTA (Free Trade Agreement) between Malaysia and Pakistan in 2007. In spite of being a necessity commodity the duty on Palm Oil imports is still very high starting from 6850 RS/MT to 10850 RS/MT even after the signing of FTA. The higher duties on these imports results in an increased burden on the end consumer who suffers the most. That's why in India there is no duty on Crude Palm Oil imports and only 7.5% duty on import of Refined Palm Oil Products. Whereas in Bangladesh they have no import duty on edible oil imports and what they only have is 10% VAT. The following parts of this paper will shed light on some aspects of the edible oil imports of the country and state some possible solutions for it.

Review of Literature

In the research paper by Shafiq Ahmad Khan, M. Saleem & Javed Iqbal Khan (2008), enlightened that edible oil's persistent shortage and, consequently, increasing imports for meeting domestic consumption-needs, has attained almost the second position in the import-bill, the first being petroleum products. Not only the increased in the quantity and import-costs, but also the remedial measures suggested to reduce the imports and slight increase in the domestic production of oil-seeds have, thus, prompted the authorities to re-visit the situation that exists in the country. The paper done by the researcher describes that unfavorable edible oil position in the country have not changed much since 1994. Although the domestic production of oil seeds have increased over time but the country is still severely relying on the imported edible oil. In order to remedy this situation, there should be a flawless national plan defining the objective to achieve the boxes of both long and short-term self-sufficiency. The plan should be drawn up with the stakeholders and its implementation should be assigned to the provincial governments, with complete assistance of the State Institutions.

In the Study by Muhammad Ali, Syed Arifullah and Manzoor Hussain Memon (2008), they have found that edible oil deficit have negative and significant long run relationship with Food expenditure of a household. The coefficient advocates that with 1 % rise in edible oil deficit, food expenditure would drop by 0.14 %. The association between the GDP per Capita and food expenditure is found to be positive and substantial with elasticity of 0.261 signifying that 1 % increase in GDP per capita will origin food expenditure to surge by 0.26 %. The relationship between food expenditure and food subsidy is found to be inconsequential symptomatic that Government's food support programs are not in effect, on account of inappropriate targeting; and end user's perception about quality and approachability of subsidized food. Negative relationship among food expenditure and edible oil deficit suggests that this product has been produced far proficiently in the exporting countries due to which it has been imported even at lower prices. It looks favorable for users but from ultimate macroeconomic perspective the imports are growing at alarming rate would increase stress on BoP deficit and the economy would undergo.

Pakistan needs to exploit its unrealized potential in the production of oilseeds. In order to accomplish this mark commendably the agronomy of oil crops should be given primacy on the basis of their yields, climatic necessities and steadiness with the other state objectives. Some worldwide practices are need to be introduce in Pakistan and requires burning attention in order to deal with the growing deficit of edible oil. Instead of banking on production of other countries, Pakistan should keep its concentration on the reinforcement of home production of edible oilseeds. There is also a necessity to encourage the cultivation of non-traditional oil seeds like safflower, sunflower, soya bean, olive and canola along side

with the other oilseed crops which have bright chances to become the key source for the country. The areas which are found socially gainful for the oilseeds crop cultivation should be marked as "Special Cultivation Zones". The areas of Potohar, Khuzdar, Loralai, Quetta, Pishin, Zhob and Sibi has great probable to contribute in the production of edible oil seeds. The weather circumstances (high rainfalls) in some parts of Punjab and few parts of KPK like Hazara region are quite appropriate for the cultivation of olive oil. The policy-makers should explore and enterprise a strategic framework for the cultivation of olive to accomplish the economic growth. The determination in research and training are needed to be parallel in order to improve the productivity in oilseed sector. Skill Development Programs are necessary for the education of farmers to understand the modern practices of farming. Authorities should encourage landowners to cultivate these crops on their land by setting reasonable support prices. The study suggests that there are many options available to coupe up but thing that's somewhere missing is the will of taking initiative.

Empirical analysis of import demand function of top 5 oil importers of Palm Oil by Amna Awad Abdel Hameed and Fatimah Mohamed Arshad, The results of this study provide the following findings. First, the palm oil price variable across the five models was found to be significant, and the demand for the oil in all the studied countries excluding India, turned to be highly sensitive to this factor. Secondly, the prices of soybean and rapeseed oils that turned to be the most essential substitute for palm oil in all countries has been found to be vital determinants for the demand of palm oil. From a policy perception, these findings emphasize the requirement for reorientation of palm oil marketing policies, in the exporting countries, in a way that would make it possible for them to capture the ever-increasing market share through adopting suitable pricing approaches. Formulation of highly competitive pricing strategies is imperative, considering the great substitutability of palm and soybean oil in the edible and non-edible usage and to some degree, the substitutability of palm and rapeseed oils for food and industrial purposes. The study reveals that the level of income is positively related to the palm oil import demand in nearly all the countries. Furthermore the exchange rate evidenced to be an imperative factor affecting the import demand in both India and China. From policy perspective, these conclusions highlight the necessity of observing the performance of these two macro-variables in the importing countries. The recognized important role played by the import tariff imposed on imported oils in shaping the overall import demand, indicates the necessity of the involvement in the bilateral and multilateral trade agreements that comprise removal of tariff barriers to open the way for palm oil among other vegetable oils. It is very important to boost activities directed towards enhancing the image of palm oil to counter the promotions that try to portrait it as a "Cruel Oil" through raising health and sustainability issues.

The research paper on the same topic by Depdeeb De (2011) explains that despite being the contribution of 6%-7% of the world Oilseed production there is a terrible gap between the domestic production and the demand. That's why India meets more than 50% of its demand for edible oil through imports from Malaysia and Indonesia. The mismanagement in this sector stems to a rise in inflation which hurts the normal Indian. Some Suggestions have been given in the paper to check the inflation like the increased role of the state owned machinery to maintain price stability. This paper also takes an overview of the domestic players and discussed the current market scenario and suggests different strategies that are quite feasible in the sub-continent region.

Data Analysis

The objective of this data analysis is to view different aspects of the edible oil imports of Pakistan and try to find the major determinants which drive the import demand of edible oil in the country. The Edible Oil imports depends heavily on Palm Oil imports which tops the

list with 94% of the total imported edible oil and the other remaining portion is occupied 3% by 1.92% by other oils like Coconut, Palm Kernel, babasu etc.,. Palm Oil is the most dominant category in the Edible Oil Imports of the country. As far as the Palm Oil imports is concern, the 75% of it came from Malaysia while the other key countries are Singapore and the Indonesia which contributes 18% and 3% respectively. If we analyze by taking historical price data in to account we came to know that the Price of Soya Oil was almost the same as Palm Oil in the initial years but as time passes the prices of Soya Oil have surpassed the Palm Oil. That was the point where Palm Oil gains its price advantage which stems the increase in the demand of Palm Oil all around the world. If we take a look at the countries from which Pakistan is importing Soya oil then the Netherland tops the list by contributing around 28% to the total imports following by the Argentina who provides 14% of the soya oil imports.

Figure 1: Historical Prices
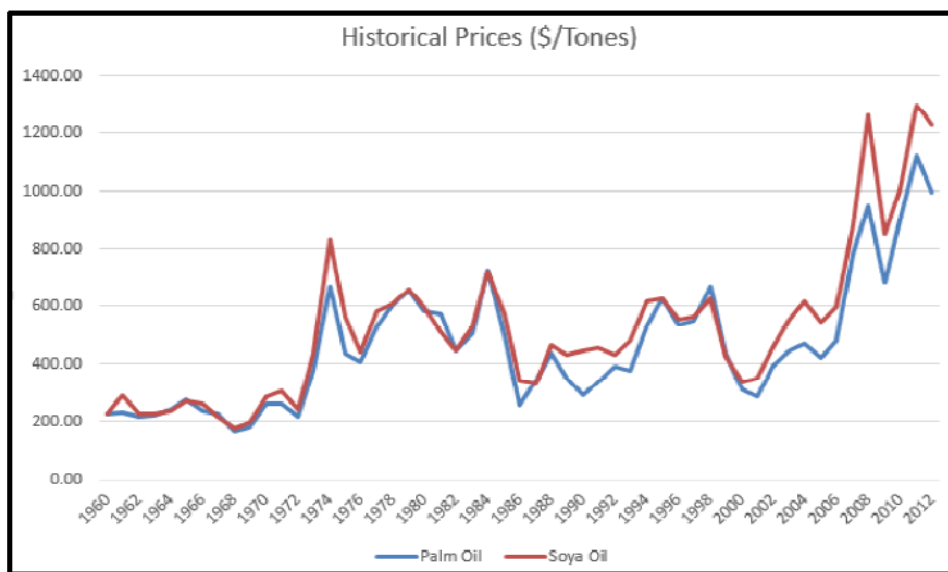
If we look more closely into the imports of edible oil we came to know that Pakistan is importing four types of palm related products. The most dominating category is Palm Olein which contributed 49.36% in the total edible oil imports of 2011. Palm Olein is liquid form of the palm kernel oil after a practice called fractionation. It is used globally as a frying and cooking oil. It is used also as an ingredient in many food products. Second most imported category of edible oil is the crude Palm Oil which contributes 36.35% to the total edible oil imports. The third category which is most imported after crude palm oil is the Palm oil which accounts for 6.82% of the total edible oil imports while soyabean and tallow contributes 2.92% and 1.39% respectively. Pakistan spends a huge amount of its foreign reserves on the edible oil imports and the most of it came from Malaysia. The trade with Malaysia has grown more after the signing of Free Trade Agreement (FTA 2007) between two countries. Despite of the fact that the volume of trade between these two countries is quite good and as far as the edible oil is concern Malaysia is the biggest trading partner of Pakistan but there are still some barriers which hinders the trade between both countries. Even after the signing of FTA between these two countries, Pakistan's government has not removed the duties on its edible oil imports or not even take it to the minimum level which will ultimately benefits the consumer and increase its purchasing power.

Figure 2: Commodity wise yearly analysis – 2011
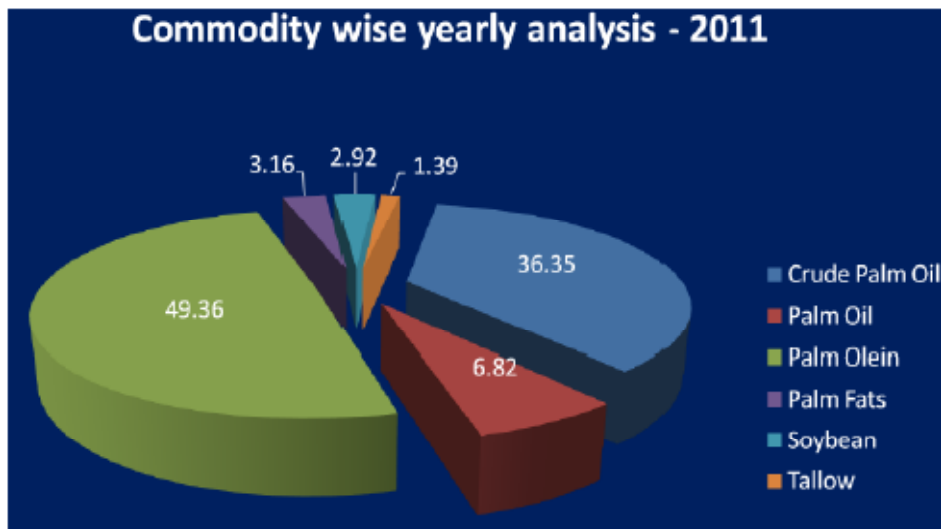
As per the FTA between Pakistan & Malaysia, edge is given to the imports from Malaysia by duty reduction of 15% equivalent to $20 for RBDPO and $15 for CPO. The trade with Indonesia has anticipated to swell up to 150% after the signing of a FTA (Free Trade Agreement). In view of this FTA, Custom Duty on imports from Indonesia will also be decreased by 15%. The most important think that we must note is that what we are doing is too little too late. In our neighboring country India which is one of the top 2 importers of Palm Oil there is no import duty on Crude Palm Oil and only 7.5% duty on import of Refined Palm Products. These are the policies by which India is encouraging its local palm oil refineries. Pakistan should take a leave out of this book. In another country of the same region Bangladesh there is no import duty in edible oil imports and what they only have is the 10% of VAT. Pakistan should study the actions of the other countries who has the same problem and analyze how they have overcome or minimize the problems. Pakistan could remove barriers from trade to benefit its consumers as Pakistan is a consumer based economy. Some actions might be taken to support domestic oil refineries as well.

Methodology

After building some background and being familiar with some of the statistical figures the following model is built to analyze the factors which explains the variations in the edible oil imports of the country. The data used for the purpose of modeling is from 1960-2012.

$$\text{Real Imports} = f(\text{Population, GDP per capita})$$
$$\text{Ln (Real Imports)} = \beta_0 + \beta_1 D[\text{Ln (Population)}] + \beta_2 \text{Ln (GDP per Capita)}$$

This equation illustrates the dependence of edible oil imports (real) on the Population and GDP per capita (real). Following are the results of the modeling applied:-

Figure 3: Regression Analysis

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Dependent Variable: LRIMPORTS
Method: Least Squares
Date: 11/19/13   Time: 23:39
Sample (adjusted): 1962 2012
Included observations: 51 after adjustments
Convergence achieved after 4 iterations
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Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.017502	1.146235	6.122219	0.0000
D(LPOPULATION)	51.48686	17.78087	2.895633	0.0057
LGDPPC	1.913863	0.139391	13.73013	0.0000
AR(1)	0.468091	0.132619	3.529582	0.0009

R-squared	0.947604	Mean dependent var		19.44200
Adjusted R-squared	0.944260	S.D. dependent var		1.303833
S.E. of regression	0.307826	Akaike info criterion		0.556622
Sum squared resid	4.453577	Schwarz criterion		0.708137
Log likelihood	-10.19385	Hannan–Quinn criter.		0.614520
F-statistic	283.3405	Durbin-Watson stat		1.987348
Prob(F-statistic)	0.000000			

The value which is denoted as C in the model is the intercept and for the intercept T-Calculated is greater than T-Tabulated so we can reject H0 which shows the significance of the variable.

Table 1:

Parameter	T calculated	T Tabulated	H_0
C	6.122	2.0096	Rejected
B_1	2.895	2.0096	Rejected
B_2	13.730	2.0096	Rejected

$T_{cal} > T_{tab}$ = Rejection of H_0(significant)

$T_{cal} < T_{tab}$ = Rejection of H_0(significant)

The positive value of "C" shows that there will be still some imports if when β1& β2 becomes zero. D(Lpopulation) is the annual data of population after taking log then the difference. It is the independent variable on which edible oil import depends. For this independent variable T-Calculated is greater than T-Tabulated which shows the significance of the variable. The relationship of Population with the Edible Oil imports is positive because as population increases, demand for edible oil imports increases. This increase in the edible oil demand is fulfilled heavily by the imported edible oil.

LGDPPC is the annual data of GDP per Capita (real). It is the independent variable on which import of edible oil depends. For this independent variable the T-Calculated is greater than the T-Tabulated which signals the significance of this variable. This model states that there is a positive relationship between GDP per capita and the imports of edible oil. As GDP per capita rises the purchasing power of the population rises so they are able to purchase more of any good at the same price level.

R stands for Auto regression. While R2 is the variable which shows the percentage of variations caused in dependent variable due to independent variables. The adjusted R2 of this model is 94.42% which means that the 94.42% of the variations in dependent variable (Edible Oil Imports) are caused by independent variables (Population and GDP Per Capita) and the remaining 5.58% of the variations are explained by "μ" which is a stochastic term.

In all of our values the confidence interval which we have set is 95% and the remaining 5% is the margin of error (α).

$$Probability < α = significant$$
$$Probability > α = insignificant$$

Table 2:

Parameter	Probability	α	Status of Variable
β_1	0.0057	0.05	Significant
β_2	0.0000	0.05	Significant

On the basis of statistics we can conclude that both of the independent variables are significant at α = 5%. F-Statistics is the measure which shows the significance of the overall model. The value of Fcal>Ftab for a model become significant. In our model the value of Fcal is 283.3405 which is greater than the value of Ftab which is 5.26.

Durbin-Watson is the measure of Auto-Correlation. When Durbin-Watson = 0 there will be severe Auto-Correlation and when the Durbin Watson reaches to 4 there will be severe negative Auto-Correlation. The value at which there is no Auto-Correlation is 2. The value of Auto-Correlation in the model is 1.987 which represents that there is almost no Auto-Correlation in the model.

With having all the significant values the model discussed describes the dependence of Edible Oil Imports on the Population and GDP per capita. Edible Oil Imports have a positive relationship with the Population and the GDP per capita of the country. In the present structure, any increase in the GDP per Capita and Population will result in increased Edible Oil Imports.

Conclusion

It is really a situation to ponder upon that an agricultural country like Pakistan is not utilizing its potential in a right manner. Pakistan is heavily depending on imports to meet its edible oil demand and this policy is increasing pressure on the nation's BoP which is already in deficit on the other hand the increased edible oil prices dampens the purchasing power of the consumer. There is not a very popular trend of cultivating oilseed crops in the country. The oilseed crops that are being cultivated have failed to produce any remarkable results in terms of yields due to lack of technical knowledge, skill development and heavy feats to take research initiatives. Pakistan should study what other countries of the region are doing. There is many room for improvement and many areas to work on. It really has the ability to decrease its edible oil deficit by many times but some really crucial steps need to be taken in order to achieve this goal. Some suggestions are given in the following part of the paper that might give some idea what needs to be done for the improvement of the conditions.

Suggestions

Following are the some steps that might help to turn the situations in the favor of the country
- Initiatives should be taken to boost up the meager efforts of agricultural research centers of every province and to make collaborations with the agricultural research centers of other countries for knowledge sharing.
- Efforts should be done to increase the area under cultivation.
- Cultivation trend of oilseed crops must be introduce in the areas which are most suitable for this purpose.
- Under cultivation lands should be divided into different zones as per the crops being cultivated (Wheat Zone, Cotton Zone, Oilseed Zone, Floriculture Zone, etc.) there which will enhance the pace and effectiveness of the research done by agriculturists.
- Proper trainings should be given to farmers, accordingly to the need of their cultivated lands.
- Government must increase the number of its procurement centers.
- Agricultural reforms should be made and a proper market structure should be formed to ensure the rights and returns of small farmers of every province.
- Public-Private partnerships should be encouraged to flourish the corporate farming.

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