ENHANCING EXPORT PERFORMANCE OF ETHIOPIAN FLORICULTURE THROUGH INFRASTRUCTURE INVESTMENT: THE MEDIATING ROLE OF MARKET CHANNELS

A Thesis Submitted to Department of Management, College of Business and Economics in Partial Fulfillment of the Requirements for MSC in International Business

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By
Semeret Mekonnen

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DECLARATION

I hereby declare that the research work titled "ENHANCING EXPORT PERFORMANCE OF ETHIOPIAN FLORICULTURE THROUGH INFRASTRUCTURE INVESTMENT: THE MEDIATING ROLE OF MARKET CHANNELS" is my own work. The work has not been presented elsewhere for assessment. Where material has been used from other sources, it has been properly acknowledged. Due references have been provided on all supporting literatures and resources.

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LETTER OF CERTIFICATE

Semeret Mekonnen has carried out this thesis on the topic Enhancing export performance of Ethiopian floriculture through infrastructure investment: the mediating role of market channels under the supervision of me. This research paper is suitable in partial fulfillment of the requirement for the award of master of business administration in management.

Yitbarek Takele (Assoc. Prof.)

Signature _____ Date _____

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ABSTRACT

The purpose of this study was to analyze the role of infrastructure with mediating effect of market channels in enhancing the export performance of Ethiopian floriculture. To achieve the objectives of the study, using Convenient and purposive sampling techniques a sample of 48 marketing and production managers of the companies was used. A quantitative research method using modified and structured questionnaires from previous studies that adopt and multiple regression analysis was conducted to find out the relationship between infrastructure and export performance. Mediation analysis is also carried out in Path analysis *using* AMOS. *The overall analysis results of the study indicated that the role of infrastructure investment has a positive effect on export performance and market channels. On the other hand market channels have a positive effect on export performance. It was also found that the market channels have shown complimentary partial mediation between infrastructure investment and export performance. Generally, infrastructure investment and market channels have a positive effect in enhancing export performance.*

Key Words*; infrastructure investment, export performance; market channels;mediation*

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CHAPTER ONE

1. INTRODUCTION

1.1. Introduction

This chapter presentsthe background of the research,the research questions, the objective of the study, the scope and significance of the study, the definition of key terms, and the organization of the paper.

1.2. Background of the Study

Infrastructure is a vital to economic development as it is a key achieving higher and stable economic growth. According to World Economic Forum (2014), well developed infrastructure not only reduces the distance between regions but also integrates national markets and connects them at low costs to other economies. The availability of infrastructure in determining trade, mainly export, has gained aplenty attention in the modern era where several empirical research studies encourage the opinion that availability of infrastructure investment enhances export performance (Ahmad, Jaini, , & Zamzamir, 2015 ;Donaubauer, Meyer, & Nunnenkamp, 2016)

Infrastructure development is critical to enhancing market accessibility and expansion, especially in developing countries(Ghosh, B., & De, 1998;Mbekeani, 2007; Deng 2013). For these scholars trade facilitation, enhanced interaction of buyers and sellers, and creation of new markets result in effective market access. Developed countries like USA realized economic take-off due to trade (Mbekeani, 2007). Trade brings market players on the same

table hence leading to establishment of networks, exchange of lessons from different economies and brings about competition which ensures efficient market allocations. To leverage on the benefits of effective market access, there must be a well-functioning infrastructure system including good transport network and effective communication.

International trade, mainly export, is often suggested as a strategy for enhancing economic growth and development (Donaldson & Hornbeck, 2016; Maparu & Mazumder, 2017). Intuitively, once the economy opens-up to trade, the government has a strong incentive to invest in infrastructure to boost firms' productivity and thus international competitiveness. The literature on the role of infrastructure mainly emphasizes on its role in providing physical connectivity and information (Vijil & Wagner, 2012).

In the case of Ethiopia, in order to realize these benefits the country adopted export oriented growth strategy in 1990s. Since then, Ethiopia has initiated several trade policy reforms aimed at promoting the export sector. Such reforms include the liberalization of foreign exchange rate regime, elimination of export taxes and abolition of taxes on import inputs meant for the export sector. Statutory bodies were also set up to facilitate, coordinate and promote the export sector and attract export-oriented investments (Gorfu, 2012).

The floriculture industry has been one of the most spectacular growth successes in Ethiopia. It has been driven by a dynamic mixture of government action, forging investment and local entrepreneurship. We build the case for the use of innovative industrial policy regimes to support processes of structural transformation in low income countries.

Despite flower production as a commercial undertaking is relatively in progress in Ethiopia's economy, recently, it emerged as one of the main sources of foreign exchange for the country. The origin of the sector in Ethiopia can be traced back to the military government of the Derg regime. In 1980, the military government established the Horticulture Development Corporation with the primary objective of generating foreign exchange earnings. The corporation had the mandate to coordinate production and marketing of horticultural products including flowers. In line with this, production and export of summer flowers was started for the first time in 1981/82 on state farms with high subsidy from the government.

However, the inefficient production did not stay long (Joosten, 2007). After the fall of the Derg regime, the industry re-emerged in the mid-1990s as a result of private initiative. Two local companies named Ethioflora and Meskel Flower pioneered production (open field) of summer flower. The two companies were able to export flowers. However, they were not as such successful mainly due to the unfavorable investment climate, their limited experience and knowledge about the business (Gebreeyesus&Iizuka, 2010).

The involvement of foreign governments contributed to the international awareness of the Ethiopian flower industry. Subsequently, a number of foreign investors began to set up flower farms in Ethiopia. Golden Roses, a subsidiary of Investment - an Indian family business based in the UK, is the first foreign firm to enter Ethiopia in 1999. It was able to produce roses for export under wooden greenhouses the same year and by 2000, it expanded its production scale using modern greenhouse technology (Taylor, 2011).

In spite of the effort by the pioneering Meskel Flower and Ethio-Flora to lay the foundations for flower production in Ethiopia, Golden Rose is considered as pioneer within the Ethiopian flower industry by many industry players, mainly because it introduced modern technology such as steel greenhouses (Gebreeyesus&Iizuka, 2010). Floriculture investment began rapid growth due to the decision of the government to promote the sector through setting five years strategic plan(Gebreeyesus &Sonobe, 2012).The government provided a generous support package with identifying three areas for intervention such as transport coordination (air freight), access to land and provision of long term credit that supposed to attract domestic and foreign investors.

In a short period of time Ethiopia become the second largest flower exporter in Africa to EU market next to Kenya. The Ethiopian flower industry is an export-oriented industry with 40% of the farms are fully foreign owned, 23% are joint ventures, and 36 % are local (Gebreeyesus & Iizuka, 2010).There are 52 active flower grower and exporter on 1,400 hectares. In 2018 Ethiopia has earned $ 243.88 from flower export of different types of flowers like Roses, Carnations, Summer flowers , Carthamus and Satice. The sector created above 80,000 employees and become the top foreign exchange earnings to the country (EHPEA, 2019).

For Ethiopia the major flower export destination is EU and Middle East. Cut flowers are sold via the markets (mainly Dutch auctions) and/or directly to supermarkets and other retailers. Farms are as new entrant, they began by using Dutch auction channel but later they diversified in terms of market channels and destinations. However, the EU is still the major destination accounting 94% of total export with the Netherlands (88%) (Gebreeyesus & Iizuka, 2010).

Ethiopia has pursued an active industrial policy since the early 2000s with a large set of carefully designed policy instruments. These include the promotion of exports and productive investment, industrial financing, and the use of state-owned enterprises (SOEs) to shape strategic sectors (Oqubay,2018). In August 2010, government used exchange rate policy to promote export competitiveness by sharply devaluing the ETB, and results indicate this policy has helped floriculture firms, which are 100 per cent exporters (Oqubay, 2015)

1.3. Statement of the Problem

The floriculture sector has become very promising and attractive business in many countries across the world including developing countries like Zimbabwe, Zambia and Kenya, east Africancountry (Ermiyas, 2016). Ethiopia has entered into the global floriculture market exchange next to the above-mentioned countries. Floriculture industry has booming in a large scale and the fourth foreign-currency generator in the country next to the top three export items such as coffee, oilseeds and cereals.

Despite several impediments for the development of the sector, the floriculture sector has brought significant contributions on the countries income in terms of enhancing foreign exchange, economic development and creating employment opportunities for youths. Ethiopia enjoys certain advantages that create many opportunities for being one among the principal producers and exporters of flower in the world.

The existence of foreign directed investment policy, government support and the formation of the horticulture producers and exporters association are the major opportunities encouraging the development of the sector.However, the opportunities seem not free from

threats. Infrastructural bottlenecks appended by shortages of agricultural inputs, narrow product range, and lack of adherence to international codes of practices, perhaps, seem the major among the perceived barriers. Possibly, a growing trend in the development of the floriculture industry in Ethiopiahas been affected by many variables, which needs to be investigated in detail yet.

In Ethiopia the major industrial policy lays a heavy emphasis on infrastructure development as the key driver for overcoming economic backwardness of domestic commodities in foreign markets. Government made immense investment in deferent infrastructure. However, this investment has not contributed to higher growth in exports as it would be expected.

In Ethiopia, many researchers investigated the floriculture and related to its marketing opportunities. For instance, in the sector, Ermiyas, (2016) studied on an assessment of market dynamics in relation to rose flower export market in Ethiopia. The researcher concluded that poor marketing management and quality control, lack of quality packing materials, lack of efficientcargo freight and high transportation costs are the main factors hindering floriculture export in the country. The study conducted by Girma (2017) also found that the value of stems of flowers that Ethiopia sold in the international market is declining from time to time.Moreover , Gebere(2011) pointed out the faller of floriculture investment is due to poor management practices(i.e. poor business planning, poor marketing management, poor financial management and poor human resource management followed by economic related and other causes like disaster, change, land fertility, joint ventures relationship lack of quality packing industries, lack of efficient cargo freight and high transportation cost).

In summary, extent studies mainly studies export performance from point of market information for example (Melese, 2019;Stebek, 2012;Gebreeyesus & Iizuka, 2010&Gebreeyesus & Sonobe, 2012). But there is no research done on infrastructure investment and market channels related to expert performance. Thus, the current study

investigated on the role of infrastructure investment with mediating effect of market channels in enhancing export performance in Ethiopia floriculture.

1.4. Research Questions

This study sought answers for the followingbasic research questions:

1. To what extent infrastructural investment influence export performance of floriculture.
2. To what extent the market channels drives export performance of floriculture.
3. To what extent the market channels medeats the relationship between infrastructure and export perefomance.

1.5. Objective of the Study

The study will have bothgeneral and specific objectives.

1.5.1. General Objective

The general objective of the study was to investigate the role infrastructure investmentwith mediating effect of market channel in enhancing export performance in Ethiopian floriculture.

1.5.2. Specific Objectives

The specific objectives of the study will be to:

1. To investigate the role of infrastructure investment in enhancing the export performance of floriculture.
2. To determine which market channel is more promoting export performance of floriculture.

1.6.Scope of the Study

The study focused on the role of infrastructure investment with mediating effect of market channels in enhancing export performance in Ethiopian floriculture . However, the study is delimited geographically, conceptually, methodologically and timely.Geographically, the study focused on the flower exporters in Ethiopia and engaged in floriculture investment of Addis Ababa Zuria of Oromia Special Zones basically involved both in the production and export.Conceptually, the study assessed the different variables that determine export performance of the firm. These are firm export the role infrastructural investment and the marketing channel. Methodologically, the researcher will use data from legally registered and commercially known exporters in Addis Ababa to collect the necessary information for the study.

1.7. Significance of the study

The study is expected to contribute for government and stakeholders in the floriculture sector for their major role in enhancing the country's performance regarding the export of flower. Additionally, the study will also create additional information for the policy makers that plays a major role in adding valuable information for interested researchers and academicians

for further analysis in the sector. Furthermore, the research may be a spring-board for other interested researchers on the area.

1.8. Limitation of the study

This study applied only a quantitative approach ignoring qualitative aspects of infrastructure investment policy in the Ethiopian context related to exporter documents. Therefore, issues related to qualitative aspects of infrastructure investment which may require an in-depth qualitative study fall outside the scope of the study.

1.9. Definition of Key Terms

Infrastructure:defines economic infrastructure as infrastructure that promotes economic activity, such as roads, highways, railroads, airports, sea ports, electricity, telecommunications, water supply and sanitation.No road, no transport no trade no specialization, no economic of scales, no productively process and no development (Sheffrin, 2003).

Marketing Channels: Marketing channels of flowers are the routes through which the flowers move from flower producers to flower consumers (Thomas ,1969).

Export Performance: Export performance is an engineering in economic growth of countries and it has an importance in the competition among counties. It is one of the fundamental aspects for decision making in international trade and company's success rate in export can be evaluated with its export performance. Jee Su Lim *et al*.,(2004).

Floriculture: Floriculture can be defined as a discipline of horticulture concerned with the cultivation of flowering and ornamental plants for gardens and for floristry, comprising the floral industry (Getu ,2009).

1.10. Organization of the paper

The paper is organized into five chapters. Chapter one is an introduction part of the study, chapter two deals about review literatures with regard to the study's major topics, and the third chapter is about the methodology and description of the study areas. Furthermore, in chapter four the study presents data collection tools, procedures and methods of analysis. Finally, the last chapter of the study presents the conclusion and recommendations.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. The Concept of Infrastructure

Conceptually it is very hard to find a generally agreed definition of infrastructure. This is why it was mentioned in World Bank report (2004b) that infrastructure is an umbrella term for many activities. Baldwin and Dixon (2008) agreed that infrastructure is very long lasting, space specific, has long gestation periods with few substitutes in short run periods, its services are capital intensive and it is usually associated with market failures. According to Sedar, (2007) infrastructure is the basic services or social capital of a country or a part of it which make economics and social activities possible.

Prud'homme (2004) defines infrastructure as consisting of capital goods which are not consumed directly; they provide services only in combination with labour and other inputs. On the other end, the concept of development tends to be moving away from economic indicators such as GDP, GNP,PCI and others to non-economic analysis such as the democratic imperatives of political governance and social indicators (Jhingan, 2006).

Development now takes into consideration the issue of sustainability. Sustainable development refers to the continuous and sustained qualitative improvement in the overall standard of living of people in a society or nation and the structural transformation in the productive and distributive input and output systems of the economy (Ojobo, 2005). A nation could be said to have attained or be on the path of sustainable development when members of

that society could boast of improved condition of living on a continuous basis over a reasonable period of time.

Efficient infrastructure plays an important role for economic growth. It increases the productive capacity and sustains development. Infrastructure consists of capital-intensive natural monopolies, physical or organizational structures, which are needed for the operation of a society and functioning of an economy.Examples, include communication systems, highways, water and sewer lines, health, education and transportation facilities etc. Most of these systems are owned by government. Economic Infrastructure includes transportation and communication facilities, whereas water and sewer lines, health centers and educational institutions are included in Social Infrastructure (Sheffrin, 2003).

Investment in infrastructure can make market more conducive for business expansion, retention and recruitment. Unfortunately, infrastructure investment in Pakistan has decreased in the last few years from Rs. 272.8 billion in 2007-08 to Rs. 199.7 billion in 2010-11. In addition, budgetary allocation for Transport and Communication has also decreased from Rs. 327.7 billion in 2008-09 to Rs. 287 billion in 2010-11. The energy sector is facing a crisis and currently Rs. 112 billion (2010-11) is invested in this sector. Furthermore, little importance is being paid to social infrastructure and the total health expenditure has declined from Rs. 79 billion in 2009-10 to Rs. 42 billion in 2010-113. Moreover, quality of infrastructure is also deteriorating. Infrastructure Quality score of Pakistan is 3.5 and it is ranked 100 out of 139 countries.

There are a number of studies that show the important linkages between infrastructure development and economic growth.Bougheas , Demetriades & Morgenroth, (1999) emphasized on the accumulationof infrastructure capital in developing countries by demonstrating that productive specialization, economic growth and core infrastructure are positively correlated. Various studies show the importance of infrastructure building in Pakistan as well, such as Imran and Niazi (2011) and Shah (1992). But most of these studies do not dwell into the importance and sensitivity of the way capital stock is constructed. Furthermore, these studies do not take into account the impact of social infrastructure. While studying the impact of infrastructure investment on economic growth, it should be taken into account that public capital takes considerable time to affect GDP.

Kularatne (2006) analyzes the impact of social and economic infrastructure on economic growth in South Asia, adapting Barro (1990) theoretical model. The result shows that there is significant and positive impact of infrastructure investment on GDP either directly or indirectly depending on the type of infrastructure. Furthermore, the study analyzes threshold effects for public infrastructure expenditure and concludes that the government can afford to invest at least 1.3 per cent in social and 6 per cent in economic infrastructure. It does not consider whether or not the services provided by the infrastructure are efficient and of highest quality. Further research can be done by increasing the length of time series and taking the quality of infrastructure into account.

There seems to be a unanimous opinion in literature on the effect of infrastructure on growth in developed countries. The majority of the studies provide evidence for the positive effect of infrastructure on development. For instance Zegeye (2000) examines the impact of public

infrastructure capital on the productivity of the manufacturing sector for a sample of over 1500 counties and the 50 U. S. states using a translog production function approach.

The study finds a positive correlation between infrastructure and output at both the state and local levels. Canning and Pedroni (2004) applied panel co-integration techniques to test whether GDP per capita and paved roads per capita form a long-run relation and if yes, in which direction causality runs. They find support for co-integration and that causation runs in both directions. Isaksson (2007) using OLS and the fixed-effects estimators examined the impact of transport infrastructure on Total Factor Productivity (TFP) levels across 112 countries for the time period of 1970 to 2000. They suspect the impact differs across stages of development and it to be greater at relatively low levels of income and,possibly, for the fast-growers.

In developing countries, divergent opinion is evident on the link between the two variables. For instance Pradhanaet al., (2013) using autoregressive distributed lag (ARDL) and vector error correction model (VECM) in India. They found out that transport infrastructure co-integrated with foreign direct investment (FDI) and economic growth indicating the presence of long-run equilibrium relationship among variables.

In a study on South Africa, Fedderke and Bogetic (2009) investigated several different measures of transport infrastructure, kilometers of open railway lines, kilometers of total roads and kilometers of paved roads. Without instrumentation, nearly all estimates are negatively signed. Generally, the instrumented elasticity of labourproductivity with respect to transport infrastructure is higher than in the non-instrumented case, i.e., instrumentation

tends to inflate the estimates, while the expectation might have been the opposite. The elasticity of railways, total roads and paved roads are, respectively, 0.81, 2.95 and 1.08, which seems excessive.

2.1.1. Trade Facilitation

Trade facilitation is a vital for promoting export and decreasing transaction costs involved in import-export trade. According to ,the Organization for Economic Cooperation and Development (OECD) defines it as "the simplification and standardization of procedures and associated information flows required to move goods internationally from seller to buyer and to pass payment in the other direction. Experience shows that trade facilitation is highly dependent on infrastructural developments. However, trade facilitation is not only about the physical infrastructure for trade (Kassahun,2014) .Studies indicate now that , "only about a quarter of the [trade] delays is due to poor road or port infrastructure." (Djankov, Freund, & Pham, 2010)

According to (Hansen & Annovazzi-Jakab 2008) ,trade facilitation looks at how the procedures and controls governing the movement of goods across national borders can be improved to reduce associated costs and maximize efficiency while safeguarding legitimate regulatory objectives. Morebroadly that address, it encompasses several interrelated factors such as customs and border agencies, transport infrastructure, services and information technology (as it relates to better logistics), regulatory environment, product standards, technical barriers to trade etc. in order to lower cost of moving goods between destinations and across international borders.

Development is enhanced through income growth, which comes from the expansion of trade, investment, and production opportunities. Trade facilitation initiatives, with the aim of lowering trade transactions costs, can enhance trade competitiveness, and expand trade flows, while at the same time playing an important role in supporting a positive business climate (Helble, Mann, & Wilson, 2009).

2.1.2. Infrastructure and logistics coordination

Logistics services which include activities required for the transportation, storage and handling of production inputs and finished products from producer to consumer (or intermediary producer), play a critical role in international trade. Consumers of logistics services are typically suppliers of products themselves (Kassahun, 2014).Consequently, the efficient supply of logistics services helps to facilitate international trade in a whole range of other products (De, P., & Saha, (2013). The more timely, reliable and efficient the logistics supply chain, the more efficiently and reliably goods can be delivered from the point of production to the point of consumption.

The quality of the logistics service results from the quality of the flow of logistics processes and the functioning of the logistic systems. Every logistics process is composed of its data and functions, and represents a quality of service. The problems within a single process, as a rule cause consequences and problems in the following process. The quality of each data. retrieve and function that start and perform the process itself is based on the level of quality. of the service provided by the process. A. high level of service is considered to be of a high quality and can only be achieved by a series of high quality processes (Ivaković, M.).

Flower export is highly time and process dependent. It requires improved infrastructureand logistical capabilities including air transport, post-harvest cold chain facilities,forwarding and handling services, packaging materials, information and communicationtechnology (ICT), and quality control and certification services. Some of thesecapabilities are national or sectoral in nature and cannot be built or possessed by eachfirm or bought from the market, and thus require coordination.

Literature indicated that there are several factors that affect floriculture and agriculture in general in Africa. Among them are political instability, limited investment in the sector, shaky policy environment and poor infrastructure. In the past two decades, for example the continent has been involved in rampant conflicts, which in turn limit the level of investment on the agricultural sector. Miguel et al., (2004), for example indicate that in the period extending from 1980s to 1900s there were conflicts in 23 out of 43 Sub-Saharan African (SSA) countries, which directly affected the infrastructural investment of the countries and indirectly affected the floricultures sectors.

2.1.3. Transport Infrastructure

Modern, efficient transport networks are considered essential for international competitiveness, as recognized by the EU policy on trans-European transport networks (European Commission 2009) or the UK Eddington transport study (Eddington 2006). Transport costs are an important part of international trade, for example, (Bahar and Venables 2011). Transport infrastructure investment reduces the costs of doing business over distance and thus improves the capacity of firms to compute in global markets. International

competitiveness is largely a matter of delivering goods to markets more cheaply than other producers.

As argued by Hummels (1999), distance matters because of transportation costs. Limao and Venables (2001) estimated the elasticity of trade in regard to transport costs and pointed out that a 10% increase in transport cost reduce trade volume by approximately 20% . Distance also has an important effect on the time cost of trade. Anderson and Wincoop (2004) high even among highly integrated economies and in underline that trade costs are still the absence of informal barriers to trade. They calculated a transportation coat mark up over production costs of 21% for the USA. Time in transit is increasingly important for modern time based competitive strategies such as just in time production and quick response delivery. Hummels (2001) and Djankov et al. (2010) find out that each additional day reduces the probability of trade by 11.5%.

2.1.4. Telecommunications infrastructure

Telecommunications infrastructure investment can lead to economic growth in several ways. Most obviously, investing in telecommunications infrastructure does itself lead to growth because its products-cable, switches, and so forth-lead to increases in the demand for the goods and services used in their production. In addition, the economic returns to telecommunications infrastructure investment are much greater than the returns on just the telecommunication investment itself. Where the state of the telephone system is rudimentary, communications between firms is limited.

The transaction costs of ordering, gathering information, and searching for services are high. As the telephone system improves, the costs of doing business fall, and output will increase for individual firms in individual sectors of the economy. "If the telephone does have an impact on a nation's economy, it will be through the improvement of the capabilities of managers to communicate with each other rapidly over in- creased distances" (Hardy, 1980). Thus, telecommunications infrastructure investment and the derived services provide significant benefits; their presence allows productive units to produce better.

The ability to communicate at will increases the ability of firms to engage in new productive activities. Moreover, the importance of this effect in- creases as the information intensity of the production process increases. Thus, telecommunication investments might lead to benefits in other sectors. In suggesting that a country's telecommunications infrastructure has strong effects on economic growth, it has been argued that telecommunications investments have important spillovers and createexternalities(Leff, 1984), argues that telecommunications lowers the fixed and variable costs of information acquisition.

An expansion of the telecommunications net- work generates cost savings externalities to other markets. These externalities involve lower costs of search, an in- creased ability to arbitrage, and increased information on the distribution of prices and services, all leading to lower transactions costs and more efficient operation of the telecommunications, using markets. Leff shows that firms can have more physically dispersed activities as telecommunications increases, and adds that X-inefficiency will be lower.

2.1.5. Water Infrastructure

Cut flower can be grown easily in simple greenhouses under arid and semi arid climate and soils having high pH and carbonate content. Because its transportation and marketing are relatively easy and it requires low initial investment costs.Agricultural use of water is an important issue for cut flower growers. Water use in greenhouse cut flower production is frequently at excessive levels. To obtain better flower yield and flower quality, irrigation under arid climates and greenhouses conditions is essential. The amount of irrigation water and frequency in flower depends on soil texture, photoperiod, relative humidity, temperature, air convection, growing period and variety. As a general rule, it is required that the soil cultivated with flower should be always moist. When the soil moisture level drops below the wilting point, the flowering and flower quality are affected negatively. One of the consequences of exposing plant to deficit irrigation regimes in terms of plant growth is the production of smaller leaves and shorter internodes sections and reductions in flower number, size and quality (Cameron et al., 1999; Sanchez-Blanco et al., 2004).

At present and most probably also in the future, as a result of global warming, irrigated agriculture will take place under water scarcity. Hence, sustainable methods to increase crop water productivity are gaining importance in arid and semi-arid regions. In other words, irrigation management in arid and semi-arid regions will shift from emphasizing production per unit area towards maximizing the production per unit of water consumed (Fereres and Soriano, 2007).

There are three primary water resource first **Precipitation water** it is cheap or free however, Water storage facilities require moderately costy infrastructures and in some cases rain water can become more expensive than ground water. The second one is Aquifers or (un)deep groundwater Difficult to control illegal water extraction and need Energy use for pumping. Finally, Surface (ditches, rivers, dams, lakes) Easier to monitor both quality and quantity and moderate to good, but less constant quality compared to rain water but, lower quality due to pollution by organic material and sodium.

2.2. Mediation

Baron and Kenny (1986, p.1173) defined mediation as „*the generative mechanism through which the focal independent variable is able to influence the dependent variable of interest"*. Mediation represents the addition of a third variable in the relationship between an independent and dependent variable, whereby the independent variable causes the mediator and the mediator causes the dependent variable (MacKinnon D. P., Fairchild A. J. and Fritz M. S., 2007). In other words, the investigation of mediation specifies a chain of relations by which an antecedent variable affects a mediating variable, which in turn affects a dependent variable.

'Mediation analysis is a set of statistical procedures used to investigate whether a particular data set exhibits a meditational structure. A meditational structure posits a particular conceptualization of the mechanism through which an independent variable might affect a dependent variable not directly, but rather through an intervening process, captured by the mediator variable (Iacobucci, 2008, p. 1).

One of the approaches to statistical mediation analysis is called the causal steps approach, which is based on the influential work of Baron and Kenny (1986). First, the independent variable should significantly affect the dependent variable. Second, the independent variable should significantly affect the hypothesized mediating variable. Third, the mediating variable must significantly affect the dependent variable, controlling for the independent variable. Finally, the relation between the independent variable and the dependent variable should be weaker when the mediating variable is added to the model (Baron and Kenny, 1986).

2.3. Market Channels

Awareness of marketing as concept and as a vital and dynamic element in economic development has greatly increased in the developing countries. The improvement in the functioning of commodity markets as well as the improved performance of the marketing system is now generally recognized as an important strategic element in agricultural economic development. Changes of attitude to marketing have come about particularly during the last decade, when many developing countries have had to undergo stringent economic reforms Amin et.al (2018). (Thomas ,1969), defined marketing channels as: "A network of cooperating organization that together performs all activities required to link producers of goods and services to the end users".

The history of today's Dutch flower auctions dates back to 1911-12, when flower producers in the city of Aalsmeer established two flower auctions: "Bloemenlust" on the east side and "Central Aalsmeer Auction" in the city centre. The auctions were established because producers felt they were in the hands of agents who manipulated prices and that the agents were not always reliable payers (van Lier, 2005).

In 1972, Bloemenveiling Aalsmeer was established through the merger of several smaller auctions; most recently, in 2007, Bloemenveiling Aalsmeer and FloraHolland, the two largest

flower auctions in the world, merged. The merged company, called FloraHolland, started its operations in January 2008 (Wernett, 1998).

Flowers are traded in two market channels: auction and direct sales. The Dutch auction is the most dominant one worldwide, and the Netherlands remain a globalhub of floriculture trade. However, since 1990s the direct sales channel has grown rapidly intraditional markets (European, North American and Japanese) as well as elsewhere (Gebreeyesus, & Sonobe 2012). Althoughdirect sales are often associated with Western supermarkets, other retailers and wholesalers areincreasingly engaging in direct sales channels in various end markets including European andMiddle Eastern markets. Furthermore, the Dutch auction is hosting a new trading system that isseemingly in direct competition with the tradition auction (Clock system). The new tradingsystem (online-trading) is used by most of the flower firms, alongside theauction. These various market channels and end markets have distinct and overlappingcharacteristics that offer opportunities as well as challenges to suppliers (Melese, 2019).

North America market, which is dominated by retailers and supermarkets that usually buy their flowers from importers and distributers located in or near Miami International Airport, the major entry point for Latin American flowers to the US market. Sub-Saharan African countries such as Ethiopia and Kenya mainly export to European countries, where their largest consumers and traders reside. Asian markets such as Japan are also largely catered to by regional players such as South Korea, Malaysia and China. However, Latin American and Sub-Saharan African countries have been entering Asian markets gradually (JETRO 2011;

Rikken 2012). The Japanese market is dominated by wholesale markets located throughout the country, and recently its traditional auction system has been dwarfed by the growth of direct sales. Imported flowers are brought into the country by specialised importers that distribute it to wholesalers and retailers.

Although there are several floriculture auctions across the world, the Dutch Royal FloraHolland auction plays the most influential role. It is the largest flower auction in the world with living plants in its four auction houses (Aalsmeer, Naaldwijk, Rijnsburg, and Elde) in the Netherlands. It is also the favoured market channel used by the specialised buyers (e.g. florists), which are dominant in Europe with a market share of around 66 percent (CBI 2015).

However,the direct sales channel is rapidly growing in European and other end markets. sales channels through which flowers from developing countries reach European consumers in the EU and EFTA.Consumers with special demands often buy flowers from specialised outlets such as florists and web-shops; whereas for their own use, consumers tend to buy (usually impulsively) from unspecialized outlets such as supermarkets and gas stations. The most common ways in which flowers from developing countries end up on the shelf of European florists and supermarkets. Exported flowers are received by an unpacking agent or import department of the auction and get processed and auctioned.

Various types of big buyers (traditional wholesalers, cash- and-carry wholesalers) participate in the auction and distribute to specialized outlets (florists, flower web-shops, stalls, street markets). However, unspecialized outlets such as supermarkets also buy from the auction to

supplement their direct sourcing or as their only source. Alternatively, unpackers or importers bypass the auction and directly get in contact with different unspecialised retailers such as supermarkets, gas stations and Do-It-Yourself stores (direct sales channel). Importers might also have direct contacts to specialised outlets such as traditional wholesalers and florists. The shortest supply chain can be achieved through direct sales when retailers like supermarkets skip importers and directly engage with exporters from developing countries to source flowers (CBI 2016).

In the Dutch auction, the price is determined by the so-called auction Clock system, which is a pressure game where the clock begins at the highest price (given by the auctioneer depending on demand and supply) and then starts counting down. Buyers have only a few seconds to stop the clock in order to purchase specific amounts of the auctioned flower, otherwise they risk losing their preferred product of specific quality and quantity. Therefore, a supplier/exporter can sell different batches of the same variety of flower at different prices to various buyers. However, in auction-direct, buyer and seller can agree on a price outside the auction clock.The market in the Middle East is dominated by specialised importers who create links with producers/export agents in different parts of the world and supply to localwholesalers and retailers (CBI 2016).

2.4. Export

Exports play an important role in any economy, influencing the level of economic growth, employment and the balance of payments. The increase in potential market size can lead to increasing returns, economies of scale, and increased capacity utilization. Exposure to world

markets may also induce competitive pressures and may encourage innovation and facilitate technological advancement and knowledge spillovers into the domestic economy, leading to efficiency gains in production and management practices (Jordan and Eita, 2007).

Exports also generate the much needed foreign exchange, which can be used to import capital goods and intermediate inputs that are critical to the domestic production of a country. Thus, an expansion of exports will have positive spillover effects on the rest of the economy. These potential benefits of trade have encouraged nations to not only cement existing trading relations but also to look for new trading opportunities (Goldberg & Pavcnik, 2007).

2.5. Export Performance

Export performance is defined as the outcome of a firm's activities in export markets (Soham, 1996). There has been understanding that performance is a multidimensional construct comprising effectiveness, efficiency, and adaptability respond to environmental changes (Katsikeas, 2000). Export performance is also defined as a firm's export performance as its degree of economic achievement in its export market Jee Su Lim *et al*.,(2004). Export performance is determined by internal and external factors: the former is the product, managerial and organizational characteristics such as planning abilities, technology, size etc. While the later is domestic and target market characteristics.

Export performance is important for the firm to explore various ways to enter the foreign markets. As firms become more involved in exporting, they become more committed to pursue other international opportunities (Jee Su Lim *et al*., 2004). Exporting is also defined as shipping of goods produced in the company's home country to other countries for

marketing (Wheelen and Hunger, 2000). The market information is vital to firm success in both domestic and international contexts (Hart and Tzokas, 1999).

From the point of view of public policy makers, a better understanding of export performance is important because it allows for the accumulation of foreign exchange reserves, increased employment levels, improved productivity, and enhanced prosperity (Czinkota 1994).

In the case of using the firm as the unit of analysis, the export performance construct is assessed in the context of the firm's overall activities in international markets. This can be attributed to the greater willingness of key informants to disclose information at this broad level (Matthyssens and Pauwels 1996).

A large number of different export performance measures, only a few were frequently utilized, such as export intensity (export-to-total sales ratio), export sales growth, export profitability, export market share, satisfaction with overall export performance, and perceived export success. Other measures, such as return on investment, quality of distributor relationship, customer satisfaction, and satisfaction with product/service quality compared to competitors were examined in only one or two studies. This large number of different performance measures restricts the advance of the export marketing literature because it makes it hard to compare and contrast the findings from different studies (Zou and Stan 1998).

Export performance can be measured by sales related; export intensity, export intensity growth, export sales growth, export sales volume, and export sales efficiency. But it

criticized overstating performance be-cause of price escalation and market growth, or understating performance because of experience curve effects and deteriorating demand (Kirpalani and Balcome 1987). On the other hand It can be measured by market related which are export market share , export market share growth, and market diversification (number of markets entered). Market-related measures have been promoted as a good indicator for success, the reason being that high market share leads to scale and experience advantages on the cost side as well as more power in approaching customers (Madsen 1987). However, due to the difficulty in measuring actual market share, these measures have been criticized and rarely employed.

Moreover, it can be measured by profit related indictors These measures include export profitability export profit margin, and export profit margin growth. As with sales-related measures, these measures are open to criticism in that export-related profit may not be known with any degree of certainty (Samiee and Anckar 1998) and that it might raise comparability problems be-cause of different accounting practices across firms (Lages 2000).

2.6. Empirical Review

Bougheas, et al., (1999), have analyzed that infrastructure can promote specialization and long-run growth and it influences on trade through its effect on resource costs. It requires resources to be taken away from the production of the final good and enhance economic growth through increased specialization.

Furthermore, recent studies on export have concentrated on the impacts of trade facilitation reforms on export performance. A study made by Poutugal-Perez &S.Wilson (2010)

analyzed the impact of hard infrastructure (roads, ports, airports, rail infrastructure and information communications technology) and soft infrastructure (efficiency of customs & domestic transport and business regulatory measures & transparency) on export performance of 101 countries during 2004 -07. The results from the study reveal that an improvement in hard and soft infrastructure leads to more exports. Investments on physical infrastructure were found to have a positive impact on exports, but declining as per capita income increases, on the contrary investments in ICT were found to have more impact on richer countries. Soft infrastructures were also found to affect exports positively.

Katsikeas, Leonidou, and Morgan (2000), who reviewed more than 100 empirical investigations dealing with export performance, contend that export performance is one of most investigated issues in international marketing and quite possibly the most controversial.

A search through literature shows that export performance determinants suffered the same fate as performance measures. This is because there are several factors that were identified and investigated in literature as determinants (Dominques and Sequeira 1993). A number of empirical studies had shown the degree of marketing programme adaptation to be influenced by internal and external factors. The internal factors affecting the degree of marketing program include the firm characteristic and competence (Zou and Stan 1998); managerial characteristics (De Luz 1993). The external factors influencing product adaptation depend on the company; foreign market characteristics; and domestic market characteristics (Zou and Stan 1998).

Empirical studies of export performance measures have explained into two categories: these are subjective measures (Zou, Taylor and Osland, 1998) and objective measures. Objective measures are economic value for example export sales volume, export sales growth and export profitability, market diversification and export intensity (Zou, Taylor and Osland, 1998;). They gave a comparable measurement of firm's export performance. These objective measures are more accurate measurement than subjective measures since this information can be obtained with minimal influence of firm's Chief Executive officers (CEOs). On the other hand, subjective measures refer based on 24 CEO's or owner's perception about export activities, normally these measures have been used in comparative studies (Woodcock, Beamish and Makino, 1994).

(Hardy, 1980), investigated the potential impact of telecommunication on growth. Using data for over 15 developed and 45 developing countries from 1960 to 1973. He regresses GDP per capita on lagged GDP per capita, lagged telephones per capita and the number of lagged radios. He concludes that telephones per capita significantly impacts the GDP, whereas the spread of radio does not. On the other hand, (Greenstein and Spiller 1996) investigate that the impact of telecommunication infrastructure on economic performance in the United States. They find out infrastructure investment is responsible for a substantial fraction of the recent growth in consumer surplus and business revenue in local telecommunications services. In sum, the preceding studies provide some evidence that telecommunications investment has positive effects on output.

2.7. Infrastructure and Export Performance

The quantity and quality of physical infrastructures are expected to play important roles in export performance. Important elements of supply capacity at the early stage of development of the export sector are infrastructure, foreign direct investment (FDI) and macroeconomic stability. These elements are significantly determining the performance of export at all levels (UNCTAD, 2004).

Infrastructure development is a major element of a countries' ability to produce and move goods. O'Rourke and Williamson (1999) argue "... all of the commodity market integration in the Atlantic economy after the 1860s was due to the fall in transport costs between markets...". Weak infrastructure is a major impediment to trade, competitiveness and sustainable development in most African countries, particularly land-locked and small island countries. Recent literature has emphasized the dependence of trade costs on infrastructure. The literature has examined the importance of transport costs and infrastructure in explaining trade and access to markets. Much of the historical literature has emphasized reductions in trade costs specifically those arising from endogenous changes in commercial policy and exogenous changes in transport technology (O'Rourke and Williamson, 1999).

Improvements in transportation services and infrastructure can lead to high positive impact in export performance. Lim˜ao and Venables (2001) shows that infrastructure is quantitatively important in determining transport costs. They estimate that poor infrastructure accounts for 40 percent of predicted transport costs for coastal countries and up to 60 percent for landlocked countries.

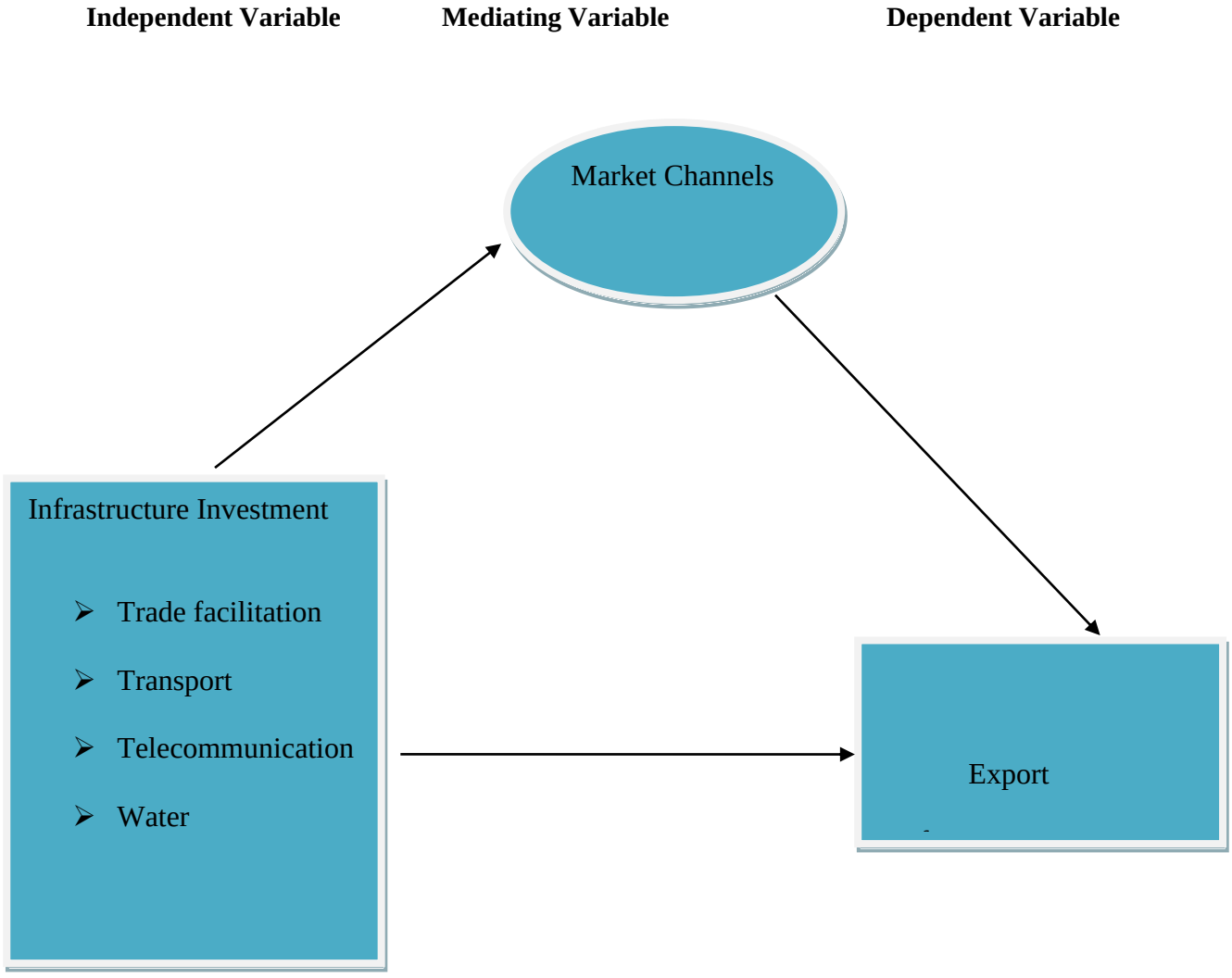
One of the major factors affecting export supply capacity is infrastructure development is key element of a countries ability to produce and move goods. It is widely agreed that more and better infrastructure reduces trade related transaction costs (e.g., Liamao and Venables 2001; Vijil and Wagner 2012). Improvements in transportation services and infrastructure can lead to high positive impact in export performance. Lim˜ao and Venables (2001) shows that infrastructure is quantitatively important in determining transport costs. They estimate that poor infrastructure accounts for 40 percent of predicted transport costs for coastal countries and up to 60 percent for landlocked countries.

Weak infrastructure is a major impediment to trade, competitiveness and sustainable development in most African countries, particularly land locked and small Iceland countries Francois and Manchin (2013).

2.8. Conceptual Framework

In relation to all the above variables of infrastructural investments and market channels relation with export performance, hereunder is a conceptual framework designed to address the objectives of this research.

Figure 2.1: Conceptual Framework



Source: Own literature review

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

3.1. Introduction

This chapter presents the research design methodology to be employed in conducting the study. Specially, the chapter will present the research design, population of the study, sample size and sampling techniques, source of data, data collection tools, method of analysis, reliability and validity of the study and ethical.

3.2. Research Approach

For this study quantitative methods are used to make it easy the conversion of information obtained into statistical models for general analyses to be made and the research questions to be answered based on the statistical models. A survey research design was used to measure the research variables namely Infrastructure investment, market channels and export performance. For the purpose of data collection, modified and structured questionnairefrom previous studies that adopt was used.

3.3. Research Design

A descriptive survey research design was employed in conducting the current study.For scholars (e.g., Neuman, 2007), descriptive research presents a picture of the specific details of a situation, social setting, or relationship study. Such a designassists in understanding and describing the current status of variables or conditions under the study (Shastri, 2010). Therefore, the researcher believes that descriptive research design is appropriate design to

investigate the role of infrastructure investment with mediation effect of market channels in enhancing export performance of floriculture in Ethiopia.

3.4. Population

The population of this study is employees of Ethiopian flower grower and exporter companies.The total targeted population is 52 flower grower and exporter companies.

3.5. Sampling techniques and Sample size

Non-probability samples can be good enough for descriptive inferences of small homogeneous populations. It can be used also for estimating treatment effects that are homogeneous (Kohler, Kreuter, & Stuart, 2019).Purposive sampling is a practical and efficient tool when used properly, and can be just as effective. Both qualitative and quantitative sampling methods may be used when samples are chosen purposively (Campbell 1955), There is no cap on how many informants should make up a purposive sample, as long as the needed information is obtained (Bernard 2002).

The sample of the study is taken from fifty(52) companies twenty six (26) flower companies which are located around Addis Ababa taken equals around fifty percent (50%) of the total population. Sample was taken using convenience sampling method.The questionnaires distributed to the appropriate respondents employees of the selected companies in Marketing and Production department through using purposive (judgmental) sampling. The reason behind is that, these respondents were relevant for the study and have knowledge on their companies' export performance than other workers. Fifty two questionnaire was distributed and 48 was collected.

3.6. Source of data

The studyused both primary and secondary data. While primary data was collected via questionnaire and, secondary data was secured through annual reports, bulletins and articles published on the area of floriculture growing and exporting so as cross-check and triangulate data coming from different sources.

3.7. Data Gathering tools

A self-developed questionnaire was used to collect quantitative data. The questionnaire has five parts including firm profile, background of the respondents, issues related to infrastructure investment, market channel and export performance of floriculture. The questionnaire was filled by employees of the selected companies marketing and production department where important. All questions were formed in a five point Likert scale.

3.8. Method of Data Analysis

Once data was collected, statistical technique was employed to analyze the data. Descriptive as well as inferential statistics was employed. Descriptive statistics helps to describe the characteristics of the variables of interest in the study (Kohtari, 2004), and hence used to describe the general information about the respondents‟ demographic situation such as frequency distribution, mean and standard deviations. For inferential statistics Pearson correlation and regression analysis were employed to test for correlation, and cause and effect relationships among the variables using SPSS Version 25.Medaiting analysis was used to find out the level of the two variables using AMOS.

3.9. Reliability and Validity of the Study

Reliability is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of a measure (Sekaran and Bougie, 2016). In conducting the reliability test, the researcher retrieved Cronbach,,s alpha values using SPSS Version 20 for the items in each construct as indicated table 1 below. According to Sekaran and Bougie (2016) reliabilities less than 0.60 are considered to be poor, those in the 0.70 range, acceptable, and those over 0.80 good.

Table 3. 1: Reliability Statistics

	Cronbach's Alpha	N of Items
Communication	.649	5
Water	.611	3
Trade Faciliation	.894	4
Transport	.649	5
Market Channles	.797	6
Export performance	.954	7

Source; Own survey 2021

As indicated in above table 1, the Cronbach,,s alpha coefficients for trade facilitation, market channels and export performance is .894, .797 and .954 which shows good reliability of the variables of measurement. However, communication, water and transport is .649, .611 and .649 respectively but above 0.60, which is still in an acceptable range. Thus, the overall reliability of the measures used in this study can be considered acceptable.

Validity is the strength of conclusions, inferences, or propositions. Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure. In other words, validity is the extent to which differences found with a measuring instrument reflect true differences among those being tested (Kothari, 2004). Validity test of the questionnaire was conducted using pearson correlation using SPSS. The validity test product moment pearson correlation was done by correlating each item questionnaire scores with the total score. Item-item questionnaire that significantly correlated with total score indicates that the items are valid. If the significance value is less than 0.05 then the instrument is valid but if it is higher it is declared invalid.

3.10. Ethical Considerations of the Research

The rights, dignity, privilege, and personality of the participants was protected as well as the anonymity and privacy of the participants and data confidentiality also respected. The respondent have assured about the confidentiality of the information obtained in the course of the study by not using personal identifiers and analyzing the data in aggregates. Also, respondents were not asked to write their names to increase the confidentiality of the information they give.Generally, ethical issues was carefully considered while conducting this research work.

CHAPTER FOUR

4. DATA ANALYSIS AND PRESENTATION

4.1. Introduction

The role of infrastructure investment with mediating effect of market channels in enhancing export performance in Ethiopian floriculture is the central focus of this study. As a result, the Ethiopian flower farmers' responses to the questionnaire are given, evaluated, and evaluated in this chapter.Figures, pie charts, and tables were used to illustrate the data, which were examined for frequencies and percentages. The mean and standard deviation of the dependent and independent variables were determined. The dependent, mediator, and independent variables were then subjected to a correlation analysis. The data was evaluated using regression analysis in the chapter's concluding portion.

4.2. Response Rate

The number of people who answered the question divided by the number of people in the study is the response rate, also known as success rate or return rate in survey analysis. It is most often expressed as a percentage. (Sataloff & Vontela, 2021).

The response rate or minimal response rate is equal to the number of full questionnaires divided by the total number of interviews (complete + partial) plus the number of non-interviews (refusal and break-off and non-contacts plus others) plus all instances of questionable qualifications (unknown if housing unit, plus unknown, other).(Ruel, 2019).

The researcher planned to collect information from 52 different samples. One questionnaire was rejected because it was incomplete, three were not returned, and none of the surveys were illegible. A total of 48 surveys were completed and input into SPSS 25. This study's response rate is 48 divided by 52 multiplied by 100 percent. As a result, 92.3 percent of people responded.

Incomplete data is not random, thus a greater response rate is preferable, regardless of the findings of these recent polls. For dealing with non-random lost outcomes, there is no suitable mathematical solution. When dealing with low survey response rates, one strategy is to presume that respondents are very prejudiced.A small, random sample with a high response rate (>80%) is preferred to a large sample with a low response rate. (Fosnacht et al., 2017). This research has a high response rate, with a response rate of more than 80%.

4.3. Descriptive Analysis Result

The initial stage in doing statistical analyses is to conduct a descriptive analysis. It offers you a sense of how your data is distributed, aids with the detection of outliers and mistakes, and allows you to spot relationships between variables, preparing you for future statistical analysis.

4.3.1. Demographic Profile of the Respondents

This section provides a profile of the employees of the horticulture; who involved in the study and data collected on basic characteristics. Accordingly, the following variables about

the respondents were summarized and described in the following table 4.1 gender, education, position and experiences were presented in this table.

Table 4.1: Demographic Profile of the Respondents

Variable	Category	N	%	valid %	Cum. %
Gender	Male	29	60.4	60.4	60.4
	Female	19	39.6	39.6	100
	Total	48	100	100	
Educational Status	Masters and above	10	20.8	20.8	20.8
	1st Degree	38	79.2	79.2	100
	Total	48	100	100	
Position	Executive Level Manager	10	20.8	20.8	20.8
	Middle class manager	25	52.1	52.1	72.9
	Line manager	9	18.8	18.8	91.7
	Professionals	4	8.3	8.3	100
	Total	48	100	100	
Experiences	Below 5 years	5	10.4	10.4	10.4
	6-10 years	23	47.9	47.9	58.3
	11-15 years	20	41.7	41.7	100
	Total	48	100	100	

Source; Own Survey 2021

Most of the respondents (60.4%) were male whereas the rest of the respondents (39.6%) were female. 79.2% of them had first degree and the rest 20.8% of them had master's degree and above with different positions. Most of the respondents have middle class managing position

followed by executive level managing position (20.8%). 18.8% of the respondents were line managers and 8.3% of them were professionals.

4.3.2. Descriptive Statistics of Dependent and Independent Variables of the Study

Table 4.2: Descriptive Statistics of Dependent and Independent Variables of the Study

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
COM	48	1.00	4.17	2.8194	1.18443
WAT	48	2.50	4.50	3.3958	.55504
TRAN	48	2.00	4.00	3.2958	.59785
TF	48	1.75	5.00	3.8698	.93112
MC	48	2.00	5.00	3.7188	.76117
EP	48	1.71	5.00	4.2798	.93420
Valid N (listwise)	48				

Source; Own Survey 2021

Most of the respondents said thatit was insufficient for communication items such as fixed voice service availability (lack of available lines), fixed voice international service quality, fax Service Availability, Mobile coverage, Internet access availability, Internet access quality

in other countries (interruptions,speed..). The mean of the mean for these items was found to be 2.83.

Most of the respondents said that Using Aquifers or (un) deep groundwater. And Using Surface (ditches, rivers, dams, lakes) have positive effect was agreed by most of the respondents. It was shown by the mean of 3.39.

Most of the respondents also agreed for transport items such as the flower grower firm reduce costs of international market, the flower grower firm delivers its, product to end destination or any outlet in time.The flower grower firm has easy access to the main gates of export market.The flower grower firm has easy access to cold transport.The flower grower firm has infrastructure. This was expressed by the mean of mean 3.29.

Complicated customs clearance procedures, Time-consuming customs procedures, Method for the assessment of customs duties is unclear, inadequate logistics infrastructure are the trade facilitation items. The mean of the means of these items was shown to be 3.87. This means they mostly agree for the items.

To study effect of market channel items develop marketing and sales channels to high-end niche markets, engage in close relations with florists and traders to develop market preferences; Market products to retailers and wholesalers and build strong relationships; create new sales and marketing channels to target flower farms; Selling through the specialized market channel; Selling through the unspecialized market channel were the items of marketing channels and the mean of the means of the items for market channel is 3.87 indicating that the respondents agreed for the marketing channels items. Performance

indicator items were presented for the respondents and most of them agreed on the ideas presented to them with the mean of 4.28.

4.4. Correlation Analysis Result

Correlation analysis is a statistical technique for determining the strength of a linear relationship between two variables. The correlation coefficient was used to determine the strength and size of the linear link between two variables, which is always between -1 and +1.

A correlation coefficient of +1 indicates that two variables have a strong and positive linear connection. A correlation value of -1, on the other hand, implies a strong and negative linear relationship between two series. A correlation value of 0 indicates that two variables do not have a linear connection.

All of the independent factors have a positive significant association with the dependent variable, as seen in the correlation table below. The following is a detailed discussion of the correlation analysis results:

Table 4.3: Correlation matrix between variables

Correlations							
		COM	WAT	TRAN	TF	MC	EP
COM	Pearson Correlation	1	-.164	.773**	-.010	.145	.301*
	Sig. (2-tailed)		.265	.000	.948	.325	.038
	N	48	48	48	48	48	48
WAT	Pearson Correlation	-.164	1	.127	.668**	.685**	.600**
	Sig. (2-tailed)	.265		.390	.000	.000	.000
	N	48	48	48	48	48	48
TRAN	Pearson Correlation	.773**	.127	1	.300*	.495**	.558**
	Sig. (2-tailed)	.000	.390		.038	.000	.000
	N	48	48	48	48	48	48
TF	Pearson Correlation	-.010	.668**	.300*	1	.785**	.798**
	Sig. (2-tailed)	.948	.000	.038		.000	.000
	N	48	48	48	48	48	48
MC	Pearson Correlation	.145	.685**	.495**	.785**	1	.827**
	Sig. (2-tailed)	.325	.000	.000	.000		.000
	N	48	48	48	48	48	48
EP	Pearson Correlation	.301*	.600**	.558**	.798**	.827**	1
	Sig. (2-tailed)	.038	.000	.000	.000	.000	
	N	48	48	48	48	48	48
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

As it can be seen from the above table, all independent dimensions, have positive relationship with overall export performance though the magnitude of the relationship between the

independent variables and the dependent variable,the independent variables and the mediating marketing variable, and the mediating market channel and the dependent variable.

From the above table it was shown that communication was positively and significantly related with export performances (r=0.301, p-value = 0.038), water has also direct positive significant correlation with export performances of the organizations (r = 0.600, p-value = 0.000), transport (r = 0.558, p-value = 0.000), trade facilitation (r = 0.798, p-value = 0.000), and market channel (r = 0.827, p-value = 0.000) have also positive significant relation with export performances.

4.5. Regression Analysis Result

The study used a cross-sectional data from the respondents and applied a multiple regression model in the form of ordinary least square (OLS). Before moving on to multiple linear regression models, the researcher ran diagnostic tests for the assumption of the classical linear regression model (CLRM).

4.5.1. Results for Test of Classical Linear Regression Model (CLRM) Assumptions

A diagnostic test is performed to determine whether or not the conventional linear regression model assumption was broken. Heteroscedasticity, Autocorrelation, Normality, and Multi-collinearity are all tested in this study, and the results are given and explained as follows.

4.5.1.1. Sum of the Constants is not Zero

Since the model has a constant term sum of the constants is not zero.

4.5.1.2. Test for no heteroscedasticity

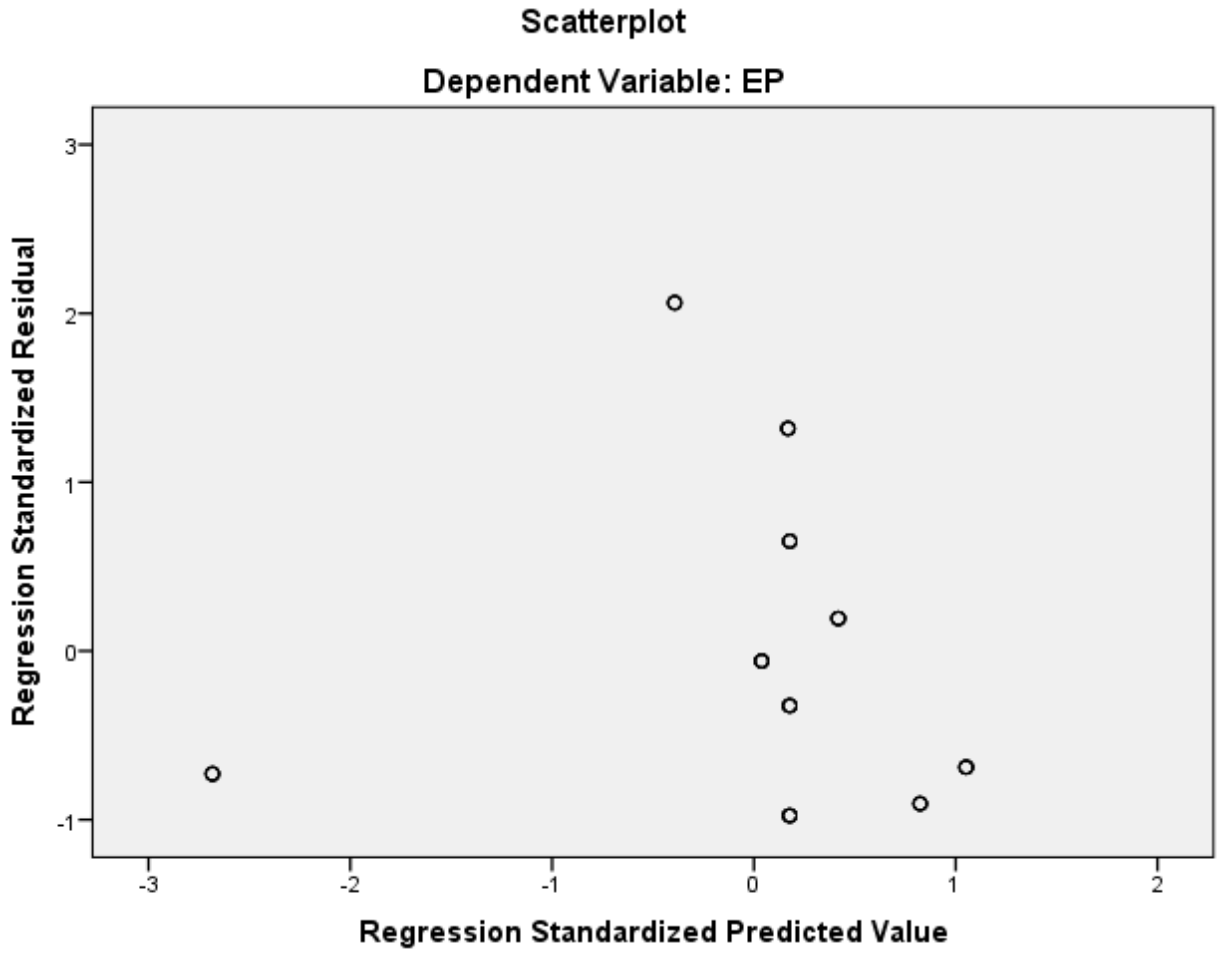
Heteroscedasticity is a crucial assumption in the traditional linear regression model. As Djalic & Terzic (2021)points out, the heteroscedasticity assumption states that the disturbances in the population regression function are homoscedastic, meaning they all have the same variance.Conditional on the values of the explanatory factors, the variance of each disturbance term ui is a constant number equal to 2. Heteroscedasticity, or equal (homo) spread (scedasticity), is based on the premise of equal variance.(Clement, 2020). There is a Heteroscedasticity concern if the error term ui does not have constant variance.

The parameter estimates are no longer BLUE due to heteroscedasticity; they are still unbiased, but no longer have a minimal variance. Unfortunately, there is no built-in mechanism for testing heteroscedasticity in SPSS. The test may be carried out by writing a few lines of code.

We may plot standardized residuals (ZRESID) versus standardized expected values despite the lack of a built-in technique to test for heteroscedasticity (ZPRED). The plot should appear random if there is no heteroscedasticity. Heteroscedasticity is shown by a pattern, such as a funnel shape or a curve.

A curve form, in instance, might signal that there is some non-linearity in the relationship that you overlooked. We may check for heteroscedasticity again by deleting one independent variable and trying again.

Table 4.4: Test for Heteroscedasticity



Source: Own Survey SPSS 25 Output

As we can see in the plot the residuals have a random pattern, which signifies that there is no sign of heteroscedasticity.

4.5.1.3. Test for assumption of no autocorrelation

This research looked into the diagnostic test for the CLRM assumption of no autocorrelation. The assumption of no autocorrelation between disturbances, according to(Maes et al., 2021), assumes that for every two X values, Xi and Xj (ij), the correlation between any two ui and uj (ij) is zero.

According to Chris Brooks (2008), the flaws are thought to be unrelated to one another. If the mistakes are not uncorrelated, they are said to as "auto correlated" or "serially correlated."The autocorrelation hypothesis was examined using the Durbin Watson (DW) test. Durbin—Watson (DW) is a test for first-order autocorrelation, which means it looks for a link between an error and its prior value.In the context of a regression of the time t error on its previous value ut = ut1 +VT, one method to justify the test and interpret the test statistic is in the context of a regression of the time t error on its previous value. Where vtN (0, 2 v) and is the autocorrelation coefficient.

The null and alternative hypotheses are the null and alternative hypotheses in the DW test statistic. The null hypothesis states that the errors at time t 1 and t are uncorrelated (the errors at time t 1 and t are serially correlated), whereas the alternative hypothesis states that the errors at time t 1 and t are serially correlated (the errors at time t 1 and t are uncorrelated).Therefore

H0: $\rho = 0$ (no autocorrelation)

H1: $\rho \neq 0$ (autocorrelation)

There are two critical values in DW: an upper critical value (dU) and a lower critical value (dL), as well as an intermediate zone where the null hypothesis of no autocorrelation cannot be rejected! Figure 4.2 depicts the rejection, non-rejection, and uncertain areas on a number line.

According to Brooks (2008), the decision rule for rejecting or not rejecting the null hypothesis is as follows. If DW is less than the lower critical value ld, the null hypothesis is rejected, and positive autocorrelation is assumed; if DW is larger than 4 minus the lower critical value ld, the null hypothesis is likewise rejected, and negative autocorrelation is assumed.

According to Brooks (2008), the decision rule for rejecting or not rejecting the null hypothesis is as follows. If DW is less than the lower critical value ld, the null hypothesis is rejected, and positive autocorrelation is assumed; if DW is larger than 4 minus the lower critical value ld, the null hypothesis is likewise rejected, and negative autocorrelation is assumed.

Table 4.5: Durban Watson test of Autocorrelation

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.896[a]	.803	.779	.43911	2.260

a. Predictors: (Constant), MC, COM, WAT, TF, TRAN

b. Dependent Variable: EP

Source: Own Survey SPSS 25 Output

For a total observation of 48 responders with 6repressors, the DW test statistic value for the model was 2.26. The model's DW test statistics are 2.26, which is clearly between the no autocorrelation and autocorrelation domains. As a result, the null hypothesis of no autocorrelation is inconclusive. As a result, the analysis shows no indication of autocorrelation.

4.5.1.4. Test for absence of multi-collinearity assumption

Adding or subtracting a variable from a regression equation would not impact the values of the coefficients on the other variables if the explanatory variables were orthogonal to one another. A minor degree of correlation between explanatory variables will almost always exist, but it will not result in significant accuracy loss.Multicollinearity is an issue that emerges when the explanatory variables are significantly associated with each other. When

two or more variables have a precise connection, perfect multicollinearity arises. It is not possible to estimate all of the model's coefficients in this scenario.Perfect multicollinearity will usually be observed only when the same explanatory variable is inadvertently used twice in a regression.

According to Gujarati (2004), multicollinearity refers to the occurrence of more than one precise linear relationship, whereas no multicollinearity implies that the explanatory variables have no perfect linear correlations. The researcher in this study made sure that the independent variables were not connected with one another.The following hypotheses were tested in the study for assumption of no multicollinearity.

Ho: there is multicollinearity among independent variables.

H1: there is no multicollinearity among independent variables.

Varying literatures have indicated different acceptable degrees of degree of association between the independent variables. According to Cooper and Schendler (2009), a correlation value of up to 0.8 between independent variables does not induce series multicollinearity, hence a correlation coefficient of less than 0.8 is acceptable.(Hair, J., Black, C., Babin, J., & Anderson, 2006)state that the correlation coefficient between independent variables should not exceed 0.9, implying that a correlation coefficient of less than 0.9 is acceptable.

Table 4.6: Multicollinearity test result among independent variables

		COM	WAT	TRAN	TF	MC	EP
COM	Pearson Correlation	1	-.164	.773**	-.010	.145	.301*
	Sig. (2-tailed)		.265	.000	.948	.325	.038
	N	48	48	48	48	48	48
WAT	Pearson Correlation	-.164	1	.127	.668**	.685**	.600**
	Sig. (2-tailed)	.265		.390	.000	.000	.000
	N	48	48	48	48	48	48
TRAN	Pearson Correlation	.773**	.127	1	.300*	.495**	.558**
	Sig. (2-tailed)	.000	.390		.038	.000	.000
	N	48	48	48	48	48	48
TF	Pearson Correlation	-.010	.668**	.300*	1	.785**	.798**
	Sig. (2-tailed)	.948	.000	.038		.000	.000
	N	48	48	48	48	48	48
MC	Pearson Correlation	.145	.685**	.495**	.785**	1	.827**
	Sig. (2-tailed)	.325	.000	.000	.000		.000
	N	48	48	48	48	48	48
EP	Pearson Correlation	.301*	.600**	.558**	.798**	.827**	1
	Sig. (2-tailed)	.038	.000	.000	.000	.000	
	N	48	48	48	48	48	48
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

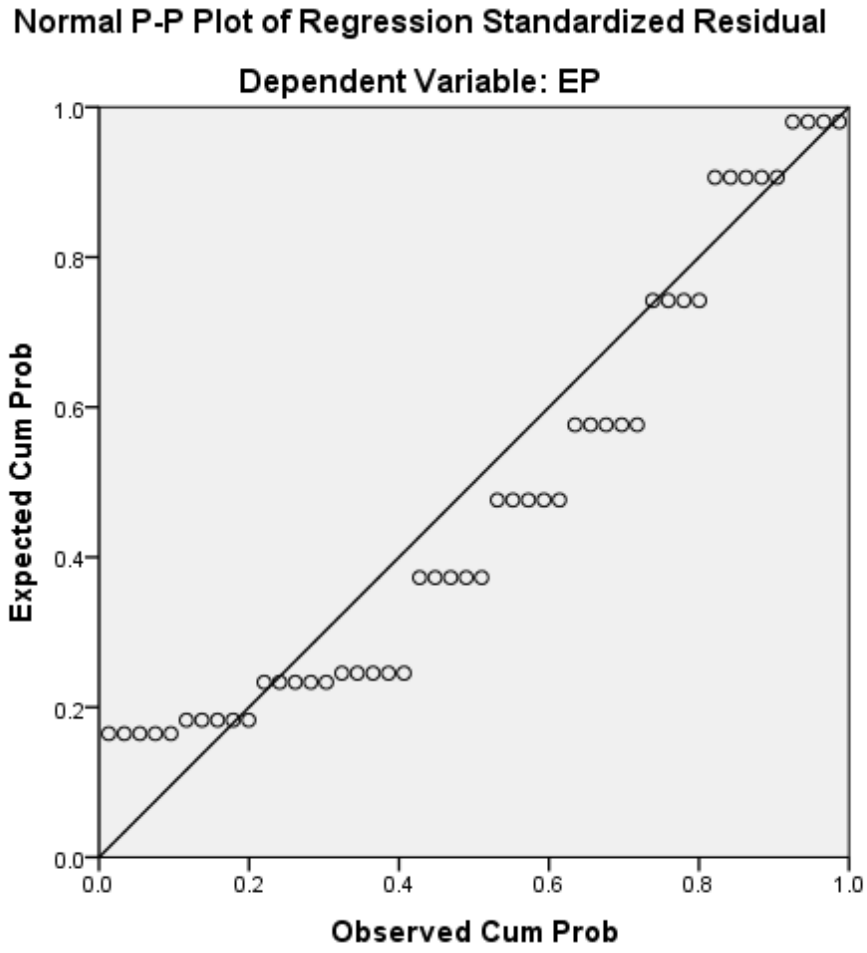
Source: Own Survey SPSS 25 Output

As shown above in the table, the maximum coefficient of correlation between the independent variables table in this study is 0.785, which was less than 0.9. This coefficient of correlation does not violate the acceptable level stated by Cooper and Schendler (2009) and Hair et al (2006). Therefore, there is no multicollinearity among the independent variables in the study.

4.5.1.5. Normality Test

The CLRM assumption of normalcy was put to the test. The assumption is that disturbances are distributed properly. Frequency distributions are available in a variety of forms and sizes. As a result, having some generic descriptions for typical sorts of distributions is critical. The data would be dispersed symmetrically around the center of all scores in an ideal world.As a result, if we drew a vertical line across the distribution's center on both sides, it should seem the same. This is referred to as a normal distribution, and it is distinguished by the bell-shaped curve. The bulk of scores are clustered around the center of the distribution, as indicated by this shape (so the largest bars on the histogram are all around the central value). As it shown below the plots follow the diagonal line and hence it is normally distributed.

Table 4.7: Normality Plot



Source: Own Survey SPSS 25 Output

4.5.2. Multiple regression output and its discussion

Multiple regression analysis was used in this study to determine the predictive value of the variables under consideration. The purpose of this was to find the linear combination of the components.

Regression of Export performance on communication, water use, trade facilitation , transport, and mediating market channel. The econometrics model employed in this study was the following

$$EP = \beta 0 + \beta 1\ COM + \beta 2\ WAT + \beta 3\ TRAN + \beta 4\ TF + \beta 5\ MC + Є$$

Table 4.8: Regression Analysis Result

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.422	.525		-.803	.427
	COM	.162	.096	.205	1.681	.100
	WAT	.151	.175	.089	.858	.396
	TRAN	.131	.214	.084	.615	.542
	TF	.446	.117	.444	3.817	.000
	MC	.424	.170	.345	2.493	.017

a. Dependent Variable: EP

Source: Own Survey SPSS 25 Output

After running this equation using SPSS 20, the regression model was as follows.

$$EP = -0.422 + 0.162COM + 0.151WAT + 0.131TRAN + 0.446TF + 0.426MC$$

Table 4.8 shows that all the independent variables communication, water use, transport, trade facilitation, and mediating market channel positively affected export performance. The effect however is significant only over the one of the independent variables and on the mediating variable of market channel. The effect of communication, water use and transport were bot significant since its p-value is greater than 0.05.

4.5.3. Mediation effect using path analysis

The mediation effect was further analyzed by using path analysis in AMOS software

Proposed path diagram with mediating variable

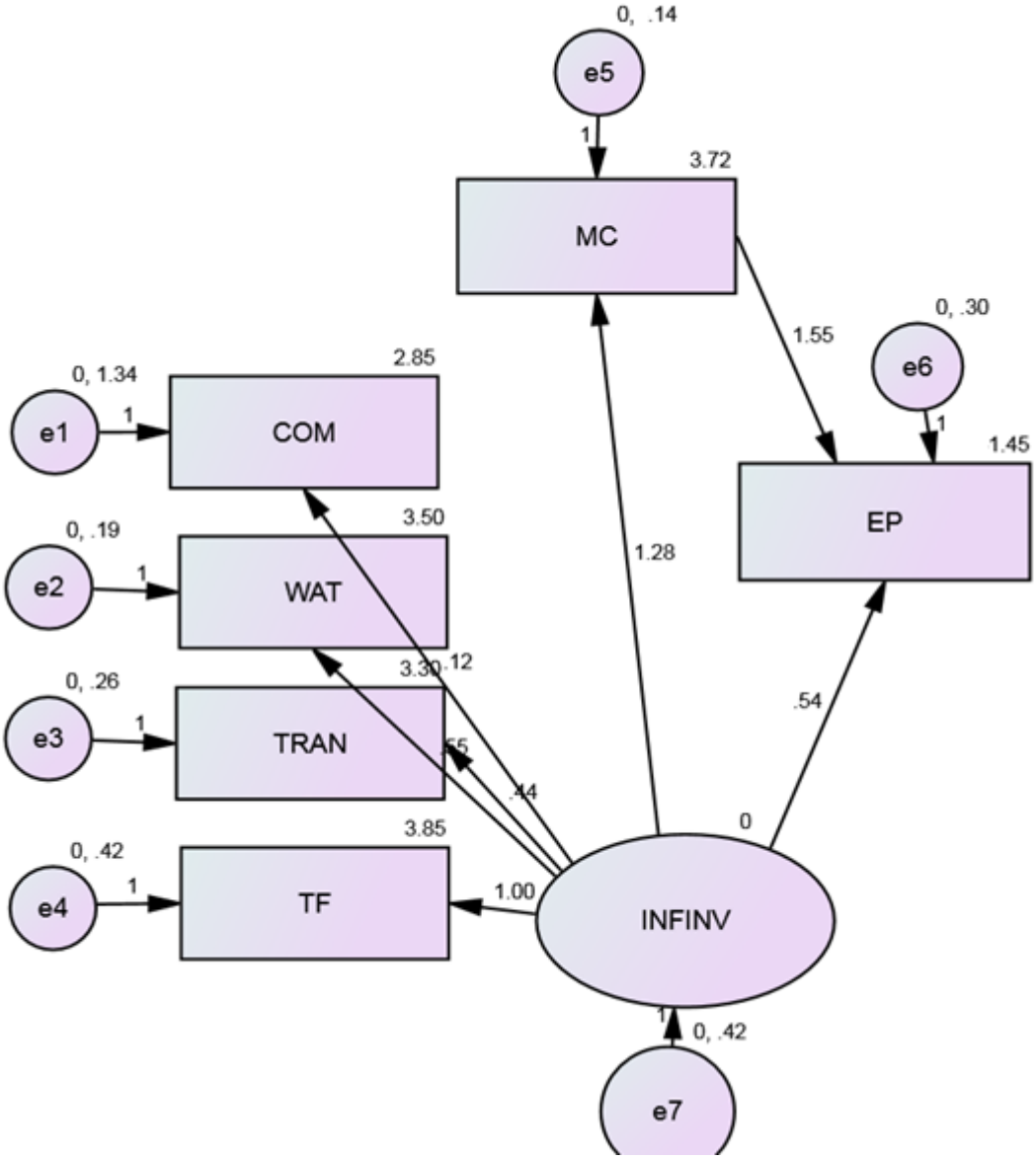


Fig 1. Path analysis with mediator

Source: AMOS output

As stated by Baron and Kenny's (1986), to confirm a mediation effect four steps need to be fulfilled.

1. In the absence of mediator, indirect variable significantly affects direct variable.
2. Mediator is significantly affected by indirect variable.
3. The mediator has significant and unique effect on the direct variable, and
4. The effect of indirect variable on direct variable has to shrinks when mediator is added to the model.

Mediation or non-mediation could occur in the cases listed below.

1. **Complementary mediation –** is one of the partial mediations in Baron and Kenny's approach and it occurs when both direct and indirect effects are significant and on the same direction.

2**. Competitive mediation -** it is one of the partial mediations that occurs when both the direct and indirect effects are significant but has opposite directions.

3. **Indirect only mediation-** it is full mediation that occurs when only the indirect is significant.

4**. Direct only non-mediation –** thisoccurs only when direct impact is significant.

5. **No non mediation -** if both the indirect and direct effects are insignificant, it is said no non mediation. This shows a failure for testing mediation.

Table 4.9. Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	status
MC	<---	INFINV	1.275	.209	6.113	***	Significant
EP	<---	MC	1.546	.369	4.194	***	Significant
COM	<---	INFINV	.117	.201	.579	.563	Not Significant
WAT	<---	INFINV	.547	.109	5.034	***	Significant
TRAN	<---	INFINV	.444	.109	4.058	***	Significant
TF	<---	INFINV	1.000				Can't be estimated
EP	<---	INFINV	.544	.363	1.499	.034	Significant

Based on the above three step segmentation analysis, market channel has shown complimentary partial mediation between infrastructure investment and export performance.

Direct Impact of infrastructure Investment on export Performance :

Direct model found a good fit $\chi 2/df=3.675$, GFI=0.942 and RMSEA=0.0.63. Next, the predicted direct relationship between Communication, Transport, Water and Trade Facilitation and perceived Export Performance were tested.

The results support the significance for Water ($\beta=0.109$, $p= 0.000$), and Transport ($\beta=0.109$, $p= 0.000$), while Communication was not supported due to insignificant value ($\beta=0.579$, $p= 0.034$).

Proposed model without mediator

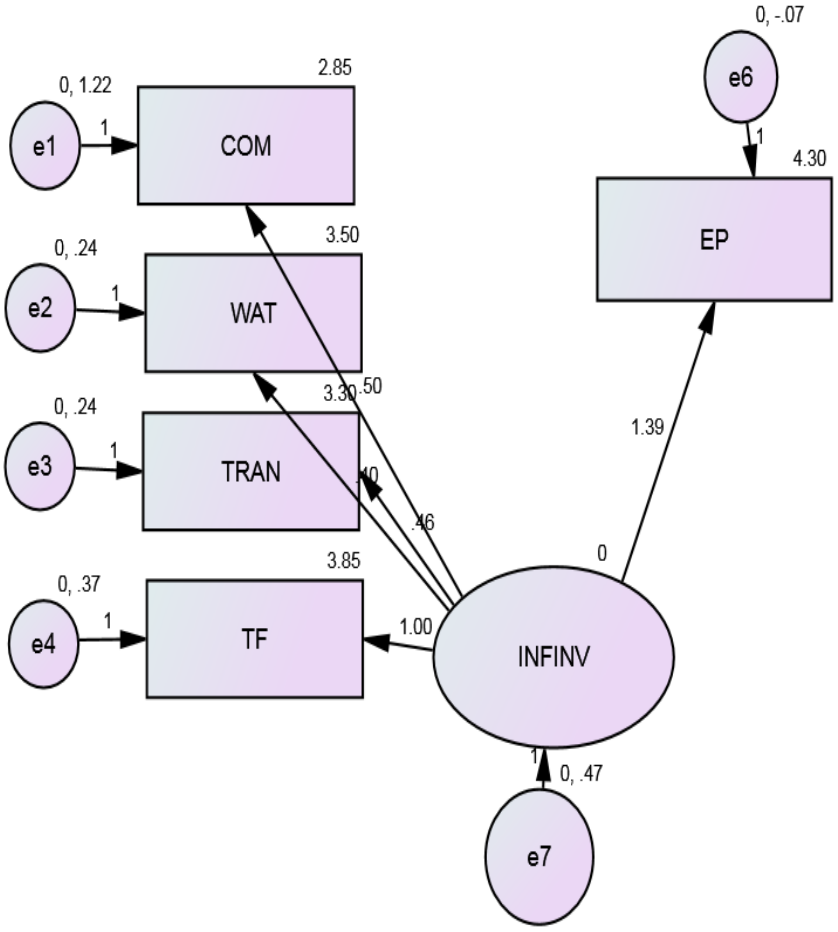


Fig 4.2. Path analysis without mediator

Source: AMOS output

Table 4.10. Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Status
COM	<---	INFINV	.502	.230	2.185	.029	Significant
WAT	<---	INFINV	.396	.110	3.585	***	Significant
TRAN	<---	INFINV	.458	.113	4.044	***	Significant
TF	<---	INFINV	1.000				
EP	<---	INFINV	1.386	.237	5.841	***	Significant

Indirect Impact of Infrastructure Investment on Export Performance:

Moreover, highlights the results of above analysis which proposed the mediating role of

Market Channel between Communication ,Water ,Transport and Trade Facilitations, and perceived Export Performance. The results suggests that after introducing the mediating variable the relationship is still significant Communication (β=0.502, p= 0.029), Water (β=0.110, p= 0.000), Transport (β=0.113, p= 0.000), and Infrastructure investment (β=0.237, p= 0.00) with Perceived Export Performance.

However, the magnitude of the relationship has reduced, suggesting partial mediation. Therefore, Market channels mediates the relationship between infrastrucrure invesment and perceived export perfromance is, partially accepted.

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATIONS

This chapter outlines brief summery and conclusion of the study in accordance with the study results and forward recommendations based on the overall results of the study and outlines future research potential areas.

5.1. Summary of the Study

The objective of the study was to investigate the role of infrastructure investment with mediating effect of market channels in enhancing export performance in Ethiopian floriculture. Based on the objective of the study, questionnaire was selected and organized from existing literature to measure the variables. Out of 52 questionnaires distributed, 48 valid questionnaires were collected and used for the analysis. The collected data was analyzed using statistical package for social science software (SPSS). Regression analyses was employed. Prior to applying regression analysis, reliability, correlation analysis and other preliminary tests (like multicollinearity, linearity, normality and heteroscedasticity tests) were performed. With regard to the reliability, the results showed that all measures used in this study had an acceptable level of reliability. Pearson correlation also indicated no problem of multicollinearity. With regard to other preliminary testes the results showed that there were no significant data problems that would lead to say the assumptions of regression analysis had been seriously violated.

5.2. Conclusion

The study revealed that there were no fixed voice service availability (lack of available lines), fixed voice international service quality, fax Service Availability, Mobile coverage, Internet access availability, Internet access quality in other countries (interruptions, speed..). This implies that the availability of internet access has positive effect on market channels and increases the export performance.

The companies use aquifers or (un) deep groundwater and surfaceswater (ditches, rivers, dams, lakes) have positive effect was agreed by most of the respondents. The flower grower firms reduce costs of international market, delivers its, product to end destination or any outlet in time. They easy get access to the main export markets, and cold transport. It was also reported that the firmswell developed infrastructure.

The study confirms that the effect of market channel items such as develop marketing and sales channels to high-end niche markets, engage in close relations with florists and traders to develop market preferences; Market products to retailers and wholesalers and build strong relationships; create new sales and marketing channels to target flower farms; Selling through the specialized market channel has positive and significant effect.

Market Channel between Communication ,Water ,Transport and Trade Facilitations, and perceived Export Performance. The results suggests that after introducing the mediating variable the relationship is still significant.

However, the magnitude of the relationship has reduced, suggesting partial mediation. Therefore, Market channels mediates the relationship between infrastrucrure invesment and perceived export perfromance is, partially accepted.

5.3. Recommendations

The finding of the study suggested that the infrastructure investment plays important role in increasing flower export performance in Ethiopia. Given this,the study has a significant implication for Ethiopian flower grower and exporter as well as for the country economic growth.

Even though all the components of infrastructure investments are essential to increase the export performance, Ethiopian government need to give a greater emphasis on trade facilitation so to increase the export performance of the floriculture. However, the infrastructure investment components of transport and communication have insignificant which need further study.

Since, the mediating effect of market channels was found to be a vital to in enhancing export, the Ethiopian flower grower and export companies should make more effortsfor development of infrastructural investment in collaboration with government.

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Annex

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I am Semeret Mekonnen, MSc student in International Business at Addis Ababa University. Currently, I am conducting MSc thesis titled "The role of Infrastructural Investment with Meditating Effect of Market Channel In Enhancing Export performance in Ethiopia floriculture." You are being requested to participate in this research project because you are believed and trusted to provide realistic and dependable data. You were selected by chance because your participation in answering the study questions plays key role for the success of the study objectives.

The results of this survey will be valuable for the management of floriculture investment, to understand the role of export oriented investment in enhancing foreign currency and national economic growth. It will assist stakeholders and investors to know the role of infrastructural investment to encourage investors involvement in floriculture production and export .

The researcher assures you that your response will be used only in the framework of this research project. Your identity and responses will be kept confidential, which means the researcher will remove anything that could identify you as taking part in this study, such as names and place of work.

Thank you for Your cooperation!

Semerte Mekonnen

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Questionnaire

Part I

Respondents profile (please put "√" in the box provided)

a) Please indicate your gender: Male ☐ Female ☐

b) Please indicate your educational background

Masters ☐ 1st degree ☐ Diploma ☐ High school ☐ Others ☐

c) Position held in the firm

Executive level manager ☐ Middle class manager ☐ Line manager ☐

Professionals ☐ Others (please specify)_____

d) How long have you been working in your current position?

Below five years ☐ 5 – 10 years ☐ 11 – 15 years ☐ > 15 years ☐

Part -II: - The infrastructure Interment Variables .
Instruction: Please Rate your agreement to the following statements related factors affecting export performance on a five-point scale provided below by encircling the appropriate number.

where 1: Very Insufficient 2: Insufficient 3: unavailable 4: Sufficient 5: Very Sufficient

	Factors	Very Insufficient	Insufficient	Unavailable	Sufficient	Very Sufficient
	Communication					
	Fixed voice service availability (lack of available lines)					
	Fixed voice international service quality					
	Fax Service Availability					
	Mobile coverage					
	Internet access availability					
	Internet access quality in other countries (interruptions, speed..)					
	Where1: Strongly negative effect 2: Negative effect 3: Neutral 4: Positive effect 5: Strongly positive					

	effect					
	Factors	**Strongly negative effect**	**Negative effect**	**Neutral**	**Positive effect**	**Strongly positive effect**
	Water					
	Using Precipitation water					
	Using Aquifers or (un)deep groundwater					
	Using Surface (ditches, rivers, dams, lakes)					
	Where1: Strongly Disagree 2: Disagree 3: Neutral 4: Agree 5: Strongly agree					
Factors		**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
	Transport					
	The flower grower firm reduce costs of international market					
	The flower grower firm delivers its Product to end destination or any outlet in time.					

	The flower grower firm has easy access to the main gates of export market.					
	The flower grower firm has easy access to cold transport.					
	The flower grower firm has infrastructuredevelopment with respect to cold store, warehouse, at Air port					
Factors		**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
F	**Trade Facilitation**					
	Complicated customs clearance procedures					
	Time-consuming customs procedures					
	Method for the assessment of customs duties is unclear					
	Inadequate logistics infrastructure					
Part -III: - The Effect of Market Channel on export performance						
Where1: Strongly negative effect 2: Negative effect 3: Neutral 4: Positive effect 5: Strongly positive effect						

	Factors	Strongly negative effect	Negative effect	Neutral	Positive effect	Strongly positive effect
C	**Market Channels**					
	Develop marketing and sales channels to high-end niche markets					
	Engage in close relations with florists and traders to develop market preferences.					
	Market products to retailers and wholesalers and build strong relationships.					
	Create new sales and marketing channels to target flower farms.					
	Selling through the					

	specialized market channel.					
	Selling through the unspecialized market channel.					

PartI V: Export performance of Ethiopian flowers

Where1: Strongly Disagree 2: Disagree 3: Neutral 4: Agree 5: Strongly agree

	Factors	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
P	**Export Performance**					
1	Export performance will be affected by Telecommunication.					

	Flower Export performance will be affected by Water resource					
	Flower Export performance will be affected by transport infrastructure					
	Flower Export performance will be affected by trade facilitation					
	Flower Export performance will be affected by market channel					
	Our exporting has significantly increased the firm's international market share.					
	Overall, our export marketing performance has resulted in our business or firm growth.					

Thank you very much for your cooperation once Again!!