**INTRODUCTION**

Food security becomes a sensitive problem affecting the world. Countries like Senegal that depend mostly on importation are suffering a lot of the spikes of the prices. In the case of the rice, Senegal currently imports more than three quarter of its rice (Ministry of agriculture). Senegal, according to the DASN is the world tenth rice importer. This situation makes it extremely vulnerable to the price fluctuations and supply shortages experienced in 2008-2009. Senegal imports its rice from Asia, Brazil but most of the rice comes from ASIA MAINLY From Vietnam and Thailand. Thailand remains the largest supplier of rice approximately 64% and Vietnam is the next largest supplier approximately 24%.

In fact, broken rice remains the most preferred rice imported with more than 99% of the market share. Thailand remains the main rice supplier in the country with 57% followed by Vietnam 28% and Brazil 11%. Senegalese people, for many reasons prefer the imported broken rice to the long grain rice grown locally.

Yet Senegal has the land and a good climate for rice cultivation and can sufficiently satisfy the domestic needs. The principal zones of production are in the Senegal River Valley and in Casamance in the south. Irrigated rice represents 70% of national production concentrated on 50,469 ha in Saint Louis, Matam region bordering the Senegal River. The biggest production of the domestic rice comes from this part of Senegal. The production is for consumption and for sale.

Rainfall cultivation supplies only 30% of national rice production. Rainfall cultivation is practiced mainly in casamance, fatick and this production is only for family production.

The farmers are still using traditional equipment for rice cultivation. This situation is the reasons why the rice production is very limited. Among other problems encountered by farmers one can mention the limited working capital to deal with smaller quantity of production.

The last three years Senegal policies attempt to change the trend and avoid depending on a volatile international market.. The government envisions the rice value chain producing 1,000000 metric tons of white rice annually by 2012 (National Strategy for the Development of the rice sector 2009).The strategies call for investment in public irrigation infrastructures, input subsidies and farmers extension and training. Still, despite the government efforts the importation of local rice remains higher. For that reason, the paper is interested in this study to analyze the trends and evolutions of the domestic rice and the imported rice productions. The purpose of the study is to show whether there is relationship between the evolution of the imported rice production and the one of the domestic rice.

**THEOROTICAL REVIEW**

Most of African countries like Senegal, Nigeria have seen the increase of rice consumption. This increase is due to the change in the habits of people and the increase of the population. In Senegal, the economic interest of French colonizers has dictated the choice of rice. Before the introduction of rice Senegalese people, for their consumption used millet peanuts and maize. Today the country is dependent on rice for 75%. Nigeria ranks third with Irak after (Philippines and Chinese) in the group of major rice importing countries in the world (AWE 2006). Such countries like Korea has created agricultural polices encouraging the improvement of the production of domestic rice. The evolution of the imported rice has triggered interest among some scholars. Rice imports have affected the domestic productions and marketing of Nigeria’s local rice. This is due to the decrease of local demand for local rice by Nigerians as opposed to the imported one.(Bamide O.O Aboyoni). The paper economic Analysis of Rice Consumption Patterns in Nigeria by F.S Bamide O.O Abayomi & O.A Esther reveals how imported rice consumption increases in the Nigerian household. The analytical tools used in the study include descriptive statistics and multinomial logit. The study works on variables like income of the head of the household/ household size and the education status of the head of the household, the price per unit kg. The factors explain the demand differentials between local and imported rice. In the study, the dependent variable is categorical and has taken three nouns.

The paper by Joseph Omoniyi Bassoroun deals with the Relationships of factors affecting rice consumption in a target region in Ekili State Nigeria.The two papers implicitly talk about demand differentials between the imported rice and the domestic one. And they all point out the increase of the quantity of imported rice over the domestic one.

**Methodology**

The study uses the data of the evolution of the imported rice production and the domestic rice production from 2001 to 2009. The tools employed for analyzing the study data are pearson’s correlation and the graph.

The paper uses the correlation methodology to analyze the relationship between the two variables. The p-value is the key element that tells whether they are related. The p- value tells us the probability that we would see the observed relationship between the two variables.

Although the p-value is a powerful indicator of whether or not two variables are related, it is limited. Although a p-value tells us something about our confidence, that there is a relationship it does not mean the relation is causal. The assertion of statistical significance can depend on other factors. In the case of this study the p-value tells the degree of confidence about the relationship between the two variables but the statistical significance can depend on other factors. The p value used in the study assesses the relationship between the evolution of the imported rice production and the one of the domestic rice production.

**Evolutions of the imported rice and the domestic rice production**

**Year Domestic rice production imported rice production**

2001 200000 700000

2002 220000 800000

2003 175000 900000

2004 235000 825000

2005 200000 900000

2006 280000 995000

2007 185000 1100000

2008 195000 845000

2009 420000 350000

**Result**

| **상관계수** | | | |
| --- | --- | --- | --- |
|  | | import | Dproduction |
| import | Pearson 상관계수 | 1 | -.752\* |
| 유의확률 (양쪽) |  | .019 |
| N | 9 | 9 |
| Dproduction | Pearson 상관계수 | -.752\* | 1 |
| 유의확률 (양쪽) | .019 |  |
| N | 9 | 9 |
| \*. 상관계수는 0.05 수준(양쪽)에서 유의합니다. | | | |

**Analysis**

The p-value is significant at level 0.05 .019<0.05 means that the relation is statistically significant It means. When the imported rice production increases the domestic rice production decreases. The same remark can be done too for the imported rice production that decreases when the domestic rice production increases. The imported rice production affects the domestic rice production and in return the same remark can be observed for the domestic rice production that affects the imported rice production. The picture on the evolutions of the imported and domestic rice shows that mostly when the imported rice production increases the domestic rice production decreases (2002, 2003, 2004, 2005). On the opposite, when the domestic production increases (2004, 2009). However in 2001 both of the productions have increased.

Some factors like government policies explain the considerable increase of the domestic rice production. In 2009 for example the government through a vast program decided to guaranty food self-sufficiency to avoid the price spikes that make the country vulnerable. Thus, the cultivated area are extended and farmers benefit help from the government.