

## **1-1 introduction:**

Marketing becomes one of the bases on which builds the economic and finance of many countries now days. For these reasons so many researchers talked about it. Moreover they began to write about market innovation, market orientation and export performance .The purpose is to explore what the customer needs and wants. The marketing department of any organization has a difficult responsibility; the success of the marketing department has the single greatest impact on the success of the business. There are several environmental factors that affect the marketing decision made by company. These environmental factors including technology, demographics, government, culture and economic The domestic and global market are very competitive companies must find a niche or be able to differentiate themselves to the costumer , when doing so they have ethical and social responsibility to their costumer to be honest and forthright.

Codogan (2003); Alhakimi and BaharunHoq, and Norbani (2009)observe that with the adoption of market oriented behaviors firms are able to generate information that particularly important for their innovativeness as it help them to come up with new and modified products, ideas, processes, and subsequently enter into new market . The increasing demand of both fresh and dried fruit in developed countries such as USA and the EU has resulted into increased fruit export from developing countries including those from the COMESA region ( Uganda, Kenya, Egypt .Swaziland, Ethiopia , and Zimbabwe)east Africa business week 2008)

In spite of the high potential and diversification of horticultural products .the export of fruit and vegetable is very limited as it contributes around 2% the total export business started in the early seventies and the amounts exports are still low (Mohammed, Osama, Khalifa (2010)) most of Sudanese vegetable

produced in winter (November- march) which is best time to fill the seasonal gap demand in European market for animas ,mango ,banana , grapefruit , sweet pepper , span bean , melon , date , and lime , export links with European and gulf countries is being established ,Holland, England, Italy, France. Saudi Arabia, Qatar, Kuwait, Jordan, Bahaman and united Arab.

The performance of Sudanese market in the period 1970 to 1993 was on all counts very poor. Sudan has being losing its share of total world export and the button market. Sudan is predominantly an agricultural country over 90% of its export is supplied by agricultural sector (source Ministry of Agriculture - Sudan 2009)

Various vegetable are grown in both irrigated and rain –fed plots in a total area of about 273.000 ha about 3% of total cultivated area producing on average about 3.4 million tons of vegetables the most important vegetables are onions and tomatoes followed by potatoes, okra , egg plant, water melons, cucumbers , pumpkin and of leafy vegetables ,are grown in small plots with pumped water including the national corporation such as Gezera Scheme where about 30.000ha are devoted to vegetables .Table 1 shows and production of some major vegetables during the period -2005-2009

During the last years ago the quantity exported Sudanese mango crop dropped dramatically from 6,597.4 tons in the years 2000 to 2,820.0 tons in 2004 and this was associated with a market fall in export value of this horticultural crop from 1,540.000 USD in To only 860.000 USD in 2004(*Mohammed, Osama, Khalifa (1996).*

Fruit production in Sudan needs very little agro-chemicals thus the fruit are relatively free of chemical residues which if certified could give comparative edge and a competitive advantage in international market. The variations in

climate and topography created condition for the production of various type of fruits including date Palme , citruses .mangoes .guava , pine . Apples and banana .in the high area of jabal Mara temperate fruit such as apple , grapes , strawberries and sweet oranges grow well. However, commercial production is hampered by the lack of investments and poor transportation facilities. the estimated total fruit in Sudan is about 1.9 million tons in cultivated area of about 186.000 ha .the area and production of some major fruit grown in Sudan during the period 2006-2009 are shown in Table ( 2)

Followed average amounts exports are shown in Table (1)

In details the total of Sudan export in the period (2005-2009) shown in the Following. The value with USA dollars – Yearly, the 2005 the total of export was (242.387.684), and 2006 was reported 215.860.352, and 2008 accounted (292.489.337), and lastly the total of export in 2009 has accounted (239.111.103)

Table (1) Sudan exports by product section inUAS dollars – yearly from 2005-2009.

Year	2005	2006	2008	2009
products	242.387.684	215.860.352	292.489.337	239.111.103

Ministry of Agriculture - Sudan 2009

Table (2) below reflected the direction of Sudan exports, Sudanese exports are distributed to the many countries. The destination of Sudan export in the Years 2005 – 2009 as the following.

Table (2): Production (000 tons) of common cultivated vegetables insudan  
*Hind a. Elbashir and Mohamed a. imam(2009)*

Year	2005	2006	2007	2008	2009
Onion	688	900.8	920	938.4	1024
Tomato	396	409.8	432	453	480
Okra	210	220	235	249	252
Egg-plant	65.6	70.4	72	75.6	75.2
Potato	352	263.9	273	248	301
Cucurbits	504	546	567	589	616
Leafy-vegetable	54	55	65	66.3	68.8
sweet potato	112	119	133	147	216

However the foreign trade sector remains crucial. Trade constitutes more than 40% of the central government. This upward trend in fruit export has largely been attributed to the efforts that have been made by the fruit exporting firms of only to engage in information gathering and research that has enabled them to have a clear understanding of the needs of the customers but also the adoption of new production leading fruit exporting countries such as South Africa.

## 1.2 Research Problem

The new thinking of the modern day in marketing has flourished with vital concepts come from an up normal factors, popular ones are market orientation and innovation. But there are other different variables that seek more investigation and analysis as the study of Nerver&Slatter (1994) and Gadogan (2013) claim. Also the study of Idris and Momni (2007). However, the current study slightly differed from the previous aforementioned ones on the following

The current study has investigated the impact of market orientation and innovation on export performance which the sample consists of exports,

importers and marketers in Khartoum state. The study has adopted the analytical descriptive approach. Also mediating variables which enhanced the relationships between variables directly and indirectly were covered in the current study. The previous studies have focused on Marketing Mix elements, which was limited to the relationship between the behavioral and cultural orientation with the performance agrees with the previous ones. In Sudan, according to the researcher's knowledge, there is no specific study has been done with regard to the current topic. Based on what was mentioned above the study was conducted to answer the following questions.

### **1.3 Research Question**

Six research questions were tacked to attain the aims of research, the question are as follows:

- 1- What is the relationship between export market orientation and export performance?
- 2- What is the relationship between export orientation and environment factors?
- 3- What is the relationship between innovation and export performance?
- 4- What is the relationship between innovation and environmental factors?
- 5- What is the relationship between environmental factors and export performance?
- 6- Do the environment factors mediating the relationship between the market orientation and export performance?

Does the environment factors mediating the relationship between market innovation and export performance

### **1-4 Objectives of the study:**

- 1) To determine the relationship between the market orientation among Sudanese export performance.

- 2) To test the relationship between the market innovation and export performance.
- 3) To assess the relationship between the environmental factors and export performance.
- 4) To examine the relationship between export market orientation and export performance.

To examine the relationship between market innovation and environmental factors

### **1-5The Hypotheses:**

Hypothesis 1: There is the relationship between market orientation and export performance.

H3.1.1: There is relationship between market intelligent generation and financial performance.

H3.1.2: There is relationship between market intelligence generation and non-financial performance.

H3.2.3: There is relationship between market intelligent dissemination and financial performance.

H3.2.4: There is relationship between export market intelligent dissemination and non-financial performance.

H3.3.5: There is relationship between responsive to market intelligence and financial performance.

H3.3.6: There is relationship between responsive to market intelligence and non-financial performance.

The second hypothesis.

**H3 -Hypothesis 2:** There is the relationship between export market orientation and environment factors.

H3.2.1: There is relationship between environmental factor and export market intelligence generation.

H3.2.2: There is relationship between environmental factor and export market intelligence dissemination.

H3.2.3: There is relationship between environmental factor and export responsiveness to market intelligence.

**H3-Hypothesis 3:** There is the relationship between export market innovation and export performance.

H3.3-1: There is relationship between process innovation and financial performance.

H3.3.2: There is relationship between process innovation and non-financial performance.

H3.3.3: There is relationship between market innovation and financial performance.

H3.3.4: There is relationship between market innovation and non-financial performance.

H3.3.5: There is relationship between new product innovation and financial performance.

H3.3.6: There is relationship between new product innovation and non-financial performance.

H3.3.7: There is relationship between product modification and financial performance.

H3.3.8: There is relationship between product modification and non-financial performance.

**H4-Hypothesis 4:** There is the relationship between environmental factors and market innovation.

H3.4.1: There is relationship between environmental factor and process innovation.

H3.4.2: There is relationship between environmental factor and market innovation.

H3.4.3: There is relationship between environmental factor and new product innovation.

**3.4** H3.4.4: There is relationship between environmental factor and product modification.

**H3-Hypothesis 5:** There is the relationship between environmental factors and export performance.

### **1-6 the importance of the Study:**

The significance of this study can be illustrated in to dimensions:

#### **1-6-1 Theoretical contribution:**

This study is useful for developing the understanding which can help showing market orientation, and market innovation, which lead for increasing the chances of Sudanese export. It gives us some facts and information in special way for Sudanese liberty and electronic one in generally to seminar for learners and researchers to be us resulted in the methodology of studding about science.

- 1) This study will add new knowledge to the existing literature for the benefit of future researchers and academicians who will be interested in this area of study.
- 2) To give the best theory in export and marketing performance to improve Sudanese economic and financial.

#### **1-6-2 Practical Contribution:**

- ❖ This study It gives the decision makers practically to have their final say in their market production, moreover it gives them the lead in market innovation.

### **1.7Definition of Terminologies:**

Below are definitions and description of terminologies which will use in this study.

**1.7.1 Market orientation:**Narver and Slater (1990) defined market orientation as the organizational culture that most effectively and efficiently creates the necessary superior performance for the business.Kohli and Joworski (1990) define market orientation in terms of three dimensions (1) the generation of



market information about needs of customers and external environmental factors ( 2) the dissemination of such information among organizational function and (3) the developmental and implementation of strategies in responding to the information these elements include continues and systemic information gathering regarding customer and competitors cross, function sharing of information and coordination of activities and responsiveness to changing market needs (Martin and Crbac 2003) the organization –wide context of market orientation illustrates the significance of adopting productive attitude to doing business and developing a competitive edge

However, efforts have been made by authors such as Cadogan (2003) to integrate market orientation constructs such as market intelligence generation, market intelligence dissemination and responsiveness to market intelligence into international marketing hence the birth of export orientation concept.

### **1.7.2 Market Innovation:**

NagemAbodNagem(2007) Adefinedinnovationasthe company's abilityto reachwhat is newandaddsmore valuefaster thancompetitorsin the market.Drucka(2007) innovation is theregulatorforabandoningthe old.

Boric (2006), Elena (2009) and Salavou (2002) that innovation can be reflected in the extent to which affirm can introduce new product, new production process, modify the existing products and exploit new territorial markets and segments within existing markets.

### **1-7-3 Export Performance:**

export marketing performance is the level of achievements by the firms in their export enterprise. This could be measured according to previous researchers in terms of growth in sales, profit and market share ( Ezirim and Machlayton 2010) or export performance can divided for two parties , economic performance and non-economic performance.

Export performance can broadly be defined as the outcome of firm's activities in export market. (Muhammad and Saleem, 2008) define it as the firm's degree of economic achievement in its export performance.

#### **1-7-4 Environmental factors:**

At all times, besides focusing on assessing and satisfying consumer needs and wants, environmental factors such as social, economic, technological, competitive and regulatory factors play an important role in forming an organization's marketing activity (Kerin, Hartley & Rudelius, 2009). These forces are uncontrollable and yet cause great impact in a marketing decision. For instance, the technological advancement that takes place influences the marketing strategies of a company. They use internet and websites to market their products and services. Besides that, economic downturn that occurs in recent times triggers a lot of discounts and promotions offered by a company in selling their products and services. Now the problem is what should the company do in order to stay current with their marketing tactics in these environments?

#### **1-8 Study Limitation:**

The study is limited to the impact of market orientation and innovation upon the performance of exports with regard to fruit and vegetable in Vegetable and Fruit Market in Khartoum and the mediating role of the environmental factors.

#### **1-9 Organization of the research:**

In brief, this study is organized into five chapters as follows:

**Chapter one** (introduction) followed by statement of the problem, research question, the objective of the study, the importance of the study, definition of terms and organization of the study.

**Chapter two** (literature review) which is divided into market orientation and innovation, Export performance and environmental factors.

**Chapter three**(Methodology), which used to answer the research questions this included the conceptualization framework, the hypotheses which drawled from the model, search design, data collection procedures, questionnaire development, measures which used and the proposed statistical analysis techniques.

**Chapter four** (findings)presents the survey findings.

**Chapter five** (conclusion) concentrated on the discussion of the finding and conclusion, future research and implications.

# Chapter Two

## Literature review

### Chapter overview:

This chapter presents the existing literature related to the study, in particular, the literature was reviewed according to the objective of the study, and it is presented in three sections. The first section presents the market orientation, innovation, Second section focus on the export performance.

Third section focuses on environmental factors.

### 2.1.1 Market Orientation:

Wail, E and Momony (2013) The aim of the current research is revealing the relationship nature between behavioral and cultural market orientation, Its impact on performance of Jordanian insurance companies and role of marketing information system. The research depends on descriptive and analytical methodize and applies the practical method of analysis. The study sample consists of workers in Jordanian insurance companies whom occupied general manager, Vice general manager and assistant general manager. The results of the reveal that there is a significant statistical impact of the relationship between behavioral and cultural market orientation on performance of Jordanian insurance companies.

Export market orientation remains one of the most recent concepts in international marketing as previous empirical studies of market orientation have been in the context of domestic markets such as Cadogan (2003) to integrate market orientation constructs such as market intelligence generation,

market intelligence dissemination and responsiveness to market intelligence into international marketing hence the birth of export market orientation concept.

**Export market intelligence generation**" concerns the activities associated with generating information about the firm's export customers current and future needs and wants , competition in the firm's export markets and other exogenous factors such as technological and regulatory developments .

**Export market intelligence dissemination:** concerns the formal and informal information exchanges which allow the information generated to reach appropriate export decision makers. (Olimpia and amoral 2006)The importance of market export market intelligence dissemination is to provide, a shared basis for concerted action, by different departments.

**Responsiveness to market intelligence:** encompasses the design and implementation of all responses to the export intelligence that has been generated and disseminated within firm.(Toften and Olsen 2003) point out that one way of developing organization knowledge is when information outside the company is acted on by integrating and incorporating it within the organization. Saleh (1990) observed that the generation of market intelligence for the whole company relative to its clients' current and future needs, dissemination of market intelligence throughout the relevant departments and the company's response to this intelligence are essential activities for the competitiveness and survival of any organization.

### **2.1.2 Market Innovation:**

It is important to have the proper understanding of marketing innovation or else you won't create an effective marketing innovation strategy, with the rate

of change in the world of marketing that would put you at a serious competitive disadvantage. Xayhone and Yoshi (2009) acknowledged that individual innovations such as new product and process innovations significantly influence the profitability and growth of an enterprise over its rivals. They clearly stressed that the process of innovation seemed to transform firms in some way that gave rise to what looks like generic differences between innovators and non-innovators. As a consequence, the processes by which profitability and growth are generated differ noticeably between innovators and non-innovators. They further noted that innovating firms have incentives to expand into other markets which enables them to earn higher returns from their investment. If your competitor figures out how to adapt a new technology, or engineer a solution, or gain insight from the existing mountains of data before you do. It could be a real game changer.

Nguyen and Pham (2009) defined market innovation as follows:

- **Product innovation:** introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics.
- **Process innovation:** implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software.
- **Marketing innovation:** implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.
- **Organisational innovation:** implementation of a new organisational method in the firm's business practices, workplace organisation or external relations.

### **2.1.3 The Export Performance**

Shahram, Shabgoon, Ladan (2013) The main objective of this study was to investigate effective factors on export performance of exporting companies of ceramic tiles industry in Iran.

In this study, effective factors on export performance in tile industries have been discussed. In this field companies must adapt themselves to environmental changes and technological and try to with changes in technology do changes in existing technologies and have been best technology to produce goods and their sell. Companies should be having creative and new ideas in this field and every day trying to improve their products. In this field should take advantage of Porter's differentiation strategy and have a competitive advantage to rival companies. Further discussion in this topic is customer orientation that is one of the most important components of any organizational. Because without customers cannot be created an industry. Customers should have the special privilege and employees should take a look at customers as the gold of organization.

Sanna Eltoun (2009) the aim of this study is to illustrate the export of mango, the problems, and to analyze the result to indicate the obstacles. The analysis is based on a theoretical perspective which focuses on marketing strategies for marketing mix. The analysis is used to find out the competitiveness of the Sudanese mango fruit in international markets in terms of the strengths, weaknesses, opportunities and threats. The method used for the study is qualitative. The sources are interviews and documentations, personal interviews with open questions have been an important part of the analysis. The results showed that the strengths of Sudanese mango are due to many factors like: production around the year, lower price

in Saudi market compared to other competitors, high quality of crop with great nutritive and healthy value. On the other hand, the basic weaknesses of mango are that it is a highly perishable commodity and lacks in the pre-, and post-harvesting technology, as well as in the marketing channels. As a conclusion, the study shows that the problems of mango marketing occur during the whole process (production, marketing channels, price and foreign market).

Besides, there is a poor existing strategy. But the situation will be more positive by doing improvement in all this process and developing the marketing strategy.

Shahram and Fatemah (2013) In this research has investigated three factors including International experience, foreign language skills, time spent abroad, international business stimuli. According to the results of the research findings, the following suggestions are offered to improve export performance:

- Focus on countries (the neighbor) in terms of export price is economical.
- Attention to consumer preferences and needs of the target market and using it in the quality of the products will increase export.
- Companies with regard to their capabilities and potential can select the appropriate number of markets and with knowledge of competitors situation, marketing mix, rules and regulations, in the markets with a cohesive marketing program enter to these markets.
- Companies can consider communication factors such as personal interactions and relationships with foreign distributors and maintain positive relationships with the distributors' knowledge, perceived export.

Study of Emmy\* Ismail (2009) examines the trade performance for thirteen commodities in the fruit and vegetable industry in relation to that of selected countries (Philippines, Indonesia, Singapore and Thailand). All commodities in vegetable and food industry have comparative advantage with greater than 1.00



for at least one country. Malaysia, for example, has comparative advantage in 4 products and thus, Malaysia needs to determine effective strategy for developing these products and not to depend solely on imports. The country should use high technology applications in growing fruits and vegetable such as hydroponics and other closed systems because of less land available for agriculture.

However, the foreign trade sector remains crucial. Taxes on the foreign on trade constitute more than 40% of the central government revenue. Several fundamental reasons for slow rate of growth in export earning: the slow growth of production and inappropriate domestic policies. The rapid growth in the demand for the exportable in the domestic market, The slow growth in world demand for Sudanese export PanosKonandereas(2009).

Other example the Sudan export performance in the period 1960 – 1980 was as following values with million Sudanese pounds .Export is one of the significant preliminary steps of an enterprising organization towards expanding its international business activities there is a lack of uniformity in conceptualization, definition and measurement of export performance : and difference among countries export performance in export literature (Eusebin 2007) this has contributed to the challenge of indentifying and understanding the antecedents of export performance.

Among the main fruit and vegetable exported by Sudan are mangos, grape fruit, bananas, melons and limes green, beans, onions, and sweet peppers, an indication of the export earnings from fruits and vegetables exports is given in compared to other agricultural exports , values are modest , and exports of fruit are by far much more important than those of vegetable ,looking at some

selective individual commodities we find similar patterns of export performance for most of them these is a high variability in performance from one year to the next , take for example mango export earning which dropped from USS1 million 2003 to less than USS400.000 in 2006 , or than of lemons and limes which dropped from USS1 million in 2000 to less than USS100.000 in 2003-2005 and 2006 similar situations can be seen for the other commodities examined here such as watermelons , dates, grapefruit and green beans.).

*Hind a. imam(2009* Looking at the destination of export of fruits and vegetables it is surprising how geographically narrow these exports are, in most of the cases, 3-4 import markets account for that commodity . For example in the cases of mangos and dates , one single country accounts for over 60%and 72% of exports send no more than five countries for 93% and 95% of export earning , respectively, European countries import insignificant amounts of mangos from Sudan as consumers these prefer the non-fiber types. The geographical spread is somewhat better for grapefruit and green beans exports in the sense that exports are not concentrated in a single.

Hind a. imam(2009).Export performance is generally defined as outcome of a firm's export activities in a foreign market (shoham1991) studies on export performance made based on two measurements – economic and non-economic. However leonidu and Morgan (2000) found from empirical research that export performance comprises three generic measurements, economic or financial export performance consists of export sales intensity, export sales growth and export profitability.

Stan (1998 ) diversified of export performance into two categories internal and external determinants. External determinants are justified by the industrial organization (IO) theory where the external factors and firm's export strategy are influencing export performance. In contrast, internal determinants are supported by the resources based view (R B V).

katsikeas ,et al (2000) revealed that export performance intensity, export sales , export growth and export profitability are the four most used measure of economic export performance, Export intensity is the ratio of export sales to a company's total sales and it is the most widely used economic measure of export performance in the literature (katsikeas,et al (2000), this is followed by export sales ,with indicates the size of export earnings in dollar value for accompany ( Madsen 1989).

The two other measure of economic export performance are export growth , which is an increase of export over a certain time period (Aaby and Slater 1989) and export profitability either an objective financial measure of profitability of the export venture or a subjective assessment of the profitability of export compared to domestic marketing .

(Baldauf 2000) it is argued in the literature that firms set goals to achieve strategic objective such as international market entry, market share and strategic position in international marketing rather than just financial goals, ( Evangelista 1994) the use of a composite measure of export performance that incorporates financial performance and managers subjective assessment of performance of the export market venture has also gained support in recent years.

( Julian and Ali 2004) an analysis of product –market strategy and export performance. 2009) successful exporting has been described as the engine of

economic growth and in the economy have been found to derive their potency in successful exporting .from engaging in export marketing by firms , the number of export marketing studies has continued and is continuing to increase. Over the years, studies in this area have been recognized as a legitimate academic.

Perhaps no recent measure of business performance has attracted as much attention as customer satisfaction with a large and continuing academic research stream ( Halstead and Schmidt 1997 ) and Yi 1990 – customer satisfaction measure have importance benchmarks in industries . the traditional disconfirmation paradigm of customer satisfaction propose that customers have repurchase expectations about the products they buy . and are more satisfaction depending on how well the consumption experience exceeds arguments of Mehmet (2008) who asserted that information generation is expected to increase the performance of companies in their export markets since they learn to effectively manage competitors, understand their customer needs better and target profitable markets.

katsikeas et ,al ( 2000) . shoham (1998) and zou et al (1998) review of the export performance measure literature indentified some categories of performance outcome: economic measure based on sales, profits and market share, non-economic measure related to export markets ( such as number of courtiers exported to ) products and miscellaneous items ( including projection of export involvement , and generic subjective measure ( including perceived export success , achievement of export objective ,satisfaction with specific export indictor and in general.

In last years ago, the three new non-financial output measures have attracted extensive research attention: customer satisfaction, customer loyalty, brand equity as follows.

### ***2.3.1 Customer satisfaction:***

A review of the existing literature indicates a wide variance in the definitions of satisfaction. The lack of a consensus definition limits the contribution of customer satisfaction research. Without a uniform definition of satisfaction, researchers are unable to select an appropriate definition for a given context; develop valid measures of satisfaction; and/or compare and interpret empirical results. Consumer satisfaction researchers have contended that these problems are pervasive and important (Gardial, Clemons, Woodruff, Schumann, and Burns 1994; Peterson and Wilson 1992; Yi 1990). This research will: 1. Suggest a definitional framework of consumer satisfaction based on commonalities in the literature and the views of consumers. 2. Discuss how this framework can be used to develop a definition of satisfaction to accommodate different contextual settings. 3. Ensure that our definitions of satisfaction are consistent with consumers' views. This is critical since, ultimately, we must understand consumers' meanings of satisfaction and consumers must understand what we mean when we use the term, satisfaction.

The Literature and Consumer Views of Satisfaction - While the literature contains significant differences in the definition of satisfaction, all the definitions share some common elements. When examined as a whole, three general components can be identified: 1) consumer satisfaction is a response (emotional or cognitive); 2) the response pertains to a particular focus (expectations, product, consumption experience, etc.); and 3) the response occurs at a particular time Sara Gutarsson (2005).

### **2.3.2 Customer Loyalty:**

Partly in response to problem with customer satisfaction as a measure customer loyalty measure have attracted increasing attention as a measure of good marketing behavioral measure of brand purchase and repurchase have existed for years in

the marketing literature Hammond (1995)but there has been a recent emphasis on expanding beyond purely behavioral conceptions of loyalty ( Disk and Basu 1994) advocates of loyalty note that financial performance ultimately reflects whether customer repurchase from a firm over time . regardless of satisfaction . one of the most prominent spokespersons for their right customer : ones whose loyalty the firm is able to earn and keep . a loyal customer base it is argued , should increase revenue per customer as satisfied customer buy more volume , a broader range of products and / or pay premium for the company's products, it also should lower marketing costs : current customer are cheaper to retain . and word-of mouth from current customers should make new customers easier to acquire .a common financially-based measure of the worth of a loyalty customer base is to calculate the lifetime value of the customers in this base ( wyner 1996).

### **2.3.3Brand equity :**

#### **Definition of Brand:**

Branding has been around for centuries as a mean to distinguish the goods of one producer from those of another. In fact, the word brand is derived from the old Norse word brand which means "to burn " as brand were and still are means by which owners of livestock mark their animals to identify them (keller, 2008) has defined the term as a set of assets and liabilities linked to brand its name and symbol, that added value or subtract from the value provided by product or service to a firm or to that firm's customers.

American market association(AMA) ,defined a brand as name ,term sign symbol ,or design, or a combination of them intend to identify the goods or services of one seller or group of seller and to differentiate them from those competitor.

(Randall Geoffrey ,2000) said , experts divided definition of brand into six aspects :

- 1- A brand shape.

- 2- People perceive the brand.
- 3- The status of the brand.
- 4- Additional value.
- 5- The overall picture.
- 6- Identity

Many researchers and managers believe that a powerful brand ( one with high equity ) is among the greatest marketing assets a firm can have. (Keller 1998). for reviews, strong brands, it is argued (1) allow firm to charge price premiums over unbranded or poorly branded products (2) can be used to extend the company's business into other product categories: and (3) reduce perceived risk to customer (perhaps investors) There have been two approaches to measuring, brand equity, the behavioral approach looks at customer response to the brand, ether in terms of perception or purchase. One definition of behaviorally base brand equity is the differential effect of brand knowledge on customer response to market of the brand (keller 1993) customer in these studies typically respond more favorably to strong brand than t unbranded or poorly branded products. The financial value of the brand to firms and their ancestors, widely cited approach in this area was developed. (Salmon and Sullivan 1993) who defined brand equity as the incremental cash flows that accrue to brand products over and above the cash flows that would result from the sale of unbranded products.

Brand equity (Aaker 1991 – 1996) said brand equity is widely used tern for the in tangible marketing asset. Shocker 1991 define brand equity as : a set of association and behaviors on the part of a brumes customers channel members and parent corporation that permits the brand to earn grater volume or grater margins that it could without the brand name and that gives strong sustainable and differential advantage .

## **2.4 Market orientation and export performance .**

Study of Godwin Joseph . Ntayi, . Muhammed Ngoma, (2013). The purpose of this study was to investigate the impact of export market orientation, innovation on the export performance of fruit exporting firms in Uganda.

The findings of this study have shown that export market orientation and innovation has a strong and positive relationship on export performance. Firms which are able to acquire, disseminate and act upon the information in the export markets are in greater position to perform better in export markets In the studies addressing the influence of export market orientation on export performance . the prevailing view is that the relationship between these two variables is positive.{ Codogan et al 2003 ,jaworski 1990) in this respect ,Akyol and Akehurst (2003)observed that firms which focus on generating export market information are in good position to perform better in their export markets than the non market oriented ones because they possess a greater understanding of their customer needs. As such, Hoq et al. (2009), Kropp et al. (2005) assert that these firms are likely to devise and adapt their products, services and processes that continue to meet the needs of the evolving market. This is in line with the Kohli and Jaworski (1990) observed that the generation of market intelligence for the whole company relative to its clients' current and future needs, dissemination of market intelligence throughout the relevant departments and the company's response to this intelligence are essential activities for the competitiveness and survival of any organization. In support of the above argument, Mariscalvo (2010) asserts that the "generation, analysis and dissemination of information about clients, competitors and technology exert a positive influence on company performance.

Faworski and kohli (1996) observe that market orientation should positively relate to customer satisfaction as one dimension of non-financial performance.



Gathering and responding to good market intelligence should lead to products than do a better job of meeting customer needs. Unfortunately they note, there is little empirical study to support this proposition. If market orientation does improve overall business performance. Customer satisfaction would occur indeed such a mediating relationship might explain why the direct effect of market orientation on business performance has been difficult to document consistently, in long satisfaction to market orientation through performance a company with a satisfaction customer base might have success. With in turn might lead to complacency and dulling of the firm's market orientation.

There is a strong linkage between export market orientation and firm innovation. For instance Hoq et al (2009) view innovativeness as one of the core value creating capabilities that drives the market orientation behavior. They propose that innovativeness is the medium for business success in the wake of appropriate intelligence gathering and decision making.

However, (Ussahawanitchakit (2007) and Freel (2000) acknowledge that innovation is so expensive and risky for both big and smaller firms and therefore has the capacity to result into both good and bad effects on the firms' performance. For instance Ussahawanitchakit (2007) argues that innovation efforts produce financial constraints that may lead a tradeoff between innovation and export performance. As such, (Freel, 2006) observes that innovation may be of less importance for those firms operating in environments where competition is not intense and therefore for resources that may be.

## **2-5 Market innovation and export performance:**

Firm Innovation refers to the firm's ability to quickly introduce new products and to adopt new processes into competitive markets. In addition, authors such

as Joaquin, Rafeal and Ricardo (2007; Natalia & Ines (2005 ) assert that innovative firm are likely to perform better than non- innovative firms mainly because through innovation, Company faces up to the changes in its marketing environment.

- . As such, Erdil et al. (2004) point out that significant innovation allows firms to establish dominant competitive positions, and help new firms in the market to gain edge in the market. In support of this position Ussahawanitchakit (2007) asserts that innovation has the capacity to increase and promote stronger export competitiveness that can ultimately to lead sustainable export performance. Ussahawanitchakit (2007) have pointed out that innovation can affect firm's export performance both positively and negatively. For instant Simpson, Singuaw and Enz e, (2007) argues that firms in foreign business markets have exploited innovative capabilities to learn how to thrive in rigorously competitive environments, sustain competitiveness, and achieve export growth and performance. Elena (2009) argues that in today's competitive environment, innovation remains one of the most core value creation activities and a competitive weapon for firms operating in international business. Freel (2000) acknowledge that innovation is so expensive and risky for both big and smaller firms and therefore has the capacity to result into both good and bad effects on the firms' performance.

## **2-6 Environmental factors of Marketing**

An organization's success is influenced by factors operating in its internal and external environment: an organization can increase its success by adopting strategies which manipulate these factors to its advantage; a successful organization will not only understand existing factors but also forecast change. So that it can take advantage of change within the environments in which it operates Best factors – there are external factors which the organization does

not have direct control over these factors is an acronym and each letter represented a type of factors (political, economical, social and technological)

*Study of the KusumaRatnawati ,SigitPramono (2015 )*The effect of Government role as a mediation a variable in the relationship between orientation entrepreneurship, innovation and market orientation in business performance. The purpose of this study was a mediation variable in the relationship between entrepreneurship, innovation, and market orientation on business performance, the population of the this study is 1,057 medium enterprise (SMEs) in Tutul village, the research sample of 100 SMEs were selected by slovin method .analysis of data used a war . we know the TuTul village as one village without unemployment in Jember (Disnaker 2003). The results indicate that a significant difference between entrepreneurship orientation on business performance and innovation a significant effect on the performance of business, while the government role is not proven mediation the relationship between innovation and performance, the findings of this study proves that the government does not have role. Jember (Disnaker 2003).

### **2-6-1 Economic Environment:**

Economic variables are considered important environmental factors affecting the success of the marketing process in foreign markets. As it owns a strong influence in terms of confirm degree opportunities or strengthening the threats faced by the business organization. Economic environment represents the characteristics and trends the economic system, which is practiced the international activities by business organizations, and the change, which is a key feature and constant it.

Therefore, international business organization should be continuous monitoring and undoubted for control economic powers, becoming acquainted with the potential impacts and take advantage of it when put plans and

marketing policies related to determining how attractive target markets where work, and predict the size of the market and identify the competitive position of the organization (al-Khafaji(2011))

Economic factors which must be studied by the organization can be identified as follows:

- ***The rate of economic growth:***

Economic growth rate is a factor effect on the opportunities and threats faced by business organizations. Whereas, rate of growth increasing are contribute positively to the availability of the possibility to expand the work of the organizations, and deal with competitive pressures in the industry. This situation leads to a high rate of consumption and increase spending, which may represent a marketing opportunity for the organization, and opposite happens if low growth. So, business organizations should be during thinking to choose the foreign markets which they conduct activity, that determining a marketing policies accordance the expectations of national disposable income and gross national product, as it is a strong indicator of economic growth ( al-Khafaji(2011))

- ***Average of Capital Income:***

Is one of the economic indicators used to determining the attractiveness of foreign markets, It is through which recognition the spending power of the target market. At the international level, the income is president gauge to interpret the type and the quantity of goods and services consumed. The capita income increasing or decreasing lead to change its consumption pattern, and varies the average of capita income from one country to another. In the time it income reaches 1,200\$ in year at countries such as Canada, Sweden and the

United States, the average national income does not More than 200\$ a year in some Asian and African countries.

- ***Market Size:***

Market size of important economic variables, so, the business organizations with international activity should be it analysis, study and learn the trends its development, it help to determining the market segments available, and knowing the different needs. Thus, determine the size of the market opportunity available to enter these markets, the most important indicators to study the size of market, population and growth rates, structural distribution of the population, the age. Etc. al-Khafaji (2011)

- ***Exchange rates and interest:***

Rate of exchange identify "determine the value of the national currency in exchange rates of foreign currencies, and it affects the competitiveness of organizations working products in foreign markets when be high, compared with other currencies. The organizations find themselves at bad competitive in foreign markets, because consumers are less enthusiastic to buy these products due to its high prices. Proceeding from this, the high exchange rate of the national currency is a threat to organizations reduce the attractiveness of working in foreign markets. While, dropping an opportunity it can gain a competitive advantage in the foreign market, what makes it an attractive factor in which to work.

As for interest rates, it is important to analysis, because of its impact on determining the level of good demand. In general, the high prices of interest rates represents a threat to business organizations, while reduced, demonstrates the existence of a marketing opportunity, which is reflected over the attractiveness of the market in which to be adopted.

- ***Availability of appropriate infrastructure:***

Availability of infrastructure is an important factor to assessing the attractiveness of foreign markets. External marketing depends largely of facilities available in foreign markets such as transport, telecommunications, and energy and provides argument marketing institutions. Some point out that it is possible lack of awareness of the overall underlying forces for some market due to inadequate infrastructure. That the failure of sound infrastructure is a threat to many of business organizations. al-Khafaji(2011)

### **2-6-2 Social Environment:**

The social variables affect significantly on the marketing programs of business organizations, they can either make up for its chance to increase revenues, or a challenge to be deal with it to mitigate its effects or avoided, and could be clarified as follows:

- ***Traditions:***

Means the set of concepts, perceptions and social behaviors common practice, that are being passed down through the years, such as the celebrations associated with the social events, religious and national, they create opportunities for a number of business organizations due to the people demand it. Thus, it becomes a factor with it attractive to work in foreign markets. If, however, the organization did not improve to deal with it, become a factor reduces the attractiveness of working in the foreign markets.

- ***Language:***

Is a means of communication method between members of the community, Take the verbal form such as words, phrases and sentences, Or non-verbal form such as signals, gestures and symbols... Etc.. Language is one of the cultural elements that should be considered when thinking about the work of

international practice. Business organization should be have the ability to correct understanding of the rules of the language and tone of target markets, and show the importance of this element for international activity at drawing and formulation of policies relating to the design of promotional campaigns in foreign markets, since it, must take into account the differences meanings codes of the various languages.

- ***Habits and values prevailing:***

Human societies involved in many specific values and ethics of human behavior. Many of them rise to the level of decisive criterion in considering and deal with situations, events, relationships and things, as they define them what is wrong and what is right, or what bad and what unacceptable behaviors, which required the organization to be cautious to deal with those communities, examples of such values honesty and punctuality, as well as attention to product quality and customer respect, and these values, either a threat or an opportunity for organizations.

- ***Degree of urbanization:***

The importance of this factor determined to identify patterns mainstream consumer in targeted foreign markets work out, based on life forms (Countryside - Urban) that make up those communities.

### **2.6.3 political/legal Environment:**

Political conditions and legislation affect on organization's decision to enter the foreign market both of operations or objectives, which are either become an attractive factor or repulsive in front of the business organization to enter those markets. Therefore, it must take these factors into account when formulating

and implementing marketing programs related to international activity, perhaps one of the most important factors is possible study and analysis of the following:

- ***The degree of political stability:***

There is no doubt that political stability has a major role to creating the appropriate environment for the activity of business organizations. In foreign markets, if the political situation is stable, it represents a catalyst for international activity, working on it without fear of the possibility of taking action against foreign organizations such as the freezing of their assets and imposing new restrictions on its shares or confiscation of property, if it represents an unstable and repellent element for international activity; because there is a state of uncertainty is unwanted by business organizations.

- ***The position of the government from foreign investments:***

Business organizations when thinking about access to foreign markets want to identify the role that is played by governments in economic activities in general. Government intervention can be classified as the governments facilitate the process of international expansion or governments hinder the international marketing operations or competition governments in international marketing operations.

It is also important to recognize the philosophy of governments towards foreign investments therein, may be a attraction factor of the organization through the provision of incentives and facilities to encourage business organizations to work, or that be a repellent factor imposing a group of threats that hamper the work, leads to the reluctance of business organizations to exert their activities.

- ❖ Legal environment construed as including all laws and regulations that govern the domestic market in the foreign country and affecting the work of the organization, since it is rare that business organizations doing any



activity without collision law barrier may limit its activity in often. Laws can be divided the following:

- ❖ The laws related protection of the environment: The overall laws enacted in order to preserving the environment and protecting them from pollution or depletion of resources.
- ❖ The laws and associations of consumer protection: Its laws embarked mainly to protect the consumer from methods of fraud and deception, as give the consumer right to receive the products with high quality and appropriate prices. Also, it gives them the right to providing information for the provided products. Most of the organizations newly started to maximize the relationship with customers and create added value for the benefit of them.
- ❖ Laws regulating of the business in target markets: Whether with regard to the laws issued and organized to the way organizations work in the host country, organization of the business and the organization the relationship between employers and they have employees in the host country, or a set of laws enacted by the State in order to protect the country's economic growth, such as greater emphasis on the establishment of productive projects, investment, laws of export subsidies and tax exemptions and credit facilities, but in other times pose a threat to work of organizations when trying to protection of local products such as laws reduction of import and quota system work and the imposition of tariffs.

#### **2.6.4 International Variables:**

Business organizations should study the effect of the international changes on activity in foreign markets, that the totality of action taken by the states directly affect and non-directly on the performance of the organizations. The host

countries it has intentionally one to protect its local industry by reduction of foreign investment, or support of some industries in local market to raise its capacity to face off foreign industries to get a suitable market share in foreign markets, making the business organization think carefully before proceeding to work in, and the most prominent.

## **2.7 Environmental factors and export performance,**

*Nihal Kartite (2014)* examined the effect of environmental conditions and organizational culture on corporate entrepreneurship and the mediator effect of corporate entrepreneurship on environmental conditions, organizational culture and firm performance. Face-to-face or online surveys were conducted with three respondents per company – one junior administrative officer, one middle level manager and one top level manager. Mean averages for each company were used in data analysis. 561 surveys, which were properly filled out and included all three levels of managers, from 187 companies were approved. Results from regression tests showed that market culture and adhocracy culture have positive and strong effects on all corporate entrepreneurship dimensions, that clan culture positively affects innovativeness but has no significant effect on new business venturing-self renewal and proactiveness. Also, hierarchy culture has no effect on corporate entrepreneurship. So it is possible to suggest that adhocracy and market cultures enhance corporate entrepreneurship more than clan and hierarchy cultures. It can also be observed that innovativeness and proactiveness are negatively affected by munificence. Munificence also has a positive effect on sales and financial performance while dynamism negatively affects market share. Besides the direct effects of the environment on firm performance, proactiveness is a mediator between munificence and financial performance. The final findings of this research show that hierarchy culture directly, strongly and positively effects sales, financial performance

and market share, which means that it is the best working culture type in the Turkey market although it has no significant effect on corporate entrepreneurship. Also new business venturing-self renewal is a mediator between market culture and sales, and new business venturing-self renewal positively and strongly affects market share, while proactiveness has a negative effect on financial performance and market share. This may be caused by the proactive attempts of firms that have financial problems or/and that lose their market share.

**StudyAzazeabdulAdis 2014** However, an investigation on the impact of marketing strategy and export performance in a single industry is lacking. In addition, the influence of environmental factors to moderate the relationship between export marketing strategy and export performance has received little agreement. This research aims to investigate the relationship between export marketing strategy and export performance in Malaysian wooden furniture industry, as well as the influence of moderating role of environmental factors on the relationship between export marketing strategy and export performance. Personal interview, mail and phone interview methods were used to measure export marketing strategy, newly developed environmental factor variables which consists of global economic situation and certification, as well as export performance. The findings showed that there were no direct relationship between export marketing strategy and export performance. Uniquely, the moderating effect of certification appeared to moderate a few relationships between product and promotion adaptation, distribution strategy, design strategy and target market specification on export performance. Managerial implications and suggestions for future research were also discussed.

## **2.8 Study Variation:**

The current study has agreed in some aspects with differed studies done in the field. For example, the similarities are in orientation and innovation, though there is countable difference as the current study aims to view the impact of orientation and innovation but through environmental factors.

## **Chapter Three**

### **Conceptual Framework and Methodology**

#### **Chapter Overview:**

This chapter presents the research framework and methodology. The Methodology section highlights and research design, the population of study, instrument.

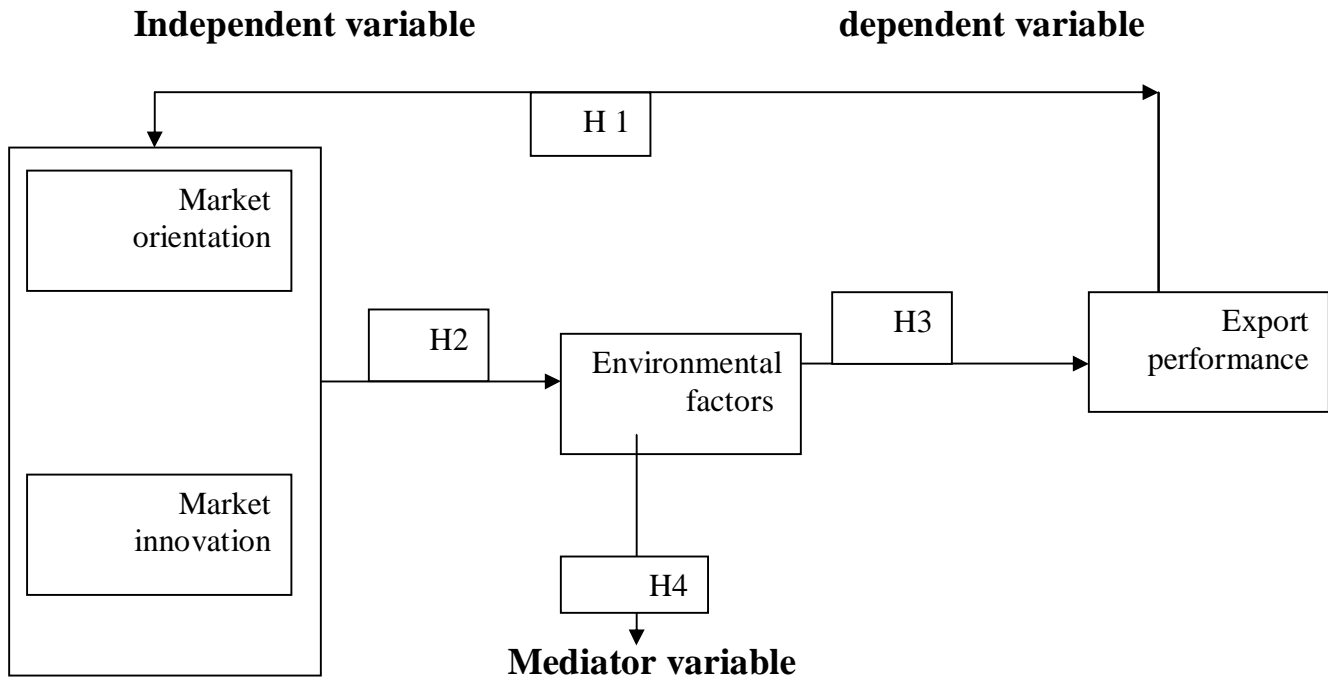
#### **3-1 Conceptual Framework**

The primary method includes Integrative model presented in figure 3.1 consist of the following: independent variables which are market innovation and market orientation, mediating variable is about environmental factors which includes items that are important in the current study as economic, legal, technological, political, social, international . Dependent variable is the export performance consisting of two dimensions financial and non-financial.

Through the examination and review of the literature and previous studies relevant to the subject of research and its problem build a model of the supposedly independent research includes variables, namely ( market orientation and innovation ) , intermediate variables of environmental factors and export performance is dependent variable.

**Figure (1)**

**the research conceptual framework.**



*(source: adapted from review of literature)*

In this study, we try to use three variables representing the overall relationship between the hypotheses developed in this research as follows:

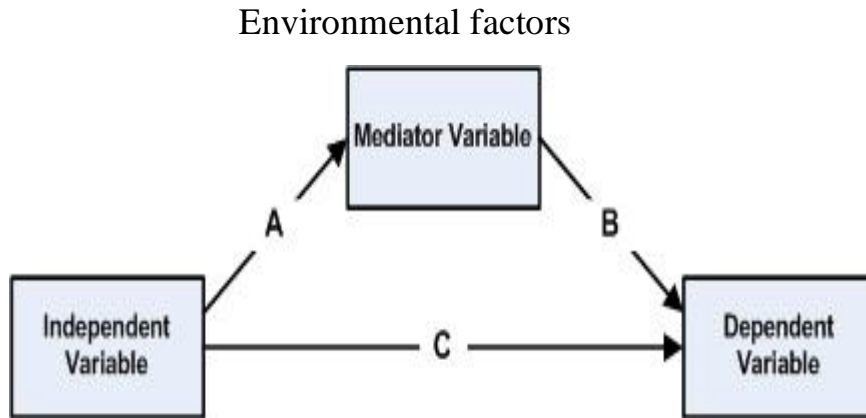
- 1- The dependent variable:** is the variable that presents itself subject to examination and study issue,( Uma\_Sekaran 2003). Represented in this study the performance of the market, so it is the case study
- 2- Independent variable:** The variable affects positively or negatively on the dependent variable, represented in this study are market orientation and market innovation.
- 3-Mediator variable:** is a variable which has the effect is predicted (Conditionally) on the impact of Theindependent variableon thedependentrelationship, and that there is a change in the expected

relationship *Baron and Kenny (1986)* Where mediator variable affect the results of the expected relationship, ( *Baron and Kenny1986*) as model described in the form below:

**(Baron and Kenny 1986) model.**

Figure (2)

Model of mediator variable.



*market orientation and innovation*

*export performances)*

1- (*Baron and Kenny (1986) the moderator – mediator variable – journal of personality and psychology 1986 –vol 51- no 6 –p1176*)

( *Baron and Kenny 1986*) said the main objective of mediation analysis is to contribute to the understanding of the relationship between two variables. In this way, mediator variables are mechanisms which help clarify or understand the meaning or the nature of this relationship, If this relationship does not exist, there is nothing to mediate. It is from there that the first condition that must be satisfied, according to Baron and Kenny’s proposal.

*Barond and Kenny (1986)* this model it has three contestations, the first step , the independent variable must affect the dependent variable significantly (B1 must be significant ), the second step the independent variable should affect the mediating variable (B2 must be significant) the third step ,mediating variable must influence the dependent variable significant (B3 must be

significant ) on other hand ,in order to establish whether mediator is fully or partially mediating variable should be zero or( B3 is not significant as a full mediator , while partial mediator exists once B4

### **3-2 Research Hypotheses:**

(Abdel Rahman, 1977) mentioned that (**hypotheses**) is a clever suggestion of guessing, that the researcher drafted and adopted, temporarily to explain some of the notices of phenomena, facts and use this hypothesis as a guide in his research and study to a reasonable results "

Hypotheses are tools that enable the researcher to determine and detect a phenomenon researched on the grounds that the assumptions allow landmarks (Salah voile (1982 )

A hypothesis can be defined as a logically conjectured relationship between two or more variables expressed in the form of a testable statement. Relationships are conjectured on the basis of the network of associations established in the theoretical framework formulated for the research study.

By testing the hypotheses confirming the conjectured relationships, it is expected that solutions can be found to correct the problem encountered.

***H1 - hypothesis 1: There is relationship between market orientation and export performance:***

Through previous studies and research models that have been verified by a researcher comes this hypothesis. We expect there a positive relationship between market orientation and export performance in the export market

(Akyol and Akehurst 2003) observed that firms which focus on generating export market information are in good position to perform better in their export



markets than the non market oriented ones because they possess a greater understanding of their customer needs.

Study of (Batia and Jain 2007) study aimed to determine the effect of market-oriented on the performance of Indian companies operating in the Indian market, and concluded that this study was to adopt a market-oriented, which lead to achieve better performance.

According (Farley and Webster 1993) they find out that the Japanese companies oriented to customers are innovational companies and at the same are the best in performance.

Study of (Morgan et al 2009) titled market orientation - market capabilities and firm performance) that market-oriented has a direct impact on the market rate of return based on the performance.

***H3.2.2 hypothesis 2 There is relationship between innovation and export performance.***

However, most previous studies on this topic reveal that there is a positive relationship between innovation in the market and the performance of the market. (Motohashi 1999) in this study found a positive relationship between performance and innovation strategy adopted by the companies.

***Hypothesis 3 -There is relationship between the innovation, orientation and environmental factors.***

We expect there to be a positive relationship between innovation and environmental factors of political, economic, technological, legal, International factors, internal environment and social.

(William's study 1993) said that the innovation in response to an Environmental changes at the same time a means to bring about change in different organizations.

(Chandler1999) showed that innovation Orientism reflects the administration for the future and their confidence in the Organization's superiority over its competitors in the external environment.

### **H3.2.4 fourth hypothesis:**

**H4- There is relationship between environmental factors and the exports performance.**

*NihalKartlte (2014)* .This study examines the effect of environmental conditions and organizational culture on corporate entrepreneurship and the mediator effect of corporate entrepreneurship on environmental conditions.

### **3.3. Research Design:**

Ali saleim (1996) Considered research design as a basic plan which works as a guide in the data collection and analysis in the research project. The research design framework that determines the type of information required, the data sources and collection procedures, Good design ensures that the information collected is consistent and objectives of the study. A good design ensures that all data in a precise manner economic measures, There is no research design standard or ideal can work as a guide for the person researcher because there are more of design research can achieve the same results

The descriptive characteristics and the purpose of the search are actually differ from other researches, where is characterized by the existence of effective research, clear the problem, specific goals and detailed information, Ali saleim (1996) The research design is characterized by the descriptive good planning and proper structure to ensure accurate results. that is, the purpose of providing information for specific questions or hypotheses .We meant by the

accurate results to reduce the regulatory bias errors to the output of the measurement process while credibility to the extent that is faithful to the measurement process free from the mistakes of the sample, often descriptive research method uses the sample of the study population at a given time. This type of research design is the most commonly used and most species.

( Creswell j.w.2003 ) said the research design include three as follows:

- 1- Gathering information tools
- 2- Methods of analysis.
- 3- Conclusions researcher proposed for use in the study

This study is designed to discuss in detail the data collection procedure, sampling technique, questionnaire design and development, administration of questionnaire as well as the data analysis techniques ( Heir, Anderson, Tatham and Black 1998) defined data as those facts that are related to any issue or subject of the study.

#### **-1 Population of the research:**

The study population consists of working agencies in vegetable and fruits markets within Khartoum state, the population study is (17) agencies, therefore, the study chose this population inside Khartoum state is the following reasons:

- 1- Khartoum state is the center of Sudanese exports.
- 2- There are means of transport and refrigerators.
- 3- Its nearby curing factories.

#### **3.4.2 Sampling Procedures:**

(Mehdi 2007) Before starting to selection of the sample and determine its size and items pulled could be taken the following:

In view of this study, which is its problem in the lack of continuity of production throughout the year and not stratification customary marketing concepts and theories, the study covered aspects related to innovation and marketing orientation, performance and determinants of this so-called study.

### **3.4.3 Type of sample**

According to descriptive data natural and its problem could be chosen the simple random sample for the following:

- 1- Random sample has remove elements from bias.
- 2- There is agreed role of precision.
- 3- We use random simple sample for variation in society.
- 4- It's an interpreter part to descriptive methodology.
- 5- Accuracy that is required in the greater sample size the greater the precision required.

So that everyone in this population has an equal opportunity to peers in the selection of the sample.

### **3.4.4 Size of Sample:**

Sample size consists of (11) agencies from the (17) agencies, they are from markers, exporters and importers. They respondent (196) individual, which, worth's (65%), it's above the rate, that umasekeran brought provided. Its acceptable rate to generalize the study results to population.

Uma Sekeran 2003 noted (1) preferably not less than the number of items on ten times the number of variables of the study.

(Sheikh Hamad (1998) the best ratio to determine the sample size is 20% of the size of the population, in the case of large numbers of more than 300 people use 30% of the size of the population .

According to (Hair 2010) every sample more than 100, can measure the phenomenon.

### **3.4.5 Data Collection Method: (Development of Questionnaire)**

In this study, the researcher used the questionnaire tool for several reasons related to the subject of research and its problem, the questionnaire is a widespread tool in collecting data and information for the purposes of scientific research methods.

It is a set of questions prepared by the researcher after identifying the problem or the subject of the assumptions and the Placing it in a certain way to allow respondents to answer the required questions and how to help a researcher at the time of a analysis of data ( Ali salim 2007)

### **3.5 Development of Questionnaire:**

According to ( Aaker and Day 2001), there are five steps in developing a questionnaire. These steps includes: planning what to measure, formatting the questionnaire, question wording, questionnaire layout, pre-testing, correcting problems and its implementations. These steps are discussed in detail, in the subsequent sections of the chapter.

#### **3.5.1 Planning what to measure:**

This step is based on the research objectives, problem statement, and the research issues. The survey questions were designed precisely to give clear ideas about the problems for the target respondents to answer. The questions on the research instrument were divided into the following:

(1) questions includes demographic information and firms information The section obtains on the respondent's information about gender, age,, education, experience years. Beside information of the firms about type of export, job title, number of employees and the export involvement Pre-exporter, sporadic, active.

(2) Second part includes questions related to the market orientation and market innovation.

3) Third parts include questions of export performance.

These sections of the study are developed based on the past literature.

(4)fourth part include question of environmental factors .

### **3.5.2 Formatting of the questionnaire:**

This step involves the conversion of the research objectives into information required to obtain the necessary output of the questionnaire. All the research constructs in this study had been converted into the relevant questions and clearly stated. Most of the respondents were familiar with Arabic language since it is a common language in Sudan. Therefore, the questionnaire has been translated into Arabic language.

### **3.5.3 Question wording:**

This step examines whether the questions are clearly understandable to all respondents. Thus it is necessary to uses simple terminologies to avoid unclear or elusiveness in the meaning. It is important to avoid double-barreled or misleading and confusing questions. Beside the phrasing and length of questions, it is also designed to solicit ideas and answers from target

respondents. Simple statements were framed so that the questionnaire could be easily understood.

### **3.5.4 Questionnaire layout decisions:**

This step concerns the sequence and flow of the statements for achieving the respondent's cooperation. The instrument should start with easy questions flow containing from general to specific questions. The sensitive or difficult questions must be avoided or not placed at the beginning. Moreover, an attractive layout of the questionnaire is considered for clarity of the items present-umasakeran 2010

### **3.5.5 Pre-testing and correcting problems**

This step involves conducting a pilot test on the questionnaire to ensure that the questions meet the researcher's expectations with no ambiguities, appropriateness in the length of the questions, and clearing the double-barreled questions. The objective of the pilot test is to eliminate confusing statements and checking the reliability of the variables. As for ensuring the availability of property in the stability measure has been adopted (Cronbach's Alpha) test which determines the level of acceptance of measuring the level of 60% or more tool, where the stability test results (saunders, et al 2007)

**Table (3-5) pre-testing of questionnaire.**

All the variable are reliable and exceed the cutoff point .60

#	Variables	Items	Cronbach Alpha
1	Market orientation	3 items	.7516
2	Market innovation	6 items	.7779
3	Export performance (financial)	5 items	.9100

4	Export performance( non- financial)	4 items	73.8%
5	Environmental factors	20 items	.8653

*Source: questionnaire*

### **3-5-6 Administrative of the Field Works:**

The current study utilizes a probability sampling technique that is random sampling. While the distribution of the survey we faced by some difficulties as the following: firstly one the questionnaire distributed directed for the respondents, but the response rate was all not good. Secondly we have received a directory about the exporters from the Union Chambers Of Commerce, but while we visit them on their place most of them were very busy, also sometimes respondents refuse to give information or refuse to fill up questionnaires, so it was so difficult to reach them and obtain an answer. In addition, Sometimeswhenwe collectedquestionnaires andfoundsome questionsnotansweredthe whenwe go backto them phonementionedthe questionnairedid not respond tous.

### **3-6 Measurements of study:**

*The market orientation measures* were adopted from ( Cadogan et al. 2003) and Jaworski and kohli (1993) who measured it using export market intelligence generation, export market intelligence dissemination and responsiveness to market intelligence. It was measured using likert five point scale strongly agree, Agree, Neutral, disagree strongly disagree.

**Table (3-1 ) Measures of market orientation**

Variable	Dimensions	Measurements	Authors
<b>Marketorie</b>	Export market intelligence generation	The gathering of information contributed in external communication with customer.	<b>Cadogan 2003, Hoq, &amp;Jaworski and kohli (1993)</b>



<b>ntation</b>	Export market intelligence dissemination	Response to customers wants participated in benefits increasing	
	Responsiveness to market intelligence	The inner coordination of management contributed in increasing of product.	
		We use techniques to support export of our products.	

*Adopted from literature review Hoq, &Norbani (2009); Codaganet al.2003*

**Market Innovation** using measures adopted from ( Nguyen and Pham (2009) and(Minguel et al 2009) Who conceptualized it as to what extent processes innovations, new product innovations, product modifications are introduced in the company and how the existing products are modified to suit the export markets. A 5 point likert scale was used to determine the level of innovation with Strongly agree, Agree Neutral, disagree, Strongly disagree.

**Table (3-2) Measures of Marketinnovation**

Variable	Dimensions	Measurements	Authors
<b>Marketinnovation</b>	Process innovation	We do large improvements of exporting products	Nguyen and Pham (2009) (Minguel et al 2009)
	Market innovation	We innovated new process that is suitable with export.	
	New Product innovation	We give potential come to developing new products.	
	Product modification	Our management it seeking to innovate new way for export	

*( Source adapted by the researcher ) from literature reviewer of Nguyen and Pham (2009) (Minguel et al 2009)*

**Export performance (financial)** was measured using both financial and non-financial measures which include export sales growth, export profit level, export sales volume, export profit contribution. (Toften and Olsen 2003). Subjective measures were used given the fact that most firms do not provide absolute figures of their performance. A 5 point scale ranging from strongly disagrees to strongly agree was used to solicit answers from the respondents.

**Table (3-3) Measures of Export performance ( financial)**

Variable	Dimension	Measurement	Authors
<b>Export performance( financial)</b>	export sales growth,	Over thepast five years,the production ofvegetablesandFruitgrowingdramatically	(Toften and Olsen 2003).
	export sales volume	Toa large extent vegetables and fruitinprofitscontributed.	
	export profit contribution	Inrecent yearshas increasedthe sizeofthefruit and vegetables	
	Market share	Fruitspreadvery quicklyin different markets Foreign	
		We are currentlysatisfied with theirshare inforeign markets	

*Source : adapted by the researcher from literature review of Toften and Olsen 2003).*

Non-financial measured using brand equity, customer satisfaction and Customer loyalty, Subjective measures were used because that most of firms do not provide absolute figures of their performance Katiskeas,el,al 2000). A 5

point likert scale ranging from strongly disagrees to strongly agree was used to solicit answers from the respondents.

**Table (3-4) Measures of Export performance non-financial**

Variable	Dimensions	Measurement	Authors
<b>Export performance non-financial</b>	Costumer loyalty	increase of Products for customer contributed on Products loyalty	<b>(Katsikeas et a 2000)</b>
	Costumersatisfaction	export Market in gainingcustomer satisfactioncontributed	
	Brand equity	Market contributein achievingthe needsandthe desires ofcustomers fromexports	
		Contribution in Market that increase in theknownbrandBrand equity	

( Source adapted by the researcher from literature reviewer of Katsikeaset al 2000)

Environmental factor (Majid Mohammed Saleh 2010 ) that the writer who pointed out that environmental factors, including political, Social. Economic ,Technology, international, internal environment, A 5 point likert scale was used to determine the level of environmental factors with Strongly agree, Agree Neutral, disagree, Strongly disagree, the researcher adapting it to become standards Its using Strongly agree, Agree .Neutral ,disagree, Strongly disagree..

**Table (3-5) Measures of Environmental factors**

Variable	Dimensions	Measurements	Authors
Environmental factors	Political variable	Political stability has contributed of increasing of export	Majid Mohammed Saleh 2010 )
		Knowledge of existing habits and value participated in knowing flair of consumers	
	Legal variable	The application of laws which related to environment protection saved resources and products.	
		The application of laws related customer protection raised the degrees quality of exporting products.	
		Organizing laws of trade work in markets participated in controlling of exporters work.	
	Social variable	Applying of management systems contributed to effortless.	
		Coordination among managements supported controlling products quality.	
		Applying technical participated in products increasing.	
		Knowledge of existing habits and value participated in knowing flair of consumers	
	international variable		
		Economic unions crated good incoming co-operation.	
	economical variable	Infrastructure participate in maintaining to export product.	

		Stability exchange and benefit raise competitive ability of export.	
		Knowledge of individual average of meaner led to discover the targeting market.	
		Relationsbetween thecountries	
	Technical variable	Applying of management systems contributed to effortless.	
		Coordination among managements supported controlling products quality.	
	internal environment	Infrastructures participate in maintaining to export product.	
		Stability exchange and benefit raise competitive ability of export.	
		Knowledge of individual average of meaner led to discover the targeting market.	

**Source** adapted by the researcher from literature reviewer of Majid Mohammed Saleh 2010 )

### 3.6.2 Operationalization of variables:

This study Includedmeasures on(43), items distributedinsub-groups, eachgroup representinga measuredealing withthe side of thepremiseform to search. The measure ofmarket orientation which determines the degree oforientationprevailingin the companyincludedthreeitems(1-3) andthe secondsidethe innovationincluded(6)items from question 4 to question 9 dealt withaspects ofthe innovativebehaviorof the organizationwith respectto research and development, quality and new productsand innovationfor allwhatis a neworganizationfor the products, andtheknowledge ofthe marketandthe interest ofthe organizationknowledge ofthe needs ofcustomersandcompeting products,

The third part, taking the financial and non-financial performance included on (9) items focused on customer loyalty and brand recognition and aspects that departments seek to achieve through the provision of a service fit the customer's current and future.

The fourth about the mediator variable environmental factors included a twenty (20) items distributed between political factors included two paragraphs of (1-2) legal factors included three paragraphs (3-5), social factors included four paragraphs (6-9), two items of international factors (10-11), economic factors include four elements from (12-15), and technological factors include two elements from (16-17), and finally internal factors include three elements from (18-20)

Researcher (Likert scale) was adopted to identify the strength of the approval or disapproval of it on vocabulary investigator assigned, using a component scale of five categories and is considered a measure of the (Likert scale) factional.

This has been using its (Scale) quintet consisting of (5) degrees ranging from the number (1), which refers to strongly disagree, while the figure represents (5) the highest degree its Strongly agree, or provide the level contained in the paragraphs of the meter property, with reference the sample of individual to choose the degree to which it deems appropriate.

### **3-6-1 Reliability of Instruments.**

This step involves conducting on the questionnaire to ensure that the questions meet the researcher's expectations with no ambiguities, appropriateness in the length of the questions, and clearing the double-barreled questions. The objective of the pilot test is to eliminate confusing statements and checking the reliability of the variables. A sampling frame was obtained from Sudanese unions of fruit and vegetable also companies of export.

### **3-6-2 validity of the content**

to make sure of the validity of the content: The researcher used a group of arbitrators and experts to identify the extent of the validity of the content of the scale, and after it has been revised from some aspects of the scale was modify those topics then included a sufficient number of questions that measure the concept.

### **3-Time horizon of the study:**

In this study, the researcher used the application of Cross-sectional study studies where questionnaires were collected in two weeks, all the transponder on the unit and face-to-face where the number of valid questionnaire

### **4-Data collection:**

In this study, the researcher used the questionnaire tool for several reasons related to the subject of research and its problem, The questionnaire its widespread tool in collecting data and information for the purposes of scientific research methods( Ali salim 2007)

### **4-Descriptive of Research**

Creswell j.w.( 2003) states that descriptive research:

- A) Provide accurate facts and data about the reality of the phenomenon assigned or designated event or a particular situation or something.
- B) Provides clarification of the relationships between the various phenomena such as the relationship between cause and effect relationship between all the Segments.

C) Provides explanations and analysis of the various phenomena including not reveal understand the factors that affect the phenomenon Different.

D) Help to predict the future of the various phenomenon's by providing a copy of the previous rate of change in Phenomenon to allow planning for some aspects of the future

### **5- Sources of Data:**

In marketing research, the two basic methods That depends on the source journals and reference library, newsletters, magazines, on the Internet pages. This source provides us with important information about the determinants of the previous studies also tells us the most important scientific methods for data collection are primary and secondary.

The primary method includes data that are collected for the purpose of the investigation, while the secondary method includes the data that are collected for other purposes of the study. That's where the secondary source is the original in the current study, which represents the most important tool Search a questionnaire that was distributed to the elements that represent the sample population of the study. The advantage of accurate information and modernity in terms of its history and use in the current study

The main difference between primary and secondary data is not these data are collected but on its purpose based on how these data are collected but on its purpose.

The data was obtained method of search survey in the literature and periodicals in order to create a secondary data, which was a good help in the formulation of the search form hypothesis and design of scale which provided



a clearer understanding of the dimensions of the problem of research and adapted to the research problem and purpose and assumptions In addition to the secondary data in the design of the questionnaire.

### **3 -13 Data analysis techniques:**

- 1- The using crunch's alpha to test the reliability or internal consistency of measuring.
- 2- Using factor analysis to test convergent validity.
- 3- The convergent validity of the constructs by using factor analysis.
- 4- Correlation analysis was used to test the correlation among all variables.
- 5- Regression analysis was used to test the hypotheses.

## **Chapter four**

### **Data Analysis and Discussion**

#### **4-1 Introduction:**

This chapter presents the finding and the data analysis in 3 Section, section one presents the respondents demographic information, section two presents the goodness of measure reliability and factor validity, while section three focuses on the result of the correlation and regression analyses and finally test of hypotheses.

This chapter presents the data analysis which related to market orientation, innovation, export performance and environmental factors in fruit and vegetable market. However, the aims of data analysis to test and present the results of:

- 1- The demographic characteristic of the respondents.
- 2- The reliability of the instrument based on internal consistency of measures using cronbach,s Alpha .
- 3- The convergent validity of the constructs by using factor analysis.
- 4- Correlation analysis was used to test the among all variables.
- 5- Regression analysis was used to test the hypotheses.

Table (4-1) the percentage of Response

Total Questionnaires sent to respondents	Questionnaires not returned	questionnaire s returned	Returned Questionnaires Not filled up	Overall response rate	%
212	5	207	11	196	92.45%

Source: prepared by the researcher from Analysis of the questionnaire by SPSS.

**Table (4-1)** present summary of response rate a total of 211 questionnaires were distributed to the employees in agencies of fruit and vegetable, however, 211 questionnaires were collected while 196 questionnaires were completed. The overall response rate was ( 92.45%) and this high response rate due to the fact that questionnaire was given face to face to respondents . The researcher was use personally administrated questionnaires (Sekaran and bougie 2010)

#### **4.2 Reliability Analysis of the Instrument.**

Testing goodness of data is testing the reliability and validity of measures. According to Sekaran and Bougie (2010). Variability of the a measure indicates the stability and consistency with which the instruments measured the concept and helps to access the goodness of a measure. That means findings would be the same if the research repeated at late date, or with a different sample of subjects .In other word, the reliability of a measure indicates the extent to which the measure is without bias and hence offers consistent measurement across the various items in the instrument.

Reliabilities less than 0.6 are poor, those in the 0.7 range acceptable and those over 0.8 good. the closer the reliability coefficient gets to 1.0 the better in other word , the generally agreed upon lower limit for Cronbach,s alpha is 0.70

In table (4-3) the result of cronbach,s alpha test for the five main variables,

the result showed that alpha cronbach,s equal (88%) for market orientation , (90.1%) market innovation , (72.4%) for export performance of financial , (71.8%)for export performance of non- financial , and finally (94.8%) for environmental factors. All the values of alpha cronbach exceed the cutoff point .70 . the overall alpha cronbach,s for the model equal 94.8%

Table (4-2) **Reliability Analysis of the instrument.**

#	Variables	Cronbach Alpha
1	Market orientation	88%
2	Market innovation	90.1%
3	Export performance ( financial)	72.4%
4	Export performance( non- financial)	71.8%
5	Environmental factors	93.4%
overall reliability		94.8%

Source : prepared by the researcher from analysis of questionnaire by spss

### 4.3 Respondents characteristics:

#### Position on export:

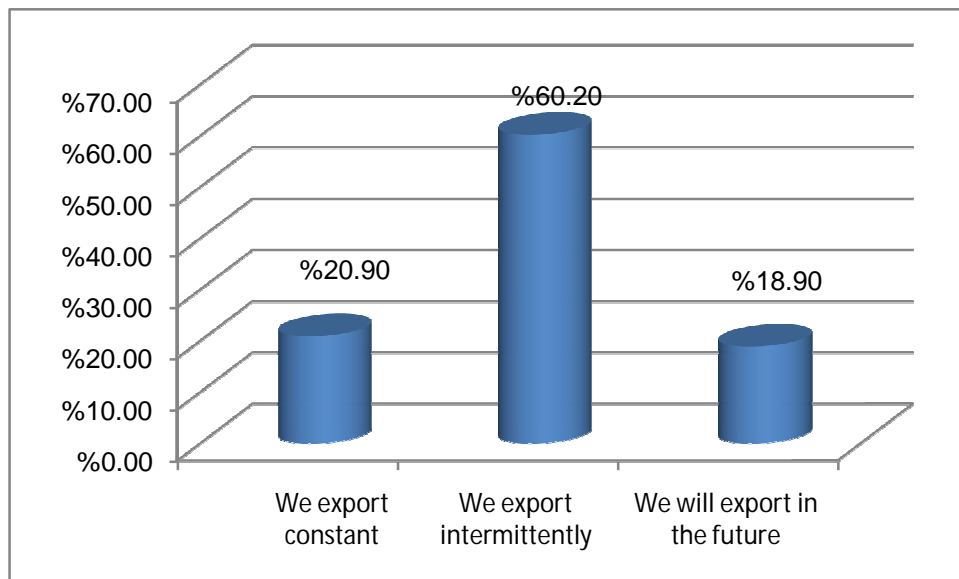
Table(4-2)and chart (4-1) below explain **our position on export**, results explain that We export constant represent 20.9% and We export intermittently60.20% and We will export in the future 18.9%. Therefore most of the respondents were export intermittently.

**Table(4.3): Our position on export :**

Items	Frequency	Percent
We export constant	41	%20.9
We export intermittently	118	%60.2
We will export in the future	37	%18.9
Total	196	%100

Source prepared by the researcher from analysis of questionnaire by SPSS

**Chart (4-1)**



Source: questionnair

**(2) Gender:**

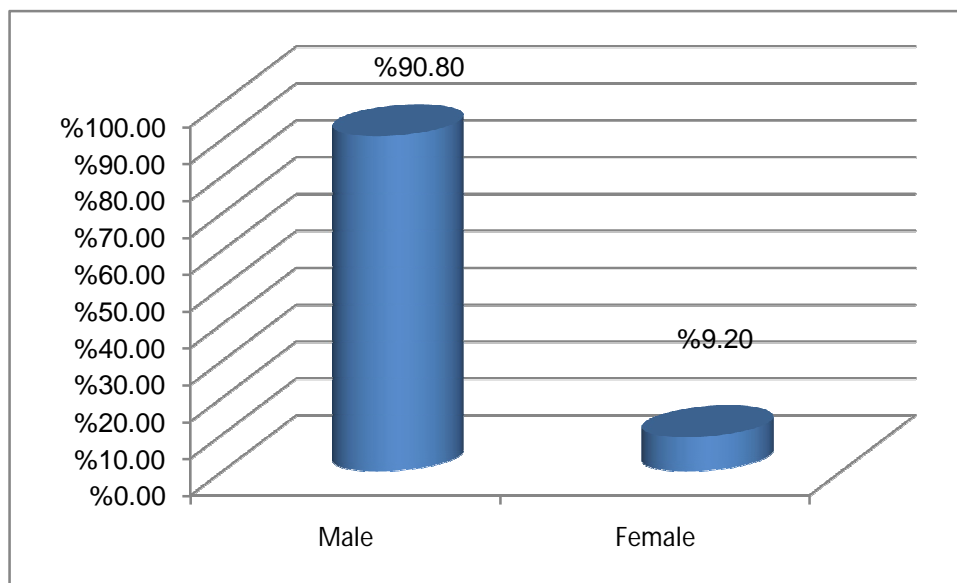
As show in table ( 4-3 ) and chart male represent 90.3% while female respondents, rate is 9.2%

**Table(4-4): frequency of Gender**

Gender	Frequency	Percent
Male	178	90.8%
Female	18	9.2%
Total	196	100%

Source prepared by the researcher from analysis of questionnaire by SPSS

**Chart (4-2)**



Source : questionnaire

**(3) Age:**

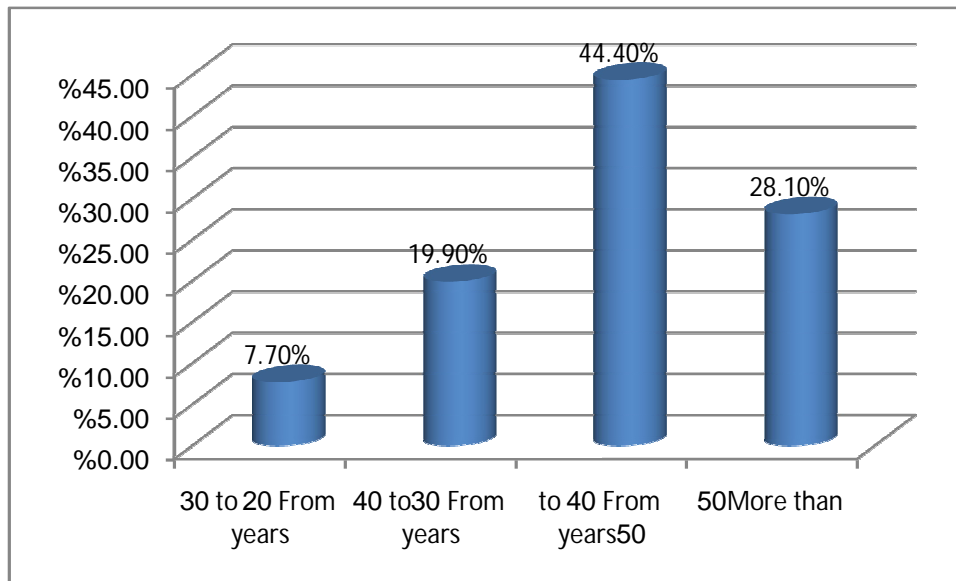
Table(4-4) and chart (4-3) below explain **age**, results explain that it From 20 to 30 respondents rat is 7.70% . From 31 to 40 respondents rat is 19.90%. From 41 to respondents rat is 44.40%. More than 50the respondents rat is 28.1% therefore most of the it is From 40 to 50years. this study showed that the community study 44% ratio between the ages of 40 and 50 years

**Table (4-5) frequency of age.**

Age	Frequency	Percent
20 to 29 years	15	7.7%
30 to 40 years	39	19.9%
41 to 50 years	87	44.4%
More than 50	55	28.1%
Total	196	100%

**Source:** prepared by the researcher from analysis of questionnaire by SPSS

**Chart (4-3)**



Source:

questionnaire

**Education level:**

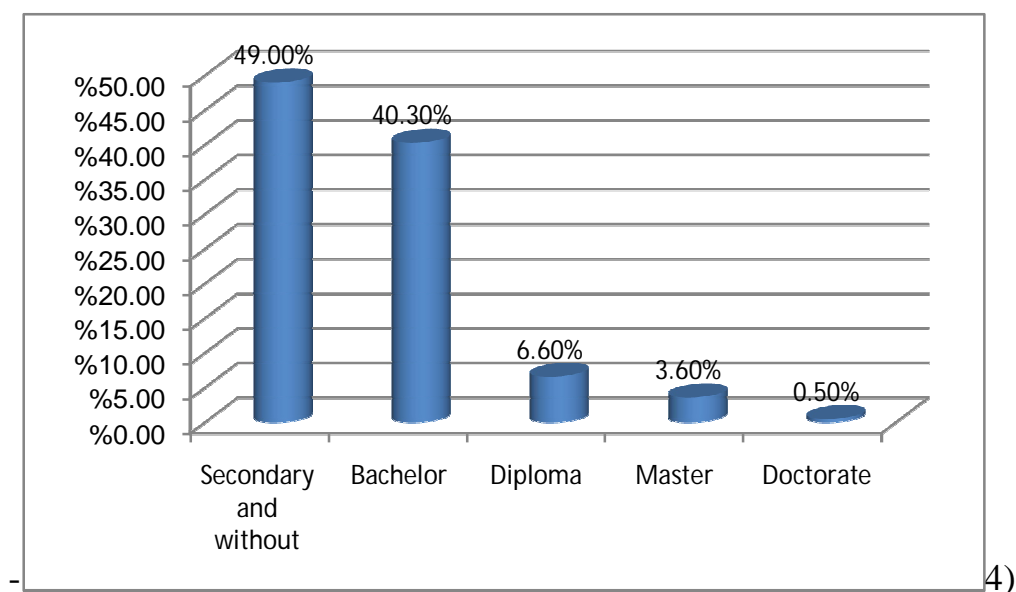
Table(4-5)and chart (4-4) below explain **qualifications**, results explain that secondary 49.00%, Diploma 6.60%, Bachelor 40.30% , Master the is 3.60% and Doctoratethe respondents rat is 0.05%

**Table( 4-6 ) : frequency of Education level:**

Paragraph	Frequency	Percent
Secondary	96	49.0%
Diploma	13	6.6%
Bachelor	79	40.3%
Master	7	3.6%
Doctorate	1	%05
Total	196	100%

**Source:** prepared by the researcher from analysis of questionnaire by SPSS

**Chart (4-4)**



Source questionnaire:

**(5) Years of Experience:**

Table(4-6)and chart (5-5) below explain **Years of Experience**, results explain that Less than 5 years is 25.00% , From 5 to 10 is 37.20% and From 10 to 15 is 14.80% and From 15 to 20 is 23.00%

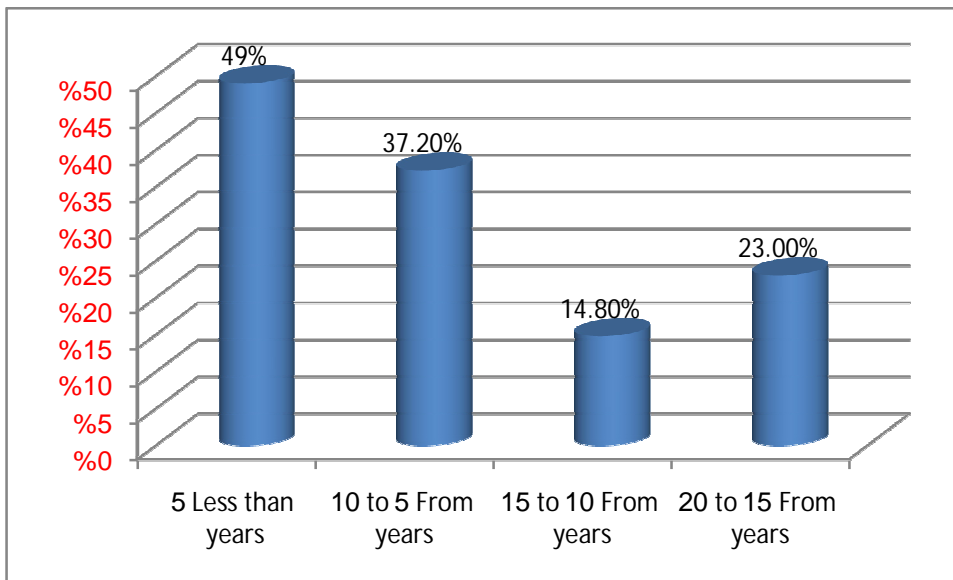


**Table( 4-7) frequency of Years of Experience:**

Years experience	Frequency	Percent
Less than 5 years	49	25%
5 to 10 years	73	37.2%
10 to 15 years	29	14.8%
15 to 20 years	45	23%
Total	196	100%

**Source:** prepared by the researcher from analysis of questionnaire by SPSS

**Chart (4-5)**



Source: questionnaire

#### **4-4 Goodness of measurements:**

This part examines the goodness through two methods

Firstly: ( cronbach Alpha) was done to measure the internal consistency of the items used on the questionnaire

Secondly: Reliability test the principal component analysis (factoranalysis) was conducted on internal component.

#### **4-5 Exploratory factor analysis:**

Exploratory factor analysis is used gather information about (explore) the inter-relationship among set of variable. Principle components analysis and factor analysis attempts to produce smaller number of liner combinations of original variables in way that captures most of the variability in the pattern of correlations( Tbachnick and fidell ,2007).

However, in principal components analysis the original variables are transformed into a smaller set of linear combinations, with all of the variance in variables being used in factor analysis however, factors are estimated using a mathematical model, where only the shared variance is analyzed (Tbachnick and fidell ,2007) factor analysis includes three steps as follows :

##### **Step (1) Assessment of suitability of the data factor analysis**

There are two main issues to consider in determining whether a particular set is suitable for factor analysis: sample size and strength of the relationship among the variable. Comrey and lee (1992) provided the following guidance in determining the adequacy of sample size :100 = poor , 200= fair , 300= good , 500= very good ,1000 Or more =excellent. And we used KMO to test the suitability of factor analysis which means the acceptance of data to be analyzed.

### **Step (2) Factor extraction:**

Factor extraction involves determining the smallest number of factor that can be used to best represent the inter-relation among the set of variable. The most commonly used approach is principal components analysis .Fidel (2007) recommended that researchers adopt an exploratory approach experimenting with different numbers of factors until satisfactory is found .

### **Step (3) Factor rotation:**

There two main approaches to rotation, resulting in either orthogonal ( uncorrelation) or oblique (correlated) factor solutions. This study used orthogonal approach because the goal of the research is to reduce of original variable to small set of uncorrelation variable for subsequent use in regression.

### **Factor analysis of orientation, innovation:**

Based on factor analysis result , the measurement of ( kMO) was, .835 which means sample is suitable to conduct factor analysis and the Bartlett's test of sphericity was significant ,both indicating there is sufficient items correlation among the factors. The result was achieved after deleting several items for insufficient correlation. Table ( 4-9 ) shows the result of analysis .

The two loading factor ranging from. 837 to .515 factor one has four question and also four question from factor two. The 2 factor cumulatively captured about 64% of the total variance in the data .all the items has factor loading above .45 with Eigen value of 4.403 and 1.399 . the factor are subject to varimax rotation and the factor were not renamed: factor1 ( innovation ) and factor ( 2 orientation) the reliability value ( cronbach ) for factor (!) were .83 and factor 2 were.799. all assumptions were satisfactory fulfilled . All the items had more than recommended value cutoff point .45 in MSA and KMO were .850 ( below the recommended minimum level of .45 , and Bartlett's test of sphere city is significant (  $P < 0.01$ ) and Eigen value above 1

**Table (4-8) KOM and Bartlett's test of orientation and innovation**

Kaiser- Meyer- olkin of sampling adequacy	.835
Bartlett,s test of SphericityApprox . chi square	823.608
Df	36
sig	0.00

Source: data of questionnaire

**Table (4-9)principle components analysis of the internal market innovation and orientation items (varimax rotation)**

Variable and question items	Factor loading	
	F 1	F
<b>Innovation:</b>		
We do large improvements of exporting products	.850	
We innovated new process that is suitable with export.	.815	
We give potential come to developing new products.	.797	
Our management it seeking to innovate new way for export	.650	
We try to bring new ideas to participate in export.		
<b>Orientation:</b>		
The gathering of information contributed in external communication with customer.		.805
Response to customers wants participated in benefits increasing		.789
The inner coordination of management contributed in increasing of product.		.766
We use techniques to support export of our products.		.637
Dropped :		
We give great attention to the development of export	.367	

<b>% of variance explain before Rotation</b>	<b>48.921</b>	<b>15.544</b>
Eigen value before Rotation	4.403	1.399
<b>% of variance explain after Rotation</b>	<b>33.254</b>	<b>31.211</b>
Eigen value before rotation	2.993	2.809
Alphcronbach	.83	.799

*Source: data of questionnaire*

**Factor analysis of export performance:**

Based on factor analysis results, the measurement of ( kmo) was .793 and the Bartllet test of sphericity was significant ,both indicating there is sufficient item correlation among the factors. The result was achieved after deleting several items for insufficient correlation. Table (4-11) shows the result of analysis.

The two loading factor ranging from. 850 to .637 factor one has five questions and also four questions from factor two .The 2 factor cumulatively captured about 64% of the total variance in the data .All the items has factor loading above .45 and einegvalue were 3.593 and 1.502 . The reliability value ( cronbach ) for factor (1)were .81 and factor 2 were.73The factor are subject to varimax rotation and the factor were not renamed, factor1 ( non-financial ) were and factor 2 (financial) the all assumptions were satisfactory fulfilled . all the remaining items had more than recommended value cutoff point were .45 in MSA and ( KMO) value of .850 ( above the recommended minimum level of .45 , and Bartlett’s test of spherecity is signifikanent (  $P < 0.01$ ) and eigenvalue above 1

**Tabl (4-10) KOM and Bartlett's test of export performance elements**

Kaiser- Meyer- olkin of sampling adequacy	.793
Bartlett,s test of SphericityApprox . chi square	584.583
Df	36
sig	0.00

*Source: data of questionnaire*

**Table (4-11)principle components analysis of the internal export performance items (varimaxrotation)**

Variable and questions	Factor loading	
	F 1	F
<b><i>Non-financial</i></b>		
Export market has contributed increasing of costumer's satisfaction	.837	
The market contributed to achieve need and wants of customer.	.819	
The export market has contributed in gaining customer satisfaction	.766	
Exporting market has participated of knowing to product with brand equity	.631	
Market issued in gaining customer satisfaction contributed	.515	
<b><i>Financial :</i></b>		
The rapid speed of fruits and vegetable has largely increasing in the board market		.847
The production of vegetable and fruits has big increased through the past fifth years		.823
Vegetable and fruits have large participation in benefits.		.660
There is increasing of export size in last years.		.652
<b>Dropping:</b>	0	0
<b>% of variance explain before Rotation</b>	39.906	16.688

Eigen value before Rotation	3.592	1.502
<b>% of variance explain after Rotation</b>	29.038	27.556
Eigen value after rotation	2.613	2.480
Alphcronbach	.81	.73

**Factor analysis on environmental factors:**

Table ( 4-13 ) presents the result of factor analysis on inimitability measured by 2 question for political environment , 3 question for legal environment ,4question for social environment , 2 question for international environment. 4 question for economical environment, 2 questions for technical environment and 3 question for internal environment. This result had been achieved after deleting various items for insufficient correlation in this section there no deleting items (  $MSA < 0.45$ ). The ( KMO) was .903 and Bartlett’s test of sphericity was significant. Both indicate significant correlation for factor analysis. the table (4-13) showed the results of the analysis the four loading factor ranging from .789 to .542 ,factors cumulatively captured 67% of the total variance in the data . All items had loading above 0.45 with eigenvalue 9.236 for factor one with 6 question , 1.752 for factor two with 5 question , 1.432 for factor three with 4 question , 1.086 for factor four with 5 question , the subject to varimax rotation and the original names of four factors remain .the reliability value ( cronpach,s alpha ) for inimitability were (.90) for factor one , (.85)for factor two, (.85) for factor three, (.83) for factor four. All assumptions were satisfactory fulfilled. All the items had more than recommended value of at least .45 in MSA with KMO value of .90 (above the recommended minimum level of 0.542 and Bartllet test of sphericity is significant (  $P < .01$ ) eigenvalue 1 this indicates that elements .

**Table ( 4-12 KOM and Bartllet’s test of environmental factors elements**

Kaiser- Meyer- olkin of sampling adequacy	.903
Bartlett,s test of SphericityApprox . chi square	2509.090
Df	190
sig	0.00

**Table (4-13) principle components analysis of the internal environmental factors items (varimax rotation)**

Variable and question items	Factor loading			
	F 1	F2	F3	F 4
<b><i>Legal</i></b>				
The application of laws which related to environment protection saved resources and products.	.789			
The application of laws related customer protection raised the degrees quality of exporting products.	.764			
Organizing laws of trade work in markets participated in controlling of exporters work.	.764			
Commercial application of labor laws.	.727			
Political stability has contributed of increasing of export.	.716			
Knowledge of languages contributed in impact the product.	.592			
<b><i>Economical</i></b>				
Infrastructure participates in maintaining to export product.		.753		
Stability exchange and benefit raise competitive ability of export.		.690		
Knowledge of individual average of meaner led to discover the targeting market.		.661		
Economic rate growth contributed in rising of price of		.632		

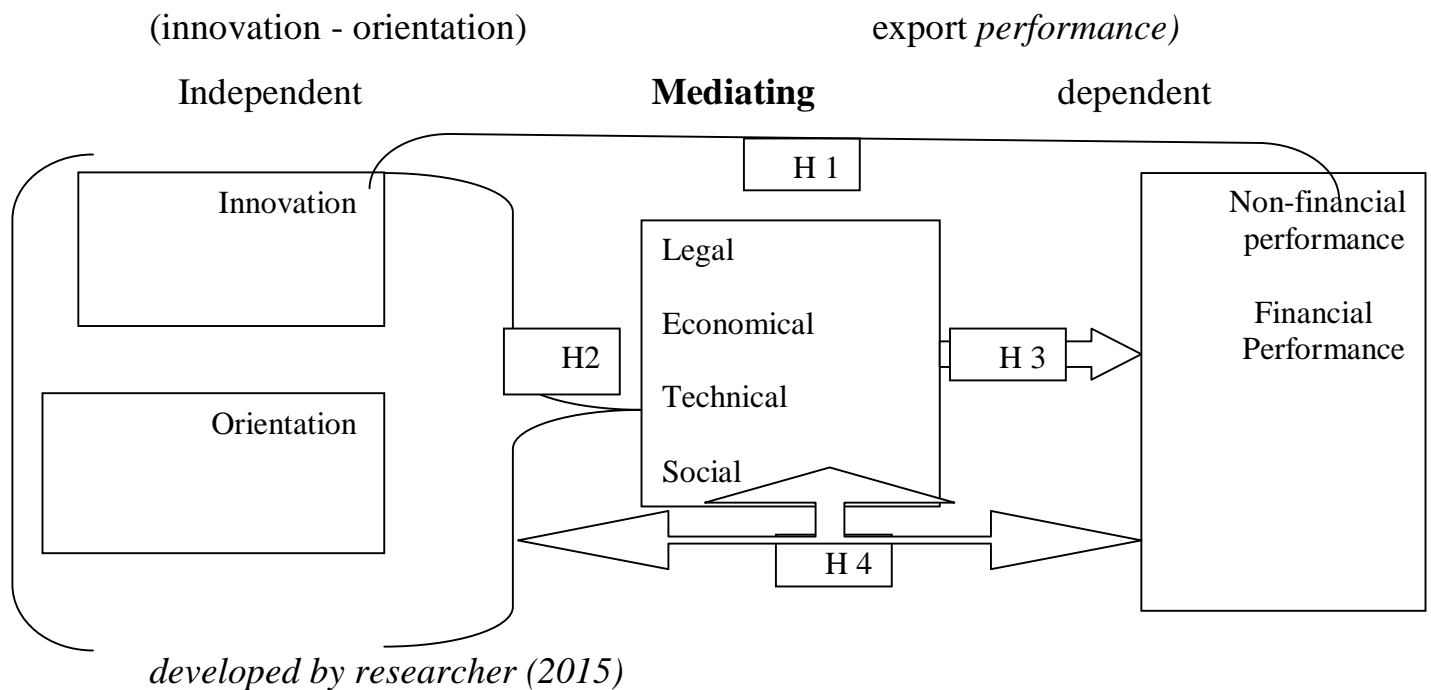


product.				
Fast of information increasing the body work.		.686		
<b>Technical :</b>				
Applying of management systems contributed to effortless.			.843	
Coordination among managements supported controlling products quality.			.833	
Applying technical participated in products increasing.			.678	
Knowledge of existing habits and value participated in knowing flair of consumers			.677	
<b>Social:</b>				
Economic unions crated good incoming co-operation.				.774
The degree of civilization of society leads to discover the want and culture of the society.				.618
Knowledge ofthe customs andvalues of society				.549
Knowing of society directions contributed in importing the product.				.542
Relationsbetween thecountries				.601
<b>Dropping :</b>	0	0	0	0
<b>% of variance explain before Rotation</b>	<b>46.178</b>	<b>8.761</b>	<b>7.160</b>	<b>5.431</b>
Eigen value before Rotation	9.236	1.752	1.432	1.086
<b>% of variance explain after Rotation</b>	<b>21.232</b>	<b>16.720</b>	<b>15.405</b>	<b>14.172</b>
Eigen value after rotation	4.246	3.344	3.081	2.834
Alphcronbach	<b>.90</b>	<b>.85</b>	<b>.85</b>	<b>.83</b>

#### 4-4 Modified conceptual framework:

From the result of factor analysis, there exists change from the earlier hypotheses. The variable related to environmental factors has change to four dimensions.

#### Figure (4-1) Modifying framework:



**Consequently the new hypotheses are:**

Through the results of the factor analysis can be formulated the following hypotheses:

**H1:0** There is positive relationship between market orientation, innovation and export performance.

**H1-1** : There is positive relationship between market orientation and financial performance.

**H1-2** : There is positive relationship between market orientation and non-financial performance.

**H1-3**: There is positive relationship between market innovation and financial performance.

**H1-4:** There is positive relationship between market innovation and non-financial performance.

**H2-0** **There is positive relationship between market orientation, innovation and environmental factors:**

**H2-1** There is positive relationship between market innovation and legal factor.

**H2-2:** There is positive relationship between market innovation and societal factor.

**H2-3:** There is positive relationship between market innovation and economical factors.

**H2-4:** There is positive relationship between market orientation technological factors.

**H2-5** There is positive relationship between market orientation and legal factor.

**H2-6:** There is positive relationship between market orientation and societal factor.

**H2-7:** There is positive relationship between market orientation and economical factors.

**H2-8:** There is positive relationship between market orientation Technical factors.

**H3-0 : There is positive relationship between environmental factors and export performance:**

**H3-1** There is positive relationship between legal factor and non-financial performance:

. **H3-2** There is positive relationship between economical factor and non-financial performance.

**H3-3:** There is positive relationship between societal factor and non-financial performance.

**H3-4:** There is positive relationship between societal factor and financial performance.

**H3-5:** There is positive relationship between economical factor and financial performance.

**H3-6:** There is positive relationship between legal factor and financial performance.

**H3-8:** There is positive relationship between technological factor and financial performance.

**H4-0**there is relationship between market orientation, Innovation and export performance mediated by environmental factors.

#### **4-5 Descriptive statistics of the main variables:**

The table (4-14) showed the mean and standard deviation of the eight variable of this study. the results in(4-14) table reveals that the Sudanese export companies ( fruits and vegetable) emphasized more on orientation (mean= 3.32) ,standard deviation= (.978), followed by technical mean=( 3.55) standard deviation(1.01) and then social shared mean=( 3.52) standard deviation (.884), followed by internal environmental mean=(3.44) standard deviation (.966), then innovation mean= (3.32) standard deviation( .978 ) ,then Non-financial mean = (3.29) standard deviation(.969) followed by legal mean =(3.25) standard deviation (1.08)and financial mean = ( 2.88) standard deviation (.858)

**Table (4-14) Descriptive analysis**

<b>Variables name</b>	<b>N</b>	<b>Mean</b>	<b>Std .deviation</b>
Innovation	196	3.32	.978
Orientation	196	3.62	1.00
Non-financial	196	3.29	.969
financial	196	2.88	.858
Legal	196	3.25	1.00
Economical	196	3.44	.966
Technological	196	3.55	1.00
Social	196	3.52	.884

*Source: factor analysis of data*

*Note: all variables used a 5 –point likert scale*

#### **4-5 Correlation analysis**

The Table (4-15 ) presents the results of inter-correlation among the variables , the correlation analysis conducted to see the original picture of the inter-correlation aimed the variables under study .The important of conducting correlation analysis is identifying any potential problems associated with multi-co linearity. The results show market innovation is positively and significant correlated with legal ( $R=.515, p\text{-value} < 0.00$ ) , there are significant correlation between market orientation and economic factor(  $.421, p\text{-value} < 0.00$ ), also there are significant correlation market innovation with technical ( $R= .306, p\text{-value} < 0.00$ ) there are significant correlation market innovation with societal factor. also the table shows that market orientation is significant correlation with legal factors(  $R=.418, p\text{-value} < 0.00$ ) , market orientation is significant correlation with economic factor(  $R=.316, p\text{-value} < 0.00$ ) Also The results show market innovation is positively and significant correlated with orientation(  $R=.475, p\text{-value} < 0.00$ ) Also market orientation is significant

correlation with technical (R= .199 ,p-value (0.00) market orientation is significant correlation with societal (R= .355, p-value 0.00) also the table shows that the non-financial performance is significant and positively correlated with legal factors (R=.562,p-value <0.00), also the table shows that the non-financial performance is significant and positively correlated with economic factor (R=.445,p-value0.00) the non-financial performance is significant and positively correlated with internal environment (R=.270, p-value<0.00)also the non-financial performance is significant and positively correlated with factors societal ( R=.527,p-value <0.00) the financial performance is significant and positively correlated with legal( r=.470, p-value 0.00) financial performance is significant and positively correlated with economic ( r=.366, p-value 0.00) the financial performance is significant and positively correlated with environmental ( r=.328 ,p-value 0.00) non-financial performance is significant and positively correlated with social (r= .441,p-value <0.00).

**Table (4-15) Correlation of all variables :**

Variables	Innovation	orientation	Non-fin	Finan	Legal	Econ	Technical	Soci
<b>Innovation</b>	<b>1</b>							
<b>Sing</b>	<b>0.00</b>							
<b>N</b>	<b>196</b>							
<b>Orientation</b>	<b>.475**</b>	<b>1</b>						
<b>Sing</b>	<b>.000</b>	<b>.000</b>						
<b>N</b>	<b>196</b>	<b>196</b>						
<b>Non-fin Sing</b>	<b>.398**</b>	<b>.472**</b>	<b>1</b>					
<b>N</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>					
	<b>196</b>	<b>196</b>	<b>196</b>					
<b>Finan</b>	<b>.548**</b>	<b>.266**</b>	<b>.370**</b>	<b>1</b>				
<b>Sing</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>				
<b>N</b>	<b>196</b>	<b>196</b>	<b>196</b>	<b>196</b>				
<b>Legal</b>	<b>.515**</b>	<b>.418**</b>	<b>.562**</b>	<b>.470**</b>	<b>1</b>			

Sing	.000	.000	.000	.000	.000			
N	196	196	196	196	196			
Eco	.421**	.316**	.445**	.366**	.503**	1		
Sing	.000	.000	.000	.000	.000	.000		
N	196	196	196	196	196	196		
Technical	.306**	.199**	.270**	.328**	.401**	.479**	1	
Sing	.000	.000	.000	.000	.000	.000	.000	
N	196	196	196	196	196	196	196	
Soci	.540**	.540**	.355**	.527**	.441**	.652**	.539**	1
Sing	.000	.000	.000	.000	.000	.000	.000	.000
N	196	196	196	196	196	196	196	196

Source : questionnaire distributed to export market ( fruit and vegetable )

Note : level of significant \* $p < 0.10$ \*\*  $p < 0.05$ ,\*\*

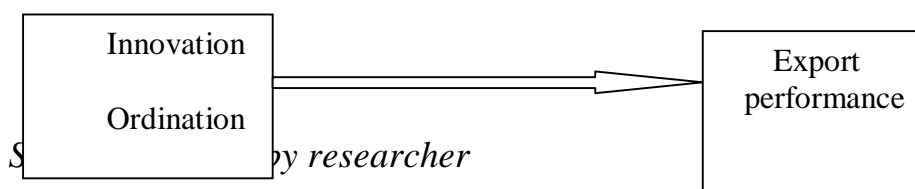
#### 4- 7 Hypotheses testing:

This section discusses the result of hypothesis of the study Given that the new emerged variable from factor analysis and the eliminated ones. There are (4) hypothesis. The main effects as well as the mediating effect were examined used hierarchical regression analysis, the statistical procedures of which had been explained in chapter 4.

Hierarchical regression analysis were used in all the tests of models to show the relationship between orientation and innovation with export performance ( non-financial, financial ), and effect of environmental factors ( namely : legal, economical, technical, social) in mediating the relation between the independent and the dependent variables .

**H1: There is relationship between (Innovation, Orientation and export performance).**

Figure (4-2 ) the relationship between innovation, orientation and Export performance.



Obviously ,from table (4-16) market innovation, orientation (namely improvements and information ) cumulatively contributed ( 63.7%) of the variance in export performance , the two drivers of market orientation and innovation are positively correlated with export performance (39.9%) , R square was ( 39.9%) which is the coefficient of multiple determinations adjusted for the number of independent variables and the sample size to account for demining returns where after the first few variables .

**Table (4-16)Model summery**

correlation analysis of market orientation ,innovation to expert performance						
Model	R	R Square	AdjusedRsquare	Std,Error of the Estimate		
					F	Sign0.00
1	.637	.406	.399	.595	65.850	0.00

Note : level of significant \*p<0.10\*\* p<0.05,\*\*

Source : analysis of questionnaire by SPSS

From table (4-17 ) below , in part one the result showed market innovation and orientation significantly influence environmental factors with Beta =.421 for innovation, Beta= .296 for orientation.



**Table (4-17) coefficient of market orientation, innovation with export performance.**

regression of market orientation ,innovation with expert performance.						
Model		Unstandardized coefficients		standardized coefficients	T	Sign
1		B	Std ,error	Beta		
	(Constant )	1.184	.173		6.858	0,00
	Innovation	.331	.053	.421	6.236	0.00
	Orientation	.222	.051	.296	4.386	0.00

Note : level of significant \*p<0.10\*\* p<0.05,\*\*

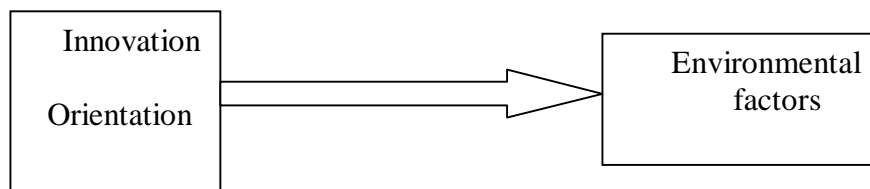
Source : analysis of questionnaire by SPSS

**Table (4-18) Result of hypothesis**

H 3	There is relationship between (innovation ,orientation ) and export performance :	
	There is relationship between (innovation ,orientation )export performance :	Accepted

## **H2-Relationship between the(innovation,oreintaion)with environmental factors**

Figure (4-3) the relationship between (innovation,oreintaion) with environmental factors.



Source: adapted by researcher

Obviously ,from table (4-19) the innovation and orientation ( namely improvements and information) cumulatively contributed ( 36.6%) of the

variance in environmental factors , the two drivers of market orientation and innovation are positively correlated with environmental (60.5%) , R square was ( 36.6%) which is the coefficient of multiple determinations adjusted for the number of independent variables and the sample size to account for demining returns where after the first few variables.

**Table (4-19) Model summery**

analysis of innovation and oreintaion with environmental factors						
Model	R	R Squar e	AdjustedR square	Std,Error of the Estimate		
					F	Sign 0.00
1	.605	.366	.360	.662	55.76	

Note : level of significant \*p<0.10\*\* p<0.05,\*\*

Source: analysis of questionnaire by SPSS

From table (4-20 ) below , in part one the result showed market innovation and orientation significantly influence on environmental factors with Beta for ( .457) for innovation, ( .214) for orientation.

**Table (4-20) coefficient**

Table (4-20 ) ( market orientation ,innovation to environmental factors						
Model		Unstandardized coefficients		standardized coefficients	T	Sign
1		B	Std ,error	Beta		
	(Constant )	1.531	.192		7.991	0,00
	Innovation	.387	.059	.457	6.566	0.00
	Orientation	.173	.056	.214	3.078	0.02

Note : level of significant \*p<0.10\*\* p<0.05,\*\*

Source : analysis of questionnaire by SPSS

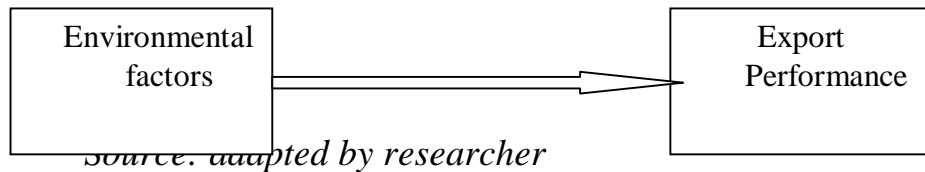
Table (4-20) result of hypothesis.

H 2	There is relationship between (innovation ,orientation ) and environmental factors:	
	There is relationship between (innovation ,orientation ) and environmental factors	<b>Accepted</b>

Source: Table ( 4-20 )

**H3: There is relationship between environmental factors and export performance.**

Figure(4-4) Relationship between environmental factors and export performance.



Obviously ,from table (4-21) the environmental factors cumulatively contributed ( .561%) of the variance in export performance , the four drivers of environmental factor are positively correlated with performance (74.9%) , R adjusted ( 55.2%) in the model is (60%) which is the coefficient of multiple determinations adjusted for the number of independent variables and the sample size to account for demining returns where after the first few variable .

Table (4-21) **Model summery**

Correlation analysis of export performanc with environmental factors						
Model	R	R square	Ad R	Std error	F	Sign
1	.749	.561	.552	.515	60.996	0.00

Note: level of significant \*p<0.10\*\* p<0.05,\*\*

Source: analysis of questionnaire by SPSS

Table (4-22) shows the result of regression equation testing the influence of environmental factors on export performance .the result shows that the model

is significant (B=.278 to legal, Beta=.141 to economical, Beta=-.048 technical. and Beta=.267 to social. The results show significant relation between legal, economical, social and export performance while technical environment was not significant.

**Table (4-22) coefficient of Environmental factors to export performance**

environmental factors to export performance						
Model		Unstandardized coefficients		standardized coefficients	T	Sign
1		B	Std ,error	Beta		
	(Constant )	.883	.164		5.390	0,00
	Legal	.278	.050	.391	5.553	0.00
	economical	.141	.055	.177	2.582	0.01
	Technical	-.056	.045	-.048	-.778	0.437
	Social	.267	.066	.307	4.046	0.00

Note : level of significant \*p<0.10\*\* p<0.05,\*\*

Source : analysis of questionnaire by SPSS

Table (4-23) Result of Hypothesis

H 1	There is relationship between environmental factors and export performance	
H1.1	There is relationship between export performance ) and environmental factors	<b>Accepted</b>

Source: adapted by researcher

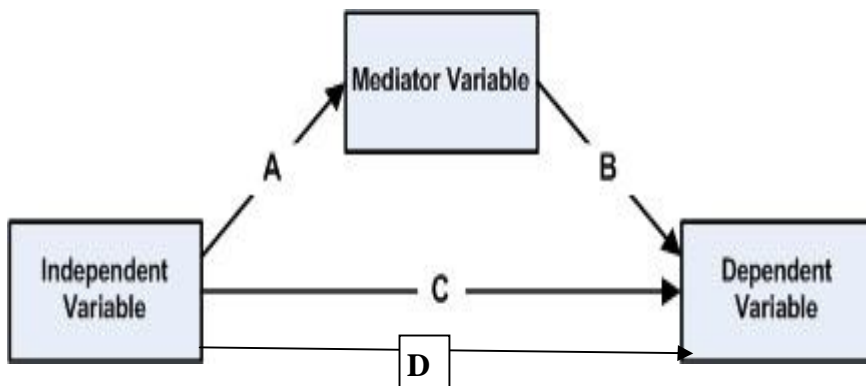
**H -4 environment factors mediating the relationship between Orientation, market innovation and export performance.**

To test this hypotheses, The study applied a three step hierarchical regression recommended by Barond and Kenny (1986) the first step , the

independent variable must affect the dependent variable significantly (B1 must be significant) the second step, the independent variable should affect the mediating variable (B2 must be significant) the third step, mediating variable must influence the dependent variable significantly (B3 must be significant). On other hand, in order to establish whether mediator is fully or partially mediating variable should be zero or ( B3 is not significant as a full mediator, while partial mediator exists once B4 is significant but reduced, to establish that, the mediator (M) fully mediator the relationship between the initial variable (X) and outcome variable (z) the impact of X on Z controlling for M should be zero or B4 is not significant, whereas, partially mediator exists when B4 is significant, as shown in figure 4-5.

**Mediation structure:**

Figure (4-5) Baron and Kenny model



Source: Model baron and Kenny 1986

**H -4 environment factors mediating the relationship between orientation , market innovation and export performance.**

Figure (4-6) the mediating role of environmental factors

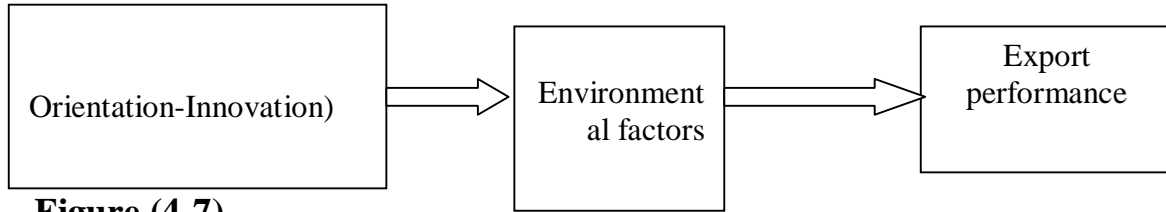


Figure (4-7)

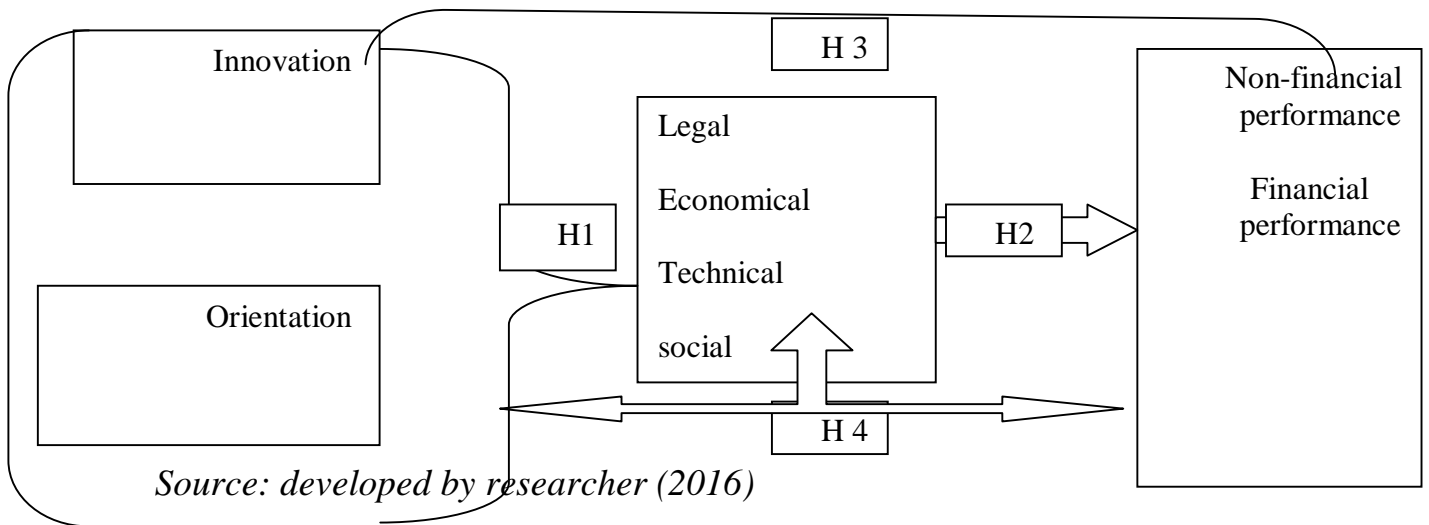
**Innovation - orientation**

**export performance**

Independent

Mediating

dependent



Source: developed by researcher (2016)

**H1 : Relationship between the(innovation,oreintaion)with environmental factors**

Following the terms of Baron and Kenny in applying mediator factor form there should be a relationship between the independent variable and the mediator variable to be statistically significant relationship. Then the hypothesis has been proved in the table (4-16) and was statistically significant. Also to find relevant statistical significant relationship between the mediator variable and the dependent variable it has been proved and was statistically significant as shown in the table (4-18)

**H 3: Relationship between environmental factors and expert performance.**

Table (4-23) Show the result of the regression equation testing the influence of the environmental factors on export performance. Obviously, from table ( 4-23 ) the environmental factors .463% of the Variance in export performance. The environmental factors is positively correlated with 68.7% .the adjusted R2 in the model is ( 2)

**Table(23) Model summery.**

Relationship between environmental factors and expert performance						
Model	R	R Square	AdjusedRsquare	Std,Error of the Estimate		
					F	Sign
1	.681	.463	.461	.565	617.51	0.00

Note : level of significant \*p<0.10\*\* p<0.05,\*\*

Source: Analysis of questionnaire by SPSS

**Table (4-24) Coefficientof environmental factors and expert performance.**

Regression between environmental factors and expert performance.						
Model		Unstandardized coefficients		standardized coefficients	T	Sign
1		B	Std ,error	Beta		
	(Constant )	1.007	.166		6.068	0,00
	Environmental	.609	.047	.681	12.943	0.00

Note : level of significant \*p<0.10\*\* p<0.05,\*\*

Source : analysis of questionnaire by SPSS

Concerning the mediation effect of environmental factors on the relationship between market orientation, innovation and export performance,

the results of the regression analysis given in table (4- 25) showed that market orientation ,innovation significantly influenced and export performance.

Table (4-25 ) in the below showed the results of the hierarchical regression testing the mediation effect of the environmental factors on the relationship between market orientation ,innovation and export performance in model (1) the result showed that the strength of association measured by the coefficient of multiple determinations (R<sup>2</sup>) explained 40.1% of the total variation in the dependent variable accounted for by the independent variable ,and the adjusted R<sup>2</sup> was 39.8% with F-value 128.99 at ( p<0.05) level of significance

In model (2) the result showed that the strength of association measured by the coefficient of multiple determinations (R<sup>2</sup>)explained 55.5% of the total variation in the dependent variable accounted for by the independent variable and mediator variable .and the adjusted R<sup>2</sup> was 55.1% with F-value 120.451 at (p<0.05) level of significant .

Table (4-25)**Model Summary.**

<b>Environmental factors as mediator variable between market orientation ,innovation and export performance .</b>						
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>AdjusedRsquare</i>	<i>Std,Error of the Estimate</i>	<i>F</i>	<i>Sign0.00</i>
<i>1</i>	<i>.637</i>	<i>.406</i>	<i>.399</i>	<i>.597</i>	<i>129.99</i>	<i>0.00</i>
<i>2</i>	<i>.745</i>	<i>.555</i>	<i>.551</i>	<i>.516</i>	<i>120.451</i>	<i>0.00</i>

Note: level of significant \*p<0.10\*\* p<0.05,\*\*

Source: analysis of questionnaire by SPSS

From table (4-26) below, in model (1) the result showed that market



orientation, innovation significant influence export performance with beta coefficient (Beta=.421), in model (1), and orientation significant influence export performance with beta coefficient (Beta=.296), the extent of export performance significantly changed the variable explained by orientation, innovation, as the beta value coefficient was decreased innovation (.185) with environmental factors, and orientation decreased to (.185) with environmental factors. In that time environmental factors significant influence export performance with beta coefficient or influence increased to (.515)

Concerning the type of mediation environmental factors on the relationship between market orientation, innovation and export performance, the results showed that the value of orientation innovation was significantly increased (in model 2) this indicated that, environmental factors fully mediated the relationship between market orientation, innovation and export performance (if we take out environmental factors we still get an effect of market orientation, innovation and export performance).

Hypothesis which states that an environmental factor mediates the relationship between innovation, orientation and export performance is strongly supported.

**Table (4-26) Coefficient of (environment factors mediating the relationship between orientation, market innovation and export performance.**

Regression of (environment factors mediating the relationship between orientation , market innovation and export performance						
Model		Unstandardized coefficients		standardized coefficients	T	Sign
1		B	Std ,error	Beta		
	(Constant )	1.184	.173		6.828	0,00
	Innovation	.331	.050	.421	6236	0.00
	Orientation	.222	.051	.296	4386	0.00
2	(Constant )	.451	.1699		3.152	0.00
	Innovation	.146	.050	.185	2925	0.00
	Orientation	.139	.044	.185	3162	0.00
	Environmental	.479	.055	.515	8692	0.00

Note : level of significant \*p<0.10\*\* p<0.05,\*\*

## **Overview:**

Through the line of this chapter an overview for the obtained result will reviewed. Also recommendations based on study results and suggestion for further studies will be presented.

## **5-1 Findings:**

Based on the hypotheses testing the research obtained the following results:

The first hypothesis has showed that orientation and innovation increase the effectiveness of exports performance so, whenever orientation and innovation are applied there will be good export performance in terms of increasing revenue. As the study of Farely and Webster found, orientation and innovation in the market increase the power of the exports performance according to study of ( Farlely and webster 1993) Hoq et al. (2009). kropp et al. (2005). The claim of the second hypothesis was totally proved, that means there is great affect of environmental factors on exports performance, therefore, exporting companies must take these factors in consideration. The current study is with agreement with Shahram (2013)' study in term of the findings, but his study focused on the managerial factors and totally ignored the environmental factors. The last hypothesis proved that environmental factors have mediating role in supporting exports performance.

The first hypothesis: there is different significance between market orientation, innovation and environmental factors. The study showed that there is a

correlation coefficient and so a positive relationship which means the focus on market orientation and innovation in Sudanese fruit and vegetable export agencies is in accordance with the environmental factors. Based on the results, market orientation and innovation increase the export performance. This proves what has been reviewed in the relevant previous studies and what was obtained agreed with the current study.

The relationship between market orientation and innovation and export performance as the second hypothesis states is proved, and the study showed that there is a valid correlation which means there is a positive relationship as confirmed by the hypothesis.

In the other part connected with mediating factors after been introduced, the correlation coefficients has changed to a valid degree and that means it increases whenever export agencies apply orientation and innovation through intermediate relationship of environmental factors. To see the impact of that relationship, the beta value has changed for the better with the introduction of intermediate factors and this was confirmed by the study Codogan (2003); Alhakimi and BaharunHoq, and Norbani (2009)Majid Mohammed Saleh 2010.

## **5-2 Limitations of the study**

This study was conducted on one export segment using one country's export (fruit, vegetables), therefore, it is impossible to be sure that these findings can be generalized on different exports and to the export activities of other countries. Clearly, tradeoffs must be made in any research between generalization and greater power achieved by reducing the noise created by agency effects or differences in activities across countries. However, the approach used and the motivation that comes from demonstrating the effectiveness in one country.

### **5-3 Suggestions for future studies**

The research represents an early attempt to build and test a theoretical framework for export. However, due to the limitations of the study which have been mentioned above, this research provides some suggestions for future research, these suggestions are detailed in the following:

Future studies can replicate this study using larger samples and dissimilar contexts such as different sectors or dissimilar countries. Besides, the theoretical framework of this study was limited. For further studies, some variables such as mediating variables or it can increase the elements of the variable.

The study covers the orientation and innovation in addition to the mediating role of environmental factors. The orientation factors were discussed from behavioral aspects, so conducting a research covering both the behavioral and cultural aspects will be an advance.

As the study covers the sector of fruit and vegetable exports, this limits the view of the study in particular way so the suggestion is that: future studies can look into different sectors other than fruit and vegetable so as to increase the view of the topic.

This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruit This research follows a descriptive analytical method to shed light on the performance of the Sudanese export market of vegetables and fruits,

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Dr. ElhamMansor	Khartoum university	Business Administration
Abu baker Balew	Nilain university	Statistic

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# Appendix(A)



بسم الله الرحمن الرحيم

جامعة السودان للعلوم والتكنولوجيا

كلية الدراسات العليا



اثر توجة السوق والابتكار علي اداء الصادرات و الدور الوسيط للعوامل البيئية

( الخضر والفاكهه )

المستجيب الكريم :

السلام عليكم ورحمة الله

هذا الاستبيان يختص بجمع المعلومات عن الدراسة الخاصة باثر العوامل البيئية علي توجّه السوق . الابتكار و اداء الصادر :  
استمارة الاسئلة هذه يجب ان تملأ بواسطة المعنيين باعمال الخضر والفاكهة تتكون استمارة اسئلة الاستبيان من اربعة اقسام .  
رجاء الاجابة عن كل الاسئلة حسب ماترونة مناسباً . كل المعلومات التي تدلي بها ستعامل بشكل سري . وسيتم استعمالها  
للاغراض الاكاديمية فقط . نسعد باتصالكم بنا اذا كنتم تحتاجون لاي معلومات او اي استفسارات تتعلق بالنتائج المتحصلة من هذه  
الدراسة .

نشكركم مقدماً علي تعاونكم معنا لدفع مجلة المعرفة ولكم منا كل الود والتقدير

اسم الباحث : الياس محمد احمد      المشرف : د. داليا محمد الزبير

موبايل رقم : 0918027730      جامعة الخرطوم مدرسة العلوم الادارية

عنوان البريد الالكتروني..... البريد الالكتروني [daliadm410@yahoo.com](mailto:daliadm410@yahoo.com)

ملحوظة : الذين يودون ان يحصلوا علي نسخة مجانية من نتائج هذه الدراسة سترسل لهم عند الانتهاء من البحث , فقط رجاء  
ادرج عنوانك ورقم هاتفك في الصندوق ادناه .

الاسم	
رقم التلفون والبريد الالكتروني	
العنوان	

مع اكد الشكرنا والتقديرنا

هذا القسم يتكون من اسئلة عامة مهمة بالنسبة لنا لمعرفة خلفية عن المستجيبين رجاء اجب علي جميع الاسئلة باستخدام الرمز (√).  
1- ماهو النشاط الاساسي لعملكم في مجال الصادر

2- الرجاء استعمال ( ) بشكل واضح في المكان الذي يعبر عن حالتك , كما هو موضح ادناه .

موقفنا من التصدير :

- 1- نقوم بتصدير مستمر ( )  
2- نقوم بتصدير متقطع ( )  
3- سوف نقوم بالتصدير في المستقبل ( )

3- الجنس : الرجاء استعمال الرمز (√ )

ذكور	انثي

4- المؤهلات العلمية : الرجاء استعمال الرمز (√ )

ثانوي ودون	بكالوريوس	دبلوم فوق الجامعي	ماجستير	دكتوراة

5- عدد سنوات الخبرة : الرجاء استعمال الرمز (√ )

اقل من 5 سنوات	من 5 الي 10 سنة	من 11 الي 15 سنة	اكثر 15 سنة

### القسم الثاني :

هذا القسم نوضح فيه المفاهيم الاساسية لهذه الدراسة والتعرف علي كل نشاط علي حده . الرجاء الاطلاع عليها ومن ثم استعمال الرمز ( √ ) امام المفاهيم التي استفدتم منها ثم ابداء رأيكم فيها وفقا للاسئلة التي تليها

MARKET OREINTATION						
البند	أ- توجه السوق	لا اوافق بشد	لا اوافق	محايد	اوافق	اوافق بشدة
1	سرعة الاستجابة لرغبات الزبون ساهمت في زيادة الارباح					
2	جمع المعلومات عن الاسواق ساهم في التواصل الخارجي مع الزبون					
3	تنسيق الادارة الداخلي ساهم في زيادة المنتج المصدر					

MARKET INNOVATION						
البند	أ- ابتكار السوق	لا اوافق بشدة	لا اوافق	محايد	اوافق	لا اوافق بشدة
1	نقوم بتحسينات كبيرة علي منتجاتنا لصادرة الحالية لم تطلبت الزبون					
2	نستخدم التقنيات لتحسن الصادر من منتجاتنا					
3	ابتكرنا عملية انتاج جديدة تناسب الصادر من منتجنا					
4	نحن نعطي اهتمام كبير لتطوير منتجات جديدة					
5	نحاول الخروج بافكار جديدة تساهم في الصادر					
6	تسعي ادارتنا الي ابتكار طرق جديدة لعمل الصادر					

### القسم الثالث :

هذا الجزء يختص بالاداء المالي وغير المالي للصادر . حسب تجربتكم في المجال اي مدي ساهمت المفاهيم في تحقيق اهدافكم في السنوات الاخيرة .  
الرجاء وضع علامة ( √ ) بعد العبارة الملائمة وذلك حسب تجربتكم في المجال .

FINANCIAL PERFORMANCE						
البند	الاداء المالي للصادرات	لا وافق بشدة	لا وافق	محايد	وافق	وافق بشد
1	الي حد كبير ساهمت الخضر والفاكهة في الإرباح					
2	علي مدي السنوات الخمس الماضية إنتاج الخضر والفاكهة تزايد بشكل كبير					
3	في السنوات الأخير زاد حجم الصادر من الخضر والفاكهة					
4	الفاكهة لدينا تنتشر بسرعة كبيرة في مختلف الاسواق الخارجية					
5	نحن راضون حاليا عن حصتنا في الاسواق الخارجية					

NON-FINANCIAL PERFORMANCE						
البند	الاداء الغير المالي للصادرات	لا وافق بشدة	لا وافق	محايد	وافق	وافق بشد
1	ساهم سوق في تحقيق حاجيات ورغبات الزبائن من الصادر					
2	ساهم سوق الصادر في كسب رضاء الزبائن					
3	ساهم سوق الصادر في زيادة ولاء الزبون للمنتجات المصدرة					
4	ساهم سوق الصادر في التعرف علي المنتج من خلال العلامة التجارية					

### القسم الرابع :

هذا الجزء يتعلق العوامل البيئية. الرجاء وضع علامة (√) حول المكان المناسب من خلال الفقرات الموضحة امام الجمل وذلك حسب تجربتكم في المجال ,

ENVIRONMENTAL FACTORS						
البند	العوامل البيئية	لا وافق بشدة	لا وافق	محايد	وافق	وافق بشد
<b>المتغيرات السياسية :</b>						
1	ساهم الاستقرار السياسي في زيادة الصادرات					
2	اهتمام الحكومات بالاستثمارات الاجنبية رفع درجة حجم الصادر					
<b>المتغيرات القانونية :</b>						
3	تطبيق القوانين المرتبطة بحماية البيئة حافظت الموارد والمنتج					
4	تطبيق قوانين حماية المستهلك رفع درجة جودة المنتجات المصا					
5	القوانين المنظمة للعمل التجاري في الاسواق ساهمت في ضبم المصدرين					
<b>المتغيرات الاجتماعية :</b>						
6	معرفة اللغة ساهم في التواصل مع الشعوب					
7	معرفة العادات والقيم السائدة ساهم في كشف اذواق المستهلكين					

					8	معرفة توجهات المجتمع ساهمت في تطوير المنتج
					9	درجة تحضر المجتمع ادت الي كشف رغبات وثقافة المجتمع و
<b>المتغيرات الدولية :</b>						
					10	الاتحادات الاقتصادية خلقت تعاون اقتصادي جيد
					11	العلاقات بين الدول خلقت اسواق جديدة
<b>المتغيرات الاقتصادية :</b>						
					12	معدل النمو الاقتصادي ساهم في رفع قيمة المنتجات المصدرة
					13	معرفة متوسط دخل الفرد ادي الي كشف السوق المستهدف
					14	استقرار اسعار الصرف والفائدة رفع من القدرة التنافسية للمصاد
					15	البنية التحتية الجيدة تساهم في الحفاظ علي المنتج المصدر
<b>المتغيرات التكنولوجيا :</b>						
					16	سرعة المعلومات زادت من ارتفاع جودة المنتج
					17	استخدام التكنولوجيا قللت من العمل الجسماني وزادت سرعة ا
<b>متغيرات البنية الداخلية :</b>						
					18	اتباع النظم الادارية ساهم تقليل الجهد
					19	تطبيق الجوانب الفنية ساهم زيادة المنتجات
					20	التنسيق بين الادارات ساهم في ضبط جودة المنتج

شكرا علي مشاركتكم في هذا الاستبيان

# Appendix (B)

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.633 <sup>a</sup>	.401	.398	.59730

a. Predictors: (Constant), Improvements+

### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46.378	1	46.378	129.998	.000 <sup>a</sup>
	Residual	69.212	194	.357		
	Total	115.590	195			

a. Predictors: (Constant), Improvements+

b. Dependent Variable: Export performance

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.180	.173		6.828	.000
	Improvements+	.549	.048	.633	11.402	.000

a. Dependent Variable: Export performance

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.562 <sup>a</sup>	.316	.313	.71321

a. Predictors: (Constant), Improvements+

### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.666	1	45.666	89.777	.000 <sup>a</sup>
	Residual	98.680	194	.509		
	Total	144.346	195			

a. Predictors: (Constant), Improvements+

b. Dependent Variable: ENV



**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.524	.206		7.386	.000
	Improvements+	.545	.058	.562	9.475	.000

a. Dependent Variable: ENV

**Regression**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.681 <sup>a</sup>	.463	.461	.56545

a. Predictors: (Constant), ENV

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.561	1	53.561	167.516	.000 <sup>a</sup>
	Residual	62.029	194	.320		
	Total	115.590	195			

a. Predictors: (Constant), ENV

b. Dependent Variable: Export performance

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.007	.166		6.069	.000
	ENV	.609	.047	.681	12.943	.000

a. Dependent Variable: Export performance

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.633 <sup>a</sup>	.401	.398	.59730
2	.745 <sup>b</sup>	.555	.551	.51614

a. Predictors: (Constant), Improvements+

b. Predictors: (Constant), Improvements+ , ENV

**ANOVA<sup>c</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46.378	1	46.378	129.998	.000 <sup>a</sup>
	Residual	69.212	194	.357		
	Total	115.590	195			
2	Regression	64.176	2	32.088	120.451	.000 <sup>b</sup>
	Residual	51.415	193	.266		
	Total	115.590	195			

a. Predictors: (Constant), Improvements+

b. Predictors: (Constant), Improvements+ , ENV

c. Dependent Variable: Export performance

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.180	.173		6.828	.000
	Improvements+	.549	.048	.633	11.402	.000
2	(Constant)	.533	.169		3.152	.002
	Improvements+	.318	.050	.366	6.312	.000
	ENV	.425	.052	.475	8.174	.000

a. Dependent Variable: Export performance

## Regression

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.637 <sup>a</sup>	.406	.399	.59665
2	.757 <sup>b</sup>	.573	.567	.50675

a. Predictors: (Constant), Information, Improvments

b. Predictors: (Constant), Information, Improvments, INV100

**ANOVA<sup>c</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46.884	2	23.442	65.850	.000 <sup>a</sup>
	Residual	68.706	193	.356		
	Total	115.590	195			
2	Regression	66.285	3	22.095	86.041	.000 <sup>b</sup>
	Residual	49.305	192	.257		
	Total	115.590	195			

a. Predictors: (Constant), Information, Improvments

b. Predictors: (Constant), Information, Improvments, INV100

c. Dependent Variable: EX100

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.184	.173		6.858	.000
	Improvments	.331	.053	.421	6.236	.000
	Information	.222	.051	.296	4.386	.000
2	(Constant)	.451	.169		2.665	.008
	Improvments	.146	.050	.185	2.925	.004
	Information	.139	.044	.185	3.162	.002
	INV100	.479	.055	.515	8.692	.000

a. Dependent Variable: EX100

**Excluded Variables<sup>b</sup>**

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
					Tolerance	
1	INV100	.515 <sup>a</sup>	8.692	.000	.531	.634

a. Predictors in the Model: (Constant), Information, Improvments

b. Dependent Variable: EX100