

**ECONOMIC IMPACT OF THE CROP MARKET IN MARKETING  
PEANUT IN HALFA ELGADIDAH AGRICULTURAL SCHEME,  
KASSALA STATE, SUDAN**

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**Abstract :**

This study was conducted at Halfa elgadidah Agricultural Scheme it aims to determine the economic impact of crop market in marketing peanut in Halfa elgadidah Agricultural Scheme. . It depends on the primary sources for data collection, where the questionnaire was designed for (50) peanut farmers whom had been selected randomly, Secondary sources to support the findings of the study was also collected.

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**Mots clés:**

Programme agricole de Halfa elgadidah,

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**Abstract :**

Cette étude a été menée à Halfa elgadidah Agricultural Scheme et vise à déterminer l'impact économique du marché des cultures dans la commercialisation de l'arachide dans Halfa elgadidah Agricultural Scheme. . Cela dépend des sources primaires pour la collecte de données, où le questionnaire a été conçu pour (50) producteurs d'arachides qui avaient été sélectionnés au hasard. Des sources secondaires pour étayer les résultats de l'étude ont également été collectées.

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## **INTRODUCTION:**

Agriculture is a vital activity that supports the survival of the human race by providing the required nutrition and minerals through the food grains. Besides acting as a survival tool, agriculture also engages the people in employment and thus also supports the economic goals of the individuals (Kapyra, Beatrice, and Black, 2018). The livelihood of the majority of the population of Sudan depends upon the agriculture and its allied activities. This sector contributes about 34.8 per cent of the total Gross Domestic Product (GDP). According to 2012 Census estimates, approximately 80 per cent of the country's total population, is still living in rural areas and their major occupation is agriculture. These conditions result in lower levels of per capita income, as a result, there is a large discrepancy between per capita income of non-farming and farming sector (Chandramouli and General, 2011). Thus, the issues impacting the income levels of the farmer should be addressed. These income levels of the farmers are dominated by the total production, supported by levels of productivity and the profits earned by the selling the produce. The process of growing and selling the yield is not as simple as it seems to be (Mohanty, and Singh, 2014). A lot of external variables act as a constraint and hinders the process. There are climatic factors such as a change in weather, delaying of rain, and deteriorating soil quality. Moreover, the market-related factors play a significant role in deterring the process. Constraints such as imperfect market conditions, lack of integration along the supply chain, and poor marketing channels affect the income levels of the farmers. Specifically. Hence, the marketing of agriculture produce plays a vital role in providing the proper remunerative marketing opportunities. Therefore, marketing channels and techniques hold the key position in enhancing the profitability of the farmer and also help to provide the balanced price of the yield by providing the proper information of the market.

### **1-2Marketing Concept**

Marketing concept is the philosophy that firms should analyze the needs of their customers and then make decisions to satisfy those needs, better than the competition. Today most firms have adopted the marketing concept, but this has not always been the case, (John, 2000). In 1776 in *The Wealth of Nations*, Adam Smith wrote that the needs of producers should be

considered only with regard to meeting the needs of consumers. While this philosophy is consistent with the marketing concept, it would not be adopted

widely until nearly 200 years later. After World War II, the variety of products increased and hard selling no longer could be relied upon to generate sales. With increased discretionary income, customers could afford to be selective and buy only those products that precisely met their changing needs, and these needs were not immediately obvious. The key questions became:

- What do customers want?
- Can we develop it while they still want it?
- How can we keep our customers satisfied?

In response to these discerning customers, firms began to adopt marketing concept, which involves:

- Focusing on customer needs before developing the product
- Aligning all functions of the company to focus on those needs
- Realizing a profit by successfully satisfying customer needs over the long-term

When firms first began to adopt the marketing concept, they typically set up separate marketing departments which objective was to satisfy customer needs. Often these departments were sales departments with expanded responsibilities. While this expanded sales department structure can be found in some companies today, many firms have structured themselves into marketing organizations having a company-wide customer focus. Since the entire organization exists to satisfy customer needs, nobody can neglect a customer issue by declaring it a "marketing problem" - everybody must be concerned with customer satisfaction, (N. Kumar, 2001). The marketing concept relies upon marketing research to define market segments, their size, and their needs. To satisfy those needs, the marketing team makes decisions about the controllable parameters of the marketing mix, (Robert D, 2000).

### **1-3The Production Concept**

Production concept prevailed from the time of the industrial revolution until the early 1920's. The production concept was the idea that a firm should

focus on those products that it could produce most efficiently and that the creation of a supply of low-cost products would in and of itself create the

demand for the products. The key questions that a firm would ask before producing a product were:

- Can we produce the product?
- Can we produce enough of it?

At the time, the production concept worked fairly well because the goods that were produced were largely those of basic necessity and there was a relatively high level of unfulfilled demand. Virtually everything that could be produced was sold easily by a sales team whose job it was simply to execute transactions at a price determined by the cost of production. The production concept prevailed into the late 1920's,( Jain, 1999).

#### **1-4 Sales Concept**

By the early 1930's however, mass production had become commonplace, competition had increased, and there was little unfulfilled demand. Around this time, firms began to practice the sales concept (or selling concept), under which companies not only would produce the products, but also would try to convince customers to buy them through advertising and personal selling. Before producing a product, the key questions were:

- Can we sell the product?
- Can we charge enough for it?

The sales concept paid little attention to whether the product actually was needed; the goal simply was to beat the competition to the sale with little regard to customer satisfaction. Marketing was a function that was performed after the product was developed and produced, and many people came to associate marketing with hard selling. Even today, many people use the word "marketing" when they really mean sales, (Mohamed, 2000).

#### **1-5- Problems In Agricultural Mmarketing In Developing Countries are:**

**-Product Quality:** Many of the farmers are not aware of the need for quality seeds and fertilizers. The poor quality seeds and fertilizers used in land will result in poor product quality.

**-Market Information:** The literacy rate of farmers in developing countries are comparably low than the developed countries. The farmers of developing countries may not have the updated knowledge of the market trend and activities. Hence they may unable to achieve the real price of their product.

**-Product Quantity:** In some places improper measuring of products are still in practice. This will result in loss for the farmers at the time of buying or selling of agro produce.

**-Functionaries Participation:** The functionaries in the marketing process hold a major share of profit in the form of commission.

**-Lack of Transportation Facility:** Many of the rural areas don't have proper road facility. This creates barrier in transporting the agro produce to the market place.

**-Inadequate Storage Facility:** The inadequacy of storage facility may leads to unwanted wastage of products, ( K.Kiruthiga,. 2015).

Groundnuts (*Arachis hypogaea*) family leguminaceae, are the edible seeds of a legume plant that grow to maturity in the ground. Sudan is one of the major groundnut producing countries. The total area under groundnut production is approximately one million hectares with an average yield of 855 kg/ hectares. The crop is grown under irrigation mainly in Gezira scheme, New Halfa scheme, some Northern region and Kassala. Under rain fed the crop grown in western Sudan in Kordofan and Darfor regions [ARC, 2003-2010.]. Sudan groundnuts contribution to the total exports of the country is also fluctuating and declining as well, that was attributed to the decrease in the area planted in irrigated sector and to changes in climate in the traditional sector, in addition to the decrease in the international prices which forced the exporters to sell locally, [Bank of Sudan, 1998.]. In Sudan, groundnut is one of the main sources of edible oil production for local consumption and exports, [Salih, 1986]. The crop is primarily used for oil extraction in Sudan. It is consumed directly because of its high food value it plays an important role in diets of rural populations, particularly children, because of its high contents of protein, fat, and carbohydrate. Groundnut haulms are nutritious for feeding livestock [IARC, 2002.].

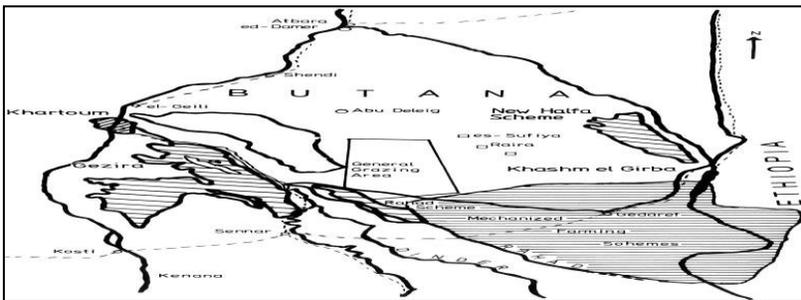
Angelina Sheba Albert (2008). Study made an endeavor to audit the marketing of rural agricultural in relation to its degree, opportunities, scope, strategies. It also reviewed some difficulties like absence of personnel training measure, high working operational, maintenance costs, and high attribution rates restricts the societies to deal with already existing brands in the market.

Rajagopal (2000) focused on ensuring the correctness in prices discovery, Weighment, regularity and packing. However, the directive of agricultural marketing is the state subject and thus reflects heterogeneity in execution. In the end, it was put forward that, it was imperative to think of a uniform pattern for execution of the marketing acts, rules. and orders.

Singh (2004) study insisted that. there should be a single market across the realm which will be beneficial for both agricultural and industrial produce and will enhance encouragement of agro-industry connection. Since, agriculture sector is a vital sector, therefore it must be given the main concern, as it deserves. Also, agricultural research, extension and training require much superior thought

### 1-6- New Halfa Agricultural Scheme (NHAS):

The New Halfa agricultural scheme(NHAS) is the one of the oldest schemes in Sudan and was the destination of one of the largest population resettlement projects in the history of the country. , (Wallin, 2014). it lies on the Eastern Sudan in Kassala State between 15°-17° longitude; and 35° – 36° latitude it is 360 kilometers east of Khartoum, with a total area of 184 thousand hectares and tenant's number of 23000. It irrigated by waters from Khashm Al Girbah Dam on Atbara River, (El Arif, 1988), the scheme situated in the arid climatic zone which characterized by annual rainfall 250 - 500 mm. It is divided into five sections, and the sections into inspection areas (of which there are 19 altogether), each headed by an Inspector of Agriculture and with a number of specialists, junior staff and water guards attached. Like the Gezira, it is a rigidly hierarchical and centralized organization. Emphasis is on vertical interaction and the efficient transmission of directives from the centre to the periphery, and the organization is rather poor at the task of transmitting information upwards from the production situation itself, (Taha, 2010).. The project which was run under the authority of New Halfa Corporation was designed to plant cotton, wheat, sorghum, groundnut and other crops, Each tenant was given a total area of 6.3 hectares to cultivate two cash crops (cotton and groundnuts) and other two (sorghum and wheat) for household consumption, (Ahmed. 2009).



**Map : The Location of the New Halfa Scheme in the Central-Eastern Sudan**

**Source: Scandinavian Institute of African Studies, Uppsala, 1985**

The concept agricultural marketing includes many activities starts from production process till its retailing. The activities involved are production planning,

cropping and harvesting, warehousing, grading, transportation and final distribution. There are varieties of agro products which are produced with dual purpose of domestic consumption as well as exporting. In the chain of agricultural marketing number connecting links such as farmers, suppliers, functionaries, importers, exporters, external beneficiaries and customers are involved, ( K.Kiruthiga, 2015).

According to the National Commission on Agriculture (XII Report, 1976), agricultural marketing is a process which starts with a decision to produce a saleable farm commodity, and it involves all the aspects of market structure or system, both functional and institutional, based on technical and economic considerations, and includes pre- and post-harvest operations, assembling, grading, storage, transportation and distribution( K.Kiruthiga, 2015). The major marketing functions involved in agricultural marketing are: concentration, Grading, Processing, Warehousing, Packaging, Distribution.

#### **1-7- Marketing of crops in New Halfa:**

There are three types of markets in the **New Halfa**:

1. **Village markets:** Some farmers are forced to market their crops (Dura and groundnuts) in their villages immediately after harvest so that they can pay some

of their financial obligations, especially those related to financing agricultural operations.

2- **Periodic local markets:** The regular markets are held on specific days and with a salary of the week and in intermediate areas between groups of villages. They provide greater opportunities for the exchange of different types of crops, except for the cotton crop that is marketed by the project management. Farmers and some village merchants and merchant agents visit these markets as buyers or sellers, and the marketing is done individually.

1- **Central markets:** They are located in Halfa city. These markets are held daily and agricultural crops are displayed where producers supply crops to the market as a collection point where brokers and dealers' agents buy directly from farmers. Marketing is done individually and the quantities received into the market vary from day to day. Marketing in New Halfa suffers from multiple problems that can be summarized as follows:

-The absence of central markets with high specifications that take into account food safety procedures, quality standards, information and auction procedures.

-Producers' lack of familiarity with the methods and requirements of modern marketing of agricultural products.

-The large losses that agricultural producers face in some high-production seasons as a result of the low prices of these products in the local markets.

-The infrastructure suffers from a clear weakness in its components, organizations, spread and efficiency, especially in the collecting markets, central markets and post-harvest infrastructure such as: storage, sorting and packaging.

-The roads linking the production areas to the markets are dirt and unpaved and completely disrupted in the autumn season due to the heavy, sticky clay soil, which increases the costs of transportation and negatively affects the cost of production.

-Low marketing efficiency due to the high cost and unjustified marketing margins and the deterioration of the farmer's share of the final price of his product.

Weakness of agricultural marketing support services such as marketing information systems, research and extension

-The scarcity of trained manpower at all stages of marketing.

-The absence of institutions, organizations, and associations of quality producers that effectively market agricultural products, even those that have poor performance in the agricultural marketing process, such as the farmers' union and agricultural cooperative associations.

-The absence of a department or unit in the Department of Technology Transfer and Extension in the New Halfa Agricultural Authority concerned with extension to trained farmers about marketing information and planned production in accordance with standard specifications to enable agricultural products for competition in internal and external markets.

largest percentage of farmers, 73%, depend on self-financing, which is often through the sale of animals, while 14,5% rely on banks in the conduct of their agricultural activity. These are mostly traders and business owners who are the most knowledgeable about banking transactions. Others are village leaders and notables, and it turns out that there are many reasons why farmers are reluctant to deal with banks for reasons related to banks, while others are farmers, the most important of these reasons are

-The complexity of banking procedures.

-Fear of dealing with banks due to suspicion of usury and interest-based transactions.

-Difficulty in providing guarantees.

-Funding is not sufficient to the extent necessary to run agricultural operations.

-High interest rate

-Failure to obtain timely financing for agricultural operations.

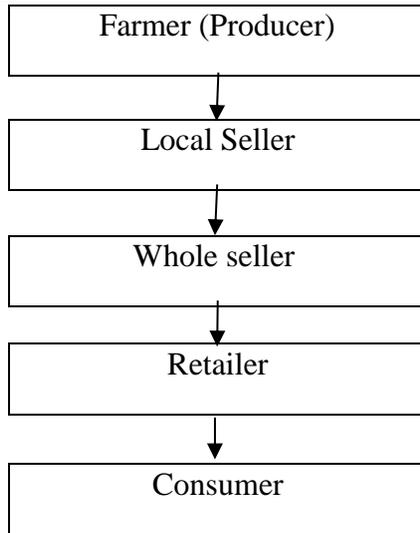
-Failure to take into account the conditions of farmers when repaying, and the principle of removing unfairness is not appropriate.

-Banks are concentrated only in the New Halfa city, and the bank does not reach large numbers of farmers. In addition, there are 5.3% of farmers who depend on the Sheyal system (the Sheyal is that the farmer sells what he expects of the crop before it is planted, in order to obtain the necessary financing for cultivation) by this system the farmer may pay lower price compared to the prices of crops. And 7.2% depend on friends and acquaintances for financing, as friends and acquaintances are sources of agricultural credit in developing countries. These wealthy people lend their friends and relatives specific amounts and for short periods in the form of a loan without interest or expenses or against marginal and weak interests. It can be relied upon due to the small number of wealthy farmers' relatives and friends in the New Halfa area. There are times for planting and each crop has a specific timetable, and therefore each agricultural operation must be completed at the specified time, from preparing the land for planting until harvesting the crop, and if that specified time is exceeded, it will result in a deterioration and failure in the productivity of the crop, therefore the financing order is considered. It is very important because the availability of money and its good management is the effective tool in raising production efficiency, (Mohammed 2018),

### **1-8- Problem Statement:**

Marketing of crops in New Halfa suffer from multiple problems due to the absence of institutions, organizations, and associations of quality producers that effectively market agricultural products, even those that have poor performance in the agricultural marketing process, such as the farmers' union and agricultural cooperative associations. Government by decision stopped the activity of the crop market since 2001, this accumulated peanut crop in the general market. although it take place in many towns in Sudan, such as Gedaref and Elubied, Which makes us questioning, what the economic impact of the crop market in marketing peanut in New Halfa agricultural scheme.

**The Channels of marketing crops in New Halfa**



**Source:** Prepared by the author depending on data collected by field survey 2017.

**1-9- The Overall Objective:**

The Overall Objective is to study the economic impact of the crop market in marketing peanut in New Halfa agricultural scheme. To achieve this objective the study sought the following specific objectives.

The Specific Objectives are to determine the following study variables under crop market and general market situations :

:-

- 1) Total area in feddan cultivated annually by peanut.
- 2) Cultivation cost in (SDG) per feddan of peanut..
- .
- 3) Harvesting cost in (SDG) per feddan of of peanut...
- 4) Total output per feddan of crop of peanut.
- 5) price in (SDG) per unit of output. . .
- 6) Transportation cost in (SDG).
- 7) Storage cost in (SDG).
- 8) Marketing cost in (SDG).

**1-10- Hypotheses To Be Tested:**

The hypotheses To Be Tested assumed that, marketing of peanut through crop market has the following impact:

- 1) Decreases total area cultivated annually by peanut. . .
- 2) Increases cultivation cost per feddan of peanut 3) Increases harvesting costs per feddan of peanut.. .
- 4) Decreases total output per feddan of crop peanut. .
- 5) Decreases price per unit of peanut production. . .
- 6) Increases transportation cos per unit. .
- 7) Increases Storage cost per unit. . .
- 8) Increases Marketing cost per unit .

**2- Research Methods, tools and measures::**

**2-1- population of the study: -**

The population is homogenous based on the study variables, thus all peanut farmers in New Halfa agricultural scheme were consider to have the same chance to be selected for the purpose of this study.

**2-2 The study sample: -**

A simple random sample of 50 farmers were selected using the table of the random numbers from the list of the Halfa agricultural scheme union.

**2-3 Data collection:**

Both primary and secondary data were used for the study purposes. Primary data were collected by using structural questionnaire techniques through direct personal interviewing. Secondary data collected from different relevant sources which include Books and annual reports of the various parties and Web sites with relevant information.

**2- 4- Selected Variables:**

- 1) Total area in feddan cultivated annually by groundnut. . .
- 2) Cultivation cost in (SDG) per feddan of groundnut .
- 3) Harvesting costs in (SDG) per feddan of groundnut. . .
- 4) Total output in sacks per feddan of crop groundnut .
- 5) Pricein (SDG) per unit of peanut production
- 6)Transportation cost in (SDG).
- 7) Storage cost in (SDG). . .
- 8) Marketing cost in (SDG).

**2-5 Method of data analysis :**

Data were processed and then transformed to computer coding form. The data were fed to the computer and analyzed by descriptive statistics using Statistical Package of Social Sciences to calculate the following:

1. Frequency distribution and means using tables.
2. T- test to measure the significant differences between selected factors.

**2-5-1-Theoretical Framework:**

**2-5-1-1- Sample mean**

The sample mean of the values:

$$\bar{X} = \frac{X_1 + X_2 + X_3 + \dots + X_n}{n} = \sum_{i=0}^n \frac{1}{n} X_i$$

This is just the *average* or *arithmetic mean* of the values.

**2-5-1-2- Frequency Distribution:**

The frequency of the class with midpoint is , for  $i = 1, 2, \dots, m$ ). Then:

$$\bar{X} = \frac{f_1x_1 + f_2x_2 + f_3x_3 + \dots + f_nx_n}{n} = \sum_{i=0}^n \frac{1}{n} f_i x_i$$

Where  $n = \sum_{i=1}^n f_i$  = total number of observations.

**2-5-1-3- Paired-samples t test (Dependent (related) samples):**

compare the means of two conditions in which the same (or closely matched) participants participated.

$$t = \frac{\frac{\sum(D)}{N}}{\sqrt{\frac{\sum D^2 - (\sum D)^2}{N(N-1)}}}$$

Where : D = deference in means. (Damishet al (2010)

**3-RESULTS:**

**3-1 Frequency Distribution:**

The result of the descriptive statistics analysis of the frequency distribution and means show that:

**Age categories:** Table (1) shows frequency distribution of farmer's according to age categories in the study sample. It was calculated using SPSS program, it explain that 72% of peanut farmers age categorie between (20 - 40) year.

**Table (1): Frequency distribution of farmer's according to age categories in the study sample.**

Age categories	Frequency	%
20-30	19	38
31-40	17	34
41-50	5	10
51-60	4	8
61-70	2	4
71-80	3	6
Total	50	100

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Source: calculated by the researcher based on the data collected by questionnaire (2017). Using SPSS computer program.

**Secondary Occupation:** Table (2) shows frequency distribution of farmer's according to occupation in the study sample. It was calculated using SPSS program, it. indicates that 50% of peanut farmers are farmers only 50% of them engaged in other occupations beside agriculture.

**Table (2): Frequency distribution of farmers according to secondary occupation in the study sample**

Occupation	Frequency	%
Pastoralists	14	28
Traders	2	4
Employees	7	14
Labors	20	40
Carpenters	7	14
Total	50	100.0

Source: calculated by the researcher based on the data collected by questionnaire (2017). Using SPSS computer program.

**Educational level:** Table (3) shows frequency distribution of farmer's according to educational level in the study sample. It was calculated using SPSS program, it. explain that 42% of farmers their level of education between basic and secondary level of education and 20% are illiterate and Khalawi.

**Table (3): Frequency distribution of farmers according to Educational level in the study sample.**

Educational level	Frequency	%
Illiterate	6	12
Khalwa	4	8
Basic school	16	32
Medium school	5	10
Secondary	15	30
Universities	4	8

Total	50	100
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Source: calculated by the researcher based on the data collected by questionnaire (2017). Using SPSS computer program.

**3-2 Means:**Table (4) shows Minimum, Maximum and Means Values of the selected variablesb which have been calculated Using SPSS computer program. It shows the following result:

- 1- The mean total area per farmer when marketing his crop through crop market was found to be 11.16 feddan compare to 11.00 feddan when marketing his crop through the general market.
- 2- The mean cultivated area per farmer when marketing his crop through crop market was found to be 9.66 feddan compare to 9.8 feddan when marketing his crop through the general market.
- 3- The mean cultivated cost per feddan for farmer when marketing his crop through crop market
- 4- was found to be 2844.4 (SDG) compare to 2980.0 (SDG) when marketing his crop through the general market.
- 5- The mean harvesting cost per feddan for farmer when marketing his crop through crop market was found to be 409.4 (SDG) compare to 620.8 (SDG) when marketing his crop through the general market.
- 6- The mean transportation cost for farmer when marketing his crop through crop market was found to be 34.2 (SDG) compare to 75 (SDG) when marketing his crop through the general market.
- 7- The mean storage cost for farmer when marketing his crop through crop market was found to be 162.0 (SDG) compare to 833.8 (SDG) when marketing his crop through the general market.
- 8- The mean marketing costs for farmer when marketing his crop through crop market was found to be 348 (SDG) compare to 477 (SDG) when marketing his crop through the general market.
- 9- The mean marketing margin for farmer when marketing his crop through crop market was found to be 2437.2 (SDG) compare to 519.4 (SDG) when marketing his crop through the general market.
- 10- The mean price per unit of output when farmer marketing his crop through crop market was found to be 300 (SDG) compare to 535 (SDG) when marketing his crop through the general market.

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**11- The mean revenue per feddan when farmer marketing his crop through crop**

Variable Name	Crop Market			General Market		
	Minimum	Maximum	Mean	Minimum	Maximum	Mean
Total area/fed.	2.00	60.00	11.16	5.00	60.00	11.00
Cultivated area/fed	2.00	60.00	9.66	27.00	60.00	9.80
Cultivation cost (SDG)	30.0	8000.0	2844.4	270.0	6000.0	2980.0
Harvesting cost (SDG)	180.0	3915	409.42	200.0	1300	620.88
Price/output (SDG)	40.0	33.48	300	1.00	90.00	535.8
Transportation cost (SDG)	0.00	50.0	34.272	0.00	101.8	75.0
Storage cost (SDG)	0.00	500.0	162.00	0.00	1500.0	833.8
Marketing margin (SDG)	20.0	2682	2437.2	200.0	2680.0	519.4
output /fed	100.0	1300	326.6	100.0	300.0	151.7
Marketing cost (SDG)	0.00	5000	348.98	200.0	500.0	477.0
revenue/fed (SDG)	36580	66500	40.16	-18300	968.7	22.23

market was found to be 40.160 (SDG) compare to 22.23168 (SDG) when marketing his crop through the general market.

**Table (4) Minimum, Maximum and Means Values of the selected variables.**

**Source:** calculated by the researcher based on the data collected by questionnaire (2017). Using SPSS computer program.

**3-2-T-test:**

The result of T-test in Table (5) shows a statistically significant differences at (0.01) level between marketing peanut through crop market and general market with respect to, output/fed, transportation cost, (SDG), marketing margin (SDG), marketing cost (SDG), revenue/fed(SDG).

**table (5) shows t- value**

Factor	Variable	Mean	T- Value	D.F	Sig(2-tailed)
output /fed	Crop Market	326.6	8.148	49	0.001
	General Market	151.7			
Transportation cost (SDG)	Crop Market	34.272	4.721	49	0.000
	General Market	75.0			
Marketing margin (SDG)	Crop Market	162.00	3.695	49	0.001
	General Market	833.8			

Marketing cost (SDG)	Crop Market	348.98	2,837	49	0.007
	General Market	477.0			
revenue/fed (SDG)	Crop Market	40.16	5.502	49	0.000
	General Market	22.23			

Source: calculated by the researcher based on the data collected by questionnaire (2017). Using SPSS computer program.

#### 4-DISCUSSION:

Crop market has the following impact in Marketing groundnut in New halfa agricultural scheme: Increase mean output per feddan of groundnut at a rate of (17.49) sacks. This may be due to farmer take care of the crop to become high quality and increase chance of crop compatibility in the market, reduce the mean cost of cultivation per feddan at a rate of 135.6 (SDG), and the mean cost of harvesting per feddan at a rate of 211.46 (SDG). This may be due to, marketing groundnut through crop market, will marketed the crop early and the farmers buy the agricultural input during its availability in the market reduces the mean of storage cost at a rate of 671.8 (SDG), because crop market introduce services for the farmers, reduces the mean marketing costs at a rate of 128.02 (SDG) and the mean marketing margin at (1917.8) (SDG)m Increase mean price per unit of output at a rate of (23.5) (SDG).

#### 5-CONCLUSION:

Based on the findings of the study conclude that,72% of peanut farmers aged between (20 - 40) year, 50% of peanut farmers are farmers only 50% of them engaged in other occupations

beside agriculture, 42% of farmers their level of education between basic and secondary level of education and 20% are illiterate and Khalawi.

The economic impact of crop market in marketing peanut in New Halfa agricultural scheme:

Increase mean output per feddan of at a rate of (17.49) sacks, reduce the mean cost of cultivation

per feddan at a rate of 135.6 (SDG), reduces the mean cost of harvesting per feddan at a rate of

211.4 (SDG), reduces the mean cost of storage at a rate of 681.8 (SDG).

reduces the mean

marketing costs at a rate of 139 (SDG), reduces the mean marketing fee at1917.8 (SDG),

increase mean price per unit of output at a rate of 235 (SDG).

#### 6-RECOMMENDATIONS:

The study recommends the following: the farmers should have to market their crop through the crop market, the crop market management should have to

take in the considerations the following, reduction marketing margin. Facilitate the procedures within the market, So that the farmer can benefit.

### **7-References:**

- Ahmed M.( 2009), Economic and managerial implications for the siltation in Khasm el Girba Dam Reservoir on New Halfa Agricultural Production Corporation – Sudan. A doctoral thesis. Department of Agricultural Economics, Faculty of Agriculture, University of Khartoum, Sudan;.
- ARC (Agricultural Research Corporation) of Sudan (2003-2010). Annual report (2003-2010) Wad-Madani, Sudan.
- Angelina Sheba Albert (2008), “Role of Cooperative Marketing Societies”, Tamilnadu Journal of Cooperation, Vol 8, No. 6, April. Pp 64-69.
- Bank of Sudan (2015). Annual report. Khartoum, Sudan.
- El Arif SA. Problems in planning extensive agricultural projects: The case of New Halfa, Sudan. *Applied Geography*. 1988;8:37-52.
- El Naim, A. M., Eldouma, M. A., Ibrahim, E. A.and Moayad, M. B. Z. (2011). Influence of plant spacing and weeds on growth and yield of peanut (*Arachis hypogaea* L) in Rain-fed of Sudan. *Advances in Life Sciences*, 1(2): 45-48.
- K.KiruthigaR.Karthi, B.Asha Daisy, 2015, Agricultural Marketing – An Overview, International Journal of Scientific and Research Publications, Volume 5, Issue 4, April 2015 1 ISSN 2250-3153
- John Frain, (2000), Introduction to marketing, 4th edition, London: International Thomson Business Press, 1999, P.199.
- Jain et al, 1999, Marketing information products and Services: a primer for librarians and information professionals, 4th edition, Canada: International Developed Research Center, P. 152
- IARC Monographs (2002). Some Traditional Herbal Medicines, Some Mycotoxins, Naphthalene and Styrene. International Agency for Research on Cancer, Volume 82.
- Mohamed Séghir Djitli, 2000, Marketing Strategies, Alger: EURL IBN SINA Edition Impression & Diffusion Editions Dgitli, P. 78.
- N. Kumar & R. Mittal, 2001, Marketing Management, New Delhi: Anmol Publications Pvt. Ltd., P. 2
- Salih FA, Ali AM, Elmubarak AA (1986) Effect of phosphorus application and time of harvest on the seed yield and quality of faba bean. *FABIS Newsletter* 15: 32–35.
- Singh, S. (2004). Crisis and diversification in Punjab agriculture: Role of state and agribusiness. *Economic and Political Weekly*, 5583-5590.
- Robert D. Histrich, (2000), Marketing, 2nd edition, Etas-Units: Barron’s Educational Series, , P. 23.

- Rajagopal (2000), “Agricultural Marketing Regulation in India” in Jagdish Prasad (Ed.) ‘Encyclopaedia of Agricultural Marketing’ Vol.5, New Delhi.
- Roman G. Hiebing & Scott W. Cooper, 2010, The Successful Marketing Plan : a disciplined and comprehensive approach, 3 rd edition, New York : Mc Graw-Hill, P. 52.
- Taha F. 2010, The history of the Nile waters in the Sudan. In: The River Nile in the postcolonial age. Conflict and Cooperation among the Nile Basin Countries. Ed. Tvedt, T.I.B. Tauris & Co. Ltd, New York.
- Wallin, Marianna, 2014, Resettled for Development The Case of New Halfa Agricultural Scheme, Sudan(M.Sc., University of Helsinki)