




ENVIRONMENTAL AND SOCIAL IMPACT ASSESMENT SUMMARY PROJECT

REPORT

FOR THE PROPOSED UPGRADING OF ICHAMAMA COFFEE FACTORY LOCATED ON LR NO. OTHAYA/GURA/457 WITHIN OTHAYA SUB-COUNTY, NYERI COUNTY



GPS Coordinates: 0°32'16.9"S 36°59'00.5"E.

Sponsor	Government of Kenya / County Government of Nyeri with support from the World Bank 
Client	Kenya Climate Smart Agriculture Project (KCSAP)
Proponent	Othaya Farmers' Cooperative Society

DECLARATION

This Environmental and Social Impact Assessment (ESIA) is for the proposed upgrading of, Ichamama Coffee Factory in Gura Ward, Othaya Sub-County Nyeri County on located on LR No. Othaya/Gura/457. The report has been prepared in accordance with NEMA regulations and World Bank environmental and social safeguards policies under the guidance and supervision of a registered NEMA Lead Expert. It meets statutory provisions stipulated in EMCA 1999, the Legal Notice No. 32 and the Environmental (Impact Assessment and Audit) (Amendment) Regulations, 2019; World Bank KCSAP triggered policies OP 4.01, OP 4.10, OP 4.11, OP 4.12 and OP 4.09. I hereby certify that the details herein are correct and true to the best of my knowledge

DETAILS OF THE EIA LEAD EXPERT

Name of Expert: Dickson Kimathi Muthaura
Expert Registration No. 6235
Address: P.O Box 2269-60200 Meru
Phone Number: 0726250782

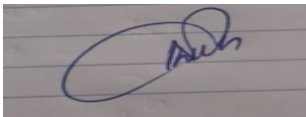
Signed: For expert



DETAILS OF THE PROJECT PROPONENT

NAME OF PROPONENT: OTHAYA FARMERS' COOPERATIVE SOCIETY
ADDRESS: P.O BOX 21 OTHAYA
NAME OF REPRESENTATIVE: MATHEW MWANGI
DESIGNATION: SECRETARY MANAGER

Signed:



ACKNOWLEDGEMENT

The ESIA Lead Expert wishes to thank the Government of Kenya, The World Bank Group and the Kenya Climate Smart Agriculture Project (KCSAP) Nyeri County Project Coordination Unit for financing the project and providing necessary assistance. I am most grateful to the Management of Othaya Farmers' Cooperative Society for providing the relevant information, documentation and for their active contribution throughout the entire ESIA preparation period. My kind regards to the KCSAP Panel of Experts for providing guidance, training on ESIA. Further, I wish to thank the local communities in Othaya Sub-County and the local administration who graciously provided pertinent data and/or information, documents and actively participated in the many consultative meetings, discussions and public participation forums that were carried out during the assessment process.

Contents

DECLARATION.....	1
ACKNOWLEDGEMENT.....	2
EXECUTIVE SUMMARY.....	5

ACRONYMS AND ABBREVIATIONS.....	7
1.2 Project Justification	8
1.3 Justification of conducting SPR	8
1.4 SPR objectives.....	8
1.5 SPR approach and methodology.....	9
1.5.1 Screening	9
1.5.2 Scoping	9
1.5.3 Methodology	9
1.6 Structure of the report.....	10
CHAPTER TWO: NATURE OF THE PROJECT.....	11
2.1 Introduction	11
2.2 Project description	11
2.2.1 Project activities	11
2.2.2 Materials, Products and By Products	11
2.2.3 Processes	11
2.2.4 Green Sourcing and transportation of construction materials	12
2.3 Project Layout	12
2.3.1 Installation of metallic drying tables	12
2.3.2 Installation of greenhouse solar drier	12
2.3.3 Other important utilities	12
CHAPTER THREE: THE LOCATION OF THE PROJECT.....	14
3.1 Introduction	14
3.2 Location description	14
3.3 Proof of Land Ownership	14
3.4 Availability of supportive environmental management infrastructure	14
3.4.1 Transport infrastructure and communication	14
3.4.2 Water Resources	15
3.4.3 Biological Environment	15
3.5 Conformity to land use or zonation plan	15
CHAPTER FOUR PUBLIC PARTICIPATION &STAKEHOLDER CONSULTATIONS.....	16
4.1 Introduction	16
4.2 Objectives of Public Consultation	16

4.3.1 Directly Affected People	16
4.3.2 Indirectly Affected Persons	16
4.3.3 Government Agencies and other organizations	16
4.4 Methodology of data collection.....	17
4.5 Summary of issues raised by the community and stakeholders’ responses.....	17
4.5.1 Perceived Benefits	17
4.5.2 Issues and Concerns	18
4.5.3 Summary of issues and Concerns raised	18
4.5.4 VMGs as beneficiaries	18
CHAPTER FIVE: ANTICIPATED ENVIRONMENTAL AND SOCIAL IMPACTS AND THEIR MITIGATION MEASURES .	19
5.1 Introduction	19
5.2 Anticipated Positive Environmental and Social Impacts.....	19
5.3 Anticipated Negative Impacts and Mitigation Measures in Preparatory Phase.....	20
5.4 Anticipated Negative Impacts and Mitigation Measures in construction Phase	20
5.5 Anticipated Negative Impacts and Mitigation Measures during Operational Phase	24
5.6 Anticipated Impacts during the Decommissioning Phase	25
CHAPTER SIX: ENVIRONMENTAL AND SOCIAL MANAGEMENT & MONITORING PLAN (ESM&MP)	27
6.1 Introduction	27
6.2 Environmental and Social Management & Monitoring Plan (ESM&MP).....	27
Environmental and Social Management & Monitoring Plan (ESMP) for the Decommissioning Phase.....	38
CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION	42
7.1 Conclusions	42
7.2 Recommendations	42
Annex 1: ESS checklist	43
Annex 2: Factory Effluent Discharge License	49
Annex 3: Proof of land ownership.....	50
Annex 4: Minutes of PP & SC	51
Annex 5: Proposed BoQ.....	58
Annex 6: Public participation questionnaires	59
Annex 7: Photos of PP & SC.....	Error! Bookmark not defined.

EXECUTIVE SUMMARY

The proposed Coffee Factory Rehabilitation Project at Ichamama Factory at GPS coordinates 0°32'16.9"S 36°59'00.5"E at Ichamama area, Gura Location Othaya, Sub County, Nyeri County. The factory is owned by Othaya Coffee Farmers' Cooperative Society. The main objective of the proposed project is to increase agricultural productivity and profitability of targeted rural coffee smallholder farmers, through intensification of agricultural systems, capacity development and efficient processing system. The Farmers' Cooperative Society is one of KCSAP beneficiary producer organizations matching grant investment. The cooperative intends to install one conditioning bin shade measuring 12ft X 10ft and construction of two solar driers measuring 50ft by 50ft. This initiative will not only address the challenge of wet and dry processing of coffee but also improve the quality of green berries produced. Security and running of the factory will be made easier. The proposed investment will reduce the food losses especially coffee which is one of the KCSAP value chains. The project cost Ksh 4,500,000.

The ESIA SPR was as a result of the recommendation by the County Director Environment (CDE) based on the screening report, Further, NEMA Public Notice on ESIA reclassification and Legal Notice No 31 categorizes the proposed activities as Low risk, thus requiring y an SPR. The project resonates well with the KCSAP objective of: increasing agricultural productivity, increasing resilience to climate change (adaptation) and reduction of greenhouse gas (GHG) emission (mitigation).

The study used scientific qualitative methodology and analysis for as a report, adhering to the relevant legislative framework governing the coffee industry. The lead expert used various approved techniques and methods to capture both primary and secondary data including; desk review, use of community participation (CPP) Questionnaires, focused Groups discussions, information sourcing and consultations through digital platforms such as telephone, email and WhatsApp, and review of related literature materials.

The proposed project involves construction and installation of one conditioning bin shade measuring 12ft X 10ft and construction of two solar driers measuring 50ft by 50ft. The expert emphasizes on minimal excavation and clearing of vegetation while carrying out the activities. Adherence with the phase specific ESMP should be done. Engineers' specifications will also be followed during the execution of the proposed activities.

From the public participation and stakeholders engagement carried out it was evident that the project will have both positive and negative environmental and social impacts. Increased access to market for the coffee factory who are currently certified by Rainforest, creation of employment and job opportunities for youths and Marginalized groups in the locality, improved processing of the coffee into parchment, reduced post-harvest losses for coffee produce, increased participation of women in socio-economic development and improved household and community income generating activities. Other positive benefits include infrastructural investment, leading to improved physical, visual and environmental quality of the area noise pollution, air pollution, occupational health and safety hazards and soil erosion during constructions, financial burden to community members, human and social conflicts.

An elaborate matrix for the negative impact mitigation measures has been laid out in chapter six presented as a detailed Environmental and Social Management Plan with timelines and cost estimates where applicable for implementation by responsible parties or stakeholders. The overall Total cost of implementing the mitigation measures for ESMMP is estimated at Ksh. 300,000 against the total proposed project cost of 4,500,000 million, farmers directly and almost an equivalent number of other people including inputs suppliers, transporters, consumers, traders and other service providers indirectly. The area is a coffee growing area. It is for this reason that the community members are very supportive of the project. It was also established that all the identified negative environmental and social impacts will be effectively mitigated through full implementation of the ESMP.

I strongly recommend that a concerted effort be made by all the stakeholders to implement the Environmental and Social Management Plan. During the operation, processing and marketing of produce, it is necessary that environmental regulations be strictly adhered to. The performance of the facility should also be monitored against the recommended mitigation measures to ensure sustainability

ACRONYMS AND ABBREVIATIONS

AFFA	Agricultural Fisheries and Food Authority
BOD	Biological Oxygen Demand
COD	Chemical Oxygen Demand
CSR	Corporate Social Responsibility
EIK	Environment Institute of Kenya
EMCA	Environmental Management and Co-ordination Act
Gok	Government of Kenya
IMS	Integrated Management Practices
ISO	Organization for International Standardization
Kgs	Kilograms
KBS	Kenya Bureau of Standards
KS	Kenya Standards
KPIs	Key Performance Indicators
MC	Moisture Content
NEMA	National Environmental Management Authority
OSHA	Occupational Safety and Health Act
OHS	Occupational Health and Safety
PPEs	Personal Protective Equipment
PVC	Polyurethane vinyl Chloride
SOPs	Standard Operating Procedures
RFA	Rain Forest Certification
TCU	True Colour Unit
TOR	Terms of Reference
TDS	Total Dissolved Solids
TSS	Total Suspended Solids
WRA	Water Resources Authority
WIBA	Work Injury and Benefits Act

CHAPTER ONE: INTRODUCTION

1.1 Background information

Ichamama Coffee Factory (Wet mill) is a coffee pulping station located in Nyeri County, Othaya District, Gura Location, Kiria sub location, Kiangoma/ Thaithi village. The site is bounded by GPS Coordinates: 0°32'16.9"S 36°59'00.5"E. The factory is about 2.5 kilometers of the Othaya – Gura road. It is part of the Othaya Farmers' Cooperative Society. It is mainly made up of small farm holders with each farmer having an average of 100 trees. Currently the factory has an active membership of 466. The factory receives between 100,000 to 150,000 kilograms of coffee cherry and its processing machine has a capacity of processing 3,000kgs per hour. The factory is managed by a committee elected by farmers with one elected factory representative sitting at the Rutuma Amalgamated FCS management committee, a body that is involved in making major decisions for the factory and for the Rutuma Cooperative Society as a whole. Varieties of coffee grown by the farmers in the factory include SL 28, Ruiru 11 and Batian.

1.2 Project Justification

The project was selected after a feasibility study was conducted in the area because of its relevance to KCSAP objective of: increasing agricultural productivity, increasing resilience to climate change (adaptation) and decreasing incidences of greenhouse gas (GHG) emission (mitigation). KCSAP through the coffee value chain has funded factories in the sustainable production of clean coffee. This will enhance the efficiency of coffee factory.

1.3 Justification of conducting SPR

The SPR has been carried out in conformity with the recommendation of the County Director Environment (CDE) based on the screening report, nevertheless, the NEMA Public Notice on ESIA and Legal Notice No 31 which identifies the proposed project as Low risk, thus requiring only SPR (ESIA).

1.4 SPR objectives

- To comply with the Environmental (Impact Assessment and Audit) Regulations, 2003, Regulation 6, which requires that an application for an Environmental and Social Impact Assessment (ESIA) license and applicable World Bank Policies.
- Study the nature of the project supported by design and plan drawn to scale
- Study any environmentally sensitive areas to be affected by the project
- Availability of supportive environmental management infrastructure
- Conformity to land use plan or zonation plan
- Potential environmental and social impacts of the project cycle phase: planning, construction, operation and decommissioning

- Mitigation measures for all potential environmental and social impacts
- Environmental management plan for the entire project life cycle
- Conduct comprehensive public consultation
- To prepare SPR report for the client

1.5 SPR approach and methodology

1.5.1 Screening

The second schedule of the environmental management and coordination Act of 1999 (Amendment 2016) provides the types of development projects which must be subjected to the ESIA study process before commencement. Depending on nature and magnitude of potential environmental and social impacts, the development projects are classified as either being Low risk, medium Risk or High risk.

1.5.2 Scoping

The scoping exercise involved identification of significant issues and reasonable project alternatives to the proposed project. This was done to enable the proponent focus on available resources on the assessment of those issues and alternatives. The Environmental Expert identified key stakeholders that would be affected by the project's activities and developed information on the natural resources that would be affected.

1.5.3 Methodology

The study adopted all the convectional guidelines, principles and approaches used and required in conducting of ESIA exercises of such proposed project in; type, impacts and magnitude:

i Data collection

To meet the objectives of the study, the expert adopted systematic, integrated, participatory and collaborative approaches. Information was gathered through document reviews, field investigations and focus group discussions. Key informants' interviews were conducted with among others administrators, scheme leaders and community leaders. Stakeholders' meetings were held, one FDG discussion, meeting with management, neighbors and community members. Questionnaires were administered to the members present. The ESIA experts also examined all legal and regulatory frameworks, socio-economic profiles in the project area, identified environmental impacts and proposed relevant mitigation measures. The report also provides environmental management framework, monitoring and evaluation mechanisms.

ii. Mobilization and Planning

This involved preparations of checklists, identification of stakeholders, mobilization of resources and logistics as well as public consultations. Community, proponent, and stakeholders' expectations were also considered and mainstreamed at this stage. All the community expectations and concerns as obtained

during the public participation were documented and addressed.

iii. Desk Review of Documents

Both Primary and Secondary data, socio-economic and baseline information as well as literature review was done at this stage.

iv. Field Data Collection

This entailed several trips by the ESIA team to the proposed site including transect walks and group/informant meetings and consultations.

v. Project Data Synthesis

The approach included both quantitative and qualitative site description, data analysis and presentation of information in charts, graphs, tables, figures, photographs and other attributes of descriptive (qualitative) statements.

vi. Public Consultation

Several methodologies were employed to collect the required data, including; structured checklists for community consultations to conduct personal interviews and systematized questionnaires to affected households. Stakeholders were consulted in relation to the project. Questionnaires were disseminated to the community members, duly signed and submitted. The collected data was then collated, analyzed and synthesized for the report compilation.

1.6 Structure of the report

- Introduction
- Nature of the project
- The location of the project
- Public participation and stakeholder consultations
- Anticipated impacts and mitigation measures
- Environmental and social management and monitoring plan (ESMMP)
- Conclusion and recommendations
- References
- Annexes

CHAPTER TWO: NATURE OF THE PROJECT

2.1 Introduction

This chapter highlights the project's description and design criteria put in place for the proposed project refurbishment, project layout and activities both at pre-refurbishment, refurbishment, operations and possibly during the project decommissioning. This chapter also highlights the various materials to be used and the total cost of implementing the sub project.

2.2 Project description

The proposed project is in Gura Ward, Othaya Sub-County Nyeri County on LR No. Othaya/Gura/457. The project is located approximately 9 kilometers East from Othaya town. The site is bounded by GPS Coordinates: 0°32'16.9"S and 36°59'00.5"E respectively. The area is historically a coffee growing area with potential to sustain the proposed development.

2.2.1 Project activities

The proposed project will involve a number of activities including

- Installation of a conditioning bin shades.
- Installation of solar driers measuring 50ft X 50ft.

2.2.2 Materials, Products and By Products

Minimal building materials will be required for the modernization of the coffee factory. These will include sand, ballast, cement, metal sheets, electrical gadgets and steel among others. Most of these materials will be obtained locally. The main sources of energy that will be required for construction of the project will include mains electricity (especially diesel). Electricity will be used for welding, metal cutting/grinding and provision of light. Diesel will run the vehicles that will transport the materials. The proponent shall promote efficient use of building materials and energy through all phases of the project. The expected By-products are mainly debris of construction materials during construction and coffee husks from the processing area. The mitigation measures for these are outlined at the ESMMP.

2.2.3 Processes

The following processes are carried out at the factory

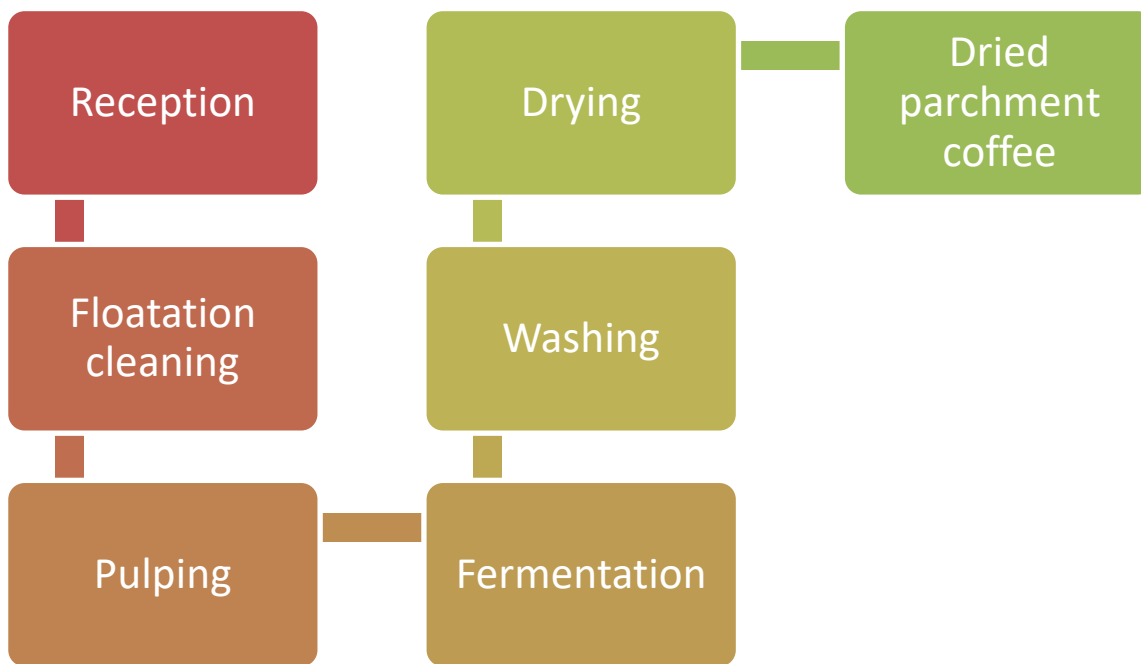


Figure 1 Flow chart showing coffee processing steps

2.2.4 Green Sourcing and transportation of construction materials

Building materials will be transported to the project site from their extraction, manufacture, or storage sites using transport trucks that are well maintained to avoid pollution. The building materials to be used in construction of the project will be sourced locally from Nairobi, Nyeri and Othaya areas. Greater emphasis will be laid on green procurement of building materials from within the local area, which will make both economic and environmental sense as it will reduce distance of travel by the materials transport vehicles.

2.3 Project Layout

2.3.1 Installation of metallic drying tables

The already existing faulty timber drying beds will be replaced with metallic drying beds that are more sustainable and reduce the uptake of natural resources. The designs, lengths and dimensions of the drying beds are as specified in the BQ annexed. The byproducts should be reused for other purposes and recycling.

2.3.2 Installation of greenhouse solar drier

The area where the installation will be done is available in the vicinity of the factory. Clearing of vegetation will be carried out but no trees will be cut down during the installation. A solar dryer helps to minimize the moisture contents in coffee beans and thus hastening the drying process.

2.3.3 Other important utilities

Water

The neighborhood get water from various sources; for domestic water the area is connected to Othaya Water Services Company, roof harvesting has been done (not the whole facility) and a storage tank available. The factory draws their processing water from Ichamama river that is a permanent stream.

Electricity

The facility is connected to KPLC electricity line. A recommendation has been given to the proponent to install solar systems for substitution. The solar energy can be used for the flood lights also.

CHAPTER THREE: THE LOCATION OF THE PROJECT

3.1 Introduction

This chapter gives a description of the siting, proof of land ownership, any environmental sensitive area, availability of supportive environmental management infrastructure and conformity to land use plan and zonation.

3.2 Location description

The proposed project is in Gura Ward, Othaya Farmers Cooperative Society Sub-County Nyeri County on LR No. Othaya/Gura/457. The project is located approximately 9 kilometers East from Othaya Water Services Company town. The site is bounded by GPS Coordinates: latitude $0^{\circ}32'16.9''S$ and longitude $36^{\circ}59'00.5''E$ respectively. The area is historically a coffee growing area with potential to sustain the proposed development. The project area is shown in the figure below;

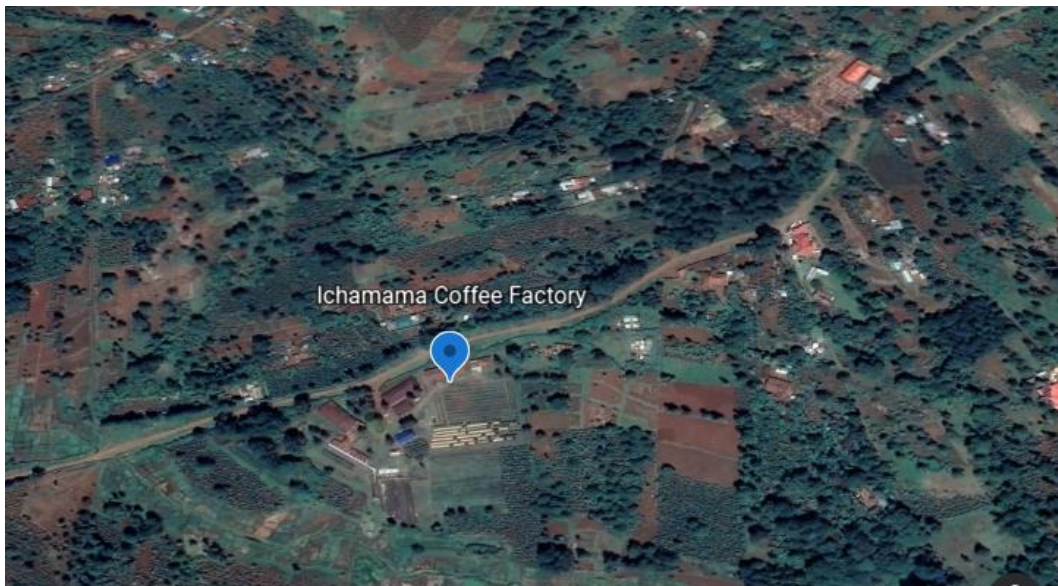


Figure 2: Map showing the proposed site and the neighborhood

3.3 Proof of Land Ownership

The proposed project site is owned by Othaya Water Services Company Farmers' Cooperative Society and is registered under the Lands Act, under title number Othaya/Gura/457 measuring approximately 9.2 Acres. (*see annex 4*)

3.4 Availability of supportive environmental management infrastructure

3.4.1 Transport infrastructure and communication

The factory is located approximately 7 kilometers from Othaya Water Services Company town. There are also several other feeder roads which connect the site to the interior of the region and are mainly earth roads, but majority already graded by the County government of Nyeri. Public means of transportation are available and the roads, hence easing product transportation in the area. The main mobile network providers in the sub project area are Safaricom, Telkom Kenya and Airtel Kenya.

3.4.2 Water Resources

The factory sources its water from Ichamama river which passes through the factory at the lower side and drains its water in Sagana River which is located one kilometer from the factory. In the factory there is also a water storage dam whose water is used during the dry season. The dam is fed by water from the stream as well as the underground runoff that flows from the valleys from both sides as the factory. The area is also connected to Othaya Water Services Company. Water harvesting both roof harvesting and storm water harvesting has also been done.

3.4.3 Biological Environment

The site environment dominantly consists of indigenous tree species and exotic trees planted on factory farmlands. Avocado, macadamia and gravellia robusta trees have been planted. Major crops grown include, coffee, maize, bananas, beans and other foods. There are also native grasses in the area with some papyrus reeds in the marshy areas. There also exist plantations of napier grass, coffee shrubs, macadamia and grevella robustus trees. The vegetation cover forms an important habitat for birds and other animal life forms. The project site is not in a protected area and does not have plants that have been marked for protected.

3.5 Conformity to land use or zonation plan

The main economic activity in the area is mixed farming where approximately 85.5% of farmers grow, coffee, maize, bananas, beans, and other food crops. In terms of effects of the climate change; the area has occasionally experienced a number of challenges in crop farming in the past. The predominant crop pests, and diseases ranging from 63%; and extreme weather conditions of frosts, landslides, floods and drought (16%). Livestock farmers have faced high costs of veterinary due to incidences of FMD, LSD, Pneumonia and other diseases, as well as other extension at; (46%) and animal feeds (39%) respectively. Hence the proposed project is intended to provide value addition in terms of proper collection, sorting, grading and handling of such products.

CHAPTER FOUR PUBLIC PARTICIPATION &STAKEHOLDER CONSULTATIONS

4.1 Introduction

This chapter discussed the objectives of community and stakeholders' consultations, categorization of the stakeholders, methodology of public participation and summary of the issues raised and responses.

4.2 Objectives of Public Consultation

Public consultations and stakeholders' participation is a requirement under the Constitution of Kenya 2010 and EMCA Cap 387 Laws of Kenya. The World Bank Group (WBG) also recognizes that engaging citizens and mobilizing communities in projects development process helps in achieving greater transparency, accountability, and social inclusion, thus improving development results. This is aimed at;

- Disseminate and correctly inform the stakeholders about the project, its key components, location and expected impacts.
- Awareness creation on the need for ESIA.
- Gather comments, concerns and suggestions of the interested and affected parties.
- Ensure that the decision-makers know the concerns of the stakeholders early enough.
- Incorporate the information collected into the ESIA study.

The purpose for such a process was to identify the positive and negative impacts and subsequently promote and mitigate them respectively. It also helped in identifying any other miscellaneous issues that may bring conflicts in case project implementation proceeded as planned.

4.3 Categorization of Community Participants and stakeholders

4.3.1 Directly Affected People

The project is targeting to reach about 566 (187-F, 379-M) households as direct beneficiaries (mainly local coffee farmers). The households fall under the larger Othaya Sub-County whose feasibility, EDP study has already been carried out.

4.3.2 Indirectly Affected Persons

They included other members of the public, and agencies that will be reached by any form of benefits from the project. These include traders, transporters and even users of the local ecosystem shared resources. This group of stakeholders also includes all those who reside in areas neighboring the project area or are reliant on resources in the project area and will have no change or the project may not adjust their livelihood.

4.3.3 Government Agencies and other organizations

The consultation also sought the participation of various government agencies, ministries, departments and associations. These included Ministry of agriculture, Local administration, WRA, Environment and climate change, Trade and cooperative development Security and the Social services. In broader extension and

especially during the operation phase, the benefits can also directly and indirectly affect other extra departments for example the ministry of; Trade, cooperative, health and education.

4.4 Methodology of data collection

The consultant held public consultative meetings with the society board members, management, farmers and key stakeholders in conjunction with the local administration where data was collected. The participants were sensitized on proposed project and were asked to give their opinions concerning any issue relating to impacts of the project to the society. The respondents comprised of neighbors, coffee farmers, community members and other relevant stakeholders. Through the public consultations, written and oral information was obtained on the benefits, anticipated negative impacts and mitigation measures.



Figure 3 Some of the members present in a participatory meeting

4.5 Summary of issues raised by the community and stakeholders' responses

The following is a summary of issues raised by the members who attended the meeting:

4.5.1 Perceived Benefits

The proposed project will create significant economic and social benefits to the coffee factory members who will be delivering more coffee cherries and thus contributing to the attainment of the National priority goals and ongoing county efforts to accelerate economic growth and alleviate poverty.

Installation of machines and appliances at the factory will reduce post-harvest losses of coffee in the wet and dry processes hence contributing to enhanced food security and improved production of quality coffee.

The installation of the machines will enhance the processing of coffee into parchments.

Income diversification strategy; Investment in the development is a strategy in reducing risks associated with livelihood variability and related challenges.

Employment opportunities will be offered to the construction workers and any other person who will be hired to provide her/his services during the construction phase. In addition to direct employment, supplies of basic

necessities to the workers will also lead to more employment opportunities and acquisition of entrepreneurial skills. This will inculcate a sense of project ownership within the community.

The project will improve the coffee industry in Othaya Sub-county and in the county.

The project will also play a role in reduction of idleness particularly amongst the youth due to an increase in income generating activities either directly or indirectly.

The project will also ease the direct resource dependency pressures on forest and forest resources due to the diversification in sources of livelihood and provision of services.

Reduced poverty levels through increased incomes and improved livelihoods resulting from construction of the proposed project and maintenance employment and consumption from the local markets, emergence of other associated economic opportunities and activities.

The project will contribute to the larger development of Gura area and thus encouraging new investors and developers.

4.5.2 Issues and Concerns

Increased production of waste due to the increased production.

Possibility of insecurity, conflicts and traffic issues as a result of transportation and entry of various people to provide services and derive benefits out of the proposed project. These are low and mitigatable by the various measures to be addressed in the management plans.

Increase in costs of utility bills in terms of energy and water. These will be mitigated by capacity building users on utility-efficient use measures such as saving mechanism, and diversification to renewable energy sources such as solar panels; or putting up of a biogas system to utilize the mentioned biodegradable agricultural wastes.

4.5.3 Summary of issues and Concerns raised

Almost all the respondents (95%) had a strong conviction on the key benefits they would accrue from the proposed project. This is mainly associated with creation of employment, value addition of agricultural produce, income and other socio-economic benefits. The perception of such benefits is an indication that there is a serious need for such a project and feasibility of demand. Equally, most respondents (97.5%) were willing to pay for the services associated with the proposed project. Already the cooperative members have identified a piece of land for construction of the project among many other contributions both in monetary and in kind, in order to ensure that the project materializes. Similarly fundamental is the contributions also made by the other key stakeholders namely KCSAP, Department of Agriculture and the County Government of Nyeri. Therefore, the ability to handle all these issues makes it a key indicator of potential project success.

4.5.4 VMGs as beneficiaries

The community members informed the ESIA team that women and children will be the greatest beneficiaries of the proposed project as they are the ones exposed to the danger of poverty when no socio-economic aspects are running well in the community.

CHAPTER FIVE: ANTICIPATED ENVIRONMENTAL AND SOCIAL IMPACTS AND THEIR MITIGATION MEASURES

5.1 Introduction

This chapter discusses the potential positive and negative environmental and social impacts and mitigation measures for the potential negative impacts for the three project phases i.e., construction, operational and decommissioning Phases.

5.2 Anticipated Positive Environmental and Social Impacts

a) Creation of Employment Opportunities to the Community

The proposed project activities are expected provide short term employment opportunities to the host community. The proposed aggregation and marketing facility will create employment opportunities for both skilled and unskilled workers. This will be beneficial both from the economic and social point of view. Economically, people employed will earn income which will improve their livelihoods and those of their families. Socially, the workers who will be engaged in productive employment which will translate into reduced social ills at the same time fostering healthy interaction thus social integration.

b) New Business Opportunities for the Host Community

In the construction phase the local community will benefit from supply of essential items to the workers on site such as foodstuffs and construction material. This will contribute to increased household income. Market will be created for local transporters who will get the opportunity to ferry construction materials to the site and for the vehicle fuel filling stations that will get the business opportunity to sell fuel to vehicles and for machinery attached to the construction.

c) Source of Revenue for Government

The supply of construction materials to the project and fuel will contribute revenue to the county and national government in form of VAT, Cess, fuel levies among others.

d) Market for Construction Materials

The construction works will provide ready market for locally available construction materials such as cement, sand, timber, and steel, building stones and other necessary materials. This will result in a boost in the local economy.

e) Improved socialization in the community

The proposed project will bring together people from different parts of the county and the country and thus bringing socialization in the community.

f) Improved Well-being of Women and Children:

In most cases, at the household level, women and children bear the burden of farming when the practice is not a business. The proposed project will encourage mechanization of the farming practices and time saved thus would be invested in agricultural production and other engagements that could bring financial benefits to the family and increased time for studies for the children.

5.3 Anticipated Negative Impacts and Mitigation Measures in Preparatory Phase

a) Conflicts over project designs, project siting and project membership

The community members may disagree on the components of the designs of the project. The project site is part of the community contribution. This can bring conflicts in financial contribution towards the project implementation. Some might want to join the cooperative because of the proposed project against the bylaws.

Mitigation measures

- a) Provision of well defined by laws that elaborate on the issues of memberships for the new and existing members. This will ease and accommodate new members.

5.4 Anticipated Negative Impacts and Mitigation Measures in construction Phase

Environmental impacts

a) Soil Erosion and Soil Quality Degradation

Installation activities and transportation associated with heavy machines have the potential to loosen soils as a result of removal of vegetation and soil disturbance during transportation.

Mitigation Measures:

- Controlled movement of machinery at the site.
- Landscaping of the area that has bare soil.

b) Dust Generation

Dust will be emitted during movement of vehicles and related earthworks. Particulate matter pollution is likely to occur during excavation and related earthworks. This is likely to affect site workers and the project neighbors. Long hours of exposure might lead to respiratory and eye related complications.

Mitigation Measures

- Construction workers will be provided with proper PPEs including dust masks to mitigate against occupational health risks of inhaling dust
- Routine sprinkling of water on bare surfaces and dusty grounds;
- Contractor to enforce strict use of personal protective clothing.

c) Water pollution

The interactions between machinery use and water during construction/installation activities at the factory that may lead to pollution of the water. The large volumes of wastewater generated if not treated may lead to water pollution.

Mitigation measures

- Controlled water usage, water should be used only when necessary.
- The factory treatment lagoons should meet the NEMA recommendations and should be well managed to avoid pollution.
- Avoid oil spillages at the factory.

d) Noise and Excessive Vibrations

The proposed project is likely result in noise emission because of machines such as electrical works, minor construction on site. Noise could affect negatively on the workers involved in the construction works. Noise can also be a nuisance to the local community near the site

Mitigation Measures

- Contractor to ensure the use of well-maintained machinery/equipment and vehicles
- All construction work to be limited to daytime only;
- Immediate neighbors to be notified in advance on the date of commencement of construction work and possible date of completion of works at the site.
- All employees likely to be exposed to ear noise to be provided with ear protectors;
- Avoid idling of Machines and vehicles engines and turn off when not in use.
- Where possible fit all noisy machines and equipment with noise arresters.

e) Generation of Solid Waste

Waste during the construction period will arise from operations at the site. There will be a likelihood of accumulation of general solid waste at the site area.

Mitigation Measures

- The proponent should ensure recycling, reuse, reduction or disposed of waste in the designated and at the approved dumpsite.
- Provision of solid waste receptacles (waste bins)
- Sensitization of construction workers on proper disposal of solid wastes

f) Occupational Health and Safety Issues

It is expected that employees are likely to be exposed to occupational health risks due to accidents at the construction site. Injuries can arise from use of tools and equipment general site preparation. The injuries can

include cuts, bruises, falling from height and colliding. This exposure to risks of accidents and injuries is likely to extend to the pedestrians along the access road as a result of moving machinery to the site

Mitigation Measures

- Provision of suitable protective gear – PPE. The contractor should provide face overalls, helmets, safety boots, earmuffs, nose masks and gloves to the workers.
- Put in place appropriate safety signage along the construction route cautioning against various health and safety risks and prescribing particular mandatory actions
- The contractor should ensure there are no oil spills, no smoking, and no sources of ignition and proper use of warning signs in an explosive environment.
- Discourage unauthorized people from the project site- secure the site by fencing

Social impacts

a) Gender based violence and sexual harassment (GBV/SH)

This impact is triggered during project construction phase when the contractor(s) fail to comply with the following provisions:

- Gender Inclusivity requirements in hiring of workers and entire project management as required by Gender Policy 2011 and 2/3 gender rule; and
- Failure to protect human risk areas associated with, disadvantaged groups, interfering with participation rights, and interfering with labour rights.

The proposed Mitigation Measures of Human Rights and Gender Requirements are:

- Ensure clear human resources policy against sexual harassment that is aligned with national law.
- Integrate provisions related to sexual harassment in the employee Code of Conduct.
- Ensure appointed human resources personnel to manage reports of sexual harassment according to policy.
- The contractor(s) shall require employees, sub-contractors, sub-consultants, and any personnel thereof engaged in construction works to individually sign and comply with a Code of Conduct with specific provisions on protection from sexual exploitation and abuse.

b) Sexual Exploitation and Abuse by project workers against community members

This impact refers to sexual exploitation and abuse (SEA) committed by project staff against communities and represents a risk at all stages of the project, especially when employees and community members are not clear about prohibitions against SEA in the project.

Mitigation measures

- Develop and implement a SEA action plan with an Accountability and Response Framework as part of the C-ESMP. The SEA action plan will follow guidance on the World Bank's Good Practice Note

for Addressing Gender-based Violence in Investment Project Financing involving Major Civil Works (Sept 2018).

c) Risks of increased spread of COVID-19 at work sites

During project execution (civil works), large numbers of workers will be required to assemble together in meetings, toolbox talks and even at work sites; varied number of workforce including suppliers of material and services are also expected to come in from various places in the country and interaction of workers with the project host community will happen as workers find accommodation close to work sites, and/or return to their homes after works. The potential for the spread of any infectious disease like COVID-19 by projects is high. There is also the risk that the project may experience large numbers of its workforce becoming ill and will need to consider how they will receive treatment, and whether this will impact on local healthcare services including the project host community.

Mitigation Measures

- The contractor(s) will develop SOPs for managing the spread of COVID-19 during project execution and submit them for the approval of the Supervision Engineer and the Client before mobilization. The SOPs shall be in line with the World Bank guidance on COVID-19, Ministry of Health Directives and site-specific project conditions.

d) Child abuse

Children within the project area will be exposed to risks associated with interaction between them and project workers. This includes child labour and sexual abuse which coherently leads to teenage pregnancies and exposure to communicable diseases such as HIV/AIDS.

Mitigation measures

- Comply with all relevant local legislation, including labour laws in relation to child labor specifically provisions of Kenya's Employment Act, 2007 (Cap. 226) Part VII on protection of children against exploitation.
- The contractor will develop and implement a Children Protection Strategy that will ensure minors are protected against negative impacts associated with the project.
- All staff must sign, committing themselves towards protecting children, a contract which clearly defines what is and is not acceptable behavior.
- Children under the age of 18 years will not be hired on site as provided by Child Rights Act (Amendment Bill) 2014.

e) Grievances/conflicts

Common grievances expected to arise during the proposed project implementation include: Worker's interaction with the project and even the neighbors. Negative project impacts which may include disruption of income streams, physical harm, and nuisance from construction activities; Health and safety risks; Socially-unacceptable project staff relations with the communities and other stakeholders;

Mitigation measures

The following are possible mitigation measures to manage grievances:

- Establish a grievance redress mechanism (GRM) for the proposed project;
- Put in place a pre-emptive community liaison structure aimed at identifying potential issues arising from project-related impacts and addressing them before they become grievances;
- Establish a grievance redress mechanism targeting communities and other project stakeholders but not applicable to commercial and employee-employee relationships, and which will allow stakeholders to easily put forth their concerns relating to the project, implementation and have them addressed in a prompt and respectful manner;
- Address all raised grievances, real or imagined and take reasonable steps to maintain confidentiality of the parties to the mechanism and regardless of the complainants' participation in this process, give a guarantee that the complainant's statutory rights to undertake legal proceedings remain unaffected; and
- Educate all project stakeholders on the availability and use of the grievance redress mechanism in a manner that is understandable to all, before, during and after construction of the proposed project.

5.5 Anticipated Negative Impacts and Mitigation Measures during Operational Phase

a) Insecurity

This will be as a result of so many different people entries and moving in and out of the site for delivery of various coffee. Insecurity can also be associated with the reason that more machines have been installed at the factory. Measures proposed to mitigate here include: establishment of a strict security management systems and program, employment of day and night security personnel, installation of CCTV cameras and also fencing of the site with a permanent perimeter fence.

b) Conflicts

Social conflict as a result of competition for community goods and services, economic gains as well as resource use conflicts are always associated with almost every project. These will be mitigated by established problem and conflict resolution mechanisms spearheaded by the proponent, community, key stakeholders and the local administration.

c) Solid wastes

Operationalization of the project is expected also to increase the volume and other output of the benefits and also related adverse impacts such as generation of garbage from the operations of the project. These include

packaging, food leftovers and farm produce that may go bad in process of bad transportation. Proper measures on waste management shall be implemented. Use of the coffee husks waste as an input in the production of green manure for the farmers

5.6 Anticipated Impacts during the Decommissioning Phase

a) Solid waste generation:

During the decommissioning phase various activities will be carried that are likely to generate solid waste at the site thus a likelihood of accumulation of general solid waste at the site area.

Mitigation Measures

- The proponent should ensure recycling, reuse, reduction or disposed of waste in the designated and at the approved dumpsite.
- Provision of temporary solid waste receptacles (waste bins)
- Sensitization of construction workers on proper disposal of solid wastes
- The Proponent to liaise with the County Government of Nyeri and NEMA office for guidance on licensed waste collectors and suitable dumping sites for generated wastes.

b) Noise and vibrations:

Noise emission and vibrations is generated by machines like excavators used on site during demolition. Noise could impact negatively on the workers involved in the construction work. Noise can also be a nuisance to the local community near the site if works begins early in the morning to late in the night.

Mitigation Measures

- Maintain the levels of noise pollution from the machinery in accordance to the manufacturer's specifications
- All construction work to be limited to daytime only;
- Immediate neighbors to be notified in advance on the date of commencement of construction work.
- All employees likely to be exposed to ear noise to be provided with ear protectors;
- Contractor to ensure strict enforcement on use of ear protectors

c) Occupational Health and safety Risks

It is expected that employees are likely to encounter occupational health risks due to accidents during demolition at the project site. Because of demolition activities, workers are exposed to risks of accidents and injuries. Injuries can arise from use of tools and equipment general site preparation. The injuries can include cuts and bruises. Injuries from construction work can include falling from height and colliding.

Mitigation Measures

- Adhere to Site Occupational Health and Safety rules and regulations as stipulated in the Occupational Safety Act of Kenya of 2007 and revised in 2010.
- Erect an appropriate project signboard as directed by the proponent

- Erect the appropriate safety signage along the construction route cautioning against various health and safety risks and prescribing particular mandatory actions
- Provide adequate first-aid facilities in the project sites to handle medical emergencies during construction and PPEs
- Comply with the National and International Labor laws

CHAPTER SIX: ENVIRONMENTAL AND SOCIAL MANAGEMENT & MONITORING PLAN (ESM&MP)

6.1 Introduction

The Environmental and Social Management Plan (ESMMP) developed for the proposed upgrading of Ichamama Coffee Factory shall be implemented and operationalized by Project stakeholders to ensure objective management of environmental and social issues throughout the project cycle.

6.2 Environmental and Social Management & Monitoring Plan (ESM&MP)

(a) Construction phase Environmental Management & Monitoring Plan						
Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Frequency/ Time Frame	Est. Cost (Ksh.)
Risk of Soil Erosion	<ul style="list-style-type: none"> Apply soil erosion control measures such as leveling the project site to reduce run-off; Ensure proper landscaping of the affected areas within the compound, and Ensure compacted areas are ripped off to reduce run-off 	<ul style="list-style-type: none"> Visible soil erosion control measures in place Areas already landscaped 	<ul style="list-style-type: none"> Contractor/Supervising engineer/work foreman 	<ul style="list-style-type: none"> Photos of original site and current site status 	monthly	50,000

(a) Construction phase Environmental Management & Monitoring Plan

Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Frequency/ Time Frame	Est. Cost (Ksh.)
	<ul style="list-style-type: none"> Controlled movement of vehicles 					
Risk of oil spillage	<ul style="list-style-type: none"> Employ safety procedures to prevent oil spillage Ensure that oil/grease spills are immediately removed along with all contaminated material and disposed of at an approved waste disposal site; 	<ul style="list-style-type: none"> No oil spills cases reported 	<ul style="list-style-type: none"> Contractor/Supervising engineer/work foreman 	<ul style="list-style-type: none"> Records Tracking documents 	monthly	20,000
Generation of Solid and Liquid waste	<ul style="list-style-type: none"> Coffee husks should be used by farmers as green manure; Provide solid waste facilities (waste bins) Liaise relevant agencies for the 	<ul style="list-style-type: none"> Quantity of wastes generated, reused or recyclable No of litter bins Waste disposal site No of farmers using the husks 	<ul style="list-style-type: none"> Contractor/Supervising engineer/work foreman Coffee factory management 	<ul style="list-style-type: none"> Tracking documents Receipts Photos 	Weekly	20,000

(a) Construction phase Environmental Management & Monitoring Plan

Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Frequency/ Time Frame	Est. Cost (Ksh.)
	management of pesticides containers					
Air quality degradation/dust emissions	<ul style="list-style-type: none"> Secure the site where this can happen with appropriate dust screens Regular sprinkling of water to be done on open surface and dust grounds unless paving is done; Landscaping of the bare spaces Provision of appropriate PPEs 	<ul style="list-style-type: none"> No. of well-maintained machinery Water sprays and mists No. of designated hauling/stockpiles areas No of suitable PPE 	<ul style="list-style-type: none"> Contractor/Supervising engineer/work foreman NEMA 	<ul style="list-style-type: none"> LPOs Reports Signed contracts between Contractor & employees 	Weekly	30,000
Noise Pollution and vibrations	<ul style="list-style-type: none"> Maintain the levels of noise pollution from the machinery in accordance to the 	<ul style="list-style-type: none"> Number of PPEs purchased. Number of workers using PPEs. 	<ul style="list-style-type: none"> Contractor/Supervising engineer/work foreman 	<ul style="list-style-type: none"> Local purchase orders Reports Receipts 	Daily and weekly	30,000

(a) Construction phase Environmental Management & Monitoring Plan

Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Frequency/ Time Frame	Est. Cost (Ksh.)
	<ul style="list-style-type: none"> manufacturer's specifications All construction work to be limited to daytime only; Immediate neighbors to be notified in advance on the date of commencement of construction work. Provision of appropriate PPEs 	<ul style="list-style-type: none"> Available servicing cards/receipts 		<ul style="list-style-type: none"> Work plan 		
Occupational Health and Safety (OHS)	<ul style="list-style-type: none"> Proper barricading of the construction site The contractor to provide all workers with full protective gear (PPEs) The contractor to train and 	<ul style="list-style-type: none"> No of Labels and warning signs No of workers using PPEs on use by those involved at the site Trained officers on First-aid Kit Incidents reported 	<ul style="list-style-type: none"> Contractor/Supervising engineer/work foreman Directorate of Occupational Health and Safety (DOSHS) 	<ul style="list-style-type: none"> Purchase receipts Reports Attendance register Contingency plan for accident response in place 	Weekly	40,000

(a) Construction phase Environmental Management & Monitoring Plan

Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Frequency/ Time Frame	Est. Cost (Ksh.)
	<p>provide First-aid Kit to the workers and provide Incident and Accident Registers on site for recording of injuries or any OHS incidence</p> <ul style="list-style-type: none"> • Compliance with MOH COVID 19 regulations. • Displaying of OSH guidelines on site 	<ul style="list-style-type: none"> • Number of COVID-19 sensitizations conducted. • Emergency contacts at the site 				
Increased demand for water	<ul style="list-style-type: none"> • Water saving devices such as push taps to be installed to minimize lose. • Installation of roof rainwater harvesting systems at the premise. • Construction workers to be 	<ul style="list-style-type: none"> • water bills paid to WRA • No. of gutters installed for water harvesting • No, of onsite tanks • Rate of metered water consumption 	<ul style="list-style-type: none"> • Contractor/Supervising engineer/work foreman 	<ul style="list-style-type: none"> • Records • Purchase receipts • WRA permits 	Monthly	10,000

(a) Construction phase Environmental Management & Monitoring Plan						
Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Frequency/ Time Frame	Est. Cost (Ksh.)
	sensitized on appropriate water use and conservation technologies applicable.					
(b) Construction phase Social Management & Monitoring Plan						
Social impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Time Frame	Est. Cost (KShs.)
Social conflict	<ul style="list-style-type: none"> • Involve local administration and other social groups like the church in social mediation and moderation • Notify all the affected persons of any incident • Establish an effective and efficient grievance redress mechanism where all conflicts related to the 	<ul style="list-style-type: none"> • No. of cases/incidents/conflicts addressed 	<ul style="list-style-type: none"> • Contractor/Supervising engineer/work foreman • Local administration 	<ul style="list-style-type: none"> • Incident Register 	1 month	10,000

(a) Construction phase Environmental Management & Monitoring Plan

Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Frequency/ Time Frame	Est. Cost (Ksh.)
	project are addressed.					

(a) Operation phase Environmental Management & Monitoring Plan

Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Time Frame	Est. Cost (KShs.)
Increased demand for Energy	<ul style="list-style-type: none"> • Use of energy saving bulbs (LED lighting). • Optimize use of natural light during the day. • Install solar panels to limit energy use • Undertake regular energy audits. 	<ul style="list-style-type: none"> • No. of Energy saving bulbs in place • No. of solar panels in place • Energy audits conducted 	<ul style="list-style-type: none"> • Coffee Factory Management • CPCU • Energy experts 	<ul style="list-style-type: none"> • Receipts • Bills • Reports • Photos 	3 months	40,000
Generation of Solid waste	<ul style="list-style-type: none"> • Provide solid waste facilities (waste bins) • use coffee husks as green manure 	<ul style="list-style-type: none"> • Quantity of waste collected • No. of waste receptacles • No. farmers using green manure 	<ul style="list-style-type: none"> • Coffee factory management 	<ul style="list-style-type: none"> • Tracking records • Photos • Copies of license 	3 months	10,000
Water pollution	<ul style="list-style-type: none"> • Regular maintenance and management of the waste lagoons. 	<ul style="list-style-type: none"> • No of times maintenance done 	<ul style="list-style-type: none"> • Coffee factory management 	<ul style="list-style-type: none"> • Tracking records • Licenses • Photos 	2 years	10,000

(a) Operation phase Environmental Management & Monitoring Plan

Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Time Frame	Est. Cost (KShs.)
Occupational Health and Safety risks	<ul style="list-style-type: none"> Adhere to Site Occupational Health and Safety rules and regulations Sensitize all workers on occupational health and safety Provide adequate first-aid facilities in the project sites to handle medical emergencies 	<ul style="list-style-type: none"> No of Labels and warning signs No of workers using PPEs on use by those involved at the site Trained workers on basic first-aid Incident report Number of COVID-19 sensitizations conducted and Records of participants etc. Emergency contacts at the site 	<ul style="list-style-type: none"> Coffee Factory Management Directorate of Occupational Health and Safety (DOSHS) 	<ul style="list-style-type: none"> Purchase receipts Reports Attendance Register 	3 months	10,000

(b) Operational phase Social Management & Monitoring Plan

Social impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Time Frame	Est. Cost (Ksh.)
Social Conflict	<ul style="list-style-type: none"> Involve local administration and other social groups 	<ul style="list-style-type: none"> No. of cases/incidents/conflicts addressed 	<ul style="list-style-type: none"> Coffee Factory Management , CPCU 	<ul style="list-style-type: none"> Incident Register GRMs policy 	3 months	10,000

(a) Operation phase Environmental Management & Monitoring Plan

Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Time Frame	Est. Cost (KShs.)
	<p>like the church in social mediation and moderation</p> <ul style="list-style-type: none"> • Notify all the affected persons • Establish a grievance redress mechanism where all conflicts related to the project are addressed 					
Theft, vandalism and destruction of infrastructure	<ul style="list-style-type: none"> • Ensure the general safety and security of the facility at all times by providing day and night security guards • Ensure only authorized 	<ul style="list-style-type: none"> • Presence of a day and night security guard • No. of complaints 	<ul style="list-style-type: none"> • Coffee Factory Management • CPCU 	<ul style="list-style-type: none"> • Incident Register 	monthly	20,000

(a) Operation phase Environmental Management & Monitoring Plan

Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Time Frame	Est. Cost (KShs.)
	personnel get access to the site facility. <ul style="list-style-type: none"> Develop mechanism to address 					
Sexual Exploitation and Abuse	<ul style="list-style-type: none"> Develop and implement a SEA action plan Ensure necessary steps are in place for: Prevention of SEA: Management and Coordination: including integration of SEA in job descriptions, employments contracts, performance 	<ul style="list-style-type: none"> SEA Action Plan Code of Conduct Number of staff trainings SEA FP Community Liaison trained on PSEA 	<ul style="list-style-type: none"> Coffee Factory Management CPCU GBV Expert 	<ul style="list-style-type: none"> SEA action plan Attendance registers 	3 months	10,000

(a) Operation phase Environmental Management & Monitoring Plan

Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Time Frame	Est. Cost (KShs.)
	appraisal systems, etc.					

Environmental and Social Management & Monitoring Plan (ESMP) for the Decommissioning Phase

(a) Decommissioning phase Environmental Management & Monitoring plan

Environmental impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Time Frame	Est. Cost (KShs.)
Air quality/dust emissions	<ul style="list-style-type: none"> Dust suppression through water sprinkling. Proper servicing of equipment to reduce exhaust fumes. Proper communication engagement 	<ul style="list-style-type: none"> No. of equipment Serviced No. of forums held No. of complaints raised 	<ul style="list-style-type: none"> Contractor Coffee Factory Management CPCU 	<ul style="list-style-type: none"> Records of servicing, Registers Photos 	1 month	10,000
Generation of Solid and Liquid waste	<ul style="list-style-type: none"> Debris from demolition and all other solid waste to be handled, managed and disposed according to the EMC (Waste Management) Regulations 2005. Solid waste to be disposed only at licensed disposal sites; 	<ul style="list-style-type: none"> Quantity of debris collected No. of licensed waste handlers 	<ul style="list-style-type: none"> Contractor Coffee Factory Management CPCU 	<ul style="list-style-type: none"> Tracking records Photos Copies of license 	1 month	10,000

Occupational health and Safety risks	<ul style="list-style-type: none"> • Sensitize the decommissioning team on occupational health and safety • Discourage unauthorized idlers at the site • Provide adequate PPE's to workers • Adhere to Site Occupational Health and Safety rules and regulations as stipulated in the Occupational Safety Act of Kenya of 2007 and revised in 2010. 	<ul style="list-style-type: none"> • No. of sensitization meetings done • No of workers using PPEs on use by those involved at the demolition site • Number of COVID-19 sensitizations conducted and Records of participants etc. 	<ul style="list-style-type: none"> • Contractor • Coffee Factory Management • CPCU • Directorate of Occupational Health and Safety (DOSHS) 	<ul style="list-style-type: none"> • Purchase receipts • Reports • Attendance Register 	3 months	10,000
Noise Pollution and vibrations	<ul style="list-style-type: none"> • Maintain the levels of noise pollution from the machinery in accordance to the manufacturer's specifications • All work to be limited to daytime only; • Immediate neighbors to be notified in advance on the date of commencement of demolition work. 	<ul style="list-style-type: none"> • Number of PPEs purchased. • Number of workers using PPEs. • Available servicing cards/receipts 	<ul style="list-style-type: none"> • Contractor/Supervising engineer/work foreman 	<ul style="list-style-type: none"> • Local purchase orders • Noise survey Reports • Receipts • Work plan 	3 months	10,000
Water Pollution	<ul style="list-style-type: none"> • Waste to be disposed off through a NEMA registered waste disposal company and in a designated site only. • Exhaust the septic tank fully through a licensed exhauster 	<ul style="list-style-type: none"> • Quantity of waste debris collected and disposed accordingly • Licensed exhauster 	<ul style="list-style-type: none"> • Coffee Factory Management • CPCU <ul style="list-style-type: none"> • NEMA 	<ul style="list-style-type: none"> • Receipts, • Reports, • Copies of licenses, • MoU, • Photos 	3 months	10,000

		<ul style="list-style-type: none"> No of times site is remediated from spills 				
--	--	--	--	--	--	--

(a) Decommissioning phase Social Management & Monitoring Plan

Social impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	Time Frame	Est. Cost (Kshs)
Theft, vandalism and destruction of infrastructure	<ul style="list-style-type: none"> Provide day and night security guards Ensure only authorized personnel get access to the decommissioning site 	<ul style="list-style-type: none"> Presence of a day and night security guard No. of complaints 	Contractor Coffee Factory Management , CPCU	Incident Register Records of employment	monthly	20,000
Increased risk of illicit behavior and crime	<ul style="list-style-type: none"> Sensitize community and workers on expected code of conduct The proponent to ensure that the contractor prioritize the employment of locals and only use the immigrant workers where the skills or capacity lacks. The Contractor to ensure that comprehensive data on all workers involved in the project during construction is kept (register of all workers kept on site). 	<ul style="list-style-type: none"> No. Sensitized workers on national code of conduct Register of all worker on site Review report on workers behavior 	Contractor/Works foreman	Minutes Reports Attendance registers	6 months	10,000

Loss of employment	<ul style="list-style-type: none"> • Prior notification of the facility management, employees, local community members and relevant local leaders • Where possible provide an alternative source of livelihood 	<ul style="list-style-type: none"> • Notifications issued • No. of forums held 	<ul style="list-style-type: none"> • Contractor • Coffee Factory Management • CPCU 	<ul style="list-style-type: none"> • Memos • Letters 	3 months	30,000
--------------------	--	--	---	--	----------	--------

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION

7.1 Conclusions

The Environmental and Social Impact Assessment has established that several positive impacts which will accrue as a result of implementing the proposed project far much outweigh the anticipated negative impacts which can however be adequately mitigated. The Study has established the baseline information of the project area against which any changes will be monitored. The proponent will be committed to maximizing on the positive impacts which will have far reaching effects while mitigating the adverse impacts as per the ESMP in chapter six. This study therefore concludes that the proposed upgrading of the coffee factory will result to insignificant negative impacts that can compromise the ecological, socio-cultural, economic and environmental integrity of the host environment as well as health and safety of the residents. There was no objection on the proposed project from the community and the stakeholders

7.2 Recommendations

- This study recommends that the proposed project proponent be allowed to proceed with the proposed project with strict adherence to the ESMP. The ESMP should be shared with the Contractor to ensure the responsibilities assigned in the ESMP. The contractor will also be required to engage a qualified Environmental and Social Safeguards specialist as well as Safety and Health officer to oversee implementation of the ESMP.
- The proponent should share the ESMP with the all-other responsible stakeholders and that the ESMP form part and parcel of the Contractor's contract to ensure that their obligations as outlined in the ESMP are executed.
- The proponent will be required to undertake annual environmental audit pursuant to the provisions of EMCA.
- The proponent will apply to relevant authorities for various inspection, licensing and permits including public health and the County Government whenever applicable.

Annex 1: ESS checklist

Environmental and Social Screening Checklist

Sub projects screening process by benefitting CIGs

Section A: Background information

Name of County.....	Nyeri
Name of CSU/Monitoring Officer.....	
Sub project location.....	Nyeri South Sub County
Name of the CBO/Group.....	OTHAYA FCS
Postal Address:.....	P.O. Box 31-10106, Othaya
Contact Person.....	MATHIAS MURAGI
Cell phone:.....	0721 759 338
Sub project Title.....	ICHAMAMBA COFFEE FACTORY
Estimated cost (KShs.).....	Ksh. 4,500,000
Approximate size of land area available for the Sub project if applicable.....	2.5 Hrs 3-6 Hrs
Objectives of the Sub project.....	To evaluate factory compliance with relevant legislation, statutory requirement and regulation governing the coffee industry To assess extent to which the existing EMP is being used as an environmental Management tool To reduce the cost of processing coffee thereby increasing the coffee prices to farmers (Adoption of Temp)
Activities/enterprises undertaken.....	Construction & services 2. Consulting Business
How was the Sub project chosen?.....	Merit Project Motivation
Financial Year.....	2021/2022

Section B: Environmental Issues

Will the sub-project:	Yes	No
Create a risk of increased soil erosion?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Create a risk of increased deforestation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Create a risk of increasing any other soil degradation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Affect soil salinity and alkalinity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Divert the water resource from its natural course/location?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cause pollution of aquatic ecosystems by sedimentation and agro-chemicals, oil spillage, effluents, etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Introduce exotic plants or animals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Involve drainage of wetlands or other permanently flooded areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cause poor water drainage and increase the risk of water related diseases such as malaria?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Reduce the quantity of water for the downstream users?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Result in the lowering of groundwater level or depletion of groundwater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Create waste that could adversely affect local soils, vegetation, rivers and streams or groundwater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Reduce various types of livestock production?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Affect any watershed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Focus on biomass/bio-fuel energy generation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If the answers to any of the above is 'yes', please include an ESMP with Sub project application.

Section C: Socio-economic Issues

Will the sub-project:	Y	s	No
Displace people from their current settlement?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Interfere with the normal health and safety of the worker/employee?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Reduce the employment opportunities for the surrounding communities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Reduce settlement (no further area allocated to settlements)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Reduce income for the local communities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Increase insecurity due to introduction of the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Increase exposure of the community to communicable diseases such as HIV/AIDS?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Induce conflict?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have machinery and/or equipment installed for value addition?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Introduce new practices and habits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lead to child delinquency (school drop-outs, child abuse, child labor, etc.?)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lead to gender disparity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lead to poor diets?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Lead to social evils (drug abuse, excessive alcohol consumption, crime, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	-------------------------------------

Section D: Natural Habitats

Will the sub-project:	<input type="checkbox"/>	<input type="checkbox"/>
Be located within or near environmentally sensitive areas (e.g. intact natural forests, mangroves, wetlands) or threatened species? <i>NB: If the answer is yes, the Sub project should not proceed.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Adversely affect environmentally sensitive areas or critical habitats – wetlands, woodlots, natural forests, rivers, protected areas including national parks, reserves or local sanctuaries, etc.)? <i>NB: If the answer is yes, the Sub project should not proceed.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Affect the indigenous biodiversity (flora and fauna)? <i>NB: If the answer is yes, the Sub project should not proceed.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cause any loss or degradation of any natural habitats, either directly (through project works) or indirectly? <i>NB: If the answer is yes, the Sub project should not proceed.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Affect the aesthetic quality of the landscape?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Reduce people's access to the pasture, water, public services or other resources that they depend on?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Increase human-wildlife conflicts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Use irrigation system in its implementation? <i>NB: If the answers to any of the above is 'yes', please include an ESMP with Sub project application.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SECTION E: Pesticides and Agriculture Chemicals		
Will the Sub project:		<input checked="" type="checkbox"/>
Involve the use of pesticides or other agricultural chemicals, or increase existing use?		<input checked="" type="checkbox"/>
Cause contamination of watercourses by chemicals and pesticides?		<input checked="" type="checkbox"/>
Cause contamination of soil by agrochemicals and pesticides?		<input checked="" type="checkbox"/>
Experience effluent and/or emissions discharge?	<input checked="" type="checkbox"/>	
Export produce? Involve annual inspections of the producers and unannounced inspections?		<input checked="" type="checkbox"/>
Require scheduled chemical applications?		<input checked="" type="checkbox"/>

Require chemical application even to areas distant away from the focus?	<input checked="" type="checkbox"/>
Require chemical application to be done by vulnerable group (pregnant mothers, chemically allergic persons, elderly, etc.)?	<input checked="" type="checkbox"/>

If the answer to the above is 'yes', please consult the IPM that has been prepared for the project.

Section F: Vulnerable and Marginalized Groups meeting requirements for OP 4.10

Are there:		
People who meet requirements for OP 4.10 living within the boundaries of, or near the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Members of these VMGs in the area who could benefit from the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
VMGs livelihoods to be affected by the Sub project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If the answer to any of the above is 'yes', please consult the VMGF that has been prepared for the project.

Section G: Land Acquisition and Access to Resources

Will the sub-project:	Yes	No
Require that land (public or private) be acquired (temporarily or permanently) for its development?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Use land that is currently occupied or regularly used for productive purposes (e.g. gardening, farming, pasture, fishing locations, forests)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Displace individuals, families or businesses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Result in temporary or permanent loss of crops, fruit trees and pasture land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Adversely affect small communal cultural property such as funeral and burial sites, or sacred groves?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

Result in involuntary restriction of access by people to legally designated parks and protected areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Be on monoculture cropping?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If the answer to any of the above is 'yes', please consult the mitigation measures in the ESMF, and if needed prepare a (Resettlement Action Plan) RAP.

Section H: Proposed action

(i) Summarize the above:	(ii) Guidance
<input type="checkbox"/> All the above answers are 'No' <input type="checkbox"/> There is at least one 'Yes'	<ul style="list-style-type: none"> • If all the above answers are 'No', there is no need for further action; • If there is at least one 'Yes', please describe your recommended course of action (see below).

(iii) Recommended Course of Action

If there is at least one 'Yes', which course of action do you recommend? *SUMMARY PROJECT REPORT*

CSU¹s and CDE will provide detailed guidance on mitigation measures as outlined in the ESMF; and

Specific advice is required from CDE², Lead Officer t and CSUs regarding Sub project specific EIA(s) and also in the following area(s)

All Sub project applications/proposals MUST include a completed ESMF checklist. The KCSAP CSU and CDE will review the Sub project applications/proposals and the CDEs will sign off;

¹ Project County Coordinating Unit

² County Director of Environment and the County Technical Team

The proposals will then be submitted to KCSAP PIU for clearance for implementation by communities in the proposed Sub projects. **Expert Advice**

The National Government through the Department of Monuments and Sites of the National Museums of Kenya can assist in identifying and, mapping of monuments and archaeological sites; and

Sub project specific EIAs, if recommended, must be carried out by experts registered with NEMA and be followed by monitoring and review. During the process of conducting an EIA the proponent shall seek views of persons who may be affected by the Sub project. The WB policy set out in OP 4.01 requires consultation of Sub project affected groups and disclosure of EIA's conclusions. In seeking views of the public after the approval of the Sub project, the proponent shall avail the draft EIA report at a public place accessible to project-affected groups and local NGOs/CSOs.

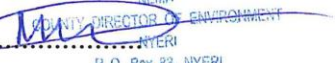
Completed by:

Name: EPHRAIM NDIRANGU

Position: CRSSCO - KCSAP

Date:

Field Appraisal Officer (CDE):

Signature: 
NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY
 NEMA
 COUNTY DIRECTOR OF ENVIRONMENT
 NYERI
 P. O. Box 83, NYERI
 TEL: 061 - 2032346

Date: 19/07/2022

Note:

Project category	Characteristics
A	Full and extensive ESIA needed- irreversible environmental impacts; impacts not easy to pick or isolate and mitigation cost expensive; ESMP design not easily done; Must have the EIA done and future annual EAs instituted
B	Site specific environmental impacts envisaged; mitigation measures easy to pick, not costly and ESMP design readily done; need an ESIA and future EAs
C	Have minimal or occasionally NO adverse environmental impacts; exempted from further environmental processes save environmental audits

Annex 2: Factory Effluent Discharge License

Serial No. **14493** Form B (r.17(1))



nema
natigaga yetu | ulul wetu | ujijiti witu

NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)
THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT
EFFLUENT DISCHARGE LICENSE

License No - NEMA/WQ/EDL/12331
Application Reference No: NEMA/WQ/EDA/13597

OFFICIAL USE:
This is to certify that the application for discharge to aquatic environment received from (name of applicant)
ICHAMAMA COFFEE FACTORY C/O OTHAYA ... of **P.O. BOX 21-10106, OTHAYA**
(address) to the National Environmental Authority in accordance with the Environmental Management and Co-ordination (Water Quality) Regulations, 2006 for **Lagoons/evaporation ponds**
(facility) located at **LR.NO. OTHAYA/GURA/457, NYERI COUNTY** (locality and district) to
discharge effluent to **land** has been evaluated and a
license is hereby issued for discharge, subject to attached conditions.
Expiry date **12/31/2022**
Dated - **6/21/2022**


Signature
(Seal)

Director-General
The National Environment Management Authority.

P.E.O.

ISO:9001-2008 Certified

Annex 3: Proof of land ownership

20


REPUBLIC OF KENYA
THE REGISTERED LAND ACT
(Chapter 300)

Canama Factory

Title Deed

Title Number OTHAYA/GURA/457
Approximate Area 3.6 ACRES
Registry Map Sheet No. _____

This is to certify that OTHAYA FARMERS CO-OPERATIVE
SOCIETY LIMITED - - - - -
- - - - -
- - - - -

is (are) now registered as the absolute proprietor(s) of the land comprised in the above-mentioned title, subject to the entries in the register relating to the land and to such of the overriding interests set out in section 30 of the Registered Land Act as may for the time being subsist and affect the land.

GIVEN under my hand and the seal of the
NYERI District Land Registry
this 9th day of February, 1999.



Land Registrar

Annex 4: Minutes of PP & SC



Republic of Kenya



Kenya Climate Smart
Agriculture Project



County Project Coordinating Unit-Nyeri

REF: KCSAP/NYI/COFFEE GEN/VOL I /

DATE: 19/11/2021

BACK TO OFFICE REPORT: INITIAL COFFEE REVITALISATION FCS MEETING

Date: 19.11.2021, Venue: OTHAYA FCS

Present

1. Patrick Mwangi-director Agribusiness & Marketing
2. Mary Ann Wanjiru-coffee Focal Person KCSAP/CRP
3. Ephantus Mwangi -Value chain expert -Coffee
4. Joseph Imboba-coffee factory officer
5. Charles Mbau Kabia- Coffee Officer Nyeri South

Othaya FCS Management committee

1. Mathew Mwangi-Secretary Manager
2. James Ndiritu
3. Edward Githambo
4. Daniel Wanjohi
5. William Kingori
6. Newton Ndiritu
7. Jane Kiragu
8. Daniel Ngunyi

MEETING OBJECTIVES.

- Sensitization of the coffee society management on the coffee Revitalization project and the activities to be involved.
- Objectives of the CRP.
- The main project activities being:
- Capacity building of the beneficiaries.

- Development of the modernization EDP
- Development of farm input proposals.
- capacity building of young coffee Agri-entrepreneur

Key issues on EDPs as discussed

- The management was given an outline of the project and being a conditional grant, all the conditions were highlighted as below:
 - Land on which factory modernization search must be consistent with the FCS name
 - The project cost for modernization is ksh. 8,100,000 and for inputs 2,060,000.
 - The 30% modernization FCS contribution. 5,600,000
 - Total FCS CONTRIBUTION: Ksh. 2,340,000
 - MOU between County government of Nyeri and FCS management.
 - Tax compliance -up to date
 - Supervisory committee on board
 - Project Account Introduced by CPCU for the FCS signatories to KCSAP banker
 - Up to date audited accounts/report
 - Any other condition put u by the donor.

Way forward

- The society management to hold a meeting and discuss the project.
- Each society to make a draft EDP from the given format through the secretary manager.
- Each society to get a way of raising the 30% required for each EDP.
- The management to select the factories that will be modernized/upgraded.
- The management to inform its members of the project activities.
- The secretary manager to be in charge of the EDP development in consultations with the Chairman

Prepared By :



Mary Ann Maina

Coffee Focal Person

KCSAP Nyeri

OTHAYA FARMERS' CO-OPERATIVE SOCIETY LIMITED



Othaya Town P.O. Box 21- 10106 Othaya
Phone: 0203526517 CellPhone 0711130732
Email: othayafcs@yahoo.com , othayafcs@gmail.com
Website: www.othayacoffee.com

EXTRACT OF MINUTES OF MANAGEMENT COMMITTEE MEETING HELD AT THE SOCIETY'S BOARDROOM ON 19th NOVEMBER 2021 AT 10.00AM

PRESENT

Mr James Gathua Ndiritu	- Chairman
Mr Daniel Gathee	- Vice Chairman
Mr Newton Mwangi	- Hon. Secretary
Mr Edward Wachira	- Treasurer
Mr Daniel Theuri	- Committee Member
Mr Charles Gatere	- Committee Member
Mr William Githinji	- Committee Member
Madam Jane Kiragu	- Committee Member

IN ATTENDANCE

Peter Njoroge	- Sub-county Cooperative officer-Nyeri Central
Mathew Mwangi	- Ag Sec. Manager

The meeting started with a prayer led by Madam Jane Kiragu .

Min.162/2021 COFFEE REVITALISATION PROJECT

Mr Patrick Mwangi Director Agribusiness and Marketing led a delegation from Nyeri County project coordinating unit for coffee revitalisation project briefing session. The coffee revitalisation project is a GOK and World Bank funded project under the Kenya Climate smart Agriculture project (KCSAP) .The project came as result of the coffee task force recommendations and the project will run for two years(2021/2022 &2022/2023).

The project touches on the following four principles:

- Government led and private sector driven.
- Focus on quick wins and rapid impact.
- Whole value chain approach.
- Data driven farmer centric intervention.

The project targets the following eight counties:

Kirinyaga, Murang'a, Nyeri, Kiambu, Meru, Embu, Machakos and Tharaka Nithi

The project aims at increasing coffee production and productivity and Value Chain.

Nyeri county- Six (6) cooperatives societies are set to benefit from the project.


The societies will receive the matching grant on a 70:30 ratio (i.e. 70% contribution by the project and 30% contribution by the cooperative society).

The Management Committee unanimously adopted the proposal.

Having no other business for discussion the chairman declared the meeting closed at 2.30P.M.

Having no other business for discussion the chairman declared the meeting closed at 2.30P.M.

Minutes Compiled by:-


Matthew Mwangi
Ag. Sec. Manager

Minutes Confirmed by:-

James Gathua  Date 9/12/2021
Chairman

Newton Mwangi  Date 9/12/2021
Hon Secretary

OTHAYA FARMERS' CO-OPERATIVE SOCIETY LIMITED



Othaya Town P.O. Box 21- 10106 Othaya
Phone: 0203526517 CellPhone 0711130732
Email: othayafcs@yahoo.com , othayafcs@gmail.com
Website: www.othayacoffee.com

EXTRACT OF MINUTES OF ANNUAL GENERAL MEETING HELD AT GATUYAINI FACTORYGROUND HELD ON 31ST JAN. 2022 AT 11.00 A.M.

PRESENT

Members 670

MANAGEMENT COMMITTEE

Mr. James Gathua	- Chairman
Mr. Daniel Gatheo	- Vice Chairman
Mr. Newton Mwangi	- Hon. Secretary
Miss Jane Kiragu	- Treasurer
Mr. Daniel Theuri	- Committee Member
Mr. Charles Gatere	- Committee Member
Mr. Edward Wachira	- Committee Member
Mr. William Githinji	- Committee Member

SUPERVISORY COMMITTEE

Mr. Moses Gachanja	- Chairman Supervisory
Mr. Richard Mwangi	- Secretary Supervisory
Mr. Dedan Muriithi	- Member

IN-ATTENDANCE

Mr. Peter Njoroge	- Sub-County Co-operative Officer - Nyeri Central
Mr. Francis Wanjii	- Sub-County Co-operative Officer - Nyeri South
Mr. Muhamand	- Assistance County Commission
Mr. Julius Wokabi	- Wokabi & Company
Mr. Mathew Mwangi	- Ag. Sec. Manager

The meeting started with prayer conducted by Pastor Mukiri

Min. 1/2022 CHAIRMAN WELCOMING SPEECH

The chairman welcomed the members and those in attendance. He introduced management committee members to attentive members.

Min. 2/2022 ADOPTION OF THE NOTICE

The Ag. Secretary Manager Mr. Mathew Mwangi read the notice convening the A.G.M. which contained the item of day's agenda.

Proposed by:- M/No.11690 Justus Kariuki

Seconded by:- M/No.12549 John Waikwa Githenya

Min. 8/2022 BUDGET PRESENTAION FOR THE YEAR REVISED 2021/2022 AND PROPOSED 2022/2023

The society's bookkeeper, Madam Faith Wanjugu presented the below budget to the members as follows:-

CAPITAL BUDGET FOR 2021/2022

SOURCES OF FUNDS	AMOUNT(KSH.)	APPLICATION OF FUNDS	AMOUNT(KSH.)
Net surplus from all society Activities	3,000,000.00	Metal drying tables in factories	3,360,000.00
Development fund 2020/2021	350,000.00	2 water pumps	1,000,000.00
Provision for Depreciation on Fixed Asset	1,000,000.00	2 Electric motor	800,000.00
New Members 150@2200	330,000.00	2 Recirculation Pump	1,000,000.00
KSCAP grant	5,670,000.00	Computer software and hard ware in coffee factories	1,360,000.00
Donation from coffee buyer(coffee machare)	121,632.00	6 sets of pulping discs	990,000.00
Borrow from financial institution	6,946,568.00	Mahiga water house and water pump	700,000.00
		Fermentation and soaking tank	350,000.00
		Furniture fittings and office equipment	358,200.00
		2 coffee solar drier	3,000,000.00
		2 coffee conditioning Bins	4,500,000.00
Total	17,418,200.00	Total	17,418,200.00

PROJECTED CAPITAL BUDGET FOR 2022/2023

SOURCES OF FUNDS	AMOUNT(KSH.)	APPLICATION OF FUNDS	AMOUNT(KSH.)
Net surplus from all society Activities	5,771,920.00	Metal drying tables in factory	2,880,000.00
Development fund 2021/2022	400,000.00	2 electric motors	800,000.00
Provision for Depreciation on Fixed Asset	1,000,000.00	2 Water Pumps	800,000.00
New Members 100@2200	220,000.00	2 Recirculation Pump	1,000,000.00
Borrow from Financial Institution	2,078,080.00	2 solar driers	3,000,000.00
		6 set of pulping discs	990,000
	9,470,000.00		9,470,000.00

During discussion of capital budget members also discussed KCSAP Project to be undertaken in Ichamama, Gatuyaini and Kiaguthu in year 2021/2022 where by the KCSAP will contribute 70% whereas the Co-operative society contribute 30%.


Members approved the projects.

Proposed by:- M/No.193 Stanley Waiganjo Ndagu

Seconded by:- M/No.387 Henry Mukumbu Kingori

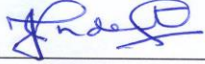
Having no other business for discussion the chairman declared the meeting closed after a prayer led by pastor Ngumo at 4.30Pm.

Minutes compiled by:-


Matthew Mwangi
Ag. Secretary Manager

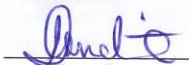
Minutes confirmed by:-

James Gathua


Chairman

Date 31/1/22

Newton Mwangi


Hon. Secretary

Date 31/1/22

Annex 5: Proposed BoQ

Investment Required (New Equipment, renovations and repairs)	Units/ for Society	Unit Cost	Total Cost for Society	Total Investment for Factory 1(Ichama)	Total Investment for Factory 2 (Gatuyaini)	Total Investment for Factory 3(Kiaguti)
Enhancing Drying capacity						
Solar Driers 50fts x 50fts	2	750,000	1,500,000	1,500,000		
Conditioning Bin Shade 12fts X 10fts	3		6,000,000	3,000,000	1,500,000	1,500,000
Metallic Dry Tables 5fts X 150 fts	6	120,000	600,000			600,000
Total Investment Required			8,100,000	4,500,000	1,500,000	2,100,000

Annex 6: Public participation questionnaires

ENVIRONMENTAL AND SOCIAL IMPACT ASSESMENT (SPR) REPORT FOR – ICHAMAMA COFFEE FACTORY

PUBLIC PARTICIPATION QUESTIONNAIRE

Name of the respondent. John Mwananga Kin. G. R. I.

Contact/Phone No. 0729 762 849 I/D No. 137 1103

Physical Address. SO OTIYA

Negative Impacts

Are there negative/harmful Impacts to the proposed project(s)?

YES

NO

Or

(Please mark accordingly using a tick or cross)

If yes, kindly list the impacts:

N/A

How can they be minimized or mitigated against

N/A

RESPONDENT RECOMMENDATION:

In your opinion, do you think the project should be allowed continue?

YES

OR

NO

(Please mark accordingly using a tick or cross)

Kindly give reasons for your choice:

E.D.R. E.S.I. Drying of coffee to facilitate timely marketing

SIGN: [Signature]

Thank you for your Comments/Participation

Environmental Impact Assessment (EIA) Report (July-2022).

**ENVIRONMENTAL AND SOCIAL IMPACT ASSESMENT (SPR)
REPORT FOR – ICHAMAMA COFFEE FACTORY**

PUBLIC PARTICIPATION QUESTIONNAIRE

Name of the respondent... METEV MUTU

Contact/Phone No. 074660604 I/D No. 12478

Physical Address... 73 OTHA

Negative Impacts

Are there negative/harmful Impacts to the proposed project(s)?

YES

NO

Or

(Please mark accordingly using a tick or cross)

If yes, kindly list the impacts:

.....
..... N/A
.....

How can they be minimized or mitigated against

.....
..... N/A
.....

RESPONDENT RECOMMENDATION:

In your opinion, do you think the project should be allowed continue?

YES

OR

NO

(Please mark accordingly using a tick or cross)

Kindly give reasons for your choice:

.....
..... it may INCREASE PRODUCTION OVER TO
..... the REDUCTION OF EXPENSES
.....

SIGN:

Thank you for your Comments/Participation

**ENVIRONMENTAL AND SOCIAL IMPACT ASSESMENT (SPR)
REPORT FOR – ICHAMAMA COFFEE FACTORY**

PUBLIC PARTICIPATION QUESTIONNAIRE

Name of the respondent METEV MUTUA

Contact/Phone No. 0744660604 I/D No. 12478

Physical Address 73 OTHA

Negative Impacts

Are there negative/harmful Impacts to the proposed project(s)?

YES

NO

Or

(Please mark accordingly using a tick or cross)

If yes, kindly list the impacts:

.....
..... N/A

How can they be minimized or mitigated against

.....
..... N/A

RESPONDENT RECOMMENDATION:

In your opinion, do you think the project should be allowed continue?

YES

OR

NO

(Please mark accordingly using a tick or cross)

Kindly give reasons for your choice:

.....
..... It may INCREASE PRODUCTION OVER TO
..... the REDUCTION OF EXPENSES

SIGN: [Signature]

Thank you for your Comments/Participation

**ENVIRONMENTAL AND SOCIAL IMPACT ASSESMENT (SPR)
REPORT FOR – ICHAMAMA COFFEE FACTORY**

PUBLIC PARTICIPATION QUESTIONNAIRE

Name of the respondent... JANE W. MWANGI
Contact/Phone No... 0792479953 I/D No... 20594745
Physical Address... 21-10106 OTHAIA

Negative Impacts

Are there negative/harmful Impacts to the proposed project(s)?

YES

Or

NO

(Please mark accordingly using a tick or cross)

If yes, kindly list the impacts:

.....
..... N/A

How can they be minimized or mitigated against

.....
..... N/A

RESPONDENT RECOMMENDATION:

In your opinion, do you think the project should be allowed continue?

YES

OR

NO

(Please mark accordingly using a tick or cross)

Kindly give reasons for your choice:

.....
..... This will enhance proper storage
..... of coffee bins. Also will help the
..... bins to dry even when the climate is poor.

SIGN: A

Thank you for your Comments/Participation

**ENVIRONMENTAL AND SOCIAL IMPACT ASSESMENT (SPR)
REPORT FOR – ICHAMAMA COFFEE FACTORY**

PUBLIC PARTICIPATION QUESTIONNAIRE

Name of the respondent... FRANCIS M. MUEMBA WANGARI

Contact/Phone No. 0721900940 I/D No. 22491250

Physical Address... 416 Othaya

Negative Impacts

Are there negative/harmful Impacts to the proposed project(s)?

YES

NO

Or

(Please mark accordingly using a tick or cross)

If yes, kindly list the impacts:

.....
..... N/A

How can they be minimized or mitigated against

.....
..... N/A

RESPONDENT RECOMMENDATION:

In your opinion, do you think the project should be allowed continue?

YES

OR

NO

(Please mark accordingly using a tick or cross)

Kindly give reasons for your choice:


.....
..... Good storage and fastening drying

SIGN: [Signature]

Thank you for your Comments/Participation

Annex 7: Lead expert practicing license

FORM 7 (r.15(2))



nema
mazingira yetu | uhai wetu | wajibu wetu

NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY(NEMA)
THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT

ENVIRONMENTAL IMPACT ASSESSMENT/AUDIT (EIA/EA) PRACTICING LICENSE

License No : NEMA/EIA/ERPL/17153
Application Reference No: NEMA/EIA/EL/22182

M/S **Dickson Kimathi Muthaura**
(individual or firm) of address

P.O. Box 2269-60200 MERU

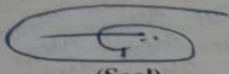
is licensed to practice in the

capacity of a (Lead Expert/Associate Expert/Firm of Experts) **Lead Expert**
registration number **6235**

in accordance with the provision of the Environmental Management and Coordination Act Cap 387.

Issued Date: **4/6/2022** Expiry Date: **12/31/2022**

Signature.....



(Seal)

Director General
The National Environment Management Authority