2020

INVESTMENT PLAN FOR SPICE, PEPPER AND TEAK PLANTATION

[U$D=TZS 2,280/- |

Prepared by F.A ltd. +255687273333

INTERNATIONAL CENTRER FOR SUSTAINABLE INVESTMETS (ICSI) GROUP LTD

30-Nov-20

INVESTMENT PLAN FOR SPICE, PEPPER AND TEAK PLANTATION

IN FAVOUR OF

INTERNATIONAL CENTRER FOR SUSTAINABLE INVESTMETS (ICSI) GROUP LTD

OF

ICSI GROUP LTD
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September 2020

Ref. +255 687 273 333
U$D=TZS 2,280/-

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EXECUTIVE SUMMARY

ICSI Group Ltd established 2020 as the subsidy of Forestry Holding AG in Switzerland. The company was established under the companies Act Cap 212 of the year 2002 with the registration BRELA 141423827, Business licence number B-03350283 and TIN 141-423-827 with effect from 02nd of April 2020. The major objective of the of ICSI Group Ltd is the development and implementation of sustainable investments in order to eradicate poverty, hunger and climate change through agroforestry, Social and Economic empowerment approaches.

ICSI Group Ltd established 2020 as the subsidy of Forestry Holding AG in Switzerland founders has broadly experience in agroforestry farming and Social & Economic empowerment approaches that will increase Tanzania economic stability and improve the management of the of the natural resources under the ICSI Group Ltd care.

Agroforestry farming involves combining a teak trees planting with another enterprise such as spices (Peeper, Ginger, Gallic etc.) farming or managing woodland for the diversity of special forest products. At the same time the trees are sheltering livestock from wind or sun, providing wildlife habitat, controlling soil erosion and in the of the most leguminous species fixing nitrogen to improve soil fertility.

ICSI Group Ltd has headquartered in Nyandira Street, Block 315 in Morogoro District in Morogoro region. ICSI Group Ltd has acquire land of about 150ha for establish a spice farm(Ericson Peeper-150) situated in Morogoro, 600 ha for establish a teak plantation(Taj Mohammed-Teak-600Ha) situated in Morogoro.350 ha for teak trees farming with the maturity of 2 years old planted situated in Korogwe District(Korogwe Teak-350) in Tanga region, Kiroka teak farm with 100ha (Kiroka Teak-100ha), Kiroka Pepper farm with 150 ha(Kiroka Peeper-150), 40 ha for Pepper plantation(Kinole Pepper-40ha) with maturity age of 2 years old situated in in Morogoro region.

The ICSI Group Ltd main object is to invest in agroforestry farming and Social & Economic empowerment activities in the Morogoro region and Tanga region both in Tanzania by employing various environmentally friendly systems and traditional practices in its operations.

The ICSI Group Ltd is a registered Company; hence operates according to the company laws. (See attachment).The management of The ICSI Group Ltd is led by the board of directors. The project itself is under farm manager who is assisted by farm attendants and accountants. Farm manager will help the board of directors in the in the day to day activities. Government extension officers will be assisting in capacity building and follow up to the fields to know the status of the fields; this will be done together with the farm attendants. The ICSI Group Ltd team has attended various training within and outside the country

The financial analysis indicates that, the investment is financially viable with a Positive NPV of TZS 13170106500/= or USD 5776363 and negative value of the net profit at the initial five years stage of investment set up and

system installations but the investment will start show the slightly net profit at the six years of investment and incremental net profit as the investment prosper up the twenty years of the investment where the teak plantation as the major crop will begin harvest. Therefore this shows that it is viable for the ICSI Group Ltd to continue with investment. It is therefore recommended that investment will bring more social and economic impact for this reason the investors call for timely considerably for permit to initiate the investment as this type of investment depends highly on seasonality

1. INTRODUCTION

1.1. Profile of the ICSI Group Ltd

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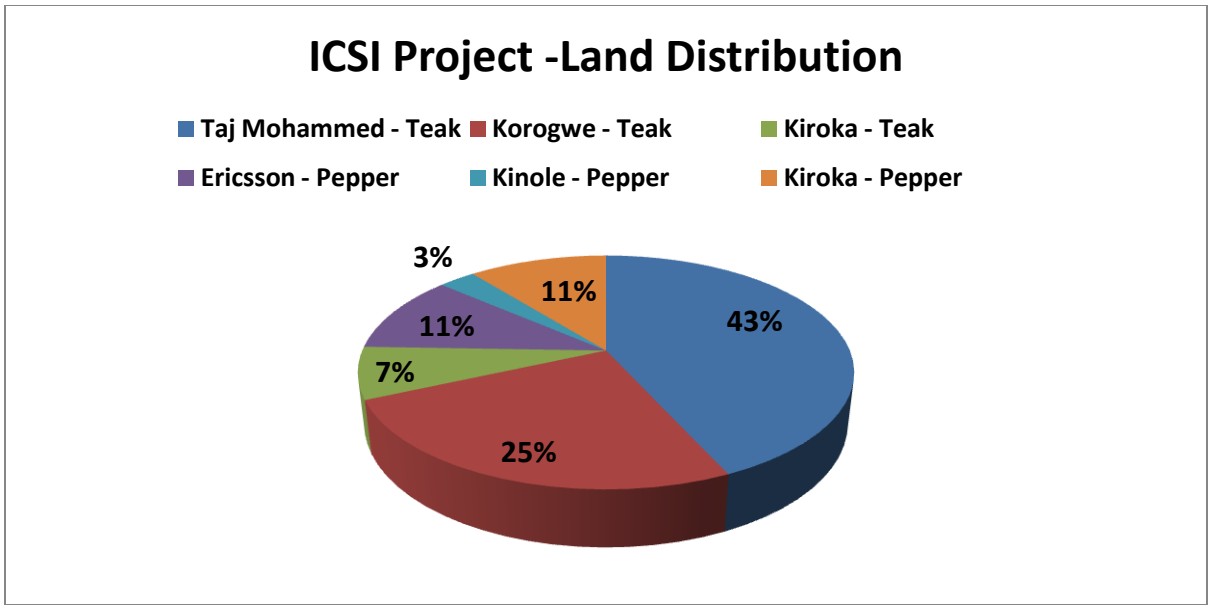


MISSION AND GOALS

Mission Statement

ICSI Group Ltd.'s mission is to become a leading agroforestry farming business in Tanzania producing high quality agroforestry product for markets in Tanzania and beyond the borders, using best practices and technology to produce high quality agroforestry produces at internationally competitive costs that enable profitable supply to our markets.

Goals

ICSI Group Ltd in the short-term range of one year has the following goals:

1. Commerce agroforestry operations at the 300 hectares farms in Morogoro and excel to Tanga region.

The company has the following long-term goals:

1. Employ agro forestry technologies that provide agroforestry produce yields above the national average.
2. Identify the best human resources available and provide annual training.
3. To become a leading agro forestry farming investment in Tanzania producing high quality spices and agro forestry product for markets in Tanzania and beyond the borders, using best practices and technology to produce high quality spices and agro forestry produces at internationally competitive costs that enable profitable supply to our markets
4. To become the impactful and sustainable agro forestry investment in Tanzania through Environmental conservation, Social & Economic

empowerment activities by employing various environmentally friendly systems and traditional practices in its operations.

Company's Assets
The company owns the following assets that are directly related to the investment includes 1390 Ha of land at Morogoro and Tanga region, one (1) Land cruiser Toyota Prado valued at TZS 45,000,000/-,(USD 20,455),Two(2) out Massey Ferguson tractors each valued at TZS 85million(USD 38,636) and office building and laboratory valued TZS 75 million(USD 34,090).

1.2. Present Management

The ICSI Group Ltd is a registered Company; hence operates according to the company laws. (See attachment).The management of The ICSI Group Ltd is led by the board of directors. The project itself is under farm manager who is assisted by farm attendants and accountants. Farm manager will help the board of directors in the in the day to day activities. Government extension officers will be assisting in capacity building and follow up to the fields to know the status of the fields; this will be done together with the farm attendants. The ICSI Group Ltd team has attended various training within and outside the country.

1.3. Past Financial Performance
The ICSI Group Ltd keeps proper accounts and records, which will be audited by B.P Consultant, Certified Public Accountants in Public Practice of P.O Box 2110, Morogoro. The summary of the past income and expenditure statement is shown in Bank statement only for the CRDB Account which commenced 04th September 2020. It should be noted that, the accounts provided here also reflect the ICSI Group currently balance, Meanwhile the ICSI Group Ltd has not yet initiate any farming activities.

1.4. Legal Status

The ICSI Group Ltd has all the necessary licenses to operate the business, (see detailed in attachments.)

- Director's CV
- Title deeds
- Business license number (B-03350283)
- TIN Number (TIN 141-423-827)
- Bank statements
- Memorandum and Article of Association

1.5. Security owned by ICSI Group.

The company owns the following assets that are directly related to the investment includes 300 Ha of land at Morogoro district, one (1) Land cruiser Toyota Prado valued at TZS 45,000,000/-(USD 20,455),Ten (2) out Massey Ferguson tractors each valued at TZS 85million(USD 38,636), and office building and laboratory valued TZS 75 million(USD 34,090).

1.6. Project Objective/Purpose of the Investment.

The ICSI Group Ltd main object is to invest in agroforestry farming and Social & Economic empowerment activities in the Morogoro region and Tanga region both in Tanzania by employing various environmentally friendly systems and traditional practices in its operations.

1.7. Investment Financing, Loan History and relation with Banks

The Investment will be financed from the own fund from ICSI Group Ltd contribution and the additional external funding from the Forestry Holding AG in Switzerland.

The ICSI Group Ltd has Bank relations with CRDB Bank with CRDB Account number 0150496460500 and, has been enjoying bank services since 04th of September 2020.

Currently the ICSI Group Ltd has no any financial obligation from any bank.

2. ECONOMIC ASPECT

2.1. Investment Contribution to the ICSI Group Ltd

The investment to be undertaken will provide to the ICSI Group Ltd a negative value of the net profit at the initial five years stage of investment set up and system installations but the investment will start show the slightly net profit at the six years of investment and incremental net profit as the investment thrive up the twenty years of the investment where the teak plantation as the major crop will begin harvest (Annex 9).

2.2. Employment Creation

The business will provide employment opportunities to 8 people (field attendants) and to a number of casual labourers for carrying different associated farming activities. An income of approximately TZS 14,364,000/- (USD 6,300) will be flowing to the employed persons, Annex 3.

2.3. Government Revenue

The investment will begin by make losses as the investment will be on the initial stages of investment by constructing the investment infrastructures, systems and set up. The government will receive additional revenue in the form of Marketing fees and social spending to the tune of TZ 183,255,000/- (USD 80,375) in the 20th year of Teak Harvesting. (Annex 9).

2.4. Overall Contribution to the Economy

The total incremental gross return is estimated to contribute to the economy to the tune of USD 80375 or TZS 183,255,000/- at harvesting period. (Annex 5)

3. TECHNICAL ASPECTS

3.1. Location and Description of the Investment

ICSI Group Ltd has situated at Nyandira Street, Block 315 in Morogoro District in Morogoro region. ICSI Group Ltd has acquire land of about 150ha for establish a spice farm situated in Morogoro, 650 ha for establish a teak plantation situated in Morogoro.70 ha for teak trees farming with the maturity of 2 years old planted situated in Korogwe District in Tanga region, 40 ha for Pepper plantation with maturity age of 2 years old situated in Kinore district in Morogoro region.

SPICES SUB SECTOR ANALYSIS

At the global level, production of spices is estimated to be 6,000,000 tons of which more than 2/3 is consumed at origin (captive use). Between 1995 and 1999, Tanzania ranked third by exporting 5% of LDCs' total spice exports. During that period, spice crops marketing and export was conducted by the General Agricultural Foods Exporting Company (GAPEX). Since 2000s, after the company was dissolved, Tanzania's share in the global spice trade was only 0.36% and it is estimated to have dropped further. A wide range of spice crops are cultivated in URT due to the existence of favourable climate and soil conditions. The most important spice crops produced for the local and export markets are clove, pepper, chillies, cinnamon, cardamom, ginger, coriander, vanilla, garlic, lemongrass and red onions. In mainland Tanzania; Clove, pepper, cardamom and cinnamon are mainly produced in the Tanga, Morogoro and Mbeya regions. Zanzibar and Pemba are the main areas for the production of clove. Ginger is grown in Kilimanjaro, Kigoma, Ruvuma, Morogoro, Kagera and Mbeya regions. Vanilla is produced mainly in Kagera and Kilimanjaro regions and to some extent in Morogoro region. Chillies including paprika are important in Iringa, Mbeya, Arusha, Tanga, Coast, Morogoro regions and Zanzibar. Coriander is almost entirely produced in Singida region in the semi-arid central Tanzania. The major spice growing areas are found in the chain of isolated mountains called the Eastern Arc. The mountains confer highlands and lowland areas which are characterized by distinct local microclimates of cool humid climate and existence of natural forests. The spices are produced by smallholders. Cardamom is grown in forests as it requires a shady environment. Partial clearing of forest vegetation is conducted for planting and as management practice. Purposeful establishment of plantations is a recent phenomenon. In Pemba and Zanzibar clove is grown in well-established plantations but isolated trees are also found. Growing of the crop is developing at a small scale in the mainland. Cinnamon production in Tanga region and Zanzibar Islands is largely under mixed cropping systems. In Morogoro both mixed systems and medium scale plantations exist. Isolated plants which consist of big trees aged above six years are predominant and are the sources of the product traded in the form of large/thick chips. The recently established plantations are potential sources of standard quills. Pepper is relatively better grown in conventional production units but there are a lot of isolated plants trained on large trees. Vanilla is entirely produced under conventional plantations intercropped with banana and or coffee. Ginger is cultivated in monoculture under rain fed conditions preferably in wet and valley areas. In Same district, irrigation is practiced and production is throughout the year. Lemongrass and chillies are grown in a monoculture rain fed and irrigated conditions, mostly by the medium scale spice

PRODUCTION LEVELS AND HARVESTING SEASONALITY

There are no reliable data on the quantities of spices produced in the URT. This is largely due to the absence of official authority for the coordination of the production and marketing of spice crops. Available data is a result of segmented information collected from different places at different levels. The production is characterized by low volumes, which are hardly sufficient to match local demand. Thus local prices often exceed export prices. The harvesting seasons is spread over the year with variations based on environmental conditions, as smallholders grow a wide variety of spice crops. Production constraints include poor agronomic practices and deficient post-harvest treatment. Neither soil fertility improvement nor soil conservation or irrigation and drainage practices are employed while no proper spacing is observed. Practices such as pruning and training, thinning and trashing are missing. The current trend is to prohibit cultivation in the natural forests as it is considered as threatening to the endemic species. The traditional production systems have not improved over time due to lack of specialized extension services**.**

Harvesting and Value addition

Individual small scale farmers are responsible for organizing harvesting of their crops. A few farmers associations exist which are aimed at assisting members in establishing collecting, processing and selling centres. Medium scale farmers have their own collecting and processing centres. These do therefore undertake the harvesting and processing activities in more elaborately organized manner. For some spice crops harvesting is organized by middleman traders who buy crops in advance. Harvesting of Cinnamon is by cutting or chipping tree stems into chips of varying sizes depending on the size of the tree. Stripping and rolling barks into quills is not a familiar practice. Cardamom is harvested by stripping whole plant panicles, a practice that compromises produce quality. Drying by flue curing to produce green cardamom is not practiced. Small scale farmers often harvest pepper before maturity. Only black pepper is produced. Harvesting and packaging of Clove in Zanzibar, under the Zanzibar State Trading Corporation (ZSTC) is better organized. Drying is commonly done at the farm in the sun. Hardly any value adding in the form of grading, cleaning or packaging is done. Other important processes include grinding for the purpose of blending or production of masalas and curries. Drying is often conducted under unclean environments, such as spreading the spices on the bare ground, floor or mats. Since the process is conducted under the open sun in the homestead, contamination due to dust and livestock is possible. Ordinary milling machines (not stainless steel) are used. Sometimes milling houses are also used as storage. Farmers/traders exporting to Europe and America have special dedicated equipment.

Table: Estimated production volumes of 10 spices in URT

Spice	Cultivation/cropping	Volumes[3]	Perspective
Clove	Zanzibar (Unguja) and Pemba, well established plantations. Export is controlled by ZSTC4.Stems are extracted in Pemba.	2013: 5,500 Mt 2014: 2,800 Mt 2015: 3,500 Mt	New plantations in Tanga & Morogoro, where ZSTC does not control
Pepper	Isolated plants trained on large trees. Small plantations scarce	2010: 2,000 Mt 2014: 3,000 Mt	Plantation growing could increase volumes
Ginger	Cultivated in mono culture, 80% is used fresh on the local market	2005: 6,000 Mt 2014: 7,000 Mt	Slicing before drying
White cardamom	Traditionally grown in forests, Recently also plantations	2010: 500 Mt 2014: 1,000 Mt	Increased planting
Cinnamon (*zeylanicum*)	Mixed cropping system. Today in Morogoro small plantations	2010: 600 Mt 2014: 1,500 Mt	Strong increase in acreage thanks to plantations
Chilies	Grown in monoculture under rainfed & irrigated conditions	2010: 7,000 Mt 2014: 9,000 Mt	Increasing acreage under organic production
Coriander	Grown in monoculture under rain fed condition in the semi-arid areas	2010: 1,000 Mt 2014: 800 Mt	Declining production due to competition for land with chick pea
Lemon Grass	Perennial grass, planted by using splits. Leaves & rhizomes are used	2010: 10 Mt 2014: 15 Mt	Monoculture system
Nutmeg	Some isolated trees	Very small	There potential for production on Mainland
Vanilla	Conventionally intercropped with banana or coffee	2010: 103 Mt 2014: 40 Mt	Increase in production is linked to World market price

Value Chain Dynamics and Challenges

The majority of spices producers are small scale farmers in rural areas. They are considered to be growing spices organically by default. The recent need for certification of organically produced products has led to the categorization between organic and conventional spice farmers. Small scale farmers certified to grow spices organically sell their produce to medium scale organic farmers or buyers who facilitated their certification. It is also common for them to sell to middleman buyers of conventional types since there is no premium price offered to organic produces. Spices production in the URT has primarily attracted traders from neighbouring countries (East Africa), there is some export within the region (SADC and COMESA) and the Middle East. Asia, Europe and America are hardy targeted for export today.

3.2. AGRONOMIC PRACTICES OF ICSI GROUP LTD PLANTATIONS

3.2.1 Pepper Farming

Soil Requirement
Pepper requires an immense amount of water during the fruiting season. A well-drained, fairly fertile therefore, the ICSI Group Ltd should set production of Pepper in soil that is high in organic matter. Organic matter is important as it increases Pepper yield. If available, recommendation for application is 15 tons of manure per acre.

Nursery Preparation and Sowing

The ideal seedbed should be 60cm wide, 5-6cm long and 20-25cm high. Draw the lines 10 to 15cm apart throughout the length of the seedbed. Sow the seeds thinly spaced in lines, press gently, cover with fine sand and then cover the bed with straw and irrigate with rose can. Irrigate the seedbed twice a day till the seeds germinate. Remove the straw after the seeds germinate. Spray the seedlings with Thiodan @ 2-2.5 ml/litre of water and Dithane M-45 @ 2-2.5 g/litre of water for plant protection and treatment.

Good cautious plants that are about 6 weeks old are best for transplanting.

Seed Varieties
The main Pepper varieties cultivated in Tanzania are *marglobe* , *moneymarker* and *roma VF*. The ICSI Group Ltd is planning to plant *roma VF* as it gives early and high yield uniform fruity, resistant to adverse environmental conditions. A seed rate of 900 to 1200g/acre is required. The ICSI Group Ltd will obtain seeds and seedlings from agrochemical shops and also get from specialists (extension officers) producers.

Planting
The ICSI Group Ltd will cultivate Pepper by transplanting seedlings on ridges and furrows. Before planting farm yard manure @ 50 ton per hectares will be incorporated. The ICSI Group Ltd will set plants 1 to 2 inches deeper than they grew in the plant bed. The spacing recommended between plants is75 x 45cm.

Watering
Pepper plants require adequate moisture throughout their growth period. The ICSI Group Ltd will water the Pepper through drip irrigation where Pepper will be planted on furrows and ridges. First irrigation will be done soon after seedlings are transplanted as frequent water is necessary in root zone when plants are small. During hot season (summer) frequent irrigation will be necessary in order to maintain wet soil.

Weed Control
The ICSI Group Ltd will do shallow cultivation for weed control as deep cultivation will prune many of the feeder roots and reduce yields, particularly early yields. The proper depth is not more than 1½ inches after plants start to set fruit.

Crop Support & Pruning
Crop support is important during production of Pepper to improve light interception, reduce disease incidence, and enhance early fruit set. The most effective and recommended crop support method is the stake and weaves systems. These restrict growth and enhance fruit production resulting to plants produce abundantly.

Pruning Pepper refers to the removal of axillaries shoots which are commonly called suckers. Any sucker that lies on the ground should be picked and discarded, as it would be subject to rot and prey to slugs and soil insects. Remove suckers allow better air circulation in the plant and promote early harvest.

Fertilization
Normally Pepper crop requires Nitrogen, Phosphorus (P_2O_5), and Potash fertilizers for good results. Pepper requires most of their nitrogen during the second and third months. The ICSI Group Ltd will use half nitrogen and full P_2O_5 at the time of transplanting and remaining nitrogen will be used after 30 days and 60 days of transplanting.

Mulching
The application of good mulch will help greatly in producing good Pepper. Good mulch conserves moisture, keeps down weeds, keeps the Pepper clean, and makes it easier to walk through the garden when the soil is wet. When the mulch decays, it adds valuable organic matter to the soil. ICSI Group Ltd will use mulch materials from maize straw and dry grasses to cover Pepper.

3.2.2 Pest and Disease Control of Pepper
The insects most likely to cause significant damage to Pepper are flea beetles, aphids, and horn worms. All of these are relatively easy to control if you do not permit them to increase their numbers before undertaking some action.

Therefore, ICSI Group Ltd will do the following to avoid the problem:

- Use disease-resistant, adapted varieties from a known disease-free source

- Do not plant Pepper too frequently in the same field
- Isolate the Pepper planting from plants which generally carry diseases injurious to Pepper, such as potatoes, cucumbers, eggplant, and weeds
- Do not smoke or handle tobacco in any form when working with Pepper. This is especially true of Pepper plants in the first 12 weeks of their growth
- Follow the soil preparation, fertilization, and transplanting recommendations faithfully

3.2.3 Harvesting, Yield and Storage

It will be about 80-85 days from the time ICSI Group Ltd plant seedlings in the field up to when they can pick ripe Pepper from the field.

Pepper is known to ripe when;

- It has turned red on the vine (or yellow for yellow Pepper, pink for pink varieties, and so forth).
- Its colour is even. In other words, ripe red Pepper doesn't have one side that's green. The entire Pepper has colour.
- It is just a tiny bit soft when squeezed ("in between firm and soft").

The harvesting procedure will be as follows:

- Grasp a ripened Pepper gently and firmly then twist it until it snaps off the vine
- Put unripe Pepper in a cool dark place, arranging them in a single layer.
- Check frequently for holes, cracks or even tiny specks of rot and remove any damaged Pepper immediately - they'll quickly transmit moisture and rot to healthy fruits.
- Store ripe Pepper at room temperature for best flavour; they'll keep for a day or two

It is expected Pepper to be harvested even up to ten times from first harvest to last harvest. Normally the highest yield is 11kg/plant and this obtained in the firth harvest; from there the yield slowly declines until end of harvesting period. The harvesting period for Pepper lasts for about one month.

3.3. General Agronomy of All Spices

3.3.1 Spices Farming

Spices
Tanzania's climate and soil conditions are very suitable for spice crops production. A wide range of crops is cultivated that constitute spices and aromatic plants. Spices are used in food and drinks for imparting agreeable flavour and aroma, colour and as preservatives. Aromatic plants are used for the production/extraction of essential oils. Some typical spice crops are also used in the production of essential oil and in the pharmaceutical and perfumery industries. The list presented in Appendix 1, is an inventory of the spices and aromatic crops in the three categories known to be grown in the URT at varying levels of importance. This list of spice crops is relatively long and the importance of each one is different. The importance of a spice crop in an area depends primarily on the adaptation to the ecology of the area and second to the advantages it has to the society

Soil

A well-drained, fairly fertile and sandy loam soil is ideal for Spices production, however with proper it can be successfully grown in clay soil.

Characteristics of major spice crops with potential for export

Common name	Life span	Duration to first harvest	Duration to peak yield	Plant characteristic
1. Clove	Perennial	5-7 years	15-20 years	Tree
2. Pepper	Perennial	2-3 years	5-7 years	Vine and herb
3. Ginger	Biennial grown as annual	8-10 month	N/A	Herb
4. Cardamom*	Perennial	2-3 years	15	Herb
5. Cinnamon**	Perennial	2-3 years	3-5	Tree/Shrub
6. Chillies	Annual	3-4months	N/A	Herb
7. Coriander	Annual	3 months	N/A	Herb
8. Lemon grass	Perennial	6-8 months	N/A	Grass
9. Nutmeg	Perennial	5-7 years	15-20 years	Tree
10. Vanilla	Perennial	2-3 years	5 years	Vine and herb

* Tanzania grows the green *Elettaria cardamomum* Maton

** Tanzania grow the *Cinnamon zeylanicum*, which is superior to cassia

Pepper and vanilla belong to two different families, they are perennial and non-self-supporting. They therefore require establishment of appropriate supporting materials prior to planting. Ginger and cardamom belong to the same family, Zingiberaceae. However, cardamom differs markedly from the other in that cardamom is perennial and the useful part is the fruit while ginger is grown as an annual crop and the useful part is the rhizome. Clove, cinnamon and nutmeg are trees and therefore perennials. All of them differ in terms of the useful part of the plant, i.e., flower buds, bark and leaves and fruits, respectively. Chillies and coriander are annual herbaceous

plants, while lemon grass is a perennial grass type of plant. These differences in characteristics account for their differences in duration to first harvest, peak harvesting period and adaptation to environmental conditions

Climate

Spices grow best when the monthly average temperature is about 21^{o}C to 29^{o}C. Planting is on the month of October to January and off- season is early August.

3.3.2 Culture and Management

Land preparation

Field should be prepared thoroughly by plowing and harrowing and removing the different plant debris. It should also be pulverized and leveled; furrows are made 2 meters apart.

Sowing

Pre-germinate the seeds before sowing; soaking it in water for overnight period. Drill 2-3 seeds per hill at a distance of 1.5x 2.0 meter apart. Ten to fifteen days after emergence thin to one plant per hill, a hectare of land will need 3-4 kilograms of seeds.

Fertilization

Soil analysis is recommended but in general for organic fertilizer a hectare should need about 10-15 tons, side dress with 10-20 grams per hill of 14-14-14 NPK two weeks until onset of female flower. At fruit setting apply 10 grams of urea (46-0-0) and Nitrate of potash (0-0-60) at 1:1 ratio 2-3 times every two weeks.

Irrigation

Field should be irrigated whenever necessary by either using furrow irrigation or by manual watering. In case of this business plan ICSI Group Ltd will use drip irrigation. Frequent high irrigation 10-15 times is recommended at planting time, vegetative, flowering and fruiting development stage. Do not allow the fruits to get wet while irrigating. Two weeks prior to maturity irrigation should be stop.

Weeding and Cultivation

Shallow cultivation by off baring, 15 days after planting followed by hilling up at 30 days after planting and hand weeding thereafter until the crop has

attained sufficient size to cover the soil which in turn will suppress the growth of weeds.

Training of vines

Rearrange or train the vines along the rows 25 days after planting to facilitate watering and weeding but main vines should not be touched anymore

Fruit thinning

Removal of misshapen spices, thinning of appropriate spices per vines of varieties which produce large size fruits and 4-6 in the case of small spices varieties are suggested and done when the largest fruit is 10 cm long and 10 cm in diameter.

3.3.3 Pest and Diseases control in Water Melon

Insect: Thrips, aphids, cucurbit beetle, fly, spider mites, and cutworm. Spray insecticide at manufacturer recommendation.

Disease: Downy mildew, powdery mildew, mosaic, anthracnose, use appropriate chemicals in controlling these diseases by following the manufacturer recommendation.

3.3.4 Time for Harvesting

Spices do not ripen further after pickling; hence the fruits should be mature enough when harvested. It takes Spices to mature from 35 to 45 days after pollination.

Harvesting indexes could be used:

- Tapping a dull or hallow sound is an indication to maturity
- Color – spices differ in color.

Table: Spices harvesting seasonality

Spice crop	District	Harvesting season (Months)											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CLOVE	Morogoro Rural												
	Muheza												
	Zanzibar												
PEPPER	Morogoro Rural												
	Muheza												
CINNAMON	Morogoro Rural												
	Muheza												
CARDAMOM	Muheza												
	Mvomero												
VANILLA	Bukoba												
	Hai & Moshi												
GINGER	Same												
	Songea												
CORIANDER	Singida Rural												
LEMON GRASS	Mvomero												

3.4. TEAK TREES FARMING

The total gross area of forest plantations in Tanzania is estimated to be about 250 000 ha. Out of this, government owns about 85 000 ha, privately owned plantations are estimated to be 40 000 ha, out-grower schemes and woodlots occupy between 80 000 and 140 000 ha in total.

The most important industrial plantation species are pines (Pinus patula, P. elliottii and P. caribaea), cypress, eucalyptus and teak. Pines are the dominant species in most of the government and private plantations with about 78% of the total area planted and the remaining 22% is shared among hardwoods and other softwood species. The age structure is considerably skewed towards young age (27.4%) and older (28.1%) classes. Generally, the health of forest stands is good in most of the plantations.

Most of the major diseases and insect attacks which affected plantations in early years of introduction in Tanzania have been addressed. However, fire seems to be a major problem in Tanzania's forest plantations. Currently, the forest sector in Tanzania is financed by both the government and Development Partners (DPs) through different mechanisms. Also the private sector is financing their forestry activities through own sources, loans and grants. The development of the forest sector in Tanzania has been dominated by dependence on donor financing, and sectorial self-financing mechanisms have remained undeveloped. Financial mechanisms in place do not effectively promote long-term investment by private actors. Potential financing mechanisms include provision of bank soft loans, private sector investments and carbon finance.

Over 2000 staff are employed by the central and local governments in forest management. Currently the number of professional and technical staff is not adequate to carry out forestry activities at satisfactory level.

Table. Forestry and other area information for Tanzania, 1990 – 2010. Source: FBD, 2010

Category	Areas in km²				
	1990	1995	2000	2005	2010
Forest	414 949	394 783	374 616	354 450	334 284
Other wooded land	181 834	165 424	149 014	132 604	116 193
Other land	289 017	325 593	362 170	398 746	435 323
Inland water bodies	61 500				
Total area	**947 300**				

Note: Forests are areas with canopy cover of over 10% and other wooded area 5-10% of canopy cover

3.4.1 Agronomy of Teak Trees Farming

Soil type and analysis

Well-draining soils and medium to heavy soils, such as clay loams or sandy loams are suitable. The required pH level is around 5.3-6.8. Water proximity If possible, a site near a water source is ideal. Soils in many plantation areas are generally fertile with varying amount of organic matter, mineral content and soil pH. Together with the above, the soils vary considerably from one plantation to another as indicated in attachments

3.4.2 Good Climate condition for production

- It tolerates a wide range of temperatures range 23 degrees to 27 degrees Celsius and 15 degrees to 18 degrees Celsius are ideal
- Generally better suited to withstand high temperatures than low temperatures
- • Best grown using irrigation, however, ideal rainfall is 600 millimeters during the production period.
- During the first month after transplanting, crop should not face any drought.
- Altitude: Can grow from sea level to 1,600 meters above sea level.
- Avoid cultivation during extremely hot periods
  Generally, the rainfall distribution varies (considerably) from year to year and from plantation to plantation.

Nursery Preparation

Since the beginning, stumps have been used for plantation establishment in accordance with the following procedure: The seeds are first pre-treated by being soaked in water and dried under full sun alternately several times in order to stimulate germination in nursery germinating beds. However, despite these treatments, the germination process may last from 2 weeks up to 6 months or even more, although in practice, only the seedlings germinated in less than 2 months are used. These seedlings are then cultivated for 10 to 12 months on average until they reach a suitable stage when they can be converted into stumps of 15 to 20 cm in length and at least 12 mm in diameter. Weaker stumps remain in the nursery longer. As an indication, 1 000 "seeds" (1 kg) ultimately give 170 plantable stumps which cost 0.15 US $ per unit. Stumps can be stored and transported in much greater quantities and in more cost effective conditions than seedlings. They are not as sensitive to climatic parameters and particularly water deficiencies as seedlings which must be planted just at the beginning of the rainy season. Stump planting is not as time-restricted and can be extended to several weeks. The main disadvantages associated with the use of stumps are:

- Must stay longer in field nursery
- Production of multiple stems resulting from the trimming of the main original stem. Trimming the tip of the original taproot also induces the formation of secondary roots which take over the main root, but incidence on the future of the plant seems very unlikely. The use of container-produced seedlings has recently been tested at Company, applying the following procedure:
- Pre-treatment of the seeds to stimulate the germination process.
- Pre-germination of the seeds.
- Transplanting the germinated plants into reusable root trainer containers of 90 cm3 filled with organic substrate made locally by mixing composted sugar cane wastes (filter and mud press) with rice residues including straws, axes and seed coats.
- Sorting seedlings within the trays according to size.
- Appropriate fertilizers and water supplies to ensure a uniform crop.
- Pest and disease control and treatments.

The seeds can be also sown directly in the container (2 seeds per container), but unpredictable germination rates (35 % on average at present) require further manipulations such as seedling removal or transplanting in order to obtain one seedling per container. This is why the option consisting of pre-germinating the seeds, in trays for instance, in order to do early transplanting into containers of only the germinating seedlings has been preferred. The seedlings germinated at the same time are then regrouped together for greater homogeneity in the size of the of plant material.

The container-grown seedlings are usually 5 to 10 cm tall by the time they are field planted. Due to the poor germination rates as well as the uneven germination characteristic of teak seeds (White, 1991) and the resulting need for “culling”, the ultimate conversion rate of seeds into plantable seedlings is approximately 17 %. Container-raised seedlings, in contrast with those left in place, produced soon after field transfer very early lateral branches, which need to be removed. If this observation is confirmed, this unusual early production of lateral branches may result from hydric stress within the terminal bud of the main stem as a consequence of transplantation. The results of the first trials comparing the early performance of seedlings and stumps have been very encouraging towards the use of suitable sized seedlings. The tallest seedlings at the time of planting grew the slowest, while the smallest seedlings planted grew the fastest, as reported in Table I. However, rigorous complementary field tests combined with accurate and realistic economic analyses are needed to determine the rationale of preferring seedlings to stumps, considering that large-scale production of seedlings may be severely handicapped by the 8-month dry season and requires more sophisticated and costly nursery facilities. On the other hand, production costs can be significantly reduced by the shorter time required in the nursery to produce plantable seedlings in comparison with stumps. At this point in time, the following aspects are worth testing in order to improve seedling performance: ▪ Container size – the current volume is smaller than in many nurseries.

Intercrops can even be mixed between rows for early additional returns to produce a uniform, top grade marketable wood, with the possibility of increasing yield and quality for more difficult sites through a more refined clone x site selection

Table II.
Major advantages and disadvantages of using stumps as opposed to container-raised seedlings.

	Advantages	Disadvantages
Stumps	• Can stand long period of storage in very basic conditions. • Reduced transportation costs. • Stump establishment is not so dependant on rainfall. • Stumps are very hardy and can survive harsh treatment.	• Large open beds required for a long period of cultivation and maintenance (weeding) responsible for higher production costs. • Interruption of the growth of the taproot and stem. • Lack of uniformity in the resulting crop. • Multiple stems resulting from the cut back stem. • Secondary roots replace main taproot after trimming. • There is a need to strip leaves for greater uniformity, which involves a serious risk of secondary infection.
Container-raised Seedlings	• Taproot remains intact. • No interruption in growth. • Requires less nursery space and time than stumps. • Relatively cheap. • Greater uniformity of the crop overall with the possibility of size sorting in the nursery. • Weeding requirements are significantly reduced due to the sterile medium utilized.	• Container size and spacing must be large enough to cater for the large leaves. • Very sensitive to hydric stress. • Requires intensive hands-on management. • Requires investment in improved infrastructure. • Infield planting not very flexible in terms of timing (require adequate rains before establishment as well as after planting). • Difficult to store and transport.

Site selection and preparation
Special consideration is given to site selection in order to maximize plantation returns as far as possible. Soil analysis, altitude, slope gradient, natural vegetation and environmental assessment are the main parameters considered for site selection and site classification. Once the site has been selected, site preparation consists of the following steps: site clearing, burning-off and pre-plant herbicide application

Site clearing
All selected sites are completely cleared of vegetation. This vegetation is then left exposed and burnt when sufficiently dry.

Burning off
Depending on slope gradients and more recently on soil assessments, sites which are more erosion prone are treated differently in order to protect against erosion. Fuel is spread over the whole site and lit. The fire is controlled so as to achieve a clean, effective result by assessing the time of day, the ambient temperatures and the humidity. Wind speed and direction are also taken into consideration when carrying out the burn-off operation

Pre-plant herbicide application
Taking into consideration the rainfall and timing, the cleared areas are chemically treated with glyphosate (3 l/ha of Round-up) prior to planting to ensure that all potential weeds are dead at the time of planting so as to reduce competition at the crucial stage

Plantation establishment
Initial plantings from 1992 until 1999 were established at 2 500 stems per hectare i.e. 2 m x 2 m spacing. The reason for this dense stocking was primarily to allow for selection of the final crop and secondly to provide a balance between the establishment costs and the requirements for weeding practices. Planting activities used to last the whole rainy season, from December to the end of April. After 3 years, this initial density was reduced by thinning to 1 250 trees/ha, and finally to 625 trees/ha after 6 years. From 2000 onwards, the plantations have been established at an initial density of 3 x 3 = 1 111 trees/ha at the beginning of the rainy season in December after the application of Round-up (3 l/ha). This change, which resulted from canopy closure experiments and from the use of a more homogenous planting stock, has noticeably reduced the establishment costs. The planting period has been shortened to the first two weeks of December by sub-contracting the work to different contractors in order to favor good soil establishment of the planting material before the dry season. In order to anticipate the planting time and to take full advantage of the first year rainy season, the use of “Aquasoil” hydro-absorber (5 g/plant) that can

be combined with nutrients and fertilizers has been also been tested successfully. At present, 650 ha are planted every year.

Further maintenance and practices

Further maintenance and practices consist mainly of singling, weeding, thinning, and pruning. Singling.This activity is the result of the stump preparation process whereby the stem is removed at the root collar. The removal of the stem causes prolific coppicing and the excess stems, numbering from 2 to 6, need to be removed. The strongest growing, straightest stem is retained and the rest are removed by hand when the shoots are young and soft, the earlier the better. Mortality recorded at this time averages 20 to 25 %. Refilling is done immediately, and ultimately plantation losses do not exceed 8 %.

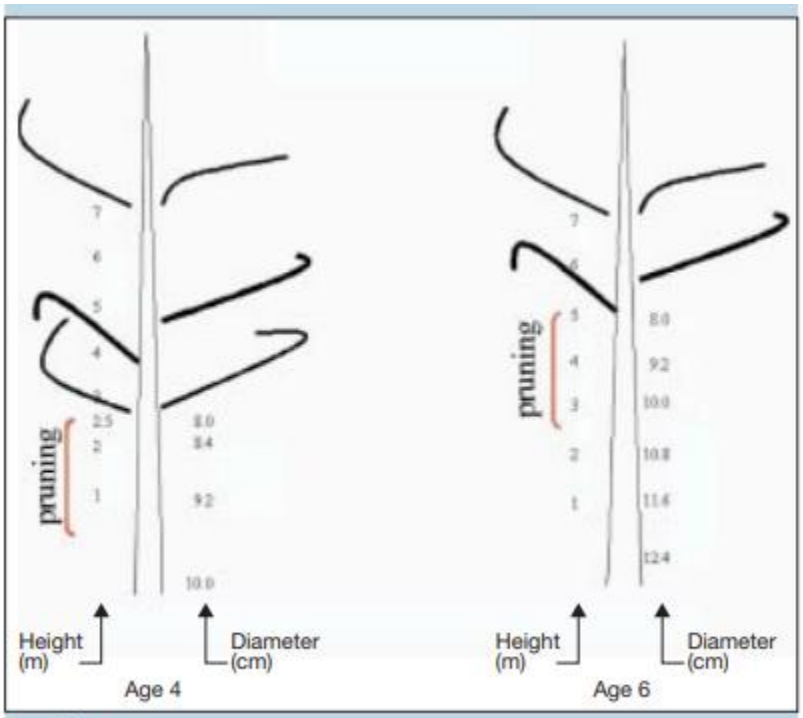


Figure 3.
Pruning teak at four and six years of age. (Drawn by W. Rance).

3.4.3 Culture and Management.

Weeding

Ensure field is weed free, thus regular weeding necessary. The main reason for carrying out this activity is to reduce competition on the crop trees. Further reasons are for fuel management and the reduction of combustible material for fire prevention reasons. Company uses manual and chemical weeding methods

Manual Weeding

Investor aims to provide development and employment opportunities to the local communities. For this reason the company limits the use of mechanical weed management methods.

Herbicides

Company aims to gradually reduce its dependence on chemical weed control in accordance with the company's environmental strategy. At this stage the company uses a systemic non-selective herbicide in the form of glyphosate for a longer-term effect on weed growth.

Thinning

Thinning is based on growth and basal area measurements at Company. According to the forest management system used by the company, thinning is planned to take place at age 8 (density reduced to 650 trees/ha) then at age 13 (density reduced to 400 trees/ ha) and lastly at age 20 to reach the final density of 250-280 trees/ha expected to be finally harvested at 30- 32 years old. The three interim thinning are planned to be utilized for commercial production.

Pruning

The plant material utilized so far produces prematurely heavy lateral branches. At this stage it is not known if this is an inherent genetic problem or a result of site interaction. The heavy branching could be a result of climatic circumstances, especially the markedly long dry season. The management considers that such heavy branching is liable to induce the formation of large nodes which may seriously depreciate log value, especially for rotary veneer production. Intensive pruning is therefore carried out: ▪ at age 2 to remove any multiple stems and the two large lower branches produced early by the young plants; at this stage, most of the plants are heavily branched already; ▪ at age 4 for stem portion more than 8 cm in diameter - usually up to 2.5 m; ▪ at age 6 for stem portion more than 8 cm in diameter - usually up to 5 m; ▪ at age 8 for stem portion more than 8 cm in diameter - usually up to 7.5 m (after thinning). Pruning is done, as illustrated, to a fixed diameter (8 cm) with measuring gauges fixed to the pruning saws, thereby ensuring that weak trees are not over-pruned and have their photosynthesis capacity reduced as a result. Each pruning is followed by a hand pruning operation where the newly formed epicormic shoots are "pinched" off. However, these pruning practices may induce bark deformities and desquamation as well as callus formation close to the nodes from which the branches were removed (see picture). The intensity of these phenomena varies from tree to tree, but this may be a reaction to the wound or stress caused by pruning. Another hypothesis is that the pruning wound may facilitate the intrusion of pests and diseases responsible for these symptoms, which may ultimately have an effect on the final value of the logs, especially for rotary veneer end-use. The projections in this Business Plan span two crop rotations, with three thinning and four pruning's and clear felling at 32 years, which may seem too long before there is any return

on investment. The possibility of selling the pruned trees removed by thinning as poles or for ceiling and wallboards after rotary peeling as is done in Central America or Brazil could generate income in the meantime. Such income can offset the costs of the pruning and thinning operations which are "actually" the most expensive maintenance activities and ultimately benefit only 22.5 % of the crop. Pruning and thinning practices may also be reduced by the use of planting stock from other origins, either different seed sources or cutting-issued selected clones, as previously suggested.

3.4.4 Crop characteristics

The first plots visited, more specifically the oldest ones (10-yearold, 625 trees/ha after systematic then selective thinning) had quite a uniform appearance, somewhat unusual for teak, in terms of straightness, bole length, and unfortunately heavy branching in the crown. The under canopy was clear as a result of the regular pruning operations carried out. 10 years is, however, too early to have a reliable estimate of criteria such as fluting and wood characteristics which have a great impact on the value of teak wood. An average growth rate of around 2 m/year in the first years on the best sites (Table III) gives rise to well-balanced trees in comparison with other countries where stem growth is much greater in the first years (4 m/year in Sabah, East Malaysia), but may expose the trees to risks of bending after the first thinning, as in certain sites in Costa Rica for trees with height/basal diameter ratio greater than 120.

Table III.
Average and best diameter at breast height (DBH) and height measurements according to age and site class from 1 (best site conditions) to 4 (the least favorable conditions although still acceptable for teak planting) with a density of 625 trees/ha for all sites.

Age (years)	Site Class	Mean DBH (cm)	Mean height (m)	Best DBH (cm)	Best height (m)	Area (ha)	Area sample size (%)	Number of trees measured
9	1	16.0	17.5	27.2	26.1	9.5	10.1	600
9	2	15.2	15.2	26.7	26.3	11.0	8.7	598
9	3	9.2	10.1	17.9	18.6	12.3	8.8	677
8	2	11.8	9.9	21.5	21.3	77.0	9.4	409
8	3	8.4	7.9	16.8	17.2	15.8	10.3	1 016
8	3	13.9	14.9	23.5	27.1	34.7	14.1	3 068
8	4	8.8	9.3	24.0	25.8	47.0	10.0	2 938
7	1	15.0	15.5	24.0	25.8	26.8	12.1	2 024
7	2	12.5	13.4	21.6	19.7	11.0	10.9	752
7	3	9.8	9.2	24.2	26.2	89.3	8.8	4 912
7	3	11.7	13.6	21.2	25.6	41.4	10.2	2 637
7	4	8.2	8.8	16.0	17.4	54.2	10.4	3 523
6	1	10.9	12.4	17.3	17.9	55.3	9.8	3 387
6	4	10.3	11.9	20.0	23.5	96.6	9.2	5 555

3.4.6.12 Availability of Farm Inputs

Farm inputs are available at village level. Traders from Morogoro are supplying all required inputs during the season at the village. There are 3 agrovets in the village. There is minimal use of mechanization on agro farming farming at Morogoro and Tanga, all farming activities such as land clearing, cultivating and harrowing are done by using hand hoe.

4 MARKETING ASPECTS

Spices Market Aspect

Tanzanian traditional exports have recorded a dwindling performance over the last two decades. Factors like commodity specialization, low price elasticity, variability in supply and demand, and geographical concentration have been advanced as potential causes of this performance (Murray, 1998; Koester et al., 1999). Export earnings influence country's national income, rate of saving, capital formation, price stability, and import capacity (Gyimah-Brempong, 1991; Love, 1992). Instability in export earnings has serious implications for the rate of inflation, tax revenue, and debt burden.

Tanzania Teak Wood Marketing Aspect.

Tanzania Teak Wood is highly demanded in the market for high strength, termite resistant structure and unmatched durability. This wood is available in a variety of sizes, lengths and thicknesses according to the needs of construction sectors. It is resistant to fungi, decay, termites and mould making it more durable and reliable to use. In addition to this, it also provides the best performance for years to come as it can easily withstand harsh environmental conditions. Tanzania Teak Wood is mainly used for designing boar decks, furniture and other wooden products. Light in weight, this timber has distinctive polished look and sturdiness.

4.1 ICSI Group Ltd's Produce

The ICSI Group Ltd.'s product produce will be Pepper, spice and teak trees.
Market and Prices
Market of pepper, spices and teak tree product depends on the population density hence its market is very variable. Farmers located near towns and large population centres like Dar es Salaam, Morogoro, Pwani and Tanga where the farm is nearly located are the popular place for the pepper, spices and teak tree product utilisation.
The pepper, spices and teak tree product are sold under retail market which the seller always sells through local markets, in Dar region are found in Mabibo, Buguruni, Kariakoo and Tandale, also in other small markets in regional centers and other products are for export. The producers sometimes use agents in these markets to sell their pepper, spices and teak tree product . But the known major buyers of pepper, spices and teak tree product are SMEs and large.

4.2 Competition

The ICSI Group Ltd has low competition since the market for the produce is ready available in urban and regional centres. However the price of the produce is determined by its quality, quantity and season in the market.

4.3 Distribution

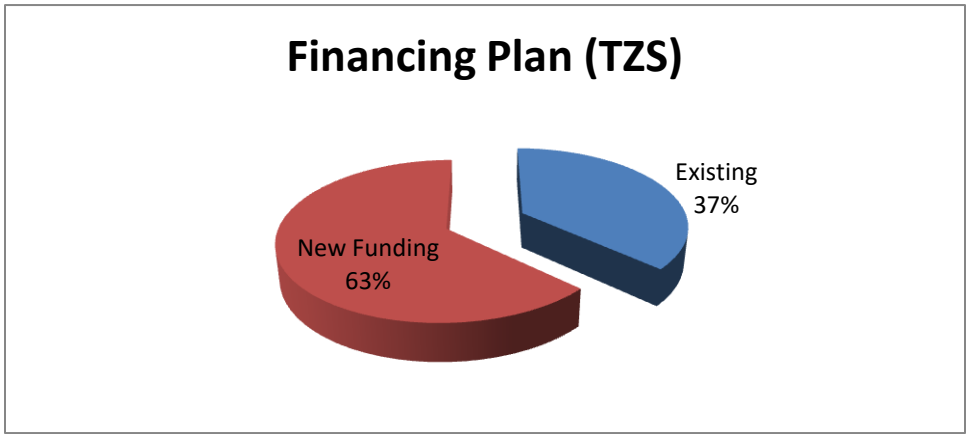
After harvesting, the ICSI Group Ltd will distribute his product to the customers who are mainly located in Iringa,Morogoro, Tanga, Arusha and Dar es Salaam and other produce are exported. In case of (pepper, spices) ICSI Group Ltd will sell the product direct to Dar es Salaam at Buguruni Market, Mabibo market, Tandale market and other areas. The ICSI Group Ltd has no doubt on that market because he has loyal customers on that market who use to communicate to request the product.

5 FINANCIAL PROJECTIONS

5.2 Investment and Financing Plan

The projected investment cost is TZS **11,000,000,000**/= (USD 5,000,000) which will be financed by additional equity contribution of TZS 7,968,640,000/-(USD3, 622,109) and additional equity of TZS 3,031,360,000/- (USD 1,377,890)(Annex 1).

Figure 1**: Investment and financing plan**



5.3 Financial Performance

The financial analysis indicates that, the investment is financially viable with a Positive NPV of TZS 13170106500/= or USD 5776363 and negative value of the net profit at the initial five years stage of investment set up and system installations but the investment will start show the slightly net profit at the six years of investment and incremental net profit as the investment prosper up the twenty years of the investment where the teak plantation as the major crop will begin harvest. (Annex 9).

5.4 Production costs and Administration Cost

The production costs will approximate TZS **3,031,360,000**/- (USD 1,371,073) in the whole period costing from land preparation to harvesting Pepper, spices and teak trees farming production costs (Annex 4).

5.5 Working Capital

The ICSI Group Ltd will have enough working capital required to finance operational cost together with labour cost in the first year of business operations. Total working capital is TZS **3,031,360,000**/- (USD 1,371,073)(Annex 6).

5.6 Sales Revenue and Prices

The ICSI Group Ltd's revenue from this business will be realised by selling Pepper, spices and Teak Trees as per attachments below.

5.7 Cash flow and Income Statements

The sources and uses of funds are shown in the projected cash flow statement. The analysis indicates that the business will meet its financial obligations with a comfortable balance.

5.8 Financial Viability of the Proposed Investment

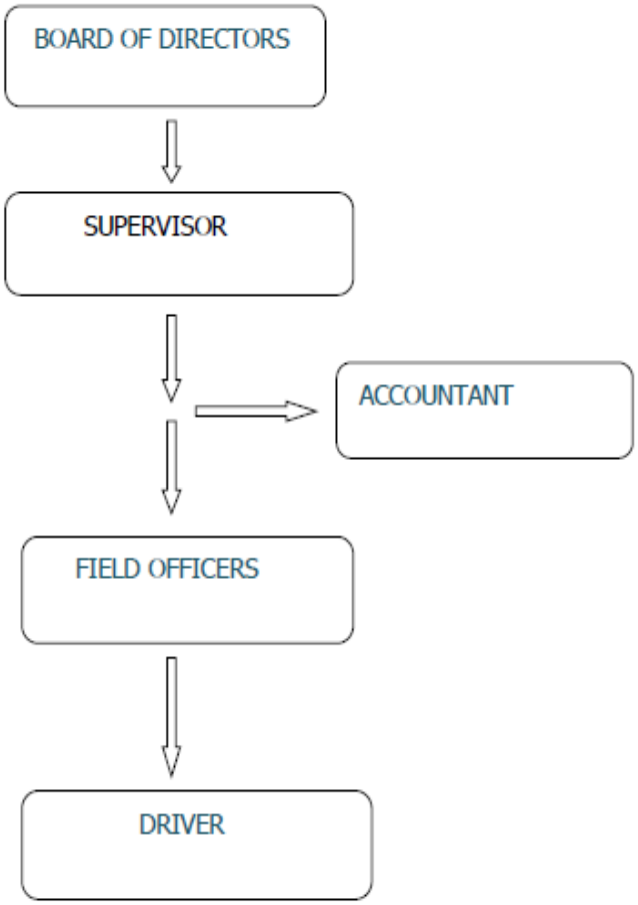
The investment is sensitive to both changes in operating cost and selling price of produce; however, the ICSI Group Ltd will be able to meet his financial obligations with a comfortable balance. See the table below for the results of conducted sensitivity analysis. The project have a positive NPV of TZS 13170106500/= or USD 5776363 hence the investment is viable and lucrative.

6 MANAGEMENT, HUMAN RESOURCES & WELFARE

6.0 Management in General

The ICSI Group Ltd is a registered Company; hence operates according to the company laws. (See attachment).The management of The ICSI Group Ltd is led by the board of directors. The project itself is under farm manager who is assisted by farm attendants and accountants. Farm manager will help the board of directors in the in the day to day activities. Government extension officers will be assisting in capacity building and follow up to the fields to know the status of the fields; this will be done together with the farm attendants. The ICSI Group Ltd team has attended various training within and outside the country.

Figure: ORGANIZATION STRUCTURE OF ICSI GROUP LTD



6.1 Availability of labourers

The requirement for human resources is not a problem. Both professional and casual labour is available at Morogoro necessary for the farm activities. The Investment will offer the insurance from the Improved Community Health Services Insurance (ICHF) organisation to the professional and casual labour

6.2 Training and Technical Advice

The project expects to benefit in extension services from experts in DAICO office at Morogoro district for consultation.

6.3 Gender Considerations

The ICSI Group Ltd has considered the gender balance in the course of employment by giving priority to women. Currently has employed one woman in the project.

6.4 HIV & AIDS Awareness.

The ICSI Group Ltd will ensure that employees check their health status from time to time and allow them to attend seminars on HIV/AIDS Control Unit and hospital for HIV/AIDS awareness and prevention campaign.

6.5 Operation and Maintenance of Truck

The ICSI Group Ltd will employ experienced truck operators to operate and supervise all transportation operations. Operators will be responsible for truck management and routine maintenance. In case of break downs, the promoter with the truck operator will ensure quick repair (including availability of most essential spares) is done.

7 ENVIRONMENTAL ASPECT

There is no strong environmental impact related to the investment. However the investor will make sure all employees get required working gears to protect them from being affected during trading operations of agroforestry products. The investor must adhere to the followings to reduce environmental destruction

Table 1 : Environmental Impact on ICSI Group Ltd.'s production and mitigating measures

Area of Impact	**Type of Impact**	**Mitigation Measures**
Environment	Soil erosion by water or wind.	Encourage ridges farming to minimize soil erosion Discourage cutting of and Encourage planting of teak trees around the field farm
Soil	Deterioration of land due to excess use of artificial fertilizers and herbicides Build-up of excess mineral salts from the use of fertilizers.	Fertiliser recommendations should be followed in terms of rate, time and method of application to maximise plant uptake and minimise impact If necessary, chemical control will be well timed and selective to reduce negative impact

Water pollution	Water pollution due to excessive use of organic fertilizer Water pollution due to spilling of old engine oil used in machines and improper disposal of old spare parts of truck such as air cleaner, fuel filter	Only recommended amount and rate will be used Proper time of application must be followed. Ensure proper disposal of oil and old or used spare parts from truck

Negative environmental impact from the ICSI Group Ltd.'s production and mitigating measures has been listed in Table 5

8 CORPORATE SOCIAL RESPONSIBILITY (CSR)

8.1 Gender Considerations

ICSI Group Ltd expects to employ six field attendants who will work only for six months. In regard to gender balance in employment the ICSI Group Ltd is planning to employ women in his other businesses including levy collection agency in the future.

8.2 Occupational Health and Safety

Most of the small and medium entities businesses are not aware of the Occupational safety and Health Authority (OSHA). However, the ICSI Group Ltd has promised to make follow up and abide with the law which enforce any company or organization with more than two employees must abide with OSHA regulation. Also, ICSI Group Ltd will make sure all employees get required working gears to protect them from being affected during applying of inputs like fertilizers etc.

8.3 Community Development Aspects

The ICSI Group Ltd is engaged by contributing money for building secondary schools and others social responsibility within the area

8.4 Anti-Corruption

According to the ICSI Group Ltd does not entertain corruption behaviour and activities. The ICSI Group Ltd seems to be genuine as he is having all documents required and follow all the procedures in his activities. This gives us a picture that the ICSI Group Ltd is playing a fair game in the business as well as out of the business. The issue of corruption is very difficult to address as the both parties involved would like to cover it. However, through probing we can see the client is genuine.

8.5 Labour Rights

In our analysis we did not see any violation of the labour rights like child employment or working beyond the normal hours without payments; however the ICSI Group Ltd has to improve on the issue of contracts to his employees even if it is six months.

9 CONCLUSION AND RECOMMENDATIONS

9.1 SWOT Analysis

Strength

The strength of this Investment is its uniqueness, since it combines more than one economic activity within a single project. That's keeping Agroforestry farming as well as producing Spices including pepper. There is proper economic utilization of resources and sufficient experience in this project.

Weakness

People have low altitude towards agroforestry farming, therefore more promotion efforts have to be used to change peoples' altitudes.

Opportunities

The idea is not very common; therefore the investor has opened a way to exploit the resources effectively and efficiently. So, the investor will have more to opportunity to prosper. Also the community around the company will have benefits of being employed.

8.4.4 Threat

Main risks involved in this investment include drought and outbreak of pests and diseases which may reduce yield at high rate. For the case of diseases and pest, they can be controlled by the use of resistant cultivars and use of pesticides and insecticides. There is no doubt regarding droughts as the ICSI Group Ltd use sustainable integrated practices of agroforestry farming and environmentally friendly systems and traditional practices in its operations.

8.5 Project Future Sustainable Plans

After five years summative evaluation will be done in order to set or improve some strategies following the investment success. Expansion will be the priority of the company. The company expects to make complete interrelationship of the project by intensive integration of agroforestry farming, animals, spices and vegetables in order to increase profitability.

9.2 Conclusion and Recommendations

The analysis of the business shows that it is profitable and viable undertaking business hence justifying the investment.

Annexes

Annex: Investment and Financing plan, Administration and Cost Analysis, Revenue Projections

Business Plan ICSI-GOUP																								
Exchange Rate	1USD	2280TZS																						
Project	Net ha	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	
Taj Mohammed - Teak	600	$ 3,335,850	$ 853,650	$ 866,250	$ 677,250	$ 752,850	$ 645,750	$ 614,250	$ 614,250	$ 626,850	$ 570,150	$ 601,650	$ 570,150	$ 626,850	$ 570,150	$ 601,650	$ 626,850	$ 570,150	$ 570,150	$ 570,150	$ 570,150	$ 664,650	$ 16,099,650	
Korogwe - Teak	350	$ 2,096,588	$ 512,663	$ 520,013	$ 409,763	$ 453,863	$ 391,388	$ 373,013	$ 373,013	$ 380,363	$ 347,288	$ 365,663	$ 347,288	$ 380,363	$ 347,288	$ 365,663	$ 380,363	$ 347,288	$ 347,288	$ 347,288	$ 347,288	$ 402,413	$ 9,836,138	
Kiroka - Teak	100	$ 497,700	$ 134,400	$ 136,500	$ 105,000	$ 117,600	$ 105,000	$ 99,750	$ 99,750	$ 101,850	$ 92,400	$ 97,650	$ 92,400	$ 101,850	$ 92,400	$ 97,650	$ 101,850	$ 92,400	$ 92,400	$ 92,400	$ 92,400	$ 108,150	$ 2,551,500	
Ericsson - Pepper	150	$ 893,025	$ 311,850	$ 311,850	$ 343,350	$ 343,350	$ 335,475	$ 316,575	$ 311,850	$ 303,975	$ 303,975	$ 311,850	$ 303,975	$ 303,975	$ 303,975	$ 311,850	$ 303,975	$ 303,975	$ 303,975	$ 303,975	$ 303,975	$ 303,975	$ 7,134,750	
Kinole - Pepper	40	$ 276,990	$ 48,510	$ 90,510	$ 98,910	$ 98,910	$ 96,810	$ 91,770	$ 90,510	$ 88,410	$ 88,410	$ 90,510	$ 88,410	$ 88,410	$ 88,410	$ 90,510	$ 88,410	$ 88,410	$ 88,410	$ 88,410	$ 88,410	$ 88,410	$ 2,046,450	
Kiroka - Pepper	150	$ 893,025	$ 311,850	$ 311,850	$ 343,350	$ 343,350	$ 335,475	$ 316,575	$ 311,850	$ 303,975	$ 303,975	$ 311,850	$ 303,975	$ 303,975	$ 303,975	$ 311,850	$ 303,975	$ 303,975	$ 303,975	$ 303,975	$ 303,975	$ 303,975	$ 7,134,750	
Administration		$ 60,086,775	$ 226,275	$ 226,275	$ 60,076,275	$ 226,275	$ 236,775	$ 226,275	$ 226,275	$ 226,275	$ 226,275	$ 236,775	$ 226,275	$ 226,275	$ 226,275	$ 226,275	$ 236,775	$ 226,275	$ 226,275	$ 226,275	$ 226,275	$ 236,775	##########	
Total		$ 68,079,953	$ 2,399,198	$ 2,463,248	$ 62,053,898	$ 2,336,198	$ 2,146,673	$ 2,038,208	$ 2,027,498	$ 2,031,698	$ 1,932,473	$ 2,015,948	$ 1,932,473	$ 2,031,698	$ 1,932,473	$ 2,005,448	$ 2,042,198	$ 1,932,473	$ 1,932,473	$ 1,932,473	$ 1,932,473	$ 2,108,348	##########	
		$ 155,222,291,700																						
Income		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	
Taj Mohammed - Teak	600											$ 175,500					$ 351,000					$ 16,380,000		
Korogwe - Teak	350											$ 102,375					$ 204,750					$ 9,555,000		
Kiroka - Teak	100											$ 29,250					$ 58,500					$ 2,730,000		
Ericsson - Pepper	150				$ 168,750	$ 375,000	$ 703,125	$ 937,500	$ 937,500	$ 937,500	$ 937,500	$ 937,500	$ 937,500	$ 937,500	$ 703,125	$ 703,125	$ 703,125	$ 375,000	$ 375,000	$ 375,000	$ 168,750	$ 168,750		
Kinole - Pepper	40				$ 45,000	$ 100,000	$ 187,500	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 187,500	$ 187,500	$ 187,500	$ 100,000	$ 100,000	$ 100,000	$ 45,000	$ 45,000		
Kiroka - Pepper	150				$ 168,750	$ 375,000	$ 703,125	$ 937,500	$ 937,500	$ 937,500	$ 937,500	$ 937,500	$ 937,500	$ 937,500	$ 703,125	$ 703,125	$ 703,125	$ 375,000	$ 375,000	$ 375,000	$ 168,750	$ 168,750		
Total		$ -	$ -	$ -	$ 382,500	$ 850,000	$ 1,593,750	$ 2,125,000	$ 2,125,000	$ 2,125,000	$ 2,125,000	$ 2,432,125	$ 2,125,000	$ 2,125,000	$ 1,593,750	$ 1,593,750	$ 2,208,000	$ 850,000	$ 850,000	$ 850,000	$ 382,500	$ 29,047,500	$ 55,383,875	
NVP		$ (68,079,953)	$ (2,399,198)	$ (2,463,248)	$ (61,671,398)	$ (1,486,198)	$ (552,923)	$ 86,793	$ 97,503	$ 93,303	$ 192,528	$ 416,178	$ 192,528	$ 93,303	$ (338,723)	$ (411,698)	$ 165,803	$ (1,082,473)	$ (1,082,473)	$ (1,082,473)	$ (1,549,973)	$ 26,939,153	##########	
																							5776383	
Cumulated Investments		$ (68,079,953)	$ (70,479,150)	$ (72,942,398)	$ (134,613,795)	$ (136,099,993)	$ (136,652,915)																	

Calculation for the culture of Pepper Plantation in Tanzania. Costs updated to 2020

Project "Farm Ericsson", Region Kingolwira, Morogoro

Project Size in ha 170

Planted Area with Pepper in ha 150

COSTS PER HECTARE

Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Land price sale	$ 2,000																					$ 2,000
Land price lease																						
Initial land clearing	$ 200																					$ 200
Irrigation installation	$ 250																					
Equipment & tools	$ 400	$ 150	$ 150	$ 150	$ 150	$ 100	$ 100	$ 100	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 1,950
Pepper Plants/Nursery	$ 300																					$ 300
Planting & replanting	$ 500																					$ 500
Fertilization	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 30				$ 50				$ 50							$ 1,030
Plantation maintenance	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 21,000
Professional staff	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 6,300
Pest control	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 315
Fire equipment & patrolling	$ 50	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 250
Infraestructure	$ 200	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 1,200
Road maintenance	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 525
Farm maintenance	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 4,200
Staff training	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420
External audits	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 840
Research	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420
Prunings																						$ -
Thinnings																						$ -
Harvest				$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 3,600
Miscelaneous (5%)	$ 284	$ 99	$ 99	$ 109	$ 109	$ 107	$ 101	$ 99	$ 97	$ 97	$ 99	$ 97	$ 97	$ 97	$ 99	$ 97	$ 97	$ 97	$ 97	$ 97	$ 97	$ 2,265
Total	**$ 5,954**	**$ 2,079**	**$ 2,079**	**$ 2,289**	**$ 2,289**	**$ 2,237**	**$ 2,111**	**$ 2,079**	**$ 2,027**	**$ 2,027**	**$ 2,079**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 2,079**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 47,315**

Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Plants ha (2x2m)	2500																					
Harvest in kg per tree				0.5	1	1.5	2	2	2	2	2	2	2	1.5	1.5	1.5	1	1	1	0.5	0.5	
Price per kg in USD				$1.80	$2.00	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.00	$2.00	$2.00	$1.80	$1.80	
Total				**$ 2,250**	**$ 5,000**	**$ 9,375**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 9,375**	**$ 9,375**	**$ 9,375**	**$ 5,000**	**$ 5,000**	**$ 5,000**	**$ 2,250**	**$ 2,250**	**$151,750**
Sles & Marketing Fee	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	
Social spendings	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	
Total	**$ 1,500**	**$ 1,500**	**$ 1,500**	**$ 1,125**	**$ 2,500**	**$ 4,688**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 4,688**	**$ 4,688**	**$ 4,688**	**$ 2,500**	**$ 2,500**	**$ 2,500**	**$ 1,125**	**$ 1,125**	**$ 80,375**

NVP	**$ 33,060**

Calculation for the culture of Teak Plantation in Tanzania. Costs updated to 2020

Project "Farm Taj Mohammed", Region Kingolwira, Morogoro

Project Size in ha 750

Planted Area with Teak in ha 600

COSTS PER HECTARE

Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Land price sale	$ 1,000																					$ 1,000
Land price lease																						
Initial land clearing	$ 600																					$ 600
Irrigation installation	$ 1,000																					
Equipment & tools	$ 500	$ 200	$ 200	$ 200	$ 200	$ 100	$ 100	$ 100	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 2,250
Teak Plants/Nursery	$ 300																					$ 300
Planting & replanting	$ 500																					$ 500
Fertilization	$ 150	$ 100	$ 100			$ 50					$ 50				$ 50							$ 500
Plantation maintenance	$ 600	$ 600	$ 600	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 9,000
Professional staff	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 4,200
Pest control	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 315
Fire equipment & patrolling	$ 50	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 250
Infraestructure	$ 150				$ 100				$ 50				$ 50			$ 50						$ 400
Road maintenance	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 1,050
Farm maintenance	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 2,100
Staff training	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420
External audits	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 840
Research	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420
Prunings			$ 20	$ 20	$ 20	$ 20	$ 20	$ 20														$ 120
Thinnings					$ 20				$ 40				$ 40			$ 40						$ 140
Final harvest																					$ 150	$ 150
Miscelaneous (5%)	$ 265	$ 68	$ 69	$ 54	$ 60	$ 51	$ 49	$ 49	$ 50	$ 45	$ 48	$ 45	$ 50	$ 45	$ 48	$ 50	$ 45	$ 45	$ 45	$ 45	$ 53	$ 1,278
Total	**$ 5,560**	**$ 1,423**	**$ 1,444**	**$ 1,129**	**$ 1,255**	**$ 1,076**	**$ 1,024**	**$ 1,024**	**$ 1,045**	**$ 950**	**$ 1,003**	**$ 950**	**$ 1,045**	**$ 950**	**$ 1,003**	**$ 1,045**	**$ 950**	**$ 950**	**$ 950**	**$ 950**	**$ 1,108**	**$ 25,833**

Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Planted trees per ha (3x3m)	1100																					
Harvested trees per ha				400				200			100					50					350	
Commercial Value in CuM				0				0			5					5					120	
Girth in cm	0	2	4	6	8	10	11.5	13	14.5	16	17.5	19	20	21	22	23	24	25	26	27	28	
Price per CuM in USD											$90					$180					$350	
Total											**$ 450**					**$ 900**					**$ 42,000**	**$ 43,350**
Fee to Forestry Holding											25%					25%					25%	
Social spendings											10%					10%					10%	
Total											**$ 293**					**$ 585**					**$ 27,300**	**$ 28,178**
NVP																						**$ 2,345**

Calculation for the culture of Teak Plantation in Tanzania. Costs updated to 2020																											
Project "Farm Kiroka", Region Kiroka, Morogoro																											
Project Size in ha	300																										
Planted Area with Teak in ha	100																										
COSTS PER HECTARE																											
Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total					
Land price sale	$ 2,000																					$ 2,000					
Land price lease																											
Initial land clearing	$ 200																					$ 200					
Irrigation installation	$ 100																										
Equipment & tools	$ 300	$ 150	$ 150	$ 150	$ 150	$ 100	$ 100	$ 100	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 1,850					
Teak Plants/Nursery	$ 300																					$ 300					
Planting & replanting	$ 500																					$ 500					
Fertilization	$ 150	$ 100	$ 100			$ 50					$ 50				$ 50							$ 500					
Plantation maintenance	$ 600	$ 600	$ 600	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 9,000					
Professional staff	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 4,200					
Pest control	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 315					
Fire equipment & patrolling	$ 50	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 250					
Infraestructure	$ 120				$ 100				$ 50				$ 50			$ 50						$ 370					
Road maintenance	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 525					
Farm maintenance	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 2,100					
Staff training	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420					
External audits	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 840					
Research	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420					
Prunings			$ 20	$ 20	$ 20	$ 20	$ 20	$ 20														$ 120					
Thinnings					$ 20				$ 40				$ 40			$ 40						$ 140					
Final harvest																					$ 150	$ 150					
Miscelaneous (5%)	$ 237	$ 64	$ 65	$ 50	$ 56	$ 50	$ 48	$ 48	$ 49	$ 44	$ 47	$ 44	$ 49	$ 44	$ 47	$ 49	$ 44	$ 44	$ 44	$ 44	$ 52	$ 1,215					
Total	**$ 4,977**	**$ 1,344**	**$ 1,365**	**$ 1,050**	**$ 1,176**	**$ 1,050**	**$ 998**	**$ 998**	**$ 1,019**	**$ 924**	**$ 977**	**$ 924**	**$ 1,019**	**$ 924**	**$ 977**	**$ 1,019**	**$ 924**	**$ 924**	**$ 924**	**$ 924**	**$ 1,082**	**$ 25,415**					
Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total					
Planted trees per ha (3x3m)	1100																										
Harvested trees per ha				400				200			100					50					350						
Commercial Value in CuM				0				0			5					5					120						
Girth in cm	0	2	4	6	8	10	11.5	13	14.5	16	17.5	19	20	21	22	23	24	25	26	27	28						
Price per CuM in USD											$90					$180					$350						
Total											**$ 450**					**$ 900**					**$ 42,000**	**$ 43,350**					
Fee to Forestry Holding											25%					25%					25%						
Social spendings											10%					10%					10%						
Total											**$ 293**					**$ 585**					**$ 27,300**	**$ 28,178**					
NVP																						**$ 2,763**					

Calculation for the culture of Teak Plantation in Tanzania. Costs updated to 2020

Project "Farm Usambara", Region Korogwe, Tanga

Project Size in ha 400

Planted Area with Teak in ha 350 60 ha already planted, 280 ha to be planted

COSTS PER HECTARE

Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Land price sale	$ 2,000																					$ 2,000
Land price lease	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 1,050
Initial land clearing	$ 400																					$ 400
Irrigation installation	$ 600																					
Equipment & tools	$ 500	$ 200	$ 200	$ 200	$ 200	$ 100	$ 100	$ 100	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 2,250
Teak Plants/Nursery	$ 300																					$ 300
Planting & replanting	$ 500																					$ 500
Fertilization	$ 150	$ 100	$ 100			$ 50					$ 50				$ 50							$ 500
Plantation maintenance	$ 600	$ 600	$ 600	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 9,000
Professional staff	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 4,200
Pest control	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 315
Fire equipment & patrolling	$ 50	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 250
Infraestructure	$ 120				$ 100				$ 50				$ 50			$ 50						$ 370
Road maintenance	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 840
Farm maintenance	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 2,100
Staff training	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420
External audits	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 840
Research	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420
Prunings			$ 20	$ 20	$ 20	$ 20	$ 20	$ 20														$ 120
Thinnings					$ 20				$ 40				$ 40			$ 40						$ 140
Final harvest																					$ 150	$ 150
Miscelaneous (5%)	$ 285	$ 70	$ 71	$ 56	$ 62	$ 53	$ 51	$ 51	$ 52	$ 47	$ 50	$ 47	$ 52	$ 47	$ 50	$ 52	$ 47	$ 47	$ 47	$ 47	$ 55	$ 1,338
Total	**$ 5,990**	**$ 1,465**	**$ 1,486**	**$ 1,171**	**$ 1,297**	**$ 1,118**	**$ 1,066**	**$ 1,066**	**$ 1,087**	**$ 992**	**$ 1,045**	**$ 992**	**$ 1,087**	**$ 992**	**$ 1,045**	**$ 1,087**	**$ 992**	**$ 992**	**$ 992**	**$ 992**	**$ 1,150**	**$ 27,503**

Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Planted trees per ha (3x3m)	1100																					
Harvested trees per ha				400				200			100					50					350	
Commercial Value in CuM				0				0			5					5					120	
Girth in cm	0	2	4	6	8	10	11.5	13	14.5	16	17.5	19	20	21	22	23	24	25	26	27	28	
Price per CuM in USD											$90					$180					$350	
Total											**$ 450**					**$ 900**					**$ 42,000**	**$ 43,350**
Fee to Forestry Holding											25%					25%					25%	
Social spendings											10%					10%					10%	
Total											**$ 293**					**$ 585**					**$ 27,300**	**$ 28,178**

NVP	$ 674

Calculation for the culture of Pepper Plantation in Tanzania. Costs updated to 2020

Project "Farm Kiroka", Region Kiroka, Morogoro

Project Size in ha 300

Planted Area with Pepper in ha 150

COSTS PER HECTARE

Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Land price sale	$ 2,000																					$ 2,000
Land price lease																						
Initial land clearing	$ 200																					$ 200
Irrigation installation	$ 250																					
Equipment & tools	$ 400	$ 150	$ 150	$ 150	$ 150	$ 100	$ 100	$ 100	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 1,950
Pepper Plants/Nursery	$ 300																					$ 300
Planting & replanting	$ 500																					$ 500
Fertilization	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 30				$ 50				$ 50							$ 1,030
Plantation maintenance	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 21,000
Professional staff	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 6,300
Pest control	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 315
Fire equipment & patrolling	$ 50	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 250
Infraestructure	$ 200	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 1,200
Road maintenance	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 525
Farm maintenance	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 4,200
Staff training	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420
External audits	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 840
Research	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420
Prunings																						$ -
Thinnings																						$ -
Harvest				$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 3,600
Miscelaneous (5%)	$ 284	$ 99	$ 99	$ 109	$ 109	$ 107	$ 101	$ 99	$ 97	$ 97	$ 99	$ 97	$ 97	$ 97	$ 99	$ 97	$ 97	$ 97	$ 97	$ 97	$ 97	$ 2,265
Total	**$ 5,954**	**$ 2,079**	**$ 2,079**	**$ 2,289**	**$ 2,289**	**$ 2,237**	**$ 2,111**	**$ 2,079**	**$ 2,027**	**$ 2,027**	**$ 2,079**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 2,079**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 47,315**

Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Plants ha (2x2m)	2500																					
Harvest in kg per tree				0.5	1	1.5	2	2	2	2	2	2	2	1.5	1.5	1.5	1	1	1	0.5	0.5	
Price per kg in USD				$1.80	$2.00	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.00	$2.00	$2.00	$1.80	$1.80	
Total				**$ 2,250**	**$ 5,000**	**$ 9,375**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 9,375**	**$ 9,375**	**$ 9,375**	**$ 5,000**	**$ 5,000**	**$ 5,000**	**$ 2,250**	**$ 2,250**	**$151,750**
Sles & Marketing Fee	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	
Social spendings	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	
Total	**$ 1,500**	**$ 1,500**	**$ 1,500**	**$ 1,125**	**$ 2,500**	**$ 4,688**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 4,688**	**$ 4,688**	**$ 4,688**	**$ 2,500**	**$ 2,500**	**$ 2,500**	**$ 1,125**	**$ 1,125**	**$ 80,375**

NVP	$ 33,060

Calculation for the culture of Pepper Plantation in Tanzania. Costs updated to 2020

Project "Farm Ericsson", Region Kingolwira, Morogoro

Project Size in ha 170

Planted Area with Pepper in ha 150

COSTS PER HECTARE

Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Land price sale	$ 2,000																					$ 2,000
Land price lease																						
Initial land clearing	$ 200																					$ 200
Irrigation installation	$ 250																					
Equipment & tools	$ 400	$ 150	$ 150	$ 150	$ 150	$ 100	$ 100	$ 100	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 1,950
Pepper Plants/Nursery	$ 300																					$ 300
Planting & replanting	$ 500																					$ 500
Fertilization	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 30				$ 50				$ 50							$ 1,030
Plantation maintenance	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 21,000
Professional staff	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 6,300
Pest control	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 315
Fire equipment & patrolling	$ 50	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 250
Infraestructure	$ 200	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 1,200
Road maintenance	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 525
Farm maintenance	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 4,200
Staff training	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420
External audits	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 840
Research	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420
Prunings																						$ -
Thinnings																						$ -
Harvest				$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 3,600
Miscelaneous (5%)	$ 284	$ 99	$ 99	$ 109	$ 109	$ 107	$ 101	$ 99	$ 97	$ 97	$ 99	$ 97	$ 97	$ 97	$ 99	$ 97	$ 97	$ 97	$ 97	$ 97	$ 97	$ 2,265
Total	**$ 5,954**	**$ 2,079**	**$ 2,079**	**$ 2,289**	**$ 2,289**	**$ 2,237**	**$ 2,111**	**$ 2,079**	**$ 2,027**	**$ 2,027**	**$ 2,079**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 2,079**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 2,027**	**$ 47,315**

Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Plants ha (2x2m)	2500																					
Harvest in kg per tree				0.5	1	1.5	2	2	2	2	2	2	2	1.5	1.5	1.5	1	1	1	0.5	0.5	
Price per kg in USD				$1.80	$2.00	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.00	$2.00	$2.00	$1.80	$1.80	
Total				**$ 2,250**	**$ 5,000**	**$ 9,375**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 9,375**	**$ 9,375**	**$ 9,375**	**$ 5,000**	**$ 5,000**	**$ 5,000**	**$ 2,250**	**$ 2,250**	**$151,750**
Sles & Marketing Fee	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	
Social spendings	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	
Total	**$ 1,500**	**$ 1,500**	**$ 1,500**	**$ 1,125**	**$ 2,500**	**$ 4,688**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 4,688**	**$ 4,688**	**$ 4,688**	**$ 2,500**	**$ 2,500**	**$ 2,500**	**$ 1,125**	**$ 1,125**	**$ 80,375**
NVP																						**$ 33,060**

Calculation for the culture of Pepper Plantation in Tanzania. Costs updated to 2020

Project "Farm Kinole", Region Kinole, Morogoro

Project Size in ha 50

Planted Area with Pepper in ha 40

COSTS PER HECTARE

Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Land price sale	$ 2,000																					$ 2,000
Land price lease																						
Initial land clearing	$ 200																					$ 200
Irrigation installation																						
Equipment & tools	$ 400	$ 150	$ 150	$ 150	$ 150	$ 100	$ 100	$ 100	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 1,950
Pepper Plants/Nursery	$ 300																					$ 300
Planting & replanting	$ 500																					$ 500
Fertilization	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 30				$ 50				$ 50							$ 1,030
Plantation maintenance	$ 2,000		$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 21,000
Professional staff	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 6,300
Pest control	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 315
Fire equipment & patrolling	$ 50	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 250
Infraestructure	$ 200	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 50	$ 1,200
Road maintenance	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 4,200
Farm maintenance	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 4,200
Staff training	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420
External audits	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 40	$ 840
Research	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 420
Prunings																						$ -
Thinnings																						$ -
Harvest				$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 3,600
Miscelaneous (5%)	$ 330	$ 58	$ 108	$ 118	$ 118	$ 115	$ 109	$ 108	$ 105	$ 105	$ 108	$ 105	$ 105	$ 105	$ 108	$ 105	$ 105	$ 105	$ 105	$ 105	$ 105	$ 2,436
Total	**$ 6,925**	**$ 1,213**	**$ 2,263**	**$ 2,473**	**$ 2,473**	**$ 2,420**	**$ 2,294**	**$ 2,263**	**$ 2,210**	**$ 2,210**	**$ 2,263**	**$ 2,210**	**$ 2,210**	**$ 2,210**	**$ 2,263**	**$ 2,210**	**$ 2,210**	**$ 2,210**	**$ 2,210**	**$ 2,210**	**$ 2,210**	**$ 51,161**

Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Plants ha (2x2m)	2500																					
Harvest in kg per tree				0.5	1	1.5	2	2	2	2	2	2	2	1.5	1.5	1.5	1	1	1	0.5	0.5	
Price per kg in USD				$1.80	$2.00	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.00	$2.00	$2.00	$1.80	$1.80	
Total				**$ 2,250**	**$ 5,000**	**$ 9,375**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 12,500**	**$ 9,375**	**$ 9,375**	**$ 9,375**	**$ 5,000**	**$ 5,000**	**$ 5,000**	**$ 2,250**	**$ 2,250**	**$151,750**
Sles & Marketing Fee	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	
Social spendings	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	
Total	**$ 1,500**	**$ 1,500**	**$ 1,500**	**$ 1,125**	**$ 2,500**	**$ 4,688**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 6,250**	**$ 4,688**	**$ 4,688**	**$ 4,688**	**$ 2,500**	**$ 2,500**	**$ 2,500**	**$ 1,125**	**$ 1,125**	**$ 80,375**

NVP	$ 29,214

Calculation for the administration of ICSI Group																							
Project Teak and Pepper plantations in Tanzania																							
Project Size in ha	1500																						
Planted Area in ha	1340																						
Activity/year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	
Office	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 63,000	
Initial infrastructure	$ 10,000					$ 10,000					$ 10,000					$ 10,000					$ 10,000	$ 50,000	
Cars	$ 100,000	$ 100,000	$100,000	$ 100,000	$100,000	$ 100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$ 2,100,000	
Cars costs	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 210,000	
Travelling costs	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 420,000	
Head of Administration	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 525,000	
Head of Operations	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 525,000	
																						$ -	
Accountance	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 52,500	
Lawyers	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 105,000	
																						$ -	
Employee insurance	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 525,000	
																						$ -	
	57,000,000.00			$ 57,000,000																		$114,000,000	
																						$ -	
																						$ -	
																						$ -	
																						$ -	
																						$ -	
																						$ -	
																						$ -	
																						$ -	
																						$ -	
Miscelaneous (5%)	$ 2,861,275	$ 10,775	$ 10,775	$ 2,860,775	$ 10,775	$ 11,275	$ 10,775	$ 10,775	$ 10,775	$ 10,775	$ 11,275	$ 10,775	$ 10,775	$ 10,775	$ 10,775	$ 11,275	$ 10,775	$ 10,775	$ 10,775	$ 10,775	$ 11,275	$ 5,928,775	
Total	$ 60,086,775	$ 226,275	$226,275	$ 60,076,275	$226,275	$ 236,775	$226,275	$226,275	$226,275	$226,275	$236,775	$226,275	$226,275	$226,275	$226,275	$236,775	$226,275	$226,275	$226,275	$226,275	$236,775	$124,504,275	

Attachments

C.1

TANZANIA

BRELA

BUSINESS REGISTRATIONS AND LICENSING AGENCY

Certificate of Incorporation of a Company

Section 15

No: 141423827

I HEREBY CERTIFY THAT

ICSI GROUP LIMITED

is this day incorporated under the Companies Act, 2002 and that the Company is Limited.

GIVEN under my hand at Dar es Salaam this 2nd day of **APRIL TWO THOUSAND AND TWENTY.**

REGISTRAR OF COMPANIES TANZANIA

SNR ASST. REGISTRAR OF COMPANIES

CTIN: 2040751

TANZANIA REVENUE AUTHORITY

CERTIFICATE OF REGISTRATION
FOR
TAXPAYER IDENTIFICATION NUMBER (TIN)

(ISSUED UNDER SECTION 23 OF THE TAX ADMINISTRATION ACT 2015)

THIS IS TO CERTIFY THAT

ICSI GROUP LIMITED

HAS BEEN REGISTERED WITH THE TANZANIA REVENUE AUTHORITY AND ASSIGNED THE TAXPAYER IDENTIFICATION NUMBER

141-423-827

WITH EFFECT FROM: **02 April 2020**

TRA LOCATION: **MOROGORO** TAX OFFICE: **MOROGORO**

PHYSICAL LOCATION: **PLOT No. 315 LOCK No. MATI-LI**

STREET / AREA: NYANDIRA

ABDUL Y. MAPEMBE

OFFICIAL SEAL

NOTE: THE REQUIREMENTS UNDER WHICH THIS CERTIFICATE IS ISSUED ARE SUBJECT TO REVIEW

AG. COMMISSIONER FOR DOMESTIC REVENUE

ADA: 209 000/- ID: 13819.
Fomu: 1,000/- MLN

TFN. 226
(Rev. 2/96)

JAMHURI YA MUUNGANO WA TANZANIA

CERT. OF INCO. NO: 141423827 OF 2nd April 2020.

LESENI YA BIASHARA

B 03350283

(Imetolewa chini ya Sheria ya Leseni za Biashara Na. 25 ya Mwaka 1972 marekebisho ya mwaka 1980 na masharti yaliyo nyuma)

*Futa isiyotakiwa

1. Ofisi iliyotolewa HALMASHAURI YA MANISPAA MOROGORO.
2. Nambari ya Usajili wa mapato TIN: 141-423-827.
3. Leseni imetolewa kwa ICSI GROUP LIMITED
   kuendesha biashara ya BIDHAA ZA MNYAMA
   katika Wilaya/Kanda* ya MOROGORO Mtaa LITI
4. Ni ya Shina/Tawi* MJINI PLOT: 315 NO
   Ada Sh. 201,000/= Nambari ya Stakabadhi 577783
   ya tarehe 12.05.2020
5. Mpya inaendeleza* muda wa Leseni Na. MPYA.
   ya tarehe .....

   (ii) Muda wa leseni hii utaishia 30 Juni 20 11.05.2021

Tarehe 12.5.2020 Cestus M. Oferman

Sahihi na Muhuri wa Mtoaji Leseni

AFISA BIASHARA WA MANISPAA
MOROGORO

GP. Dsm

Personal Current Account Statement

Statement Date 19-Oct-20
Statement Period 01-Sep-20
19-Oct-20 12:00:0
Page Page 1 of 1 to

Branch MANDELA
Branch Code 00004239

Contact Details

Tel 232600504
VRN No 10-015768-X
TIN No 100476541

CRDB BANK PLC
RECEIVED
OCT 2020
CUSTOMER SERVICE DEPARTMENT
MANDELA BRANCH, 39

ICSI GROUP LIMITED

VRN No
TIN No

Account No	0150496460500
Account Description	01J10-CURRENT ACCOUNT-SMEORD
Currency	TZS

POSTING DATE	DETAILS	CHANNEL ID	VALUE DATE	DEBIT	CREDIT	BOOK BALANCE
04/Sep/20	Monthly Maintenance Fee	UXP	04-Sep-20	15,000.00		232,671,074.28CR
17/Sep/20	CHQ. NO 000014 ICSI GROUP LIMITED jamila taj schimid	BranchTelle	17-Sep-20	20,000,000.00		212,671,074.28CR
17/Sep/20	19620119-67117-00001-Cash Withdrawal OTC Charge	BranchTelle	17-Sep-20	5,085.00		212,665,989.28CR
17/Sep/20	VAT (18%) PAYABLE ON COMMISSION AND FEES	SCH	17-Sep-20	915.30		212,665,073.98CR
26/Sep/20	VAT (18%) PAYABLE ON COMMISSION AND FEES	UXP	26-Sep-20	2,700.00		212,662,373.98CR
04/Oct/20	Monthly Maintenance Fee	UXP	04-Oct-20	15,000.00		212,647,373.98CR
06/Oct/20	FUND TRANS TO JERSEY DRILLING COMPANY L	BranchTelle	06-Oct-20	11,000,000.00		201,647,373.98CR
19/Oct/20	Interim Statement Charge	UXP	19-Oct-20	3,388.00		201,643,985.98CR
	TOTAL VALUE			31,042,088.30		
	CLEAR BALANCE AS ON 19-Oct-20					201,643,985.98 CR
	BOOK BALANCE AS ON 19-Oct-20					201,643,985.98 CR

End of Statement

OVERDRAFT FACILITY DETAILS :

Overdraft Limit	TZS	0.00	Total VAT -3615.3
Overdraft Review Date		01-Jan-70	

Kindly examine this statement immediately. Any discrepancies must be reported to the Bank as soon as possible. Please note that the balance reflected could change if there are transactions that still need to be processed.