ALFRED NOBEL UNIVERSITY

DEPARTMENT OF GLOBAL ECONOMICS

Bachelor's Thesis

DEVELOPMENT AND IMPLEMENTATION OF THE INTERNATIONAL INVESTMENT PROJECT «GREEN HOUSE IN NIGERIA»

Student: Bashir Janmutum Dayyab
Group: MEV-17a
Specialty: 292 “International economic relations”

Supervisor: Kliuchnyk R.M. Candidate of Political Sciences

Dnipro
2021

ALFRED NOBEL UNIVERSITY
DEPARTMENT OF THE GLOBAL ECONOMICS

First (bachelor) level
Specialty 292 International economic relations

Approved by:
Head of Department _____
_____
_____
(signature, last name, initials, scientific degree, academic status)

"____" _____20__ p.

The Bachelor's Thesis Assignment

Bashir Janmutum Dayyab

1. Title "Development and implementation of the international investment project "Green house in Nigeria""

2. Supervisor Kliuchnyk R.M., Candidate of Political Sciences, Associate Professor

Approved with the Order of "___" _____ 20___, No. _____
3. Deadline for submission of May 15, 2021
4. Aim of the paper: to evaluate the big trends of the Nigerian investment climate , to asseses the prospects for the development of the agricultural sector and develop an investment project for opening an agricultural green house in Nigeria.

5. Thesis outline (list of issues to be developed):

CHAPTER 1. ANALYSIS OF THE PROJECT ENVIROMENT
1.1.Internal factors that influence the project life cycle
1.2.External factors that influence ther project life cycle
1.3.Economic factors
CHAPTER 2. THE MAIN IDEA OF THE GREEN HOUSE IN NIGERIA
2.1.Production strategies
2.2.Climatic suitability for greenhouse vegetable production
2.3.The project life cycle of my chain of green houses
CHAAPTER 3. INVESTMENT PROJEVT APPRAISAL
3.1.Project appraisal
3.2.Sensitivity analysis
6. Date of issue of the assignment February 1, 2021
7. Thesis schedule

no	Stages	The deadline for submission	
		Schedule date	Actual date
1	Chapter 1	March 12, 2021	March 10, 2021
2	Chapter 2	April 2, 2021	March 25, 2021
3	Chapter 3	May 5, 2021	April 20, 2021
4	The whole paper	May15, 2021	May 5, 2021

Student _____ Bashir Janmutum Dayyab
signature *last name, initials*

Supervisor _____ Kliuchnyk Ruslan
signature *last name, initials*

Summary

Development and implenmentation of the international investment project “ greenhouse in nigeria

We can see through various analyses and the use of figures that this project would be a successful one. I understand that every project has to come to an end but if there is one project that probably shouldn’t come to an end, it is this one. This project would not only boost the country’s standings in the midst of the world economies but also boost the lifestyles of the country’s residents. Of course the main purpose of any project is to make sure it is profitable and the figures and indicators such as the projected project’s Net Present Value and Internal Rate of Return proves just how successful this project would be if it were to be ever developed. The beautiful thing about the Greenhouse project is that it does not have to be limited only to Nigeria as this project idea can work in any agro-based country. Take for example; Ukraine is a country that has been blessed with about 40% of arable soil which is great for farming. Ukraine has many similarities with Nigeria which proves that this same project can be developed in Ukraine and can succeed as well. These similarities include; great soil for farming, cheap labour force, a fairly high level of corruption etc. This just proves that the greenhouse project never really has to die but it can just end in one country and be restarted in another country.

Резюме

Розробка та реалізація міжнародного інвестиційного проекту "теплиця" у Нігерії

Під час моєї роботи ми можемо побачити за допомогою різних аналізів та використання цифр, що цей проект був би успішним. Я розумію, що кожен проект повинен закінчуватися, але якщо є один проект, який, мабуть, не повинен закінчуватися, це цей. Цей проект не лише зміцнить позицію країни серед світових економік, але й покращить спосіб життя жителів країни. Звичайно, основною метою будь-якого проекту є переконатися, що він вигідний, а показники та показники, такі як чиста теперішня вартість проекту та внутрішня норма прибутковості проекту, доводять, наскільки успішним був би цей проект, якщо б він був коли-небудь розроблений. Найкрасивішим у проекті «Теплиця» є те, що він не повинен обмежуватися лише Нігерією, оскільки ця ідея проекту може працювати в будь-якій агропромисловій країні. Візьмемо для прикладу; Україна - це країна, яка отримала близько 40% ріллі, яка чудово підходить для сільського господарства. Україна має багато схожості з Нігерією, що доводить, що цей самий проект можна розвивати в Україні, а також може мати успіх. Ці подібності включають; чудовий ґрунт для сільського господарства, дешева робоча сила, досить високий рівень корупції тощо. Це лише доводить, що проект тепличного господарства ніколи насправді не повинен вмирати, але він може просто закінчитися в одній країні та відновитись в іншій.

CONTENTS

INTRODUCTION

It is a factual saying that no two projects are the same albeit international or local. Have you ever seen an unlikely business project that just seemed to take off regardless of the peculiarities surrounding the project development process? This is because in the process of developing the project, these project developers did an extreme deep dive into the characteristic features of where they were developing their product in. What this does is that it helps them to better understand and decide on what types of strategies to use to use to go about the project development. The fact that no two projects are the same is the exact reason why for each and every project, we have to develop a new idea and strategy for going about its development. During the course of my individual work, I will be going through the strategies and methods which I will use to establish my very own international project. I have chosen to focus on opening a chain of greenhouses in Nigeria as the country is extremely blessed with fertile lands and also other factors that can contribute to favorable yields of agricultural products such as a great climate for agriculture. The Green House project would be named “Bashir Green Houses” The main reason for my choice of Green Houses as the choice of my individual work is to enable the country take advantage of its blessings by using its gift (agriculture) to take over the world. The plan is for the country to use Green Houses as a way to grow the crops that cannot naturally grow on the Nigerian soil.

My individual work is divided into three parts. The first part is devoted to analysis of the project environment. This section will be further subdivided into two parts and that is where I will be discussing the scope of internal and external factors which impact all the project lifecycle. In the second part of my individual work, I will be discussing the main idea of my Green House project. This part of my course paper will be divided into two subsections. The first subsection will focus on the scope, forms and methods of investment. I will also lunge into discussing the idea of the international project, its substantiation, volume, forms and methods of investment. The second subsection of the

second part of my course paper will discuss the initial information about the project. This is where I will be touching on points such as the Green House Project products (services), the project participants (stakeholders): internal and external, the project lifecycle with main stages, the project content, the investment into the project (structure of all expenses), the structure of procurement - structure of consumption of material resources, including their distribution of materials, machines and mechanisms and finally, the schedule for major works and also the information on the timing of the individual project activities. The third part of my individual work will be centered on the Green House investment project appraisal, project risks and risk management.

CHAPTER 1

ANALYSIS OF THE PROJECT ENVIRONMENT

In order to develop and manage a project effectively, it is a known fact that we must analyze the environment in which the project would be established. The project environment represents a connection, where the project is processed. It impacts the project and is, therefore, conditioned. Such an interaction is provided by numerous factors as operational, physical, ecological, social, cultural, economic, psychological, financial, organizational etc [2]. The environment not only formulates the project but also estimates it. The project environment for my course paper is Nigeria. Nigeria is a federal republic in West Africa, bordering Benin in the west, Chad and Cameroon in the east, and Niger in the north. Its coast in the south lies on the Gulf of Guinea in the Atlantic Ocean. It comprises 36 states and the Federal Capital Territory, where the capital, Abuja is located. Nigeria is a democratic secular country [1]. I have chosen some important facts to discuss when it comes to developing and managing a project in Nigeria.

Continent – Nigeria is located in Africa. It is important to know what continent you are developing a project in as this information will enable you and probable investors to know important facts that could be crucial to the project development such as the neighboring countries. It is important to know what Neighboring countries the country has as this helps us understand things like what countries we can buy cheaper raw materials or machinery from in case they are too expensive in our country of choice (Nigeria) and this can also help us to understand what countries we can sell our products to while trying to maximize profits.

Gross domestic product -This statistic shows domestic product (GDP) in nigeria from 1996 to 2019 , with projections up until 2026. Gross domestic product (GDP) denotes

the aggregate value of all services and goods produced within a country in any given year GDP is an important indicator of a country's economic power , in 2019 ,Nigeria's gross product amounted around 448.12 billion US dollars

Inflation- 18.17% april 15 (Reuters) Nigeria's annual inflation climbed to a more than four year high in march rising 82 basis points from a month earlie to 18.17% the statistics office said on thursday

Foreign direct investment- The stock of US foreign direct investment (FDI) in Nigeria was USD 5.8 billion in 2017 , a substantial increase from USD 3.8 in 2016 , but only a modest increase from 2015's USD 5.5 billion in FDI in Nigeria countinues to be led by the oil and gas sector

Region – Western Africa. The region helps us to understand what types of goods to produce. As we know that Nigeria is in West Africa, we can start by trying to produce the goods that are in demand in the Western part of Africa. After conquering this region, we can expand our business into Africa as a whole.

Size – 923,768 km² [4]. The size of the country helps us to understand just how much space we are going to have while conducting our business. The fact that the country is a big one helps us to understand that we will have enough space to conduct our business on a grand scale.

Language – English (official), African dialects. It is very important to know the language of the country you're managing a project in because some businesses fail due to language barriers. One of the most important managerial duties is communication. Communication must ensue between the stakeholders and the CEO, between the owner and workers, between the CEO and the government (to settle the legal aspects of developing a business) and so on.

Monetary Unit – Naira. The currency or monetary unit of a country is very important while trying to start a project there. The knowledge of the country's currency is a

deciding factor for a number of things. The monetary unit helps you to understand the exchange rate between the country and yours and it is sensible to choose the country with the most favorable exchange rate situation.

Natural Resources – Nigeria is blessed with natural resources such as natural gas, petroleum, tin, iron ore, coal, limestone, niobium, lead, zinc, and arable land. As can be seen, arable land has been stated as one of Nigeria's many natural resources and this is the exact reason why we are taking the chance to develop the project of green houses in the country.

Agriculture – Nigeria is a mass producer of cocoa, peanuts, cotton, palm oil, corn, rice, sorghum, millet, cassava (manioc, tapioca), yams, rubber; cattle, sheep, goats, pigs; timber; fish. This is another important fact to know when talking about Nigeria. The country is immensely blessed with an agricultural upper hand in comparison with most countries in the world. Another reason why the green house project would perform so efficiently in Nigeria is that the country is already well experienced in the agricultural sector and the introduction of green houses is only a step in the right direction for the country's future.

Neighbouring Countries – The neighboring countries to Nigeria are Niger, Chad, Cameroon and Benin. All four of these countries are relatively poorer than Nigeria and have a lower standard of living than the country. This means that purchasing raw materials and equipment from them would be cheap (at least cheaper than purchasing from the country itself) and this is great for our project.

Population – Nigeria's population is estimated at about 181,562,056 million. This means that there wouldn't be a problem in finding cheap labour for the project. This is a very good thing as this gives us, the project developers a chance to pick and choose from skilled labourers at a cheap rate.

Climate – Nigeria's climate is as follows. North, tropical – 20°C – 36°C all year, South – 22°C – 33°C. The country's climate is in full support of agriculture and this is great for us because that's the sector of our project.

Yearly Rainfall – The yearly rainfall in Nigeria is as follows. The yearly rainfall in the North is 50 cm (approx) mostly from June to September, and in the South it is 400cm mostly from March to July.

Animal Life – The most common animal life found in Nigeria: gorilla, chimpanzee, baboon, monkey, crocodile, lizards, snakes, giraffe, hippopotamus, elephant, lion, leopard, gazelle. The bird life is as follows - ostrich, grebe, storm petrels, pelicans, boobies, gannet, cormorant, darter, frigate bird, heron, stork, ibis, spoonbill, terns, ducks, geese, swans, osprey, hawk, falcon, bustard, sandpiper, gulls, parrot, macaw. The animal life helps in our project because we are going to be using manure from the animals as fertilizers to develop the soils used in our green houses and also to grow our plants more quickly and prepare them for quick harvesting.

1.1. INTERNAL FACTORS THAT INFLUENCE THE PROJECT LIFE CYCLE

When we speak of the internal factors that affect a project, we are basically talking about the factors that are within the reach of the company and many at times, these factors can be changed. These factors are:

I) **Value System**: A value system could be defined as a coherent set of values adopted and/or evolved by a person, organization, or society as a standard to guide its behavior in preferences in all situations [20]. I intend for the Greenhouse project's value system to be very successful as the value system will be based on a very thorough research.

II) **Mission, Vision and Objectives: A** mission is a general statement of how you will achieve your vision. Strategies are a series of ways of using the mission to achieve the vision. Goals are statements of what needs to be accomplished to implement the

strategy. Objectives are specific actions and timelines for achieving the goal [21]. The mission of my Greenhouse project is to revitalize agriculture as an occupation in Nigeria and enable the country gain its rightful place among the world's top agricultural products producers and exporters through the establishment of these greenhouses in every state in the country. The strategy is to start with the most prospective states in the country then move on to the less prospective ones after some profit has been made from the more prospective ones. The goal is to ensure that the project doesn't fail and one of the main ensuring factors of the possibility of this happening is by completely avoiding corruption. The main objective is to start making some returns from the first harvest period.

III) **The Strength of Employees:** Employee strength is an essential internal business factor. We need to check if employees are motivated, hard-working and talented. They will produce better results compared to an unmotivated and less talented workforce. The processes and relationships between and within departments can also improve effectiveness and efficiency. As the project manager of Bashir Greenhouses, it is my priority to pick employees who are the most suitable for their posts at work. Another strategy I have to ensure that all my employees are efficient is that I will be conducting seminars monthly on how to do certain things or work certain machinery that might have been an issue to an untalented employee. I feel like the more these seminars hold, the better trained the employees will be and this will of course strengthen the project.

IV) **Organizational and operational Procedures:** These are a part of the operational and administrative procedures. This includes disorganized or inaccurate record keeping. Interruptions to your supply chain and outdated or faulty IT systems are also factors you should evaluate. If you do not overcome these, your customers might see you as unreliable. You can also lose all your data. Being organized is a priority at

Bashir Greenhouses so there shouldn't be any leaks in the organizational and operational administrative procedures.

V) **Management Structure:** A project organization is a structure that facilitates the coordination and implementation of project activities. Its main reason is to create an environment that fosters interactions among the team members with a minimum amount of disruptions, overlaps and conflict. The Bashir Greenhouses project would make use of a "**Functional Organizational Structure**".

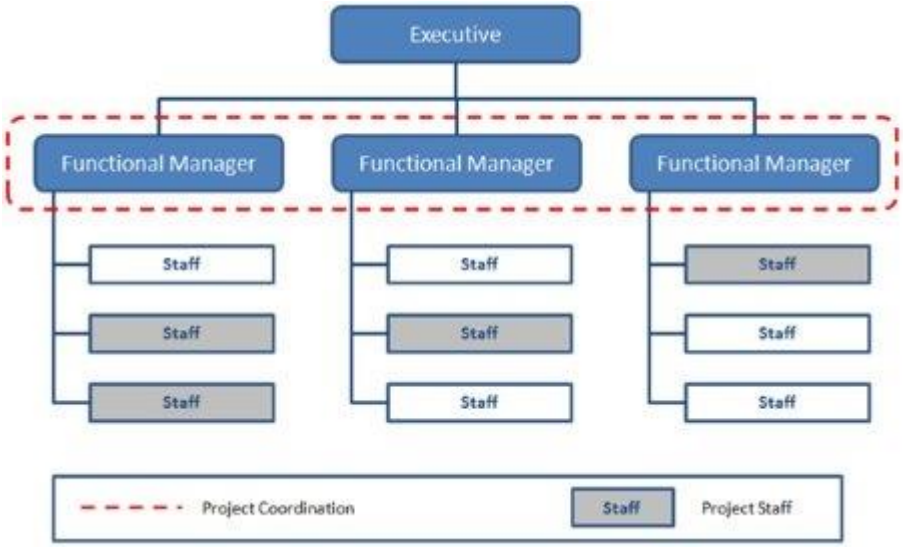


Fig.1. Functional Organizational Structure

1.2. EXTERNAL FACTORS THAT INFLUENCE THE PROJECT LIFE CYCLE

When we are discussing the external factors that can influence a project, we are basically talking about factors that are beyond our control. These factors can either make or break a project depending on if the project manager uses a long period of time (in my case 60 days) to make researches on these factors and if he finds a way to

maneuver through the different factors in a way that benefits the project. These factors are otherwise known as the **"PESTLE"** factors. The factors that can affect the establishment of a project in Nigeria are:

I) **Political Factors**: Nigeria operates a multi-party system with more than ten political parties. However, there are only two dominant political parties, one playing the role of opposition party. The current ruling party has majority seats in both upper and lower chambers of the legislative arm of government [22]. Politically, Nigeria seems to be stable except for the uprising of the terrorists in the Northern part of the country. This has to be taken into account when developing the project as we obviously do not want terrorists to tear down our projects. According to an editor at legitsmallbusiness.com, the Nigerian Government Policy is as follows; "The government of the day seems to realise the need for Nigeria to diversify its economy. Therefore, agriculture is one of the sectors that are receiving much attention. Nigeria is blessed with fertile soil and several mineral resources. Therefore, anyone that wants to explore this area will definitely enjoy the backing of the government." The fact that the government has realized the need for agriculture would only make it easier for the government to see the grand scheme of things and the benefits that this project could bring to the country and it shouldn't be a difficult situation to get them to invest in this project.

II) **Economic Factors**: Currently, the economic situation in Nigeria has not been that successful. Nigeria as a country has been a mono-economy with total dependence on oil revenue. With the current glut in the oil market, the revenue coming to the country has come down drastically. Because Nigeria operates a federalism system of government with three tiers of government namely; Federal, States and Local Governments, revenue has to be shared across the three tiers of government [22]. The Bashir Greenhouse project has to be presented to the Nigerian Government properly

and show them that the ultimate aim of our project is to help Nigeria improve and diversify its economy.

III) **Social/Cultural Factors**: Under the social and cultural factors, we have three sub factors that can very well influence our project. They are:

Population: Nigeria has an estimated population of 181.56 million people. It has the highest population in Africa and it ranks No. 7 in the whole world. That is why Nigeria is being referred to as the giant of Africa. The market potential here is very huge. We have to take advantage of this market potential that the country has to offer and spin it to our advantage. Even before we start shipping our farm produce outside Nigeria and Africa, we would sell within Nigeria to begin with. This on its own can ensure the success of our project.

Ethnic/Religion: Nigeria is diversified in term of ethnicity and religion. Nevertheless, they still celebrate their unity in diversity. Developing our project in Nigeria requires that we understand the religion and cultural values of each group. For example, we have to be extremely sensitive to our employees and let the workers go home early in case they are Muslim and would want to pray.

Fashion/Brand Preferences: An average Nigerian likes fashion. In some cases, they like spending on frivolous things. Average Nigerians will spend money on anything that appeals to his/her interest. For instance, despite the fact that most people in Nigeria live below poverty line, record has it that Nigeria is still one of the bestselling markets for Smart phones in the world. This basically proves to us that if we can get our product to trend, we can be certain that it will sell in Nigeria. Although this would mean that we would need to spend more advertising dollars (or in this case, Naira) but we are sure to get high returns.

IV) **Technological Factors**: Unlike before, Nigerians are fast becoming computer savvy. A large number of Nigerian youths are computer literate. Although, laptops and

personal computers still remain a luxury to some people, the use of Smart phones seems to be bridging this gap. With Smart phones, many people are now active users of internet with social media presence. Nigeria now has an estimated number of 86.22 million internet users giving a penetration of 46.10% of the population. Therefore, for our project, I would say online advertising is the best way to spread the word of the project and also maybe use the internet as a means to get the growing kids and school leavers excited to work on/ invest in the greenhouse project. Also the fact that many people are computer literate cuts the employee training phase time in half as it would be easier teaching computer literate people how to handle machinery than computer illiterate people.

V) **Legal Factors**: In Nigeria, the law stipulates eighteen thousand naira per month as the minimum wage [16]. Notwithstanding, you still find a lot of organisations including governments paying the amount that is less than the minimum wage. This is possible because of the stiff competition in the labour market due to the high rate of unemployment in the country. It is important to keep in mind that as of the 23rd of May, 2018, eighteen thousand naira (#18,000) is equal to fifty dollars and 4 cents ($50.04). While this is sad for the country, it is of great benefit to us as we can easily get cheap labour rates and still maintain getting high returns. As for the Nigerian tax laws, Nigeria operates the progressive tax system for Personal Income Tax. However the Company Income Tax rate is thirty per cent while Value Added Tax is five per cent.

VI) **Environmental Factors**

The Federal Government of Nigeria plays crucial role in protecting the ecology of the country. This is great because our greenhouse project is all about protecting the environment as well. Bashir Greenhouses is an ecology friendly project.

CHAPER 2

THE MAIN IDEA OF THE GREEN HOUSE IN NIGERIA

2.1. PROJECT DESCRIPTION

A greenhouse (also called a glasshouse, or, if with sufficient heating, a hothouse) is a structure with walls and roof made chiefly of transparent material, such as glass, in which plants requiring regulated climatic conditions are grown [5].

Having a number of greenhouses in Nigeria will be groundbreaking and great for me as an investor because it is a new and innovative way to make the best out of the Agricultural sector. I will be getting profits from selling products grown from my greenhouses and renting out the greenhouses to farmers. There will be various types of greenhouses used for my investment project and they will be shown in the figures below.

A nursery is a structure with glass sides and a glass rooftop wherein plants that need assurance from or are delicate to climate are developed. A nursery is not the same as a commonplace ranch which comprises of a zone of land utilized for developing harvests or keeping animals.

Nurseries are encased spaces utilized for developing harvests as it were. Nurseries make it conceivable to manage the temperature and dampness of an encased space consequently making it feasible for specific yields to become and flourish paying little heed to the outside climate conditions.

Nursery cultivating in nigeria

Nursery cultivating in Nigeria

Nursery cultivating in Nigeria is the matter of taking a shot at and dealing with the developing of harvests and plants inside a nursery. Nursery cultivating innovation makes it conceivable to develop tropical harvests (pineapples, tomatoes, peppers)

neglected districts of Russia and France. What's more, in the opposite course, calm harvests (apples, cabbages, blackberries) can likewise be developed in hot locales of Nigeria, Dubai and Israel utilizing nursery cultivating innovation.

Nursery cultivating is truly gainful and has gotten mainstream in nations like Netherland, Belgium, New Zealand, and Germany and so forth. For example, Netherland have more than 3,000 nursery organizations that work more than 9,000 hectares of nurseries and utilize somewhere in the range of 150,000 specialists delivering €7.2 billion worth of vegetables, natural products, plants and blossoms.

nursery cultivating in nigeria

Nursery cultivating is bit by bit discovering its balance in Nigeria as well. For instance, Taraba State is setting up a huge nursery ranch which is going to utilize more than 300 young people. Likewise, numerous people and private associations are grasping nursery cultivating in Nigeria.

Points of interest of Greenhouse Farming

There are numerous points of interest of developing harvests and plants in a nursery. A portion of these favorable circumstances are:

Plants are shielded from ominous climate conditions that influence their development

Plant condition are better figured out how to lessen the unsafe impact of vermin and sicknesses

Plants can be become and made accessible consistently

Plants and harvest can be developed in business amounts in urban zones or in the city

Improved gather and creation yields because of better administration and control of plant condition

Nursery Construction in Nigeria

In nurseries, three contemplations which are extremely basic to the development and advancement of plants: ventilation, the measure of light that breaks through to the plants and holding the warmth produced from the beginning. These contemplations decide the decision or sort of materials used to build a nursery.

nursery cultivating in nigeria

Because of these contemplations, two materials are significantly utilized in nursery development: Glass and Plastics (Moldable Polymers).

Glass has a higher light transmission esteem (97% to 98%) contrasted with plastics (80% to 96%) so a glass nursery permits all the more light to get to the plants. Be that as it may, light going through plastic diffuses subsequently making light enter more territories of the nursery.

nursery cultivating in nigeria

Plastics are lighter than glass so they require less development work and materials when utilized for nurseries. Despite the fact that plastics like twin-divider polycarbonate (TWP) can be more costly than glass, they are increasingly tough and last more.

Additionally, plastics have a decent warm protection esteem (R) which makes them reasonable for holding the ground-created heat inside the nursery.

To cook for legitimate ventilation in nursery cultivating, the nurseries are situated with the goal that the vents are open towards the course of winning breeze stream of the nursery site or area.

nursery cultivating in nigeria

Sorts of Greenhouse

In light of the kind of material and robotization forms included, nurseries can be ordered or assembled into three principle types:

Residential: This kind of nursery is fabricated utilizing glass, for the most part of 3mm thickness, which is known as Dutch Light or Horticultural glass grade. It's the least expensive kind of nursery.

nursery cultivating in nigeria

Plastics: This kind of nursery is fabricated utilizing pliable polymer materials, for example, polyethylene (or polyethene) film or polycarbonate materials. It is more tough than the household nursery.

Business: This kind of nursery is a full-administration, independent unit with worked in screening, warming, cooling and lighting hardware that can be remotely controlled by means of a cell phone or PC. A case of such a unit is Freight Farm's hydroponic tank. This sort of nursery is the most costly.

Cost of building a nursery in Nigeria

You can decide to manufacture a nursery ranch in Nigeria as opposed to buying a business nursery, which is one of the administrations we give. The kind of nursery we can work for you for this situation are the Plastic sort utilizing polyethene material and steel outlines, appeared in the video underneath:

You can likewise fabricate Plastic nurseries with wooden casing. Building or developing your nursery gives you adaptability since you can work as indicated by the size of land you have. It's additionally less expensive when you develop or assemble

your nursery. Building a neighborhood plastic nursery in Nigeria with a component of 10 meters by 25 meters (250 square meters) will cost you at least N1,800,000.

On the off chance that you might want to begin nursery cultivating in Nigeria and you need a nursery cultivating strategy or interview administration, if it's not too much trouble send a mail to agsolutions@agricdemy.com

With our nursery cultivating field-tested strategy, you will learn:

The diverse nursery sizes accessible and the materials required to assemble them

The various products of the soil you can develop in the nursery and their yields

The expense of building and developing a nursery dependent on the size you need

Benefit and misfortune gauges for the initial three years of running one unit of nursery

Vegetable and natural product advertise investigation in Nigeria

Advertising and deals methodology for running a fruitful nursery in Nigeria

Work force required to work your nursery, key achievements thus significantly more

Ease Green Houses for Vegetable Production.

Agribusiness is the foundation of India's financial movement and our experience during the most recent 50 years has exhibited the solid connection between's agrarian development and monetary flourishing. The present rural situation is a blend of exceptional accomplishments and botched chances. In the event that India needs to develop as a monetary force on the planet, our rural efficiency should approach those nations, which are right now appraised as financial intensity of the world. We need

another and powerful innovation which can improve ceaselessly the efficiency, productivity, manageability of our significant cultivating frameworks. One such innovation is the green house innovation. In spite of the fact that it is hundreds of years old, it is new to India.

Nursery Technology

Developing plants is both a craftsmanship and a science. About 95% of plants, either food yields or money crops are developed in open field. Since days of yore, man has figured out how to develop plants under normal natural conditions. In a portion of the calm locales where the climatic conditions are very unfriendly and no harvests can be developed, man has created strategies for developing some high worth yield persistently by giving security from the over the top cold, which is called as Greenhouse Technology. In this way, Greenhouse Technology is the procedure of giving positive condition to the plants. It is fairly used to shield the plants from the antagonistic climatic conditions, for example, wind, cold, precepitation, inordinate radiation, outrageous temperature, creepy crawlies and infections. It is additionally of fundamental significance to make a perfect smaller scale atmosphere around the plants. This is conceivable by raising a nursery/glass house, where the natural conditions are so

altered that one can develop any plant in wherever whenever by giving reasonable natural conditions least work.

Nurseries are surrounded or swelled structures secured with straightforward or translucent material huge enough to develop crops under incomplete or completely controlled natural conditions to get ideal development and profitability.

Points of interest of nurseries :

The yield might be 10-12 times higher than that of out entryway development relying on the kind of nursery, sort of harvest, ecological control offices.

Reliability of yield increments under nursery development.

Ideally appropriate for vegetables and bloom crops.

Year round creation of floricultural yields.

Off-season creation of vegetable and organic product crops.

sans disease and hereditarily predominant transplants can be delivered persistently.

Efficient usage of synthetic concoctions, pesticides to control irritation and ailments.

Water necessity of yields extremely restricted and simple to control.

Maintenance of stock plants, developing united plant-lets and miniaturized scale proliferated plant-lets.

Hardening of tissue refined plants

Production of value produce liberated from imperfections.

Most valuable in checking and controlling the shakiness of different biological framework.

Modern procedures of Hydroponic (Soil less culture), Aeroponics and Nutrient film methods are conceivable just under nursery development.

Nurseries – WORLD SCENARIO

There are in excess of 50 nations now on the planet where development of harvests is attempted on a business scale under spread. US of America has a complete zone of around 4000 ha under nurseries for the most part utilized for gardening with a turnover of more than 2.8 billion US $ per annum and the territory under nurseries is relied upon to go up impressively, if the expense of transportation of vegetables from neighboring nations keeps on rising.

The region under nurseries in Spain has been evaluated to be around 25,000 ha and Italy 18,500 ha utilized generally for developing vegetable harvests like watermelon, capsicum, strawberries, beans, cucumbers and tomatoes. In Spain straightforward passage type nurseries are commonly utilized with no expound ecological control supplies generally utilizing UV balanced out polyethylene film as cladding material.

In Canada the nursery business provides food both to the blossom and slow time of year vegetable markets. The principle vegetable harvests developed in Canadian nurseries are tomato, cucumbers and capsicum. Hydroponically developed nursery vegetables in Canada find more prominent inclination with the purchasers and could be estimated as much as double the ordinary nursery produce.

The Netherlands is the customary exporter of nursery developed blossoms and vegetables everywhere throughout the world. With around 89,600 ha under spread, the Dutch nursery industry is presumably the most progressive on the planet. Dutch nursery industry anyway depends intensely on glass confined nurseries, so as to adapt up to overcast conditions common all the all year. An exceptionally solid innovative work segment has kept the Dutch business in the front line.

The advancement of nurseries in Gulf nations is fundamentally because of the limit in the predominant climatic conditions. Israel is the biggest exporter of cut blossoms and has wide scope of yields under nurseries (15,000 ha) and Turkey has a zone of 10,000 ha under spread for development of cut blossoms and vegetables. In Saudi Arabia cucumbers and tomatoes are the most significant harvests contributing over 94% of the all out creation. The most widely recognized cooling strategy utilized in these regions is evaporative cooling.

Egypt has around 1000 ha nurseries comprising predominantly of plastic secured burrow type structures. Game plans for characteristic ventilation are made for guideline of temperature and stickiness conditions. The fundamental yields developed in these nurseries are tomatoes, cucumbers, peppers, melons and nursery plant material.

In Asia, China and Japan are the biggest clients of nurseries. The improvement of nursery innovation in China has been quicker than in some other nation on the planet. With an unobtrusive start in late seventies, the zone under nurseries in China has expanded to

48,000 ha as of late. Out of this 11,000 ha is under natural products like grapes, cherry, japanese persimon, fig, loquot, lemon and mango. Most of nurseries utilize nearby materials for the edge and adaptable plastic movies for coating. A large portion of the nurseries in China are accounted for to

be unheated and utilize straw mats to improve the warmth maintenance qualities.

Japan has in excess of 40,000 ha under nursery development of which about 7500 ha is committed to just natural product plantations. Nurseries in Japan are utilized to develop wide scope of vegetables and blossoms with an extensive portion of vegetable interest being met from nursery creation. Indeed, even a nation like South Korea has in excess of 21,000 ha under nurseries for creation of blossoms and organic products. In this manner, nurseries license crop creation in zones where winters are serious and very cold as in Canada and USSR, and furthermore grant creation even in territories where summers are amazingly deplorable as in Israel, UAE, and Kuwait. Nurseries in Philippines make it conceivable to develop crops inspite of extreme downpours and furthermore in moderate atmospheres of a few different nations. In this manner, fundamentally nursery development is being rehearsed and conceivable in a wide range of climatic conditions.

Status in India

While nurseries have existed for mutiple and a half hundreds of years in different pieces of the world, in India utilization of nursery innovation began distinctly during 1980's and it was for the most part utilized for research exercises. This might be a result of our accentuation, so far had been on accomplishing independence in food grain creation. In any case, as of late considering the globalization of worldwide market and huge lift and fillip that is being given for fare of agrarian produce, there has been a spray in the interest for nursery innovation. The National Committee on the utilization of Plastics in Agriculture (NCPA-1982) has suggested area explicit preliminaries of nursery innovation for reception in different locales of the nation.

Nurseries are being worked in the Ladakh area for expanding the developing period of vegetables from 3 to 8 months. In the North-East, nurseries are being developed basically as downpour safe houses to allow slow time of year vegetable creation. In the Northern fields, seedlings of vegetables and blossoms are being brought up in the nurseries either for catching the early markets or to improve the nature of the seedlings. Proliferation of hard to-root tree species has likewise been seen as extremely promising. A few business gardening adventures are coming up in Maharashtra, Tamil Nadu and Karnataka states to fulfill the needs of both household and fare markets.

The business use of nurseries began from 1988 onwards and now with the presentation of Government's progression approaches and formative activities, a few corporate houses have entered to set up 100% fare arranged units. In only four years, since usage of the new arrangements in 1991, 103 activities with remote venture of more than Rs.80 crores have been endorsed to be set up in the nation at an expected expense of more than Rs.1000 crores around Pune, Bangalore, Hyderabad and Delhi. In this manner the zone under climatically controlled nurseries of these ventures is assessed to be around

300 ha. Out of which many have just initiated trades and have gotten empowering brings about terms of the acknowledgment of the quality in significant markets abroad and the cost got.

Order of nurseries:

Nursery structure of different sorts are utilized for crop creation. In spite of the fact that there are points of interest in each kind for a specific application, when all is said in done there is no single sort nursery, which can be comprised as the best. Various sorts of nurseries are intended to meet the particular needs. The various sorts of nurseries dependent on shape, utility, material and development are quickly given underneath:

1. Nursery type dependent on shape:

With the end goal of grouping, the uniqueness of cross order

Nursery PRODUCTION STRATEGIES

When arranging the establishment of a nursery, two primary inquiries must be replied (Jensen and Malter, 1995):

• Where will the creation be showcased (residential or trade markets or both)?

• What sort of items will be created (consumable or ornamentals)?

2. Nursery site choice 23

As a rule, ideal climatic conditions and low creation costs (with great quality) are critical to the choice of an area; transportation costs are likewise a significant thought when markets are far away (Castilla, 2007). Other specialized and financial viewpoints (water and power gracefully, work accessibility and so forth.) additionally impact creation expenses and seriousness (Castilla and Hernandez, 2005).

There is presently an appeal from shoppers for an all year gracefully of value items (Plate 3), molding the creation methodologies in the nursery business. Nursery crops in mellow winter atmospheres, for example, in the Mediterranean territory, can't be developed throughout the entire year with high caliber. The test of providing great vegetables lasting through the year can be met by receiving one of two fundamental techniques:

• Growing in cutting edge nurseries, staying away from solid reliance on the outside atmosphere.

• Growing in at least two areas with correlative reaping periods, empowering a nonstop and facilitated all year flexibly to business sectors (Castilla and Hernandez, 2007).

The subsequent other option (utilizing various areas, typically with various nursery mechanical levels) is an inexorably embraced procedure.

In certain locales, including the Mediterranean, adjusting plants to an imperfect situation has in the past been the most well-known creation methodology. Conversely, in northern Europe, the supported methodology has been to streamline the nursery condition so as to arrive at most extreme expected yields. These days, showcase globalization has prompted more noteworthy seriousness; it is in this manner important to build the nature of nursery items through better atmosphere control (Castilla and Montero, 2008).

CLIMATIC SUITABILITY FOR GREENHOUSE VEGETABLE PRODUCTION

The present nursery innovations mean it is conceivable to develop every single plant specie in any locale of the world, given that the nursery is appropriately structured and prepared to control the climatic boundaries. Be that as it may, for gainful and

manageable development of the objective harvest, a lot stricter choice of the area is essential, based on climatic conditions and the prerequisites of the chose agricultural yield.

Sunlight based radiation is the principle atmosphere boundary expected to assess the atmosphere reasonableness of a district for secured development. Day length and sunlight based radiation captured by a flat surface during daytime hours are estimated to decide absolute day by day sun oriented radiation. Another essential atmosphere boundary is surrounding temperature. The strength of the two qualities in various months of the year empowers

Holes for nursery vegetable harvests: Principles for Mediterranean atmosphere regions

Normal month to month temperature of the air (°C)

the portrayal of their mean month to month esteems (acquired by averaging informational indexes for quite a long while) for a given area in the atmosphere graph, which speaks to the area's atmosphere (Figure 1).

Other atmosphere boundaries, for example, soil temperature (firmly connected to air temperature), wind, precipitation and air structure (mugginess and CO2), impact less significantly the assessment of atmosphere reasonableness.

The sort of nursery embraced relies upon the area's climatic qualities and on the yield necessities. For instance, in a locale with a tropical muggy atmosphere, where insurance from downpour is the nursery's primary reason (predominance of the umbrella impact), the kind of development favored might be unique in relation to that attractive in a semi-desert or Mediterranean atmosphere area (Plate 4).

Climatic necessities of vegetables

The most usually developed species in nurseries are vegetables with medium warm necessities (tomato, pepper, cucumber, melon, watermelon, marrow,

Sunlight based radiation

. Nursery site determination

green bean, eggplant); the point is to broaden the developing schedules past the customary outdoors development season, and hence increment benefit (Plate 5). These days, the creation of nursery crops in topographical territories without reasonable atmosphere conditions, is exceptionally faulty since it involves noteworthy and costly fake atmosphere control. Regardless, monetary outcomes decide the last determination of a nursery venture area.

The demonstrated species, generally developed in the warm season, are adjusted to average encompassing temperatures going from 17 to 28 °C, with cutoff points of 12 oC (least) and 32 oC (most extreme) (Nisen et al., 1988). They are touchy to the cold and endure irreversible harm with ices.

Plate

Insurance against downpour in districts of high precipitation

Temperatures constantly under 10–12 °C

more than a few days influence profitability, as do

temperatures over 30 °C (on account of

dry air) or 30–35 °C (on account of high

air stickiness) (Nisen et al., 1988). Day by day

variety among day and night normal temperatures (warm periodicity) is required for appropriate physiological working. These warm contrasts are somewhere in the range of 5 and 7 °C (Nisen et al., 1988).

The base every day radiation necessities of these species are evaluated at around 8.5 MJ m-multi day-1 (proportionate to 2.34 kWh m-multi day-1) during the three most limited a very long time of year (November, December and January in the Northern Hemisphere; May, June and July in the Southern Hemisphere). This implies around 6 hours of light for every day, to a base aggregate of 500–550 hours of light during these three months (Nisen et al.,

1988). The length of the day and night

also, thus, the absolute sunlight based radiation

Getting the necessary atmosphere conditions

The trouble of expanding, at a sensible cost, the normal radiation conditions (aside from in extremely refined nurseries and with high-esteem crops) makes it important to structure and find nurseries to streamline the capture attempt of sun based radiation during the harvest time and winter months. Thusly, the common radiation conditions are the primary constraining element to consider while setting up nurseries.

Given the parallelism among air and soil temperatures (even with less wavering inside a nursery than in the outdoors), accomplishing a reasonable surrounding temperature likewise includes legitimate soil temperature esteems. FAO proposed an approach for accomplishing the necessary atmosphere conditions (Nisen et al., 1988).

Ensured development in nurseries or high passages causes the expansion of daytime temperature (corresponding to the outside) to high qualities (Figure 2), contingent upon:

• attributes of the cladding material;

• outside wind speed;

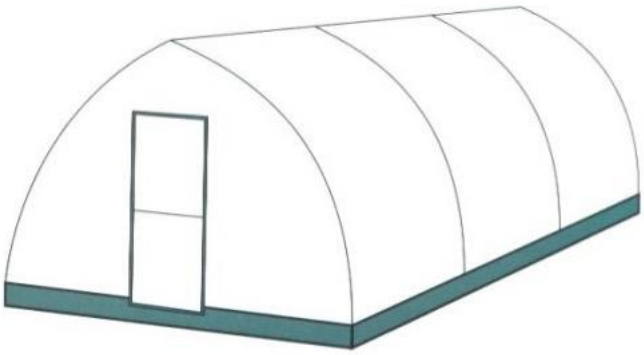
• episode sunlight based radiation;

• transpiration of the yield become inside the nursery.

Night temperatures, then again, just increment marginally comparable to the outside (2–4 °C and no more) and, at times, are lower (warm reversal). The greatest temperature increment differs with scope and, for every particular area, with the season as the sun powered radiation changes (Figure 3).

To expand low temperatures, the most widely recognized arrangement is to warm the nursery, yet this isn't generally productive. Now and again, a proficient separation framework can forestall temperature drop around evening time – as in the "shelter nursery" in

Green Houses types:



A Gothic arch–style greenhouse design.

Fig. 2.1 Gothic arch greenhouse.

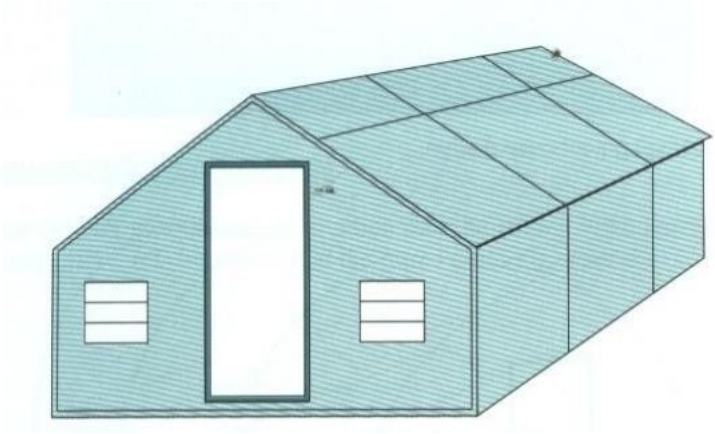
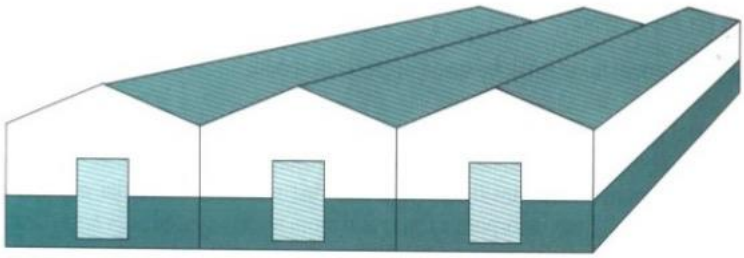
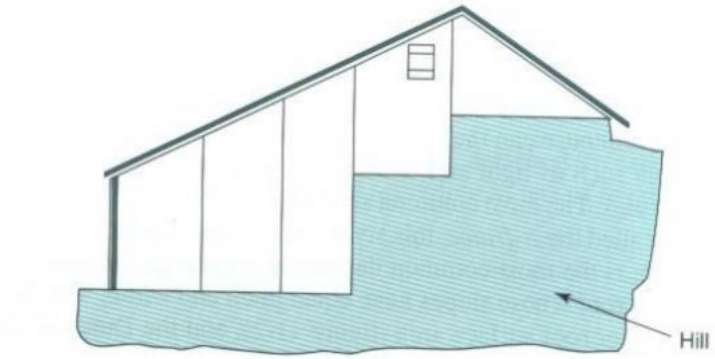


Fig. 2.2 Even-Span greenhouse.



11-7 A ridge-and-furrow greenhouse range.

Fig. 2.3 Ridge and furrow greenhouse.



An uneven-span greenhouse design.

Fig. 2.4 Uneven-span greenhouse.

Generally all greenhouses have a purlin, truss, ridge, ridge ventilator, gutter, lateral ventilator and a gutter support.

- Door hardware
- Greenhouse lumber
- Greenhouse insulation
- Greenhouse flooring
- Polymax HDPE board
- Greenhouse anchors and ground posts
- Galvanized square and rectangle conduit
- Heavy duty galvanized square tube fittings
- Galvanized conduit
- Universal cross connectors
- Boss 310 industrial silicone sealant
- USA made triple-galvanized struts
- Curtain stabilizer bars
- Premium two piece gasket roofing system

- Hose rack
- Coat rack
- Tool tacks
- Black vinyl pipe end caps
- Polymax rolls
- Tools and accessories
- Quick klamp pipe fittings
- Greenhouse electrical supplies [13]

There will be an installation of a sample greenhouse (miniature greenhouse) in every city and every day in different parts of the city, there will be little street presentations to show the citizens how greenhouses work. Fruits made from greenhouses will be given to the people on the street to taste. The green house products and street presentation materials will be moved from street to street using “BASHIR” trailers.

2.2. PROJECT SERVICES

In general, the following services will be provided by Bashir Greenhouses :

- Leafy greens
- Micro greens
- Spinach
- Cucumber
- Tomatoes
- Peppers
- Herbs
- Citrus fruits
- Strawberries
- Chilies
- Raspberries

- Coriander [9]

2.3. PROJECT CONTENT

This subsection discusses the activities that have to take place for the project to come into fruition. Below is a detailed explanation of how to go about this.

Registration of business. I plan on opening a LLC.

Documents required for the opening of LLC:

For founders of natural persons:

• Photocopies of the passports of the founders (pages 1, 2, 3, 4, 11);

• Photocopies of identification numbers of the founders;

• Photocopies of the director's and accountant's passports (pages 1, 2, 3, 4, 11);

• Photocopies of the identification numbers of the director and the accountant;

• Name of the registered enterprise;

• Branch of the bank in which it is planned to open a bank for a registered LLC;

• Name of KVED (classifier of types of economic activity, ie what types of activities the enterprise plans to engage in);

• Contact phone number for government agencies;

• Location of the enterprise;

• The size of the authorized capital of a limited liability company;

• Distribution of shares among the founders of the LLC (if the founders are more than one person); [11]

• A copy of the certificate of state registration by an individual entrepreneur (only for founders who are registered as an individual entrepreneur);

For founders of legal entities:

• A copy of the certificate of registration of a legal entity, notarized;

• A photocopy of statutory documents (a photocopy of the charter, protocol);

• A photocopy of the certificate of statistics;

• Photocopies of the passport (pages 1, 2, 3, 4, 11) and the identification number of the director of the company being created;

• Photocopies of the passport (pages 1, 2, 3, 4, 11) and the accountant's identification number of the company being created;

• Name of the registered enterprise;

• Branch of the bank in which it is planned to open a r / s for LLC;

• Contact phone number for government agencies;

• Location of the company.

• Name of KVED (classifier of types of economic activities, ie what types of activities are planned by the LLC);

Tax system - Unified Tax 3 group (5% + VAT)

•single tax

• ERUs

• withholding from wages

• VAT

Branding of a Greenhouse. Each greenhouse has to be branded. Each greenhouse will have the “BashirGreenhouses” logo. These logos should be made with a very visible font and a stylistic design. It is suggested to coat it with profiled sheeting and use neon painting for the logo. The logo should also be decorated with LED lamps so as to be seen at night.

Completion of a Greenhouse.. Each greenhouse will need to be completed with the following things (bought from the company “FarmTek Growers Supply”).

- Gutter Extension with closed End
- Gutter Extension with Downspout
- Gutter Extension with open end
- Gutter saddle
- Gutter with downspout

- Aluminum extensions
- Polycarbonate
- Hardware
- Hardware fasteners
- Greenhouse films
- Aluminum latches
- Labor saver fabric clips
- Air inflation system for greenhouse film
- Inflation system replacement blowers
- Greenhouse premium repair tape
- Guardian felt tape
- Curtain stabilizer bars
- EZ-Shade Tarp arm and panels
- Fabric Gathering doors
- Greenhouse doors [6]

Money Transfer. For money transfers, we need to use the most popular and safe organization available which is Western Union. To transfer money from another country to Nigeria, we need to:

- Open a personal account in Nigeria in bank with a bank that operates with Western Union.
- Open a personal account from country where the investment is in bank which works with Western Union.

2.4. THE PROJECT LIFE CYCLE OF MY CHAIN OF GREENHOUSES

Every project has a different life cycle (in terms of the time of manifestation of the stages) but all projects go through the same four life cycle stages. These stages are discussed below:

Phase 1: The Conceptualization Phase

This can also be referred to as the ‘Initiation Phase’ and is the starting point of any project or idea. For the Conceptualization Phase to begin, a strategic need for the project or service must be recognized by upper management. [18] In the case of Bashir Green Houses, the conceptualization stage occurred when I asked the following questions:

- What is the problem? – The problem that I realized was that Nigeria as a country is so blessed agriculturally and they still aren’t among the world top producers of agricultural products. Nigeria is also immensely blessed with crude oil and they send the raw materials out of the country only to re-import the final products at a more expensive price. Of these two problems, the one I saw an easier and more feasible solution to was the idea of creating green houses so that the country would benefit from it. The reason for not choosing the building of oil refineries as my project is because it is too much of a huge step for the country to take at once and besides the country’s top officials are much too corrupt and this will hinder the development of the refineries.
- Will the development of a project solve that problem? – The development of green houses would definitely solve the problem as this will enable the country grow crops more efficiently in any season and also grow crops which do not normally grow in Nigeria. The development of this project would help solve the problem and place the country among one of the top agricultural producers.
- What are the specific goals of the project? – The specific goal of the project is to create a chain of green houses in every city in the country. There will be more green houses in the areas with sufficient space for farming.
- Do we have enough resources to create and support the project? – With the help of investors, we can easily develop this project.

The conceptualization phase also involved the creation of the statement of work (SOW), presenting of the business case and creation of a business contract.

- Phase 2: The Planning Phase

The second phase of the project management life cycle is referred to as the Planning Phase. Once management has given the OK to launch a project, a more formal set of plans—outlining initial goals—is established. [18] The planning stage occurred when I asked the following questions:

- What is the project purpose, vision, or mission? – The project purpose is to put Nigeria on the map as one of the top agricultural producers in the world. The vision is that when the project is over, the Nigerian farmers with the help of the government open their own green houses and continue to use them till they become a norm on every Nigerian farmland.
- Are there measurable objectives or success criteria? – The measurable objectives that I have for my project is to see an increase in the total number of agricultural products in the Nigerian market in the first six months. Also I want to see an increase in the percentage of agriculture in the share of the country's GDP.
- Do you have a high level description of the project, requirements and risks? – Yes, the description of the project can be seen in part 2.1. Of my course paper.
- Can you adequately schedule and budget high level milestones? – Yes. This is a job for the manager of the project. The project manager's job is to do precisely this.

During the planning phase, I determined resource availability, **c**reated a project budget and also **I** began to allocate tasks to certain resources.

- Phase 3: The Execution Phase

The third phase is labeled Execution. This is when the actual work of the project is performed. Required materials, tools, and resources are transformed to reach the project goals. During this phase, performance is continually measured to ensure the project is successful. [18] The planning stage occurs when you ask the following questions:

- Are all resources being tracked? – I plan to do so because in a country like Nigeria where corruption is rampant, it is my duty (as the project manager) to ensure that all the resources are used correctly and nothing goes to waste.
- Is the project on budget and on time? – Budgeting and timing are very important in every business as they can be crucial in ensuring the success of a project.
- Can resource planning be optimized? – Yes it can, and it will be. Once again this is a managerial duty that I, myself will supervise so I will make every resource is well planned for and is optimized correctly.
- Are there major roadblocks that require change management? – This is a question that cannot be answered unless the project is already in action. In any case, if their needs be, I will employ a junior manager to cross check my decisions so I don't make mistakes.

The execution phase typically involves strategic planning and implementation planning.

- Phase 4: The Termination Phase

The fourth and final phase is called Termination Phase, also referred to as Project Closure. This phase begins once the project has been completed. The planning stage occurs when you ask the following questions:

- Are the project's completion criteria met?
- Is there a project closure report in progress?
- Have all project artifacts been collected and archived?
- Has a project post-mortem been planned?

The termination phase of any project would typically involve the disbandment of the project team, personnel and tools are reassigned to new duties, resources released back to parent organization, project transferred to intended users.

2.4.1 KEY MILESTONES

	Milestone	Duration (Days)
A	Project Research	60
B	Project Planning	35
C	Registration of Business	7
D	Place or Space	70
E	Inventory Procurement	30
F	Project Closure	10

2.5. INVESTMENT INTO THE PROJECT

This subsection focuses on the structure of the expenses of getting the Bashir Green House project running.

Table 1 Primary costs

№	Name	Amount (Naira)
1	Gutter Components and Accessories	700 000
2	Aluminum	1 600 000
3	Polycarbonate	200 000
4	Doors and Hardware	340 000
5	Greenhouse flooring	500 000
6	Galvanized square and rectangle conduit	140 000
7	Universal cross connectors	40 000
8	Plastic pipe and tube cutters	25 000
9	Branding (greenhouse)	100 000
10	High pressure hose	10 000
11	Infrared thermometer with laser	65 000
12	Double turf industrial sprayer boom	125 000
13	PolyMax rolls	20 000
14	Pipe fittings	450 000
15	Obtaining permits	250 000
16	Advertising costs	300 000
17	Lawyer Fees	100 000
18	Opening of LLC	40 000
20	Installation work fees	350 000
21	Greenhouse electrical supplies	100 000

22	Power failure alarm	10 000
23	Magnetic nut setters	20 000
24	Standard clincher	20 000
25	Multipurpose clamps	60 000
26	Scrappers, scoops and shovels	30 000
27	Manual cage ringer and cage rings	40 000
28	Isotel Ultra 4 Outlet Surge Suppressor	100 000
Total		***5 735 000***

Bashir Greenhouses will produce goods in bulk and sell to retailers who further sell to the final consumers. Table 2 shows the data

Table 2 Value of the products

№	**Product (Per 100kg)**	**Price(Naira)**
1	Leafy greens	50 000
2	Micro greens	55 000
3	Spinach	50 000
4	Cucumber	100 000
5	Tomatoes	150 000
6	Peppers	130 000
7	Herbs	80 000
8	Citrus fruits	250 000
9	Strawberries	100 000
10	Chillies	140 000
11	Raspberries	70 000
12	Coriander	100 000

One of the most important issues in an investment project is the definition of total costs. Table 3 shows the monthly cost data.

Table 3 Monthly Expenses

№	**Name**	**Amount (Naira)**
1	Salary	500 000
2	Insurance Payments	400 000
3	Products	100 000
4	For rent	200 000
5	Tax Payments	350 000
6	Othercosts	600 000
Total		***2 150 000***

Table 4 Revenue of sale

Revenue of sale	**Year**		
	1	**2**	**3**
Leafy greens	12 000 000	13 000 000	15 000 000
Spinach	6 000 000	6 500 000	7 000 000
Cucumber	2 000 000	7 000 000	5 000 000
Tomatoes	16 000 000	20 000 000	23 000 000
Total	***36 000 000***	***46 500 000***	***50 000 000***

Table 5 Expenditures

Expenditures	**Year**		
	1	**2**	**3**
Salary	6 000 000	6 500 000	7 000 000

Insurance payments	4 800 000	5 200 000	6 000 000
Products	1 200 000	1 250 000	1 400 000
For rent	2 400 000	2 500 000	2 550 000
Tax Payments	4 200 000	4 400 000	4 600 000
Other costs	7 200 000	7 500 000	7 650 000
Total	***25 800 000***	***27 350 000***	***29 200 000***

Table 6 Revenue and Profit

Indicators	**Year**			
	0	**1**	**2**	**3**
Investment, Naira	5 735 000	-	-	-
Revenue of the sale, Naira	-	36 000 000	46 500 000	50 000 000
Expenditures, Naira	-	25 800 000	27 350 000	29 200 000
Amortization, Naira	-	800 000	915 000	1 026 000
Tax 5%, Naira	-	75 000	79 500	82 000
Netprofit, Naira		10 200 000	19 150 000	20 800 000

Below are the calculations of performance indicators. Such as:

Inflation rate in Nigeria in 2018 = 17.24 %.(***Predicted inflation rate for 2019 = 15.1%, and in 2020 = 11.2%.***

Discount rate = 4.25% (mecometer.com)

Risk = 20%

2.6. STRUCTURE OF PROCUREMENT

This subsection of my course paper describes the structure of consumption of material resources, including their distribution of materials, machines and mechanisms

2.6. STRUCTURE OF PROCUREMENT

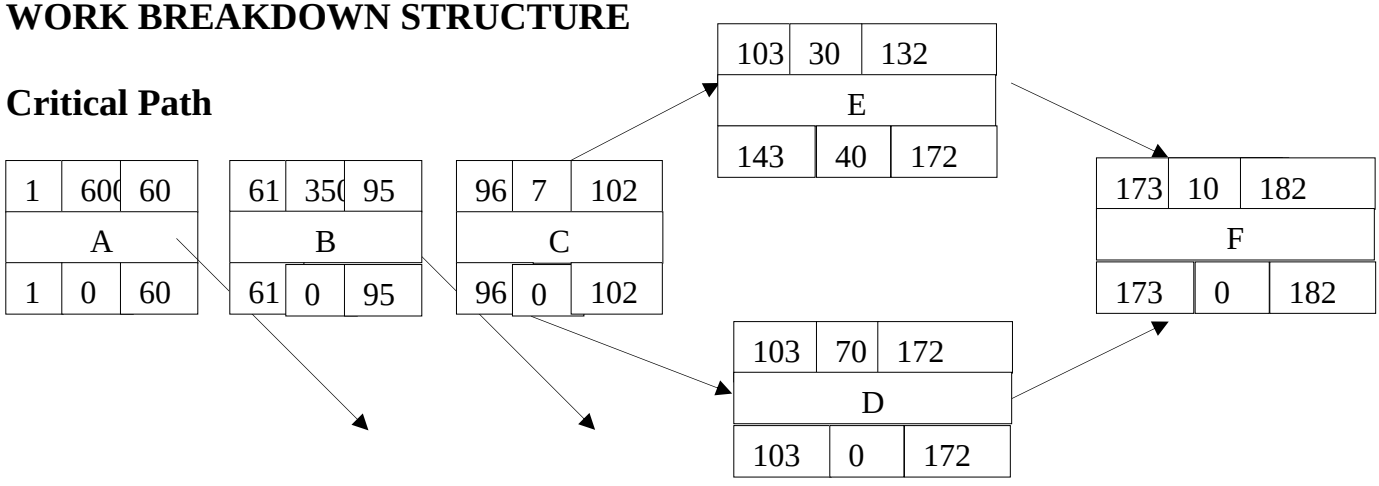
Table1. Expenditures

Expenditures		**Year**		
	0	**1**	**2**	**3**
Salary	**-**	**6 000 000**	**6 500 000**	**7 000 000**
Insurance payments	**-**	**4 800 000**	**5 200 000**	**6 000 000**
Products	**-**	**1 200 000**	**1 250 000**	**1 400 000**
For rent	**-**	**2 400 000**	**2 500 000**	**2 550 000**
Tax Payments	**-**	**4 200 000**	**4 400 000**	**4 600 000**
Other costs	**-**	**7 200 000**	**7 500 000**	**7 650 000**
Investment	**5 735 000**			
Total		***25 800 000***	***27 350 000***	***29 200 000***

2.7. THE SCHEDULE FOR MAJOR WORKS.

WORK BREAKDOWN STRUCTURE

Critical Path



According to the Work Breakdown Structure, the critical paths are – A, B, C, D and F. We know this because in all these project milestones, we did not obtain "0" which is known as a slack or float. What this means is that there could be slight delays on "E" but there must not be any form of delay on A, B, C, D and F. Should we delay on A, B, C, D or F, the problem of minimum profits would emerge.

To get the critical path, we need to add the critical paths of A, B, C, D and F.
60+35+7+70+10 = **182 days**

CHAPTER 3
INVESTMENT PROJECT APPRAISAL

Project appraisal is the process of assessing, in a structured way, the case for proceeding with a project or proposal, or the project's viability. It often involves comparing various options, using economic appraisal or some other decision analysis technique. [19]

3.1. PROJECT APPRAISAL

Period	Investment, Naira.	Net profit, Naira.	Amortization, Naira.	Cash flows, Naira.	Discount rate, (%)	Discount price	
						Investments	Cash flows
0	**5 735 000**	**-**	**-**	**-**	**-**	**5 735 000**	**-**
1	**-**	**10 200 000**	**800 000**	**11 000 000**	**1/(1+0,5167)**	**-**	**5 550 000**
2	**-**	**19 150 000**	**915 000**	**20 065 000**	**1/((1+0,4792) *(1+0,5167))**	**-**	**9 532 500**
3	**-**	**20 800 000**	**1 026 000**	**42 626 000**	**1/((1+0,4792) *(1+0,5167)* (1+0,4640))**	**-**	**20 000 000**
Total		***50 150 000***	***2 741 000***	***73 691 000***	**-**	***5 735 000***	***35 082 500***

1) Discount rate

$i = (1 + Hn) \times (1 + \pi) \times (1 + rk) - 1$

$i_{2017} = (1+0.1724) \times (1+0.0425) \times (1+0.2) = 1.1724 \times 1.0425 \times 1.2 - 1 =$ **0.4667**

i_{2018} = (1 + 0.151) x (1+0.0425) x (1+0.2) = 1.151 x 1.0425 x 1.2 – 1 = **0.4399**
i_{2019} = (1 + 0.112) (1+0.0425) x (1+0.2) = 1.112 x 1.0425 x 1.2 – 1 = **0.3911**

2) Net Present Value
NPV = $\sum_{k=1}^{n} P_k/(1+i)^k$ – I NPV =(11 000 000/(1.5167)+ 20 065 000/(1.5167x1.4792)+

42 626 000/(1.5167x1.4792x1.464))- 5 735 000 = **23 429 127**

3) Profitability Index
PI = ((11 000 000/(1.5167)+ 20 065 000/(1.5167x1.4792)+
42 626 000/(1.5167x1.4792x1.464))/5 735 000 = **5.09**

4) Payback Period
Pk = 35 082 500/3 = **11 694 166. 67**
PP = 5 735 000/11 694 166= **0.4**

5) Internal Rate of Return
IRR = **7%** (Calculated via Microsoft Excel)

According to every indicator calculated above, the investment project is attractive to foreign investors because it is profitable. This is evidenced by the indicators:

- **NPV.** A positive NPV (i.e NPV>0) shows that the international project should be profitable because the value of the company will increase as the stock price increases.
- **Profitability Index.** The Profitability index is 5.09, and if the profitability index (i.e PI>1) , it shows that the investment is profitable.
- **Payback Period.** The payback period index shows how long it will take for an investment to recover its initial outlay. According to the index, it will take 0.4 (4 months) for me to reach my initial investment.
- **Internal Rate of Return.** The Internal Rate of Return is 7%. Since the figure is above zero, we can safely make an educated assumption that the project would be successful (profitable).

3.2. SENSITIVITY ANALYSIS

To calculate the sensitivity analysis, I have chosen to calculate the NPV of the cash flows of each year either adding a 10% interest rate or deducting a 15% interest rate to determine the safe and unsafe profitability zones.

+10% 1ST Year – 11 000 000 + 1 100 000 = **12 100 000**
+10% of 2nd Year – 20 065 000 + 2 006 500 = **22 071 500**
+10% of 3rd Year – 42 626 000 + 4 262 600 = **46 888 600**

NPV (of +10% assumption) = (12 100 000/ (1.567) + 22 071 500/ (1.567) + 46 888 600/ (1.567)) – 5 735 000 = **45 994 482**

-15% 1ST Year – 11 000 000 - 1 650 000 = **9 350 000**
-15% of 2nd Year – 20 065 000 - 3 009 750 = **17 055 250**
-15% of 3rd Year – 42 626 000 - 6 393 900 = **36 232 100**

NPV (of -15% assumption) = (9 350 000/ (1.567) + 17 055 250/ (1.567) + 36 232 100/ (1.567)) – 5 735 000 = **34 237 783**

According to my sensitivity analysis, if the interest rate somehow increases up to 10%, that means that it will be more profitable for the project as we would be having a **22 565 355** increase in the net present value. And also if the interest rate were to somehow drop by 15%, the project would still be profitable but with only **10 808 656.**
In essence, what this means is that the +10% assumption is a safe investment zone and also anywhere from +10% all the way to -15% can be more profitable than the current project.

CONCLUSIONS

In conclusion, I would like to revisit and strengthen the main idea of my individual work which sheds light on the benefits of the BASHIR Greenhouses to Nigeria. During the course of my course paper, we can see through various analyses and the use of figures that this project would be a successful one. I understand that every project has to come to an end but if there is one project that probably shouldn't come to an end, it is this one. This project would not only boost the country's standings in the midst of the world economies but also boost the lifestyles of the country's residents. Of course the main purpose of any project is to make sure it is profitable and the figures and indicators such as the projected project's Net Present Value and Internal Rate of Return proves just how successful this project would be if it were to be ever developed. The beautiful thing about the Greenhouse project is that it does not have to be limited only to Nigeria as this project idea can work in any agro-based country. Take for example; Ukraine is a country that has been blessed with about 40% of arable soil which is great for farming. Ukraine has many similarities with Nigeria which proves that this same project can be developed in Ukraine and can succeed as well. These similarities include; great soil for farming, cheap labour force, a fairly high level of corruption etc. This just proves that the greenhouse project never really has to die but it can just end in one country and be restarted in another country.

It is important to not only focus on the great sides of things but also on the not-so-favorable aspects as well. While all these great factors have been mentioned as to why the Greenhouse project would succeed in Nigeria, we have to look at the factors that might hinder it from taking off or reaching its full potential. The first and utmost factor that might hinder the project development is corruption. Nigeria is known to be quite a corrupt country (probably the most corrupt country in Africa) and this corruption is the reason why many projects that were started in Nigeria never see the light of day. Many at times, there have been roads/bridges that have been built halfway or with poor quality materials just so the project managers could take some money off the budget and put

into their pockets instead. This mismanagement of funds can easily lead to the disruption of a project which is why when investing in Nigeria, it is important to reduce the government involvement in a project to the minimum in order to ensure smooth running of events. Another major issue that could affect the Greenhouse project development in Nigeria is the fact that agriculture is looked down upon in the country and many of the young prospective employees always opt for medicine or law or some other type of fancy job that is considered prestigious. This problem runs so deep that some parents even force their children to study prestigious courses (e.g. Medicine) while being completely ignorant of the fact that agriculture is the fastest growing sector of the Nigerian economy and if properly manoeuvred, can be one of the most profitable business ventures. The only way i see this ideology changing is by developing a successful project and letting it speak for itself. This way, parents and children would be eager to be a part of this industry.

LIST OF REFERENCES

1. Nigeria - Wikipedia. 2020. *Nigeria - Wikipedia*. [ONLINE] Available at: https://en.wikipedia.org/wiki/Nigeria. [Accessed 11 May 2020].
2. What does project environment mean?. 2018. *What does project environment mean?*. [ONLINE] Available at: https://www.inloox.com/project-management-glossary/project-environment/. [Accessed 13 May 2020].
3. WorldAtlas. 2018. *The Largest Countries in Africa - WorldAtlas.com*. [ONLINE] Available at: https://www.worldatlas.com/articles/which-are-the-10-largest-countries-of-africa-by-size.html. [Accessed 13 May 2020].
4. Natural History on the Net. 2018. *Nigeria - Facts and Figures*. [ONLINE] Available at: http://www.naturalhistoryonthenet.com/Facts_Figures/Country_Facts/nigeria.htm.[Accessed 13 May 2020].
5. Horticulture :: Greenhouse cultivation. 2017. Horticulture :: Greenhouse cultivation. [ONLINE] Available at: http://agritech.tnau.ac.in/horticulture/horti_Greenhouse%20cultivation.html. [Accessed 16 May 2020].

6. Westernunion.com. (2017). Envoyer de l'argent | Transfert d'argent International | Western Union. [online] Available at: https://www.westernunion.com/fr/fr/home.html?&src=gg_FR_EU_G_Brand-WU_SERP_All_Exact_FR_&utm_content=siCe7KMt5|dc_pcrid_189244626474_mt_e_kw_western%20union [Accessed 16 May 2020].
7.Agriculture - Nigeria - export, growth, area, crops, farming, sector. 2017. Agriculture - Nigeria - export, growth, area, crops, farming, sector. [ONLINE] Available at: http://www.nationsencyclopedia.com/Africa/Nigeria-AGRICULTURE.html. [Accessed 17 May 2020].
8. Arable land - Wikipedia. 2018. Arable land - Wikipedia. [ONLINE] Available at: https://en.m.wikipedia.org/wiki/Arable_land. [Accessed 17 May 2020].
9. theselfsufficientliving.com. 2018. No page title. [ONLINE] Available at: http://theselfsufficientliving.com/growing-vegetables-and-fruits-in-a-green-house/. [Accessed 17 May 2020].
10. How To Build A Greenhouse In 10 Easy Steps | Rimol Greenhouses. 2017. How To Build A Greenhouse In 10 Easy Steps | Rimol Greenhouses. [ONLINE] Available at: https://www.rimolgreenhouses.com/learning-center/10-steps-to-building-a-greenhouse. [Accessed 17 May 2020].
11. Ranking of economies - Doing Business - World Bank Group . 2018. Ranking of economies - Doing Business - World Bank Group . [ONLINE] Available at: http://www.doingbusiness.org/rankings. [Accessed 17 May 2020].
12. How To Set Up A Cheap Greenhouse - Agriculture - Nigeria. 2017. How To Set Up A Cheap Greenhouse - Agriculture - Nigeria. [ONLINE] Available at: http://www.nairaland.com/2114186/how-set-up-cheap-greenhouse. [Accessed 17 May 2018].
13. Global Competitiveness Report 2015-2016. 2017. Global Competitiveness Report 2015-2016 - Reports - World Economic Forum. [ONLINE] Available at: http://reports.weforum.org/global-competitiveness-report-2015-2016/economies/#economy=NGA. [Accessed 17 May 2020].
14. Amortization Schedule Calculator. 2017. Amortization Schedule Calculator. [ONLINE] Available at: http://www.amortization-calc.com. [Accessed 29 May 2018].
15. Elib.pstu.ru. (2018). [online] Available at: http://elib.pstu.ru/vufind/Record/RUPSTUbooks67751 [Accessed 17 May 2020].
16. Mfa.gov.ng. (2020). The investment climate in Nigeria - MFA of Nigeria. [online] Available at: http://mfa.gov.ng/en/page/open/id/821 [Accessed 17 May 2020].
17. Super User. 2017. Legal requirements for investing in Nigeria. [ONLINE] Available at: http://printnigeria.com.ng/legal-requirements-for-investing-in-nigeria. [Accessed 17 May 2018].
18. What is the Project Life Cycle?. 2020. *What is the Project Life Cycle?*. [ONLINE] Available at: https://www.mavenlink.com/resources/what-is-the-professional-services-project-life-cycle. [Accessed 18 May 2020].

19. Project appraisal - Wikipedia. 2020. *Project appraisal - Wikipedia*. [ONLINE] Available at: https://en.wikipedia.org/wiki/Project_appraisal. [Accessed 18 May 2020].
20. BusinessDictionary.com. 2020. *What is value system? definition and meaning - BusinessDictionary.com*. [ONLINE] Available at: http://www.businessdictionary.com/definition/value-system.html. [Accessed 21 May 2020].
21. Vision and Mission Statements -- a Roadmap of Where You Want to Go and How to Get There | Ag Decision Maker. 2020. *Vision and Mission Statements -- a Roadmap of Where You Want to Go and How to Get There | Ag Decision Maker*. [ONLINE] Available at: https://www.extension.iastate.edu/agdm/wholefarm/html/c5-09.html. [Accessed 22 May 2020].
22. Small Business Ideas. 2018. *Doing Business in Nigeria - PESTEL Analysis*. [ONLINE] Available at: http://legitsmallbusiness.com/nigeria/. [Accessed 24 May 2020].