Reversing Climate Change
with
Sustainable Agroforestry

Business Plan - April 2021 ver. 1.6.0

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A. Executive Summary

eGro - *Reversing Climate Change with Sustainable Agroforestry*

eGro is a climate startup. We use a production method that will replace conventional agriculture. Our objective is to reverse climate change with sustainable agroforestry.

eGro focuses on making carbon positive food products for Nordic conscious consumers. This will make the food consumers able to be carbon positive by eating foods produced in the right way, and the farmers able to build food-forests all over the planet - for profit - and thus, together with the global green consumer become the driving force for a climate solution.

We design and build forests in emerging markets with smallholder and subsistence farmers. eGro produces and trades agroforestry products working together with local women farming groups and cooperatives. We are currently raising a small seed round to export and produce peanuts for the snacks market - salted and hand roasted from our Ghanaian farmers.

While we are building the sales channel to the Nordic conscious consumer.

Background
eGro is a Zebra company as opposed to a Unicorn.

The idea was conceived in 2008 and established as a startup in 2012 - since then we have been professionalising as a social enterprise and since developed into a for-profit climate business, operating with a strong global mindset in a mission driven culture.

We have been engaged in several countries before settling on the most stable country in West Africa in 2016-2018 for our pilot project; in sub-saharan africa in Northern Ghana. In 2019 we also investigated and built partnerships in China, both for future market purposes, for Chinese botanical experts and access to Chinese investors in African countries.

eGros team consists of seasoned mid-age entrepreneurs and specialists in ecology in Copenhagen, a network of advisors that have been onboard on average 5 years with eGro, and an experienced farm sector staff as management in Ghana, having hired their own team of young rural people working with us for 3 years on the ground.

Status
eGro is early-stage with a proof-of-concept for production of climate positive foods. We already made it work between 2016 - 2018 in a production scale pilot project. In a first of a kind commercial system, where we applied the method with our producers.

With a 1-acre model, we contract with farmers in rural emerging markets to produce according to these methods.

We now work with women cooperatives and rural farmers in Northern Ghana in Sub-Saharan africa to make their production price competitive. They do operations in production and post-harvest according to our plans. eGro does logistics, processing and trading of these climate resilient products from the sustainable agroforestry production fields.

Method/Technology

We use sustainable climate resilient production methods that secures harvest in extreme weather conditions due to climate change. We facilitate specialty seeds, and tree seedlings to amend the soils for the farmers, and we bring materials for production and secure post-harvest of their crops. We export and market the products to the high-end consćious consumers in the western markets.

We are producing only with climate resilient methods, using sustainable agroforestry - giving us an advantage over traditional agricultural methods in harvest productivity as well as keeping the production price stable. This method is carbon positive and lowers the footprint of our customers the more they buy from us.

Product

We are focused on making a market entry with food snacks in collaboration with local women farming cooperatives, and export these foods to the European market. We will value add and package the products in Europe and sell to climate conscious consumers as a green alternative to traditional agriculture that has a heavy carbon footprint.

Ask

Seed round 1 and 2 - 2021

We are currently looking for two small seed rounds to prove our ability to export out of Northern Ghana and enter a product to market.

Beyond 2021

We need financial partners to expand production, consolidate operations and facilitate further market entry in Northern Europe.

Our customers are based locally in Denmark and the Nordics, with expectations to expand to the Swiss and German conscious consumer food market.

We are looking for an investment of 18mio DKK 3mio USD to build an agroforestry project in Northern Ghana between 2021 and 2025.

Vision for a Green Planet

Imagine a future in 130 years where all the planet's semi-arid deserts are covered in lush forest where people and robots are producing foods and non-edibles and “non-timber-forest-products” like textile fibres from large trees and cork to replace leather.

A production system where mankind is using forest raw materials in all industry sectors for building sustainable products.

This is how consumer driven capitalism in the future will be reversing the damage that mankind has done on the planet through the industrial revolution by capturing carbon in all the forests spanning the continents.

We will need to plant these productive forests, in this business plan we will show you how we are going to start the commercialisation of these so called agroforestry projects in a scalable way and making them more profitable than conventional agriculture due to the adversities of extreme weather events and the depletion of soil and water that have made agriculture into a non-profitable debt business.

Jacob Vahr - Founder of eGro

Commercialisation

We produce climate resilient products in emerging markets, export them as raw materials and process them for sales under our own label. Selling it with a high level of transparency to the conscious consumer groups.

We commercialize existing subsistence farmers in emerging markets with our one-acre model, by providing the first input, materials on how to, knowledge, seeds and processing equipment. We train them via digital media in cinemas in their local communities and give them the “know-how” to help them design climate resilient cash crops and forestry systems to become part of the growing global supply chain in demand of secure and stable food and non-edibles of the future.

Investment Needed

We are seeking 3-3.5mio USD to invest in building up our production capacity between 2021-2025

This investment should be delivered in 4 tranches

	2021	2022	2023	2024/2025
	Initial build up EUR 33.600-67.200	**Consolidation** EUR 211.000-253.000	**Expansion** EUR 1.01-1.27mio	**Volume increase** EUR 0.85 - 1.27mio

Operational	Recruiting and educating producers First test harvest in 125 acres	Adjustment of production method First full harvest and small expansion 250 acres total	Growth to more production all areas; 1250 acres Heavy storage capacity to meet full production level in year 2025	Value adding by local processing facilities First diversified product range
Market	Market entrance in Europe	Gain large market share in Dansih market since has the second highest penetration of conscious consumers per capita		Product Line introduction to more markets; Nordic - Swiss highest conscious consumer per capita and German large cities

Pilot project successes

Each tranche is designed on the experiences gained in our initial bootstrapped pilot project where we invested 84.000 EUR over a period of 2 ½ years and adjusted for an upgrade in professionalism in our organisations both in Copenhagen and Northern Ghana.

We efficiently operated for three year's in Ghana on a smaller scale already having tested the procedures of our first 3 tranches, eliminating our wrongful assumptions about working in Sub-Saharan Africa and qualifying ourselves to achieve the first 3 tranches in this project.

We worked with over 112 local farms growing peanuts, chilis (not 2018), planting 4000 trees of mango, lemon, and cashew (since 2017).

The upgrade of the Copenhagen team and the ability to do the market entrance will be found under the B. **Company Presentation** & Organizational Management subheadings.

Stage

We are a pre-revenue early stage for-profit agriculture/sustainable production business still bootstrapping and still working towards our first product sales and proof of business validating our business concept in the European market.

Technique

We are commercialising an agricultural production method known as agroforestry that is mainly used globally to prevent desertification in reforestation projects. The principle of agroforestry entails planting forests for protection of different crops that grow under the protection of the trees, and thus creating synergy effects. This is achieved by planting crops together with different fast growing trees, a process which helps fertilize the soil, thus providing crops with the nutrients they need to aid their growth.

WIthin agroforestry we are drawing specifically on permaculture and syntropy principles. These methods are characterized by instead of heavy mechanical inputs as in normal conventional farming, it is mainly handlabour by cooperative members, and by using special zone designs according to dominant winds and solar patterns to increase energy efficiency in the ecosystem and logistics with small vehicles over short distances.

The forests provide safety for the cropping plants under the trees in the form of shade, and adds moisture in the root zone of the cash crops, as well as providing nutrient exchange from large trees to small crops.

These agroforestry systems ensure safety of the crops survival and yield from extreme weather events such as heatwaves, drought, floods, torrential rains and so on. Therefore making the production resilient to existing and future global climate change, resulting in a higher consistency of product quality and quantity for market volume. The fertile soils after a few years create a higher yield and more stable production and makes for permanently secure and predictable supply.

We are pioneering its use in a large production scale. And are some of the first in the world to use it for direct access to end consumers.

Historically

Permaculture is not new to humanity as it is practised around the globe but is not practised on a commercial scale. Jacob Vahr the founder and CEO conceived of the idea of commercializing permaculture during his visits in West Africa and with his leadership eGro plans to become the first commercially scalable operator of this ancient method and a global leader on this method by growing quickly and expanding into other developing countries throughout firstly Africa but later expanding organically to other countries with vast underused land areas.

These methods have historically been used by mankind in desert environments, where they are recognizable in the arab word oasis, and ecosystems planted by man can be found in certain distances all along the silk road. It was the chemical and mechanical development

that during the industrial revolution led to the complete transition to monoculture fields as far as the eye could see.

With our methods of using permaculture, the practice of planting as vaste a variety of species to reach the highest possible biodiversity, to create symbiotic relationships between flora and fauna from microscopic fungi, bacteria and nematodes, to worms, insects and rodents and predators that all contribute to keep the crops healthy and reduce need for inputs.

In essence, the agroforestry system will become self sufficient as long as people keep pruning and harvesting inside it. It only needs sunlight, rainfed water and it's soil to create near infinite amounts of output in the form of raw materials and crops.

This is the detrimental opposite to the common practice in monoculture, where fields are planted with only one crop species per season, a method proven to cause environmental damage. It depletes the soil, and though it may yield a faster cash crop and a faster revenue, it is neither financially viable nor sustainable. This is because the inputs needed to obtain the same out increases over seasons, in the form of fertilizers, pesticides, mechanical upgrades and more expensive seeds and additive inputs, while it's consistency continues to fall and fluctuate from season to season until it no longer functions under rainfed water, or the groundwater is depleted to the level where irrigation is not only impossible but directly toxic because it is saline.

Permaculture has no proven negative impact on the environment, in fact it shows that it can clean polluted soils, and make them fertile and productive again.

In the short term, eGro goes to an extent of ensuring that we make a financial output faster than other agroforestry designs, while planting as large areas of land as possible. While ensuring a medium range 4-7 year's increase in productivity with a succession of trees. In the long run it leads to a fully biodiverse food-forest which makes output without the need of input such as fertilizer or irrigation systems.

The Carbon connection

The enhanced production capacity and sustainability is due to the forest effect of increasing the carbon in the soil layer; as the local rainfall is absorbed and makes the forest alive for and smart soil practices provide the forest with what it needs.

This solves a multitude of serious global problems. eGro’s methods on a mass scale act as a significant carbon sink from the growing forests, revitalize soils and water levels.

Initially it yields food and creates production and processing jobs in rural areas too dry or difficult for normal practices, empowers impoverished farmers and lastly provides more food to the global market.

Therefore, it is part of the positive long term solution to the global environmental challenges, both for biodiversity, animals as well as for human habitats, such as providing drinking water and food security for urban areas, resolving issues locally and creating stability regionally

and geo-politically.

Based on the EPA report, in 2018, around 10% of the GHG emission stems from the agriculture sector. Under the current climate risk situation, a climate resilient method in agriculture is highly needed. With agroforestry, sequestering the atmospheric carbon and eGros model gives hope of an overall global solution to climate change from agroforestry production of foods and raw materials for all types of industry.

To sequester human emissions that have been in existence since the industrial age, and control global warming to below 1.5 degrees as per the Paris Agreement, we will need to plant profitable agroforestry systems of a land area the size of India, Argentina, Kazakhstan and Algeria. To curb the follow on effect in the form of the 8 tipping points, forest fires, ice fletchers smelting, methane emission from permafrost, reduced corals, ocean heating and expansion and so on so forth, we will need to grow all of the earth's land surfaces to make a Green Planet, this will help stabilize the climate and ensure human and other species continued survival.

eGro´s has a new model for global food production which result in a completely sustainable crop that benefits the farmers, the organization, and the environment. eGro performs polyculture, also known as permaculture, instead of the more traditional monoculture.

Polyculture is the practice of planting many different species in the same field and it has long-term benefits as the name permaculture would suggest. In the natural world, fields of only one species do not exist. A more diverse ecosystem naturally occurs where different species benefit from each other. eGro’s model operates in a more natural way, where the species sustain themselves and do not need inputs such as fertilizer or additional water which isn’t supplied by weather once they’ve matured. The practice of polyculture has many benefits including resisting the global problem of desertification.

eGro does not own farms but acts as the teacher, supplier, and buyer to farmers in developing countries. eGro then processes the product before selling it. It has secured partners and suppliers in the english speaking country Ghana. In Ghana, there is a vast base to scale up the business and later expand into other neighbouring countries in West Africa.

Products

We produce unsalted, hand roasted peanuts from our Ghanian farmers and sell them to high end conscious consumers and foodies who are interested in sustainable and ecological products in prospective European markets.

Using our one-acre production model, we contract with farmers in rural emerging markets to produce according to our sustainable production methods. These production methods entail using climate resilient ways of production. We use sustainable climate resilient production methods. Firstly, we hold courses in villages to show what these methods are and how they can be used. Then we provide specialty seed. We help facilitate specialty seeds, and tree

seedlings to amend the soils, and we bring materials for their production and secure post harvest of their crops. We export and market the products to the high-end conscious consumers in the European markets.

Organization of Production

We focus on operations in facilitating, producing, processing and trading of climate resilient products from agroforestry method of production that caters to both edible and non-edible products industries for both foods and non-edibles industries.

eGro is doing this by acting as the organiser, consultant, supplier and purchaser to the local farmers that are contracted to use the method. We work with village authorities like chieftaincy leaders and lead farmers to find the right fit for commercial partnerships and supply the farmers with the knowledge and physical resources in order to start their climate resilient one-acre permaculture farms. eGro and the farmers have an agreed upon price for the products so it is a low-risk high potential deal for the farmers who primarily are subsistence farmers before partnering with eGro. This means they typically have between 25-40% production of eGro crops, and 75 - 60% for consumption in their own household.

Scope

During our first pilot project, we were able to form successful partnerships through eGro Ghana Ltd and successfully produced and harvested peanuts which were tested in Denmark. This can be quoted as an excellent example of a single business case for transitioning away from expensive and non-sustainable agriculture of high input, i.e irrigated plantations, which with eGro´s model will become the norm of climate resilient production as we confront more extreme weathers in all food and non-edibles industries.

Our aim is to target large B2C businesses not only as a consultant in building projects for these raw material supplies, but to act as a joint venture direct supplier. A provenance case like this will be valued because eGro's story and methods are completely unique to the market, creating an excellent branding and marketing opportunity for future partners in many parts of the value chain.

eGro uses a production method that will expect to replace conventional agriculture in future generations. Not only do we ensure sustainable production that is not negatively impacted by different changing seasons, but we also secure a sustainable supply chain and share the story of how the products were produced with the end-users We secure a sustainable supply chain for the ingredients industry with our permanent agriculture methods. We produce and trade peanuts for snacks and unsalted hand roasted from our Ghanaian farmers for high end conscious consumers and foodies interested in sustainable and ecological products.

Impact - The 4 Bottom lines

We offer the sustainability and ecological interested conscious consumers the ability to buy and eat CO2 POSITIVE and water POSITIVE foods and non-edibles at their convenience store.

By consuming these products, they can increase the planting of forests and thus be the driving force in capturing CO2 from the atmosphere which is the main cause of climate changes. They become part of the change and join the movement of sustainable agriculture that is working towards eliminating CO2 from the atmosphere. The forests further regenerate soil fertility and refill water aquifers, preventing water conflict, stopping desertification, alleviate extreme poverty and create economic equality between the developing and the industrialised world.

We call these the four bottom lines; ecology- green, water-blue, social-red, proft-black.

Green - Ecology We measure our ecological impact in three stages; when local microclimate is improved, the local microclimate improves, the ecological biodiversity is enhanced and fortified against collapse, and there is a global impact from capturing carbon to the reversal of climate change in the long term. The local environment changes within a few years, biodiversity increases and future desertification is prevented or even reversed where it has already started.

Red - Social We measure the impact of alleviating poverty, when we offer rural populations an income stream. The impact is already enormous.

In Our business model, we provide the BoP “Bottom of the Pyramid” people who make less than one dollar per day per capita with not only improved education on long lasting farming methods but also jobs. This helps alleviate poverty, improve gender equality (we work with women farmers) and help empower youth, resulting in wide societal development

When working with people at the BoP “Bottom of the pyramid”, people that make less than a dollar per day per capita, employing a majority of them in an agroforestry business it also the people in the households during the season for seeding, maintenance, harvest, post harvest, as well as increasing their knowledge about local nature and health issues through our presence in the local communities. Our educational programmes to upgrade the farming knowledge is diversified and with our cinema night to explain nature science and processing we reach the public as well On a higher level people throughout are employed and educated in the province in processing, storage, transport and building of eGros projects. As well as on a macro level where we pave the way for new industrial methods, increasing the export balance in an important sector. There are multiple side-effects outside of the one directly linked to employment and education which leads to alleviation of poverty, such as social cohesion and equality between gender and empowerment of youths for wide societal development.

Blue - Water The forests we build during our production capture the rain and keep it from evaporating during dry and sunny seasons. in the savannah capture the rain and keep it from evaporating under the baking African sun. Our water impacts are measured by how

much of the rain water our forest systems filters into the water tables and the aquifers. It is also a measure of how many local wells we can replenish in dry-season to keep locals and their livestock and rural settlements with clean drinking water. This ensures that the population in the rural areas can continue to dig wells for their plantations and industries and have non-toxic and clean drinking water, even if their populations continue to grow for another generation.

Black - Profit - The profit bottomline is the common understanding of a businesses measure for success; the general profitability of the company return on investment is usually measured in quarters as per the fluctuation of the stock exchange.We have an increasing profitability over the long term, as opposed to traditional agriculture that has a decreasing profitability. Our linear growth in the first year is taken over by a more aggressive growth curve as more revenue streams are added when the forest matures and begins to produce larger volumes of product. Thus we are not a Unicorn but rather a part of the companies that belong to the Zebra movement.

Therefore, we are ensuring a number of beneficial factors to reach a sustainable society both in the production countries as well as the high consuming part of the world. This commercial model based on agroforestry and permanent agriculture is at the heart of eGro, and we wish to spread and consolidate it throughout the world, in order to keep a sustainable balance between consumerism and natural resources availability., keeping the balance without undermining its own natural resources available and the productivity of the soil and water, and the profitability of the business.

B. Company Introduction

Company History

The idea of eGro can be traced back as far as Christmas 2008 and the first mention of the project in Berlingske Media was in 2011 when eGro under the concept name “Permaculture” became runner up of the national start-up competition Connectors Cup, during global entrepreneurship week.

Since November 2014 co-founders Jacob Vahr Svenningsen, Ghazal Torabi and Diana Salkauskiene have been working full time along with other start-up volunteers, advisors and student interns to build the company with its business model, strategies, its website, educational concepts and teaching materials, along with general professionalisation of the company’s organization.

2016
In March 2016 the organization decided Ghana was the optimal country for financial success and operations in the country began by searching for and engaging potential farmers.

In April 2016 eGro succeeded in finding the right partners in Ghana, Ibrahim Abukari Zukpeni a global citizen and networker, and his long time social business partner Mubarak Alhassan, agronomist both age 32.

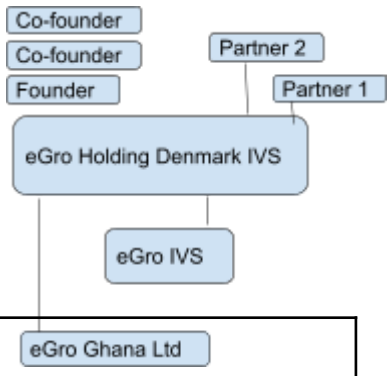
After a few online discussions we found 4 villages to work in and engaged 16 farmers for the first year of 2016 and did test production with these farmers to learn about their willingness to adapt.

2017-2018
They established contact with 48 and 112 farmers in each year and recruited them with families and 140 acres of available land to operate the methods of eGro Ghana Ltd..

2019
eGro Ghana was underfunded for the educational parts of the project from 2016-2018 and after a season of drought, we didn't manage to agree the buy back terms with the farmers, since local market prices had gone up. eGro Ghana Ltd. decided to find a new farming group closer to home office and in 2019 looking into qualifying these farmers to comply with eGro's methods and thus customers.

eGro's Vision & Mission Statement

Below is a table sharing the Vision, Mission, and strategic goals of eGro. The goals have been categorized into short and long-term. Further detail for all these subjects can be found in the Appendix.



Vision, Mission, & Goals	
Vision	*"Our vision is a sustainable mankind"*
Mission	*"to stabilize the earth's climate."*
Goals	
Overall- Develop a feasible and profitable agroforestry model for future global businesses and securing existing supply chains	
Short-term	**Long-term**
Make more money than conventional agriculture	Be more reliable suppliers than competitive suppliers
Remediate poor soils and sequester carbon	Create secure jobs in rural areas, blocking rural-urban drift
Have a safer harvest with higher yields	Sequester carbon on a mass scale

Lift people out of poverty	Create food security in developing countries
	Replenish aquifers that have run dry caused by use of irresponsible irrigation systems during the green revolution

Company Structure

In August 2013, eGro was registered as an enkeltmandsvirksomhed. Before that it was an innovation project hosted by the Danish Technical University DTU Createch student incubator and it's address located at the leading nordic social innovation house KPH//Projects at Enghavevej 80c where it still resides today. We are currently looking for a new location for the Copenhagen office.

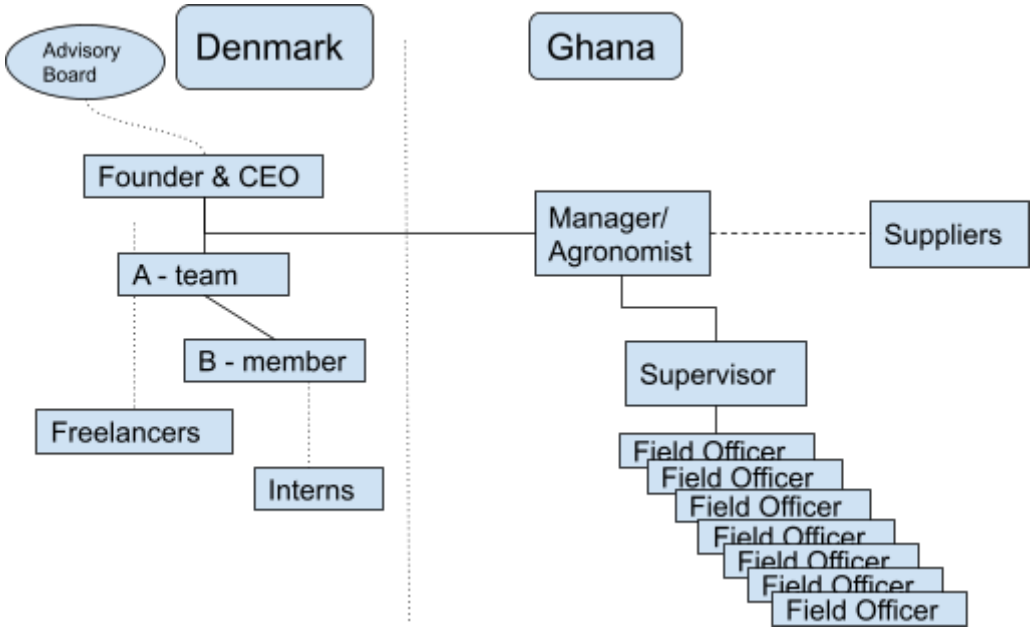
In October 2016 eGro Holding IVS was registered with the Danish business Authorities, as was eGro Ghana Ltd. in early 2017 in Ghana. Both as limited liability companies form to allow for equity loan guarantees, convertible loans and equity investments, as well as co-founder shares to be given out.

In August 2018 eGro Holding Denmark IVS replaced eGro Holding IVS in an ownership structure 95% owned by Jacob Vahr Holding IVS

It will reach its final company structure revision in spring 2021 when it transitions from IVS to Aps form and takes form in both eGro Holding Denmark company with an administrative company eGro Aps and registering eGro Ghana Ltd as a subsidiary of this Holding structure.

eGro today consists of two departments, one in Copenhagen, and one in Northern Ghana in Tamale, a central production and trading hub. eGro has an advisory board in Copenhagen, as well as a board of trustees, both consisting of business professionals with industry related experience and/or international background.

An organizational diagram is below which creates a visual representation of eGro’s structure. One can see the dividing line between Denmark and Ghana where Denmark has the traditional roles of a head office and Ghana’s roles mainly consist of the field operations.



Management

Founder in Copenhagen and management in Ghana has been working together since Spring 2016. The management in Ghana has been paid for the 2016-2019 seasons.

From July 25th 2016, during the rainy season, for one month founder/CEO Jacob Vahr was on the ground embedded in manager/agronomist Mubarak's family compound in the busy city of Tamale in Northern Ghana. Jacob also spent time living with the farmers' families and sleeping in their huts in the rural areas of Ghana giving him time to build the relationships needed with the Ghanaian team including its field officers and building a trust based organisation.

The management in Ghana, Mubarak built the organisation with a deceased friend/*brother* Ibrahim, he died in march of 2020, he was the first member of the management team and first contact to Copenhagen. They had been working together on multiple projects since they were teenagers. They have successfully co-founded more than non-profit organisations, firstly Grooming dot org, an organisation training youth in entrepreneurship and development sponsored by the Danish Youth Forum. These organisations continue to have small activities during the year outside of eGros scope, but are supported by eGro as we took over paying for their internet, stationary, phone and the use of the office facilities Tamale from 2016-2019.

Copenhagen Team

Jacob Vahr, Founder & CEO

Jacob is a self made entrepreneur. As the founder and CEO, Jacob oversees all aspects of the organization, leading both teams in Copenhagen and Ghana. He is a former professional in the golfing industry where he built maintenance systems in the green service sector. He

grew up in an international environment of greenkeepers and golf course constructors in Tuscany, where weather and plant stress is at its extreme. As an adventurer and globetrotter he also did plant studies in West Africa where he got the idea for making climate safe crops.

Ghazal Torabi Kristensen, Project Manager
Ghazal is a physicist from Chalmers University in Sweden. She also studied wind energy at DTU (Technical University of Denmark), where she did her thesis at National Science Labs at Forskningscenter Risø. Ghazal acts as the project manager and mathematician of the eGro team.

Diana Salkauskiene, Agronomic Officer
Diana is eGro's Agronomic Officer. Her formal education suits the role as she has earned her BA in Ecology and MA in Agriculture. Diana works with the development of the agricultural aspects of eGro's model by exporting plans to the Ghanaian team.

Tamale Team

Ibrahim Abukari Zukpeni, Manager - deceased
Ibrahim is eGro's local manager and our first connection to the Ghana team. He is the man on the ground and the main communicator between the teams in Ghana and Copenhagen. To gain inspiration for his dreams of development in Northern Ghana, Ibrahim has been through several training programs in Denmark and other European countries.

Mubarrak Alhassan, Agronomist
Mubarrak is eGros local agronomist and works directly with the farmers. He provides the farmers with educational material, field training and support. He has been trained in participatory methods by a Danish organisation and has gained a lot of experience working directly with local farming communities. Through the participatory methods, Mubarrak is able to identify eGro's future high-quality suppliers and with a mass educational method, he educates any late adapters.

Mubarak has been a youth trainer in his grooming.org social enterprise since 2012, and he is also the co-founder of non-violence communication network Ghana, where he set up and facilitated 120 youths in non violence communication at the local football stadium, the only venue in Northern Ghana able to hold such a large 2 day workshop.

Abdalla Alhassan, Media Developer - inactive
Abdalla is eGro's local developer of educational material for the farmers. He develops the material in the Ghanaian language and with a cultural understanding. He also produces and trains his own documentary crew for the recording of the material.

Advisory Network

The advisory network consists of a diverse mix of professionals who provide their input to the organization. The board's members have a general interest or passion for social entrepreneurship but have found commercial success in a wide breadth of industries. The

team also has experience working in challenging global markets and are able to provide insight on how to navigate such markets.

Skill Assessment

There is a need for a versatile person with human resources skills in a part time position. Currently there is not enough work in a single administrative area to create a half or full time position for them. People with a high level of integrity who already know eGro's mission and objectives are brought in as paid freelancers on short term to fill the skill gaps, as well as it being filled by the working board. The freelancers help fill various voids that does not exist in eGro's current makeup.

The freelancers are selected based on their pre-existing knowledge of the organization, if they have skills that fill gaps, and if they have an interest in eGro's mission. The freelancers have not signed contracts and compensation is done with an hourly wage. The freelancers include Americans, Brits, French, Canadians, Germans, and Danes to make a more diverse mix and global culture.

Ghanaian Staff

There is a clear challenge in Ghana regarding staff. There is uncertainty as to the feasibility of finding adequately qualified staff to fulfill all managerial and technical roles needed in the future.

The understanding of professionalism and corporate language is a barrier to our scalability. We have to be extremely focused on capacity building and have to be patient in our human resources development. We need to be early in our recruitment and preparation of staff, this requires a higher investment level at an earlier stage or our expansion rate will stagnate instead of increase in the future.

Management in Ghana have already requested replacement for them to be able to focus more on operational field work, relieving them of administrative office burdens. For this we will need to hire an office administrator as a COO. This could be Rufai's future work.

eGro´s Ghanaian human resources department is something Mubarak and Jacob will have to train with Danish professionalism and expertise, yet with the understanding of Ghanaian Dagomba values and African entrepreneurial understanding and drive. As long as we are in Tamale this should not be a problem, but will have to be initiated as soon as possible, since it is the NGO capital of West Africa. Lots of locals have already been trained successfully by Danish and other international non-profits in teamwork and pedagogia.

In regards to future field trainers, there is plenty of human capital with the ability to become field trainers for our suppliers in the rural areas. Local structures of leadership selection will be used. Mubarak has already trained 11 field officers and other staff and upgraded 4 of them to data collectors in the 2020 research on impact, which we did with our Chinese Master student of Environmental Economics and partner in eGro Zhenyu Ma.

Compensation Packages

Currently the only compensation package in place is one that has compensated the Ghanaian farmers for their lower than expected yields during the pilot project.

Ownership Structure

eGro´s ownership is held by six individuals, with Jacob Vahr having the majority shares. The ownership share amounts are listed below. Two are the other members of the Copenhagen A-team, Ghazal and Diana. One is an early investor in eGro and two are former team members in the Copenhagen office The five owners and their ownership amounts are listed below.

Jacob 95% - Founder & CEO
Ghazal 1.2% - A-team member
Diana 0.8% - A-team member
Louise 1.0% - first investor - current advisor and consultant
Freja 1.0% - inactive former A-team member
Roman 1.0% - investor - inactive former A-team member

6% of the company's equity is on loan in convertible loan agreements
Chritsina GrønKjær 2 %
Maxwell Brandon Hartman 4%

C. Business Case

eGro’s Model

The model that eGro has developed on our agricultural and supply chain methods that differentiate from anyone else in the field. Implementing the system into developing nations will allow them to produce a variety of products and simultaneously fight climate change and provide income for local farmers.

Insert picture of model

Agricultural Model

The eGro model is simply a climate resilient agrofroestry practice to replace failing conventional agricultural practices.

Using the methods of agroforestry with a high level of biodiversity and low mechanical implements and no chemical inputs, to produce cash crops for global market make it possible to have a permanently sustainable production system with low input and high output which make it financially viable on short, medium and long term and thus investible with a high level of security in a balanced return of investment.

Most importantly, it solves the problem that current agricultural models face in the future - the lack of security of production stability due to climate change. Current agricultural models are not secure and not sustainable due to their highly intense mechanical practices. They undermine their own stability in the short run, and their sustainability in the long run, by heavy implements like ploughing which removes carbon, stops rainwater from filtering and removes fertility in the soil and becomes sterile from prolonged mechanical and chemical methods..

eGro uses the principles of permaculture and syntropy, 2 branches of where the benefits of the pillars of profits, people, and planet are all realized. As a visual aid, the image below shows what a field may like with permaculture as opposed to monoculture. One can see that many species are planted in a field, all benefiting from each other. This results in less inputs needed once the field has matured.

Other benefits include:

- Landscape water-catchment mitigates droughts and sudden flooding disasters.
- Regenerative planting improves soil fertility for higher yield.
- Perennial crops secure high output in years of drought.

Supply Chain Model

The supply chain of the eGro model starts with providing the emerging farmers with designs and knowledge of how to implement and maintain productive ecosystems. They receive materials, biological fertilizers, seeds and seedlings from our professional nurseries.

The farmers own the land as independent farmers and by contract they become eGro's suppliers. This makes our supply lines predictable, organic and resilient to climate change. eGro buys back the products at the suppliers' farmgate, we process it centrally, cutting out the middlemen. eGro then sells, ships and delivers the product to the specialty store and retail supermarkets as well as our own webshop. By making our customers' supply chain completely sustainable we become an essential part of the global raw material industry from agroforestry.

Ghana Country Selection

In spring 2016, after a few years of spontaneity, we started a rigorous pre-feasibility strategy to find the best possible locations for our long term strategies to succeed. Ghana was selected because it is a safe and English speaking country in a cooperative business environment with a high literacy level and the best internet connection in Africa. It has a brilliant reputation amongst other African nations and regional small business owners in West Africa trades with high trust with any Ghanaian person, this speaks volumes for the people of the country.

Northern Ghana as a region fits our needs for a semi-arid climate to operate in, where our methods can make the most difference and our unique value can become valuable for the locals.

The developing country and their underdeveloped market has a need for the eGro model as rural farmers can see an increase in crop yields and improve their financial well being. These farmers can then convert from subsistence farmers to ones who can make a profit off of their harvest to small time commercial farmers.

An adjusted PESTEL study was conducted which included climatic, soil characteristics and conflict risk to determine which country was best to enter. A few other countries around the

world that stood out were considered like Nepal and Uruguay. Our favour for developing an African model finally decided for us to go with Ghana.

Ghana Climate
Located close to the Equator, it is part of the periphery of the equatorial conveyor belt, where most of the planet's humidity is concentrated and is distributed to the two hemispheres. This means Ghana, and therefore also the rest of sub-saharan sahelian savannah, will have an annual predictable rainfall that lies acceptably within the extremes of climate change extreme weather fluctuation. It means the land, soil, and forest systems are safely rainfed every year to a minimum and this can secure a harvest season even in times of drought or flood. In the dry areas, at least 250mm all the way up to 1800mm will precipitate in a permanent rain pattern till the end of the planet's lifespan.

This is more than enough to securely build an agroforestry system and make it survive and be productive with a return on investment, where many other regions are facing more uncommon patterns and are relying heavily on irrigation inputs with the adverse weathers in a climate change future.

The country also has the highest internet user penetration of Africa, which is 3 times higher than that of their neighbouring countries. This allows for much easier communication between Ghana and Denmark management and transfer of knowledge, training and direct real time sparring, as well as social media content creation in real-time for consumer transparency campaigns.

The combination of economic, climatic, and social powers in Ghana form the ideal nation to truly test the eGro model.

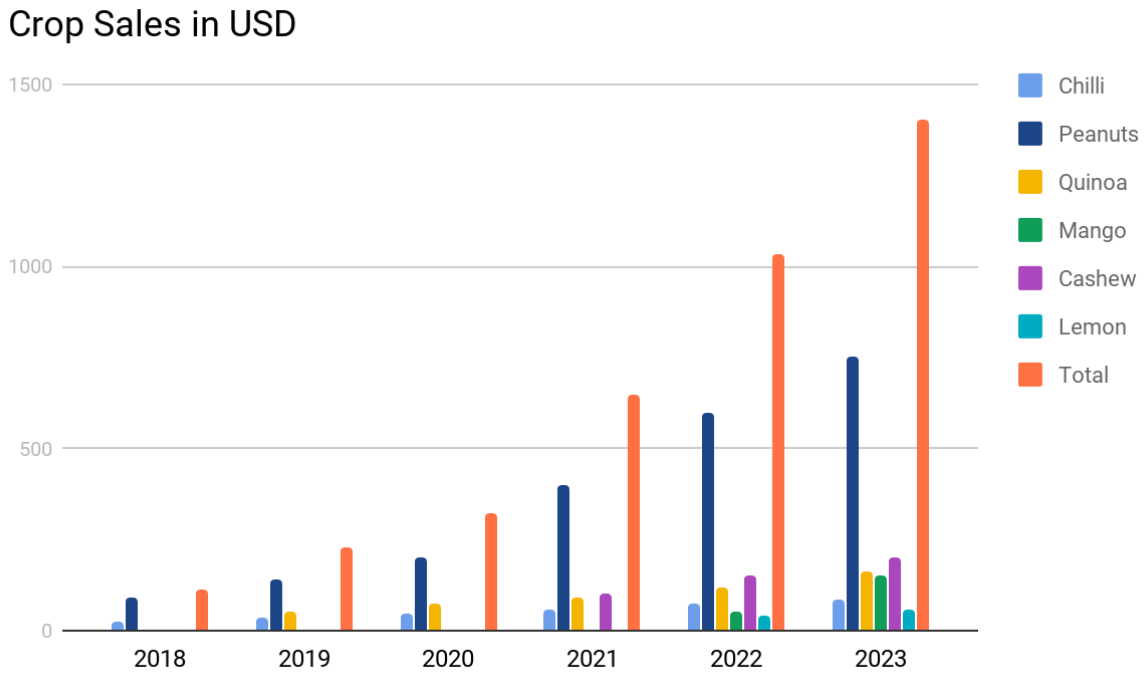
Once the model has been optimized within this safe environment, it can with few adjustments expand into neighbouring countries and they will not present as many challenges and thus the eGro model will be easy to replicate.

The city of Tamale was chosen in Northern Ghana because it is a safe and central agricultural hub with adequate infrastructure needed for the project.

Our farmer selection and implementation practices are further discussed in the Appendix.

Crop Variety and Revenue

eGro has planted a variety of species and harvested chili and peanuts in Q4 of 2017. The future crops are listed below with their expected revenue. The crop sales are dictated by anticipated crop yields based off of expansion forecasts.



Pricing Structure

Each crop will have its own price per kilo but overall eGro plans to have a competitive, medium priced product per kilo when comparing them to the market. The pricing structure will be communicated with price/kg to produce and then market value prices/kg.

Chillies are the first product harvested this year. In Denmark, chillies have a market value of 25 euro/kg in dried form. The break-even price for eGro is 6 euro/kg. This leaves ample room to sell to the market and still make a profit.

This year, the type of chili did not perform so there will be no international sales. Another chili species will be planted for 2018.

In regards to peanuts, eGro has two varieties of peanuts. The Samnut 23 is the variety which saw the most success and will be used in coming harvests. The other variety was purchased due to a lack of supply of Samnut 23 seeds. The local language calls the second variety “Chinese.” Some information on the peanuts is included in the table below.

Peanuts						
Type	**Size**	**Oil Content**	**Acreage**	**Yield**	**Value**	**Revenue**
Samnut-23	Mid-Large	50%	1o1-12 acres	700 kg	$12,000 per tonne	$8,400 USD

Chinese	Small	36%	40 acres	600 kg	$6,000 per tonne	$3,600 USD

Secondary Sources of Revenue

Carbon Credits

Other forms of revenue can be provided by the sale of carbon credits due to the carbon sink created from the forests eGro is planting. This is not anticipated to be a significant contribution to the revenue but will be a supplementary source. The next couple years could see carbon credit sales as high as $5,000/year.

Tree Production

Another complementary branch of eGro's operations will be nursery sales to local farmers for some of the trees they are growing. The tree sales are expected to bring in as much as $10,000/year before the end of the decade.

Technology, IP, & Licences

No relevant information is needed in regards to technology and IP.

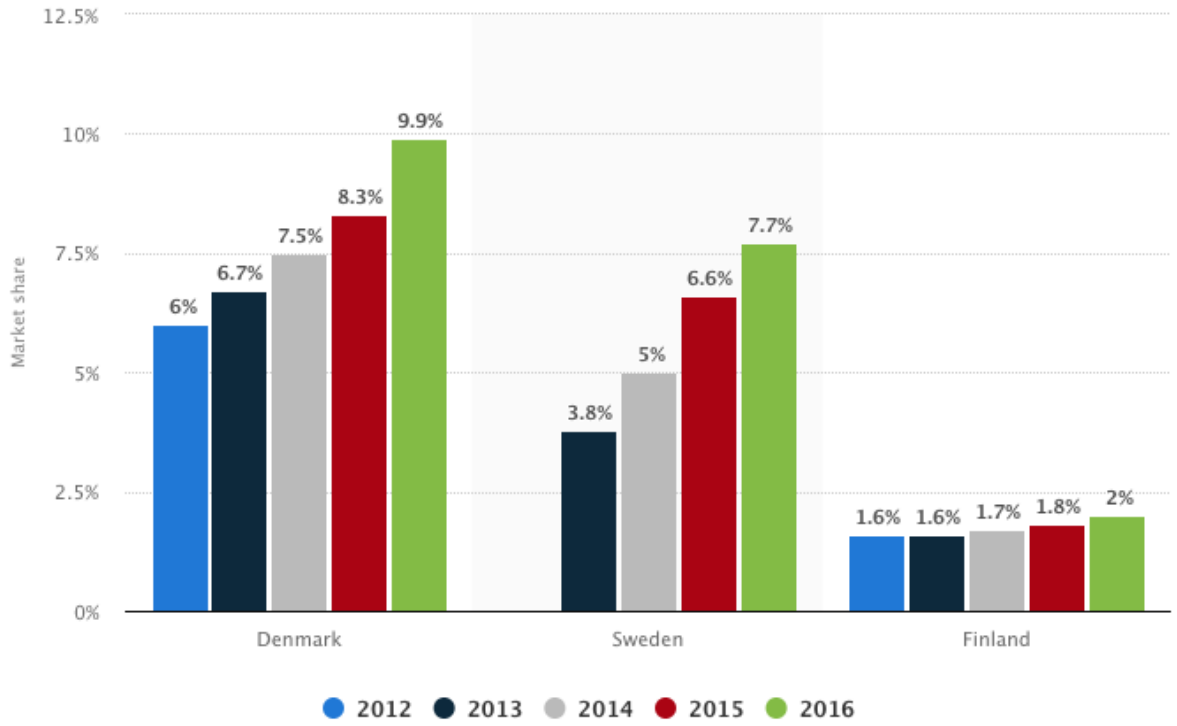
D. Market, Industry & Competition

Markets

The geographic markets eGro will be entering are the European Nordic countries. They have been selected because of the general values each region possesses towards environmental sustainability and conscious consumerism.

Nordic Countries

When looking at the Nordic countries, EY conducted a survey on consumer preferences in 2015. 93% of Swedes reported that they would pay more for something that is environmentally friendly. These attitudes are not solely held in Sweden. Denmark holds the greatest market share of organic food products at 8% of their national consumption and Sweden has the greatest proportion of organic certified farms in Europe. The region shares similar values and much literature supports a desire for more sustainable products amongst consumers in these regions. In general, there is consistent growth in organic and sustainable products in the market. The table below helps demonstrate this attitude and was found at statista.com. The numbers indicate the percent of market share for organic food products in each of the three countries from 2012-2016.



The graph shows the steady growth in the market and has yet to indicate that the growth will slow down.

The table below provides further information on the target regions.

Region	Subregions	Population	Regulating Bodies
Nordic Countries	Denmark, Finland, Iceland, Norway, Sweden,	26 million	European Food Safety Authority (EFSA), Norwegian Food Safety Authority (NFSA)

Product Line

eGro's product line will diversify over time as the forests mature and different species start to yield produce. The first six types of products are listed below with their global demand, various forms of growth, and other information.

Product	Global Demand	Growth	Other
Chilli	30 million tonnes	Consistent 2% in global demand	High Asian and Hispanic populations in PNW
Peanuts	29 million tonnes	Lack of growth because productivity cannot keep	China's increased demand for peanuts will change the market as

		up with demand	they have historically been a net exporter
Mangoes	43 million tonnes	24% production increase from 2009-2013	Key Markets: Nordics,
Cashews	717,000 tonnes	Demand increase of 53% from 2010-2016	Vietnam's is the leading producer but the country's sensitivity to drought makes cashews an unpredictable commodity
Quinoa	223,000 tonnes	Peruvian and Bolivian exports rose by 227% to the EU from 2012-2015	Price tripled from 2000-2014. Supply cannot meet demand
Lemon	7.2 million tonnes	4.2% demand increase from 2016-2017	Supply cannot meet demand

Consistent growth is seen with all the products listed. The general demand for the products combined with the growth in organic and sustainably produced products makes for a rapidly growing market where supply often does not meet demand. This creates a large window of opportunity for eGro.

Market Share

eGro does not currently hold any market share because of their youth. Their current and expected operations for the next couple years would not result in a sizable number of the market globally. However, they may capture a noticeable amount of market share in niche markets such as organic and/or sustainable peanuts in Denmark.

Industry

Regional Markets & Targeted Buyers

When looking at each region, the industry being characterised is the target market eGro is looking to enter rather than the agricultural market they exist in. A group of students from Queen's University in Kingston, Canada conducted a six-month consulting project for eGro. Some of their research included a Porter's Five Forces analysis of the Canadian retail market to better understand the competitiveness of the industry. Their findings concluded that the industry has strong competition as a few major organizations have a large portion of the market share. The situation creates a difficult bargaining position for eGro but eGro's entrance strategy should mitigate some of the challenges associated with the competitive market. The full analysis has been included in the Appendix. The situation is similar in the other regions of the PNW.

The Nordic Region has similar characteristics in the grocery industry. According to Statista, the four largest grocery store chains owned 93.7% of the market share. 40% of the Danish

grocery stores total turnover was through discounters followed by big grocery stores. Sweden's atmosphere is similar with ICA holding over half of the market share in the country.

Agricultural Industry

The agricultural industry is a more complex one to dissect due to the global aspect and the various crops that eGro is producing. Each crop has different major producers and different means of production as well as sensitivity to climatic crop destruction. For example, China and India are major producers of chilli. China and the Americas present a major market for chilli. Argentina is a major producer of lemons but lemons are also produced in the EU, although have faced some difficulties due to EU regulations.

eGro's technique is also unique to the industry. Certain practices may be in place but not with the capitalistic intentions that eGro has. The technology used by eGro's farmers is low but the technological comparison is crop dependent.

Competition

As stated earlier, eGro's techniques make them unique to the industry and hard to place. Competition could be considered the major GMO organizations who This sector is defined as the "Big 6" who are the largest organizations in the industry. They are BASF, Bayer, Dupont, DOW Chemical Company, Monsanto, and Syngenta. Competition could also be the smaller more grassroots producers who produce organic and more sustainable crops. The United States represents the largest share of organic crops worldwide with approximately 7%.

eGro's Competitive Advantage

eGro's unique methods and business model have natural competitive advantages which will be realized upon crop maturation. The natural benefits of permaculture are that it will result in a more sustainable and reliable supply chain for buyers. Due to permaculture's resistance of droughts and flooding, crop yields will be more predictable and stable. Upon further growth, the reliability will increase as a greater geographical range will deter climatic events from destroying a large portion of eGro's products.

eGro has a further competitive advantage in its story. The unique nature of the project differentiates itself from competitors where consumers will understand the ecological benefits. A more informed consumer is becoming a global trend and those consumers want to make responsible decisions. Proper execution of the story greatly benefits public image and branding, making this eGro´ s additional marketing competitive advantage.

Market Entry

The market entry strategy for North America is to find a food broker(s) who already has the existing relationships to bring eGro's products to the market. The market places much

importance on relationships and eGro does not have enough labour or capital to spend time nurturing such relationships. Finding the right food broker would also bring the knowledge needed of the local market including import regulations and logistics.

eGro's physical location puts them in a different situation in the Nordic countries. Operating in Copenhagen has allowed them to form various relationships with buyers and the entry strategy was briefly mentioned in the business case. As already stated, eGro is currently working with Orkla on a limited release product using eGro's peanuts. The limited edition offering will mention eGro and tell the story of how the peanuts are socially and environmentally responsible. If successful, the limited edition offerings will result in all of 2017's peanut harvest being purchased.Discussions are also with OK Snacks as a supplier for the treatment of eGro's products. The hope is that this partnership could lead to future sales.

E. Corporate Governance

The Board of Directors

The board is composed of nine professionals who are responsible with overseeing eGro's operations and help provide a guideline for strategic critical paths to success. The board members have been selected based off of their experience, passion for social causes, and access to the market. Their diversity allows for a broad spectrum of knowledge and experience which has allowed for comprehensive analysis of eGro's operations. Jacob, the CEO reports to the board and they provide feedback to him and aid in the facilitation of the strategy.

The board acts as more of an advisory board and has less obligations than a typical board of directors as Jacob is independently responsible for making the organizational decisions. The board also helps in a hands-on context by levering their connections to help eGro enter markets and meet potential customers. In 2018, the board will meet once per quarter.
Jacob acts as the only independent director and this point in time.

Corporate Governance Policy

In regards to making sure the integrity of the organization, Mubarak and Ibrahim are the responsible individuals to make sure the integrity is upheld in the operations of Ghana. Through regular communication, Jacob oversees their management of the field. In Denmark, Jacob is the responsible individual for the same task.

Nothing is written in regards to how any of the stated individuals will act if there is an employee or farmer who is not acting in accordance with eGro's standards. However, there are certain rules that the farmers must comply with. For example, the prohibition of pesticides on eGro's farms.

F. Sustainability

Sustainability Policy

Areas of Zero Tolerance

1. **Pesticides**- None of eGro's suppliers are allowed to use pesticides. They are instructed to do this and regularly monitored to make sure this is none issue.
2. **Bribery**- Fortunately, the lack of involvement with government officials and licensing has made it so there have been no incidents involving bribery with eGro in Ghana. With that being said, there is still a zero tolerance policy for bribery.
3. **Soil and Water Pollution**- There is a clear risk of unsolicited use of pesticides and thus water and soil pollution from our own or our neighbouring farmers. To mitigate the risk we will educate the entire community on ecosystem pollution, effects and consequences of chemicals in drinking water and foods. Our farmers will have a clear financial incentive to protect their productive ecosystems.
4. **Child Labour**- We see a clear risk in reputation loss to our brand when involving complete communities in farming for our profitability. We make a clear distinction between the household son and daughter taking part in developing the family land to become a productive forest, and the imported and underpaid labour in a large landowner estate.

There is a risk that Togolese underaged males will be working our farms in the future, this can and must be advised against and observed. The consequences must be dealt with at the local level by the cooperative in a collective manner to mitigate the risk of it occurring as child labour endangers the reputation of the entire company.

Personnel

The combination of eGro's owners and staff make for a team that has expert level knowledge of sustainable agriculture. Jacob's decade of studying has led to a thorough understanding of permaculture (a sustainable practice in itself). Diana's formal education in biology and agriculture also provides for an excellent level of knowledge in sustainability. Ghazal's studies in wind energy bring a different breadth of knowledge which is also a vital part of sustainability. This is paired with the Ghanaian team and their understanding of the local environment/issues which provide the native knowledge.

The Four Bottom lines

eGro's primary mission is climactic in the sense that once a forest system is created and profitable there should be no incentive to break it down. eGro's operations result in the final product being self-sustaining forests which in turn help with many environmental issues. With the primary mission in mind, project bottom lines were created in four different

categories which have been codified with colours. If any of the bottom lines cannot be met, eGro will not engage in the project. The bottom lines are:

1. **Green**: Climatic Benefits
2. **Red**: Social Impact
3. **Blue**: Freshwater
4. **Black**: Financial Viability

Examples of why eGro might not engage in a project are listed below for each colour.

Green: This could be an active volcano site, where the topsoil layers are thick and are remineralised each millenia.
Red: If the farmers are fully established in a secure financial system, they have no monetary incentive to transition.
Blue: This could be a lake, riverside or dam site, where water is plentiful, agroforestry is not necessarily a priority.
Black: This could be a site where the local market is so dominant in its demand, that the real estate is too costly to compete with high intensity monoculture on a reasonable R.O.I scale.

Furthermore, a balance must be found between the bottom lines to be able to maintain the permanent climatic impact once it is created. For this, all four bottom lines must be performing above a minimum to be valid.

The Green Bottom Line: Create Sustainable Ecosystems

In a terrain that is prone to deforestation the introduction to an ecosystem is defined by being a self sufficient designed biotope, which is maintained by people that are aware of their influence on this ecosystem in their management of it.

We measure:

- The performance on the green bottom line is measured by the local farmers ability to increase biodiversity in respect to other areas where eGro's model is not used.
- The quantity of the living biomass that is created is measured and calculated in CO2 sequestration
- The area of land that is under status of endangered by deforestation to be reversed and held as safe and secure from deforestation.
- The area of land that was previously desertified that is regenerated

The Red Bottom Line: Social Impacts

We create a number of jobs, in areas where no jobs were previously recorded with an income. The local inhabitants will mostly be poor subsistence farmers or women taking part in the household and not the income generating workforce. The creation of jobs lifts people above the poverty line, and the introduction of further currency in the communities creates opportunities for even more that will service the exporting farmers or workers in the industry that follows for the processing of goods for eGro's trade.

We measure:

- The number of farmers that are occupied as suppliers.
- The number of people employed in processing that previously did not generate an income
- The number of people educated from the cinema project

We do not measure:

- We do not believe that this social work must outweigh the efforts to increase our expansion in the area, but rather it is a supplement to the training in ecosystem design and forest management.
- We do not prioritize the social impact in one community above that of being able to introduce our methods in another.
- We think reach and scalability before consolidation.

The Blue Bottom Line: Replenishment of Freshwater Aquifers

When motivating people to build forests in dry and semi deserted areas, or in areas in danger of becoming desertified, water management is a crucial factor. We could not introduce a functional and sustainable ecosystem without the enhancement of water harvesting and water retention in the soil. This leads to an increase in water aquifers and is another bottomline of eGro.
The ecosystem must be able to plentifully replenish the aquifers to the extent that it supports both drinking water and the use of industry for processing.

We Measure:

- Performance is measured by benchmarking with current and historical records of water levels in wells and aquifers. This must, as a minimum, be brought back to a stable level and predictably be able to replenish even under future drought scenarios to support the systems.
    - When increasing water availability, a natural increase in human activity as well as possible migration to the water sources will predictably happen. We account for that to be able to support humans as well as wildlife as a part of our strategic evaluation of our desire to remain present.

We do not measure:

- We do not venture into water scarce areas with the sole purpose of regenerating surface water reservoirs, such as, natural wildlife areas or rivers that have been emptied. As such we are not a reforestation or wildlife agent. We are a for profit company with add on climatic effects.
- We do not enter into a project that is not permanently replenishable. The ecosystem must have the ability to become self sufficient and permanently profitable even when human migration happens. This is to say that we do not engage in areas that are already overpopulated and that we are unable to assist with sustainability. Our effort must be able to cover the water necessities of the local populace, if not, the system by design will eventually be prone to collapse and in vain.

The Black Bottom Line: Financial Viability

The ecosystem must be designed with profits as a target. It must at all times over a 10 year horizon outperform conventional high intensity monoculture. Performance is measured on

the eGro model's ability to keep suppliers using our methodology. They must not become insecure and speculating in short term gains from overharvesting the ecosystem. If an ecosystem does not provide substantially for the farmers in terms of financial gains this will tend to happen, thus they will be thus designed for relatively high profit as a measure of success.The ecosystem however must not be designed for such a high profit margin that it does not perform on any of the other bottom lines. Then it would collapse financially at the slightest deviation climatically.

We measure:

- Profits that create financial security for the farmers.
- Profit for eGro.

G. Legal, Regulatory & Political Environment

Global Opportunity Evaluation

eGro chose to enter Ghana, after having investigated and visited other international opportunities. Those other opportunities had various problems where Ghana offered greater security. Politically unstable nations or hostile environments are issues that do not plague Ghana and make it for a relatively safer choice.

Some of the other opportunities that were explored include a pre-feasibility study of the fertile and irrigated fields of Hashtrud in East Azerbaijan and Northern Iran. eGro was invited by members of Iranian parliament during a visit to the fields facilitated personally by the local governor. We built a business plan with Pakistani partners for Punjab in Pakistan, with available land from local farmers. We have successfully consulted for NGOs with native Mayan people in Guatemala and we have been concept developing with Ethiopian and Eritrean natives. We've been offered lands in Uganda, along with working on specific products and locations in Nepal.

After having been driven by personal acquaintances and random opportunities, we have used a strategic business analysis model to make up our minds. Based on an adjusted PESTEL evaluation we built a country matrix, modified to suit our needs, mixing it with thorough cultural and conflict analyses which are disqualifying factors for long-term engagement, since these two indicators are unlikely to change over foreseeable time.

Political Climate in Ghana

In Ghana we have found the right political and security climate for a startup. Ghana has a benign environmental awareness in the general population, even in the illiterate population, evidenced by the fact that the local consumer favours organic local products that they know the processing methods of, over canned and industrialized foods. It has technological capabilities with products and services for technology devices that match that of Denmark in 2000-2005. Everyone has access to cellphones and 20% have access to internet usage (in urban areas). Ghana is an example of a country experiencing economic growth, with a well

functioning legal business climate, that is expedient and pragmatic. Functional infrastructure, roads only moderately damaged by weathering and under expedient re-establishment, a highly mobile, skilled and knowledgeable workforce create a suitable environment for eGro's operations.

Ghana is one of the most politically stable and predictable African countries. However, there are still moderate corruption levels. The history of Ghana is that it was the first country to become independent from Great Britain. Commonwealth law is still in practice, with some amendments. Ghana has never had a violent coup even being positioned in "the banana belt", where all neighbouring countries have had several coups and civil wars. This is possibly due to its strong intact tribal heritage and its clear professional military, with no draft or conscription.

The Ghana elections of 2016 are indicative of a continued direction towards liberal conservative politics. There are no rising socialist movements interested in nationalising natural resources and restricting export of goods. In fact the most predominant wind of change is that a local businessman has risen with a new liberal political party.

More information can be found on the agricultural climate in Ghana in the Appendix.

Regional Security

A scenario is possible, however unlikely, where a regional war should arise with geopolitical interest by a superpower such as the US, Russia, China or EU. This is the only conceivable scenario where the Boko Haram group funded by external donors and the conflict in Mali for the independence of Azawad scales beyond these borders and develops into an Afghan or Iraq/Syria like conflict.

In that case, Ghana would be a natural staging point because of its evangelical christian churches. The objective of, for instance US ground forces would be to interrupt the supply lines of Boko Haram travelling from Algiers, Mauritania, Senegal and Mali in the west on highways through Burkina Faso to the east where the conflict zone is currently in Northeastern Nigeria and Northwestern Cameroon.

This would either happen if Boko Haram strategically targets an essential power supply such as an oil field in Nigeria or Uranium in Niger. Or if West African muslims become a major recruiting base for global terrorism. Their obvious ability to operate covertly is reduced and with the tribal origins, even the most radical muslims in West Africa are not salafists in their mindset.

The likelihood of any of these scenarios happening is closer to 0.01% than 1%.

Repatriation & Capital Entry/Exit

eGro's model is designed in a way where not a lot of infrastructure or capital is needed in the local market. The current strategy is to send only the amount of money that is needed to the Ghanaian subsidiary. This is to protect eGro from a sudden depreciation of the Ghanaian currency. The lack of significant resources on the ground in Ghana mitigates the risk in case of forced repatriation.

With that being said, the Ghanaian subsidiary was set up to help strengthen the ties and

eGro's foothold in Ghana. The subsidiary also allows for quicker and easier acquisition of licences which has proved useful.

Other than the bank transfer charges, there have been no issues with the movement of capital between Ghana and Denmark to this date.

Tax & Legislation

Tax

Income Tax which is applied for eGro's suppliers is included in a table below, the majority of farmers will be under the lowest bracket and will not pay income tax.

Residents

Individuals who are tax resident are taxed at the graduated rates with 25% being the highest marginal bracket. Below are the applicable graduated rates:

	Chargeable income (Annual)	**Rates**
	(GHC)	
First	2,592	Free
Next	1,296	5%
Next	1,812	10%
Next	33,180	17.5%
Exceeding	38,880	25%

eGro's Ghanaian subsidiary will be charged the national corporate tax rate of 25% and sales tax is 15% for all products.

Legislation

For each product that eGro farmers produce there is likely to be different certifications that need to be acquired. eGro's buyers will have great influence over this, as eGro is willing to produce crops which have been specifically requested.

When this becomes relevant, it will need to be handled appropriately. Some trade restrictions do prevent certain products from entering a certain market, but eGro's international buyers will help overcome some of the obstacles. For example, there is a current import ban on Ghanaian chili in the EU and the chili produced will be sold in North America.

Since Ghana is already an international exporter of goods and foods, regulations and our closest partner, supplier and adviser in Ghana is The Food & Vegetables Exporters Union, from where we source our nursery equipment. They will be our knowledge and network partner in insuring that we find the correct licenses and certifications in time for export.

H. Structure & Financing

Finance Structure

eGro is an LLC with active holding. It acts as the holding company and there is an established subsidiary in Ghana. The Ghanaian subsidiary is also a LLC. As mentioned in the previous section, the subsidiary was created for a multitude of advantages.

- The subsidiary provides the ability to give shares and local ownership to incentivize locals to work for their own business.
- To attract local money as part of investment opportunities
- Aids with the practice of doing business in Ghana when gaining certificates and memberships in export associations and so on.

The last injection of capital had the terms of a 20,000 DKK loan which converts to 0.4% ownership if not paid out. The date of the payment is currently being negotiated. This was with the valuation of eGro at 5,000,000 DKK. Current debt is 228,500 DKK. Leaving the debt to equity ratio being

Debt to Equity Ratio: $\frac{228{,}500}{5{,}000{,}000}$

Current Lenders

Throughout the organization's history, Jacob has been the primary lender of the organization. However, the overall increase in eGro's operations have created a greater need for capital. eGro is currently not considering any banks for lending. eGro's immediate network has provided lending options which have preferably terms to those provided by the banks. Listed below are the existing lenders to the company. The numbers provided are in DKK.

Existing Loans

Name	Amount	Year Received	Terms (Y/N)	Interest %	Interest Nominal	Repayment	Convertible (Y/N)	%
Ajlin	1,100	2016	N	0.00	0.00	-	N	0.00
Morten O	1,200	2016	N	0.00	0.00	-	N	0.00
Morten E	1,200	2016	N	0.00	0.00	-	N	0.00
Louise P	200,000	2016	Y	4.00	800	-	Y	0.40
Maxwell H	100,000	2017	Y	5.00	2,500	2,024	Y	2.00
Christian G	100,000	2017	Y	5.00	2,500	2,024	Y	2.00
Total	223500.00				5800.00			

More capital is required to continue with operations and for this we are using Lendino as the lending platform. Lendino is a Danish lending institution which offers more favourable rates than banks and loans of up to 5 million DKK can be acquired. The leasing price is 4,000 DKK and 1% interest. This loan will act as a short-term 12-month loan at 4% interest.

Currency Exchange

eGro's general currency exchange strategy is to hold as much of the finances as possible in its Danish bank. This helps provide security from potential inflation of the Ghanaian Cedi. When transferring money. Four different methods have been evaluated.

Western Union
Instant transfer, high transfer rates and expensive currency exchanges

Azimo
Transfer promised in a few hours. Realistically 36 hours. With a 1% risk of the transfer "getting stuck". No transfer rate. Expensive currency rate.

Danske Bank to local Ghana Bank
Promises 3 bank day delivery. We have experienced a 6 bank day delivery. Low Transfer rate on Danish side and good price on currency. However, a loss of currency on Ghana Bank end. Transfer price of 500 DKK for 19000 DKK

Danske Bank to Standard Chartered
Currency exchange rates are favourable but they charge a fixed transfer. This makes it for a favourable transfer method when transferring large amounts.

Operating Costs

Ghana is responsible for almost the entirety of eGro's operating costs. For the year of 2017 the anticipated operating costs were 115.000 DKK. Actual operating costs are 96,352 DKK.

VAT is not relevant to Ghana because the government has not applied it and there are no VAT shipping costs.

Financial Information

Due to the infancy of operations, eGro does not have the financial information desired. However, eGro has managed to secure 285,000 DKK of convertible loans and 6200 DKK with no terms. That amount of capital is going towards the pilot project in Ghana. This includes the support to the Ghana team and the buy-back program with the farmers.

I. Financial Analysis

Revenue

The sales forecasts have been determined by projections for the various crops which have been planted and with their expected yielding as well as the anticipated future crops. The projections are modest and could certainly be higher. The tables below show these projections for volume and then revenue projections.

CROP HARVEST FORECAST (Volume-kg)						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
CHILI	2,000	3,500	5,650	8,100	11,000	14,000
PEANUT	5,000	10,640	17,022	25,000	34,000	43,180
QUINOA	100	200	400	1600	1600	1600
MANGO	0	0	0	3000	5000	8000
CASHEW	0	0	0	45	90	135
LEMON	0	0	0	0	2,550	5,100
CARBON CREDITS	18,000	28,000	42,000	60,000	72,000	96,000

The two tables below show two scenarios, the first, selling at medium quality would be a strategy in which the products are sold to businesses with little to no value added elements to them. They would be packaged for bulk sales and the buyer would add value with their production. The second scenario, selling at extra high quality would be more of a value added strategy where the crops are harvested and packaged to be sold directly to consumers. If this scenario becomes a reality, it is possible that the crops are sold at even higher prices than the prices listed below.

Because the harvest occurs late in the year, the majority of the crops will not be sold until the following year. So the sales revenue numbers correspond with the crop harvest forecast from the previous year.

SALES FORECAST (DKK) SELLING AT MEDIUM QUALITY						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
CHILI	0	70,000	122,500	197,750	283,500	385,000
PEANUT	40,000	375,000	798,000	1,276,650	1,875,000	2,550,000
QUINOA	3,500	7,000	14,000	14,000	56,000	56,000
MANGO	0	0	0	0	60000	100,000
CASHEW	0	0	0	0	9,000	18,000
LEMON	0	0	0	0	0	51,000

CARBON CREDITS	0	28,000	42,000	60,000	72,000	96,000
TOTAL	**43,500**	**480,000**	**976,500**	**1,548,400**	**2,355,500**	**3,256,000**

SALES FORECAST (DKK) SELLING AT EXTRA HIGH QUALITY						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
CHILI	0	200,000	350,000	565,000	810,000	1,100,000
PEANUT	65,000	625,000	1,330,000	2,127,750	3,125,000	4,250,000
QUINOA	6,500	6,500	13,000	26,000	104,000	104,000
MANGO	0	0	0	0	120000	200,000
CASHEW	0	0	0	0	18,000	36,000
LEMON	0	0	0	0	0	76,500
CARBON CREDITS	0	28,000	42,000	60,000	72,000	96,000
TOTAL	**71,500**	**859,500**	**1,735,000**	**2,778,750**	**4,249,000**	**5,862,500**

OPEX & CAPEX

The OPEX and CAPEX are listed below. The numbers correspond with the anticipated increase in farms. More detailed tables can be found in the Appendix.

OPEX	**2017**	**2018**	**2019**	**2020**
Salaries	**71,160**	**109,250**	**136,350**	**76,350**
Land Rent	**30570**	**46800**	**57,800**	**101115**
Administration	**12794**	**14850**	**14850**	**14850**
Field Operations & Expenses	**11975**	**27,420**	**81,080**	**39,770**
Transportation	**23197**	**92685**	**89337**	**80537**
Shipping, Packaging & Labelling	**0**	**4,000**	**0**	**0**
Miscellaneous	**10,200**	**0**	**10,200**	**10,200**
Total	**159,896**	**295,005**	**389,617**	**322,822**

CAPEX	**2017**	**2018**	**2019**	**2020**
Land	**3,500**	**3500**	**3500**	**3500**
Buildings	**7,000**	**21,000**	**56,000**	**20,000**
Movables	**49,850**	**112,650**	**324,450**	**113,550**

Other	**3,230**	**1100**	**0**	**0**
Working Capital	**4,390**	**2,860**	**3,860**	**23,880**
Total CAPEX	**67,970**	**141110**	**387,810**	**160,930**

Balance Sheet				
	2017	**2018**	**2019**	**2020**
Total Assets	**539,500**	**1,100,000**	**1,759,400**	**2,502,000**
Fixed Assets	23,000	47500	107,000	66,500
Inventory & Receivables	466500	967500	1,552,400	2,310,500
Cash	50,000	85,000	100,000	125,000
Liabilities + Equity	**539,500**	**1,100,000**	**1,759,400**	**2,502,000**
Total Liabilities	**470800**	**514182**	**547,917**	**581,821**
Payables	232500	251300	267,882	284,535
Interest	5800.00	11582.00	12,153	12,752
Equity	**68,700**	**585,818**	**1,211,483**	**1,920,179**
Interest Bearing Debt	220000	235800.00	247382.00	259534.78

Budget Forecast

Finally we come to the budget forecast. The forecast is based on sales revenue numbers from selling the produce at medium quality because the OPEX and CAPEX have been calculated based on selling the crop varieties at medium quality. This is due to the fact that it was felt that a more accurate calculation could be performed with the medium quality strategy.

When looking at the table, it can be seen that the 2017-2019 will result in net losses through the period of rapid growth. This changes in 2020 once the entire operation has expanded 15 - fold. This is heightened by the fact that the tree fruits and nuts will start harvesting after a few years as well.

In DKK	**2017**	**2018**	**2019**	**2020**	**2021**
Profit & Loss					
Turnover	0	43,500	480,000	976,500	1,548,400
EBITDA	-236,934	-392,615	-297,427	492,748	
EBIT	-236,934	-392,615	-297,427	492,748	
Profit after Tax (22%)	-236,934	-392,615	-297,427	384,343	

Operating Cash Flow	-236,934	-392,615	-297,427	384,343	
Balance Sheet					
Fixed Assets	23,000	47,500	107,000	66,500	
Inventory & Receivables	43,500	492,000	998,500	1,584,400	
Cash	50,000	85,000	100,000	125,000	
Equity	-354,300	110,318	657,583	1,194,079	
Payables	232500	251300	267,882	284,535	
Interest bearing debt	220000	235800.00	247382.00	259534.78	
Key Figures					
EBITDA Margin	-	-9.03	-0.62	0.50	
Return on Equity	0.67	-3.56	-0.45	0.32	
Debt-Equity Ratio	-0.66	2.28	0.41	0.24	

J. Risks & Opportunities

Risk Factors

The main risks of eGro's operations are included in the table below. The table helps show the likelihood of the event and the severity of the event. Those in green do not represent great risks and those in red present more serious risks.

Probability %	**Rare 0-20**	Lack of farmers	Lack of land	Political Risk	Piracy & bandits	Plant disease
	Unlikely 20-40		Ebola & other diseases	Local financial risk	Lack of sales	Lack of funding
	Moderate 40-60		20-year event or poor soil quality	Poor seed variety		
	Likely 60-80			El nino	Lack of machines	Quality assurance
	Very Likely 80-100			Low digitalization	Social structures	
		Trivial 1	**Minor 2**	**Moderate 3**	**Major 4**	**Extreme 5**

Impact

The risks listed in the chart are almost exclusively project specific risks with operating in Ghana and future cooperating nations. The only listed risk relative to the head office is a lack of financing to continue operations. Financial risk represents the major challenge for eGro outside of Ghana. Other potential risks are more human capital related such as; a lack of cohesion between the eGro employees, eGro leadership and the board, and finding talented labour at below market prices.

Partner risk with the team in Ghana or Denmark?

SWOT Analysis

Below is a shortened SWOT Analysis, a more detailed one can be found in the Appendix.

Strengths	Weaknesses
• eGro's model has innovative ideas and advantages in the production process • eGro's practices are unique to the world and can provide a first-mover advantage • eGro has a balanced, professional, and well-mixed working team	• eGro is not a recognizable brand • The advantages of productivity, profits and environment of the eGro model are unproven • eGro is still in the learning phase regarding operating in a new country
Opportunities	**Threats**
• The concept of "carbon market" is becoming popular making it easier for eGro to get financing • The potential in organic food market is still great • The threats of climate change, increase the value of the eGro model • Climate and agricultural trends will provide expansion options into other countries	• Food & Import regulation of import and food will be a barrier for eGro • The market for organic food is competitive in developed countries • Climatic events could devastate supplier farms • Purchasing a poor variety of seeds which lead to low yields • Poor soil quality

Mitigation Techniques

A number of the risks presented do not require much work to mitigate but others have limiting mitigation factors. For example, the lack of farmers and land may be prevented by appropriate planning by eGro to understand the local environment and then adjust expectations or change current strategies to find farmers and land.

Ebola & Other Diseases
For ebola and other diseases there is little eGro can do other than help ensure that their workers are provided with proper hygiene to prevent their workers from getting sick.

Piracy & Bandits
Piracy and bandits are something that eGro has little control over other than to hire security. Because of the unlikely scenario, this is deemed an unnecessary cost at the moment. If conditions change, security may become a reality but not until then.

Plant Disease
eGro's partnerships with many farmers on many farms acts as a great mitigator for plant disease. The likelihood of a plant disease affecting significant operations is unlikely because of the distribution of farms. With organic operations there is not too much that can be done to prevent plant disease but if it does become a reality, it is likely that it will only impact a small percentage of the farms.

Lack of Funding
This is a foreseeable resource in the next few years during the establishment of eGro's operations. As the years go on, this need should start to weaken and eventually phase out to no risk at all. For the coming years, eGro is trying to find favourable loans and investments to help with operations. If initial efforts fail, eGro can then look to bank loans or other less favourable sources of capital.

Poor Seed Variety
Communication with local experts in the agriculture industry will be a valuable resource with the purchasing of proper seed varieties. An extent of this solution is going to be through trial and error.

20-Year Event & El Nino
eGro's agricultural practices also help provide some security in regards to the climactic events. A 20-year event or an El Nino year would both have negative impacts but a agri-forest is naturally more protected against such events. In the early years, the immature forests will be more susceptible to such events and there is little control eGro has in such situations.

Local Financial Risk
As mentioned already, eGro holds their finances in Denmark as opposed to Ghana to protect them from financial risk such as inflation of Ghanaian Cedi. Once eGro grows and has more

financial freedom, certain international insurances can be purchased to protect them against expatriation and other political risks.

Lack of Sales
Currently, the management team is working on constructing LOI's with a couple partners which should ensure the sale of the products. If the ongoing communication continues, eGro will develop the crops which the partners desire and this in turn should almost guarantee the sale of the crop to the partner who asked for it.

Social Structures
The social structures of Ghana could provide challenges for eGro. However, the eGro team in Denmark have made themselves adequately knowledgeable on the social structures to create an understanding which should inhibit such challenges from becoming a reality. Furthermore, eGro's team in Ghana can provide further insight into social structures to help the organization navigate through the local customs in a respectful manner which should prevent any conflict.

Quality Assurance
Quality assurance will largely be controlled from the management team in Ghana. Expected levels of growth will demand a growth in management or field officers to make sure regular check ups of the farms occur to prevent quality from being reduced. The Ghanaian management team will also have to properly plan to prevent a lack of machines from being a reality.

Low Digitalization
eGro has been using some of its resources to adequately equip the Ghana team with the technology needed to get the job done. This is likely the most realistic solution to this threat.

Lack of Machines
Now the farmers operate with very low levels of equipment and heavy machinery is not present. As operations expand, a need for more machines is likely to increase. An increase in funding and revenue should help solve this problem but a lack of supply is certainly a possibility. When this becomes a reality, building up a local supplier value chain, with our expertise is the favoured method of securing that we integrate into the local skills

Mitigation answers need:

1. Any potential in p

Must-Win Battles

1. **A Successful Peanut Harvest-** A few key factors come into play with the peanut factors and the yield percentages will grow immensely if each is achieved.
    a. **Finding the right seeds**- As already stated, two variations of seeds were planted and one had terrific results while the other did not. If eGro can source the proper seeds an increase in yield of 400% can be achieved.

b. **Proper ploughing and field size**- If the preparatory work is executed effectively, another increase in yield will be present at approximately 100%.
c. **Double Harvest**- There is an opportunity in the Ghanaian climate which should allow for two growing seasons of peanuts with their two wet seasons. The wet season is 180 days and it only takes a peanut 70 to mature. So, it is seen as very possible. Capitalizing on a double harvest of peanuts will be extremely impactful to the financial well being of eGro as their would be another 100% harvest increase.

2. **Improve the Financial Well Being of eGro's Farmers**- If the financial well being of the farmers is increased they will continue to work with eGro. If their conditions do not improve there is less incentive to work with eGro. The farmers are integral to the operations of the organization and their cooperation is necessary for eGro's existence. The success of the farmers will also be seen in their respective communities which will promote the adoption rates of other farmers.
3. **Establish Sales Channels**- The current development of sales channels will greatly promote the short and long-term success of the organization. Having reliable partners will act as the major source of revenue but could also help dictate the crop varieties which are produced. Establishing an international sales network will also help mitigate trade risk and promote the brand in different major markets.

K. APPENDIX

Article 1: Vision, Mission & Strategic Goals

Vision: *"Our vision is a sustainable mankind"*

We believe that in a distant future humankind has the ability to develop and become the shepherd of stability on this planet.

Mission Statement: *"to stabilize the earth's climate."*

One company alone can not achieve this, but by being the first to prove the financial viability of benign food production models, it has the ability to inspire others to do the same as us. If we succeed in making and proving that agroforestry is more profitable and more productive in total volume of food and water produced than conventional agriculture, we humbly do believe that generations to come can be safe, both locally and globally, even from extreme weather and climate changes.

eGro is the first company to commercially use an ecosystem design to strategically secure the supply chain of the food industry. By building ecosystem designed forests for profit we sequester vast amounts of carbon to offset carbon emissions from industry and conventional food production, as well as filter clean water into the deeper aquifers. Even drylands and deserts that were previously non-arable and unproductive will in a few generations be lush and green all over the planet, making money and creating jobs for people in these countries.

Overall Goals and Objectives

The overall objective of eGro is to develop a feasible and profitable agroforestry model for future global businesses and securing existing supply chains. That will ensure food production and create the basis for economic security in the world. Using the model it will eventually create environmental and climatic stability as well.

Strategic Goals

Below are a list of short and long-term strategic objectives. These objectives can be achieved by using our eGro model in a “business as usual” fashion, just keeping focus on building agroforestry products and bringing them to the global market.

Short-term Strategic Goals:

- Make more money than conventional agriculture
- Remediate poor soils and sequester carbon
- Have a safer harvest with higher yields
- Lift people out of poverty

Long-term Strategic Goals:

- Be more reliable suppliers than competitive suppliers
- Create secure jobs in rural areas, blocking rural-urban drift
- Sequester carbon on a mass scale
- Create food security in developing countries
- Replenish aquifers that have run dry caused by use of irresponsible irrigation systems during the green revolution

Article 2: Farmer Selection and Implementation

With eGro´s 1-acre model for Sub-Saharan Africa we have success with engaging subsistence farmers to become new market producers. We educate them with public evening cinema in their own communities, using digital media videos, cartoons, animations of agriculture and do daylight training in the fields they have designated as eGro´s community demonstration sites.

We are facilitated by local governmental extension officers in finding the most innovative communities with the strongest leadership. Those that are selected are the ones who have a high probability of becoming successful suppliers of western industry.

With these methods we have created 15 single farms and 4 demonstration sites in the course of half a rain season from July to September 2016 . Local experts aided eGro in the entrance of the market by using appropriate local protocols.

These three methods when combined ensure that eGro can scale operations in the future. We approximate a success rate of 25%, in which one in every four farmers that enters our training will be able to live up to our criteria within the first year. One of the three villages we have engaged with is currently performing according to our expectations, while one is failing

due to difficult sandy soil and one is less communicative in providing measurements. With 15 farmers each owning a 1-acre farm, and just as many following the training, there is potential for expansion to three times as many fields.

A fourth community is providing reserve seedling from a prepared nursery, built by local farmers of the community. It also has a functional and productive demonstration site.

At the beginning of 2017 we replicated our entrance model in 5 more clusters of communities, totally in 8 villages and 55 1-acre farms in production for the harvest season of November 2017. The final decision has yet to be made, but 2018 will see an increase to 110-180 acres farmed by 70-110 farmers.

Article 3: Porter's Five Forces Analysis of the Canadian Grocery Market

Bargaining Power of Suppliers

1. **Level of suppliers** [JS1] **–** The level of supply is high considering that eGro believes it can grow more than two-fold on an annual basis (high) (weak force). Moreover, eGro's model is flexible and adaptable to each country. It is designed differently for each part of the world and, in finding a suitable country, the team considers a co-dependent complexity where all the criteria must be met to have a high likelihood of success with their business model.
2. **Size of individual suppliers –** The size is small in comparison to large Western world farmers (small) (weak force), as it is still considered a start-up and looking to partner with an already established company in North America.
3. **Number of suppliers –** The number of farmers/land is high (high) (weak force) and the eGro model we are presenting will be driven forward by global consumerism, and thus have a global impact. The model will have a potential to fully transform all infertile and dry lands into productive and useful ones.

Therefore, the fact that all three of these sections suggest weak forces would indicate that the bargaining power of suppliers is a weak force for eGro.

Bargaining Power of Buyers

1. **Switching costs (medium-high) (medium-strong force)**
   a. **Grocery Stores (high) (strong force)** – In a few of the responses we have received back from potential partners and companies, the issue/ requirement of

an exclusivity agreement was brought to light. Therefore, we think that switching costs may be very high in the largest most established stores, whereas smaller places will have lower switching costs.

b. **Restaurants (medium) (medium force)** – Many restaurants have one supplier who supplies all their food products. Examples include Gordon Food Services and Sysco. This makes it so the restaurants have limited options in what they can choose for products. The restaurants with these agreements could only make a change by getting other restaurants on board for a certain product, which would put pressure on their supplier to then start buying the suggested item. Not all restaurants have these agreements and these would have lower switching costs.

c. **Food Importers (medium) (medium force)** – This type of suppliers has an added advantage of conducting market research and getting companies on board with their products prior to making orders from their source. Moreover, food importers attract and maintain exclusivity agreements with both grocery stores and restaurants in that they supply more than one product to the retailer, allowing all eggs to come from the same basket as a means of ease and payment tracking purposes.

2. **Quality of information (medium-high) (strong force)**

a. **Grocery Stores** – This type of stores always has readily available information for customers to learn about and understand the product they are purchasing. Especially now that most people are calorie and health concerned, substitute products and variations are accessible to those who are seeking. In addition, food and fresh products are produced with environmental trends and sustainability kept in mind.

b. **Restaurants** – Apart from first-hand information provided by the chef or servers with regards to genetically modified products or allergens, there is not much access to information about makeup and structure of products. Moreover, in the smaller food stands and fast food restaurants, the only additional information available to customers is how many calories each product purchased contains, which doesn't really serve our purpose, as we are looking to source an already end-product as compared to a small element of something to be made up.

c. **Food Importers** – Prior to an exclusivity agreement signed between the producer and the retailer, information in the form of brochures and websites are available for the retailer to peruse and select the products they want to be imported and in what quantities and packaging. In our scenario, other than a few samples being available, we do not have a concrete list of the types of products eGro intends on selling to the North American market and what products are in the works to being harvested, other than chilies. This makes it hard to convince a partner to come onboard without substantial information or a website of products.

3. **Volume of individual purchases (high) (strong** [JS2] **force) –** Because eGro is small, it will not require a large purchase to be a significant one for the organization. Hence, a high number of purchases become high volume purchases in a relative sense and allow for easier importation and distribution. This could be easier as well, if retailers have one specific place to go to and the products be collected/cleared through customs.

When looking at all categories, one can see that this is a strong force that eGro must cooperate with. It will be difficult with too much influence when negotiating with the types of buyers. We should indicate that this would depend on the type of buyer. A food importer is likely to represent a weaker force with bargaining power than a large grocery store chain.

Threat of Substitutes

1. **Availability of substitute products (high) (strong force) –** There are a lot of products available that are similar in competition but also the cheaper, more traditional products present a threat of substitution. In addition, eGro will have to create a product that would stand out. We intend on selling the fact that their environmentally sustainable model and packaging will be the differentiating factor, but also the story behind their harvest: *"It not only creates jobs and wealth, it also empowers farmers. It allows rural people to dream of their daughters becoming doctors"* (Vahr, 2016) will show our partners that there is more to eGro than just sales and profits.

1. **Switching costs (medium) (medium force) –** Switching costs for the consumer are very low, whereas for the retailer they are higher. In the case of Whole Foods or similar stores, switching to more traditional products is unlikely. In contrast, more traditional grocery retailers may be more inclined to start increasing more sustainable

products. With regards to restaurants, it depends on the product at hand and the restaurant image. In the case of chilies, it is likely that switching costs would be low.

1. **Cost of substitutes (lower) (strong force) –** The cost of substitutes is typically low considering eGro is a mid-high priced product, and there are a lot of variations and options accessible to consumers in the market.

The threat of substitutes represents a strong force due to the cheap costs and readily available products that are less sustainable and socially responsible while being mass produced. Industry trends may favor eGro as consumers are becoming more aware of what they purchase.

Threat of New Entrants

New suppliers, in this case, are anyone packaging products spices that are available for consumption. We could also look at this as a broader spectrum because they will have more products in the future.

1. **Ease of doing business (not that easy) (weak-medium force)** – This process has proven hard so far, as companies have already established relationships with wholesalers and are skeptical about trusting and relying on a small upcoming business from outside of North America, such as eGro. This also has the added implication of quality standards (despite making samples available for testing), import taxes and other government regulations.
2. **Switching costs (medium-high) (weak-medium force)** – Switching costs would be low for the consumer but switching costs for a retailer would be higher, and as a result, switching to more traditional products is unlikely. Grocery retailers would be more inclined to start increasing their sustainable products. In the case of chilies, it is likely that switching costs would be low.
3. **Cost of doing business (medium) (medium force)** – We think this will have an impact in terms of packaging, space and manpower. However, as of yet, there are no huge capital costs to get initiated. eGro will be looking to sell their product to one or two companies, but will not set up an office in North America, unless business were to pick up significantly.

The troubles finding buyers and realizing the exclusivity agreements in the market has determined that entering the market may not be that easy and repelling to new suppliers. This is determined as a medium force.

Industry Rivalry

1. **Number of firms (high) (strong force)** – This has had a huge impact and effect on us approaching businesses to partner with, as no one is willing to bet on an upcoming start-up just yet. However, we think it is understandable, as they compete against themselves for retail sales with the large food chains. Annex Business put it best when they said, *"While small outlets are the target location for ethnic produce only farmers able to ensure a consistent supply of quality product will be selected"* (AG Annex, n.d.). However, we also considered that the barriers to entry in the food industry are not as high, as even small shop owners are competing in this segment and it is not due to lack of large capital or expertise.
2. **Aggressiveness of firms (high) (strong force)** – "*Competitive rivalry is extremely strong in the organic and natural food industry. More companies are entering into and expanding their presence in the organic and natural food business due to customer inclinations toward fresh and organic products"* (Bells, 2015). We agree with what Bells research, as consumers have become more health conscious and inclined to consuming more environmentally friendly products, with greater natural additives and calorie counters.
3. **Switching costs (medium-high) (medium-strong force)** – Switching costs would be low for the consumer but higher for the retailer, as supermarkets use promotions and sales marketing, which allows them to differentiate themselves and attract customers. Moreover, competitive and smart pricing allows restaurants and groceries stores to utilize a yo-yo effect on the customers to their advantage, as they keep adjusting to market trends and variations.

These three strong forces make up an even stronger force for industry rivalry, as trends are constantly changing and consumers' tastes and preferences are now more inclined towards being health-conscious and environmentally friendly. Moreover, with many more and larger wholesalers and producers entering the food industry, it makes it harder for smaller firms to establish and maintain themselves, while at the same time trying to form partnerships.

Article 4: eGro Ghanaian Staff Information

Ghana Staff Sheet

https://docs.google.com/spreadsheets/d/1YAaftFB56SenSbIMPTTwNBW9YDdlfUjAmMLvwFx86gE/edit#gid=869948669

Ghana Staff Roles

https://docs.google.com/document/d/1S2Act752O33P2u0usA2CKlMj3rbsOK7YWC6oaQ_88ps/edit#heading=h.qf253qw5ksfb

Article 5: Ghanaian Agriculture Climate

When entering a country we evaluate how much importance is given to the development of our sector. The Ministry of Food and Agriculture is well established with highly educated extension officers in all zones of the country, providing agronomic knowledge extension services for all farmers.

We have had success with building good relationships to the local extension officers and the local director of MOFA in the region. Two of their local extension officers have facilitated contact to local innovative communities where their best farmers were identified as our potential producers. These agronomists are educated in conventional mechanised and chemical monoculture practices. These practices are those promoted by MOFA, funded in programmes by The World Bank and IMF, the same methods that have led to deforestation and climate changes. The opposite of eGro's methodology.

In Ghana during the Green Revolution social state farm programmes were run to provide the people with cereals and grains such as maize, which is now a staple food in their local fufu. These were large scale high intensity farms, irrigated and mechanised. These state farms no longer exist. Most farmers continue to grow inferior varieties of maize, incapable of getting a good yield from the poor soils. This is partly due to the fact that maintenance practices have fallen in quality within mechanised agriculture, once it became every man's practice.

During the Green Revolution fields were plowed in opposite directions and then harrowed. Today the general practice is to plow in a single direction on contour to the landscape with an inferior locally produced disc plow. No harrowing is used. Poorly maintained tractors are prone to breaking down. To this day the local tractor owners and operators are the ones educated as agronomists and employed by the MOFA as extension officers, serving a dubious dual role of both public sector advisors and private suppliers of land cultivation services to the farmers.

The former UN Secretary General was urging the communities on the local TV3 news channel that more focus should be put on agricultural development. His message is not the only one. The forum for agricultural producers also got in the news in August promoting this agenda. Nonetheless, little efforts are given to shift governmental strategic focus to agriculture. Most is shifting towards oil, gas and minerals.

For eGro such a strategic shift towards more agricultural development and less focus on the service sector or manufacturing would seem like a great idea. Nonetheless, with more funds available for the MOFA, this would create an increase in their non-sustainable practices and begin to compete with our forest benefitting methods in that they are promoting conventional agricultural using fertilizer and pesticides on highly mechanised monoculture crops.

For eGro, these methods if used by our own farmers or by neighbouring farms, would devastate the biodiversity of fungi, insects and bacteria and collapse the ecosystem. Further subsidized schemes by government or NGO initiatives would also undermine our long-term efforts to change the mentality back towards sustainable forestry because it would incentivize our farmers to use these subsidized methods on their farms. We found that a poor functioning conventional agricultural sector was actually to our benefit, against all logic.

As long as the status quo,or the agricultural sector becomes less important on the national budgets (currently only 0,12 %) we can continue to operate with success in Ghana. Too many resources (towards 1-2%) dedicated to the MOFA and its current modus operandi would not be beneficial for either eGro, the farmers or Ghana's national economy as a whole. Emptying of soil and water resources, increasing deforestation and exposing the farmers to extreme weather phenomenons and ecological collapse are all consequences of further government involvement.

The subsidies from foreign donor nations or the World Bank, to increase spending on the management of the Ghana public sector services is unlikely to increase. In fact the tendency is that more initiatives are being funded in the private sector, and less is being given to the public sector. Even the development organisations such as UKaid are now shifting towards building entrepreneurial incubation and acceleration programmes that support private sector growth.

This increase in the national budgets would only happen if Ghana finds a methods taxate the labour force, or their natural resources such as oil, gas and other minerals currently exported to the global market.

Article 6: Relevant Legislative Bodies

The EU & Nordic Countries
Ghana is one of the countries that falls under the EU-ACP partnership. Therefore, they have simplified access to the EU market without tariffs. Only VAT is applicable on the importing country. In the case of Denmark it is 25%.

In 2016, the Ghana-EU Interim Economic Partnership Agreement was signed. The agreement has similar goals to the EU-ACP partnership. It promotes the development of Ghana and trade between the two parties by decreasing trade barriers and simplifying the process.

Canada & The US
Ghanaian imports of food products fall under the Most Favoured Nation Tariff in Canada and the United States. Making it so there is no applied tariff rate in Canada. The US charges a VAT rate of 17.5% or 3% for smaller scale organizations.

Article 7: Extensive Financial Tables

3.1- Extended OPEX

OPEX	2017	2018	2019	2020
Salaries	**71,160**	**109,250**	**136,350**	**76,350**
Copenhagen Staff	6,000	31,900	60,000	

Ghana Staff	48,910	50,400	50,400	50,400
Field Officer	12,890	15,030	15,030	15,030
Field Officer Bonus	1,000	1,000	6,720	6,720
Nursery Caretaker	2,360	6,720	4,200	4,200
Research Assistant	1,625	4,200	1,680	1,680
Poly tunnel caretaker	140	1,680	5,400	5,400
Land Rent	**30570**	**46800**	**57,800**	**101115**
Kopenhagen Office	25,705	42,060	53,060	96,000
Leasing Storage	125	0	0	375
Rental Room Sang	600	600	600	600
Training Centre	4140	4140	4140	4140
Administration	**12794**	**14850**	**14850**	**14850**
Domain Name	300	300	300	300
Hosting Expenses	150	150	150	150
Communication	7,652	9,870	9,870	9,870
Office Supplies		450	450	450
Statitionary	1020	1,020	1,020	1,020
Internet	3672	2,100	2,100	2,100
Business Insurance	0	960	960	960
Field Operations & Expenses	**11975**	**27,420**	**81,080**	**39,770**
Equipment Rental	0	0	6,000	6,000
Tape Measure	510	0	510	510
Gloves	850	0	915	915
Raincoat	765	0	2,295	2,295
Boots	510	0	0	1,530
Ploughing	7,140	21,420	64,260	21,420
Village Entrance	200	0	100	100
Documentation Video	2,000	6,000	7,000	7,000
Transportation	**23197**	**92685**	**89337**	**80537**
Bicycles	2,752	0	8,052	8,052
Motorbike Maintenance	1,530	2,520	2,520	2,520
Fuel	9,415	5,400	5,400	5,400
Business Transport	1,500	2250	750	750
Trucks Lease	300	4,200	6,000	4,200
Seedlings Transport	5,100	15,300	0	15,300
Construction Transport	2,000	2000	2000	2000
Wagon Rental	600	1,800	5,400	1,800
Travel	0	10,515	10,515	25,515
Import Tariff	0	33,700	33,700	0

Emergency Travel	0	15,000	15,000	15,000
Shipping, Packaging & Labelling	**0**	**4,000**	**0**	**0**
Shipping	**0**	**4,000**	**0**	**0**
Packaging & Labelling	**0**	**0**	**0**	**0**
Miscellaneous	**10,200**	**0**	**10,200**	**10,200**
Total	**159,896**	**295,005**	**389,617**	**322,822**

3.2- Extended CAPEX

CAPEX	2017	2018	2019	2020
Land	**3,500**	**3500**	**3500**	**3500**
Purchased Land	3,500	3500	3500	3500
Buildings	**7,000**	**21,000**	**56,000**	**20,000**
Fencing	1,000	3,000	2,000	2,000
Poly Tunnel	6,000	18,000	54,000	18,000
Movables	**#REF!**	**#REF!**	**#REF!**	**#REF!**
Cashew	7,750	23,250	69,750	23,250
Mango	5,050	15,150	45,450	15,150
Lemon	5,050	15,150	45,450	15,150
Acacia	5,050	15,150	45,450	15,150
Neem 1 Full Bag	400	1,200	3,600	1,200
Peanuts	24,000	36,000	108,000	36,000
Chilis	2,550	6,750	6,750	7,650
Buyback	#REF!	#REF!	#REF!	#REF!
Other	**3,230**	**1100**	**0**	**0**
eGro Ghana	3,230	0	0	0
Export Licensing	0	500	0	0
Association Licensing	0	600	0	0
Working Capital	**4,390**	**2,860**	**3,860**	**23,880**
Transfer Cost	2,190	2,400	2,400	2,400
Bank Charges	1,000	0	1,000	1,000
Interest	400	400	400	20000
Mastercard	0	60	60	480
Other Financial Fees	800	0	0	0
Total CAPEX	**#REF!**	**#REF!**	**#REF!**	**#REF!**

3.3 - Extended Balance Sheet

Balance Sheet				
	2017	**2018**	**2019**	**2020**
Total Assets	**539,500**	**1,100,000**	**1,759,400**	**2,502,000**
Fixed Assets	23,000	47500	107,000	66,500
-Land	3,500	7,000	10,500	14,000
-Buildings	7,000	28,000	84,000	40,000
-Machinery	10,000	10,000	10,000	10,000
-Trees	2,500	2,500	2,500	2,500
Inventory & Receivables	466500	967500	1,552,400	2,310,500
-Accounts Receivable	0	12,000	22,000	36,000
-Inventory (seeds, unsold product)	466,500	955,500	1,530,400	2,274,500
Cash	50,000	85,000	100,000	125,000
Liabilities + Equity	**539,500**	**1,100,000**	**1,759,400**	**2,502,000**
Total Liabilities	**470800**	**514182**	**547,917**	**581,821**
Payables	232500	251300	267,882	284,535
-Accounts Payable	9,000	12,000	17,000	21,500
-Long-term debt	223500.00	239300.00	250,882	263,035
Interest	5800.00	11582.00	12,153	12,752
Equity	**68,700**	**585,818**	**1,211,483**	**1,920,179**
Interest Bearing Debt	220000	235800.00	247382.00	259534.78

Article 8: Extended SWOT Analysis

Strengths

- The eGro model has innovative ideas and advantages in the production process
- eGro's practices are unique to the world and can provide a first-mover advantage
- eGro builds strong bonds with local entrepreneurs, farmers and communities Collaboration can create scale of economies
- eGro has a balanced, professional, and well-mixed working team.
- Ghana, as the first place of operations, is peaceful and positive for future growth opportunities

Weaknesses

- The history of eGro is not long. Its development might be restricted due to its relatively small scale.

- Marketing and promotion will be limited because eGro's brand is not currently recognizable
- The advantages of productivity, profits and environment of the eGro model are unproven
- The first harvest turned out weak, showing that eGro is still in the learning phase regarding operating in a new country.

Opportunities

- The concept of "carbon market" is becoming popular. It is easier for a company like eGro to get financing from outside sources
- The potential in the organic food market is still great, especially in emerging markets. People are increasingly caring about their health and the source of their food.
- Ghana is a place with innovative and enterprising communities. Entrepreneurs in Ghana are willing to bring new ideas into reality.
- With the threats of climate change growing, the value of the eGro model will rise because of its superiority in preserving soil and water.
- Current climate and agricultural trends will provide for more potential farms and farmers in other developing countries
- eGro's story is unique, creating an opportunity for differentiation and excellent branding in the consumer market

Threats

- The attitude of the public towards the eGro model is still unknown
- eGro needs to transport the food produced in Ghana to other parts of the world.
- Regulation of import and food will be a barrier for eGro. EU regulation currently challenges for imports into the market
- The market for organic food is competitive in developed countries
- Climatic events could devastate supplier farms impacting total yields and therefore potential sales volume
- Purchasing a poor variety of seeds which lead to low yields
- Poor soil quality
- Lack of farmer participation

The end:

eGro´s business plan was adopted from Cole Caswell´s MIB (Queens College) in 2017 and has since become eGro´s corner-stone.

This business plan applies only for the business activities eGro will undertake in the next 5 years in Ghana through eGro´s subsidiary eGro Ghana, as the provider and it is based on our previous operations in Ghana.

It does not encompass the holding companies strategy to expand outside Ghana.

With Thank for editing by;
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