



ENVIRONMENTAL AND SOCIAL IMPACT ASSESMENT SUMMARY PROJECT


REPORT

FOR

THE PROPOSED COFFEE FACTORY MODERNIZATION OF GATHAITHI FARMERS COOPERATIVE SOCIETY LIMITED ON PLOT NO AGUTHI /GATHAITHI /879 IN TETU SUBCOUNTY, NYERI COUNTY



GPS COORDINATES: -0.51019276,37.00268042

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

DECLARATION

This Environmental and Social Impact Assessment Summary Project Report for the proposed upgrading of the coffee factory through the construction and installation of eco pulper, metallic drying tables, flood lights, installation of greenhouse solar drier, tilling of the fermentation and channels and installation and remote alarm system on plot No Aguthi /Gathaiti /879 in Tetu Subcounty, Nyeri County. 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

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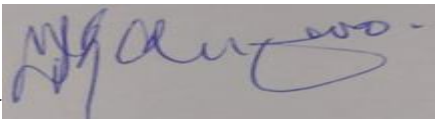
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ACKNOWLEDGEMENT

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LIST OF ABBREVIATIONS & ACRONYMS

ASL	Above Sea Level
AEZ	Agro Ecological Zone
AFA	Agriculture, Fishery and Food Authority
CCTV	Closed Circuit Television with digital Camera
CGN	County Government of Nyeri
CIG	Common Interest Group
EA	Environmental Audit
EDP	Enterprise development Plan
EHS	Environmental Health and Safety
EIA	Environmental Impacts Assessment
EPZ	Export processing zone
FAO	Food and Agriculture Organization
GIS	Geographical Information System
GPS	Global Positioning Global Positioning and System
HH	Households
KCSAP	Kenya Climate Smart Agriculture Project
ESMP	Environmental and Social Management Plan
EMCA	Environmental Management and Coordination Authority
OSHA	Occupational Health and Safety Act
KBS	Kenya Bureau of Standards
KFS	Kenya Forest service

NEMA	National Environment Management Authority
TEWASCO	Tetu Water and Sewerage Company
PCPB	Pest Control Products Board
PPP	Public Private Partnership
SPR	Summary Project Report
VMG	Vulnerable and Marginalized Groups
WHO	World Health Organization
WRMA	Water Resource Management Authority
WUA	Water Users Authority

EXECUTIVE SUMMARY

This report presents the Environmental and Social Impact Assessment Summary Project Report findings for the Proposed upgrading of Gathaiti Coffee Factory. The factory is an existing establishment that has an active membership of 2114 (698 F,1416 M). The factory is registered under the Cooperative Societies Act Registration No CS/9176. The factory serves members from Aguthi/Gakii Ward in Tetu Sub County.

Gathaiti Coffee Factory Cooperative Society is one of KCSAP beneficiary producer organizations matching grant investment. The cooperative intends to construction and installation of eco pulper, metallic drying tables, flood lights, installation of greenhouse solar drier, tilling of the fermentation and channels and installation and remote alarm system. 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 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 proposed project involves construction and installation of eco pulper, metallic drying tables, flood lights, installation of greenhouse solar drier, tilling of the fermentation and channels and installation and remote alarm system. 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

The study involved the use of several techniques and methodologies such as use of questionnaires, focused group meetings and technical departments stakeholders' meetings. The techniques and methodologies used were necessary for collecting baseline information, analysing the legal and policy framework, assessing and predicting the potential positive and negative impacts, analysing the impacts in order of importance and thus formulating the order in which the impacts are to be avoided, minimized

and or mitigated accordingly. The team was guided by the requirement of the Environmental Impact Assessment Guidelines, section 58 of EMCA 1999 and Environmental (Impact Assessment and Audit) Regulations and the World Bank Environment and Social Safeguards policies; Environmental Assessment.

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 and 4C,improved processing of the coffee into parchment, reduced post- harvest losses for coffee produce, reduce on the volumes of water required ,encourage the use of renewable resources (e.g. use of solar flood lights) 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. 390,000** against the total proposed project cost of **Ksh.12,665,714** (KCSAP fund 8,866,000, PO fund 3,799,714. The project will benefit a total of 2114(1416 M,698 F) 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.

An environmental social management and monitoring plan has been developed in this report to assist the proponent in mitigating and managing environmental and social impacts associated with the life cycle of the project. It is noteworthy that key factors and processes may change through the life of the project and considerable provisions have been made for the dynamism and flexibility of the ESM&MP. As such, the ESM&MP should be subjected to periodic review for improvement purposes. Its thus the

experts' recommendation that the proposed project should be approved by NEMA and approval letter issued to enable the proponent to commence the project implementation.

CHAPTER ONE INTRODUCTION

1.1 Background information

Coffee production is one of the major economic activities in Tetu Sub County in Nyeri County. Nyeri County has eight sub-counties and Tetu is the among the largest producer of coffee with. Gathaihi Coffee Cooperative Society is one of the oldest and biggest coffee cooperatives within Aguthi/Gakii ward with an active membership of 2114 (698F,1416M). The project is supported by Kenya Climate Smart Agriculture (coffee revitalization) through the funding from the World Bank, Government of Kenya, the County Government of Nyeri and community own contribution by Gathaihi Coffee Factory.

1.2 Project Justification

Gathaihi Coffee Factory is an existing establishment that serves Tetu Sub County. The factory has been experiencing coffee losses and low production. The factory has been using traditional and obsolete equipment's for production thus resulting to low quality parchment which results to low market prices and therefore less benefits to the farmers. Security at the coffee factory has also been an issue. The project was selected after a feasibility study 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 farmers in the sustainable production of coffee. The cooperative aims at enhancing the processing of coffee into parchment and Mbuni in order to market on their behalf and payment is made after auctioning.

1.3 Justification of conducting SPR

The SPR was as a result of 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

The principal objective is to highlight the possible positive and negative environmental and social impacts expected during the establishment and operation of the proposed project, with the aim of proposing the possible mitigation measures to the negative impacts. This is in line with ensuring that such a development does not negatively impact the environment in terms of social, health, economic and physical (soil, water, plant and animals) state of the area. The SPR identified the possible environmental impacts during the construction, implementation and

operational phases of the project. The exercise was carried out in accordance with the National Environmental Management Authority (NEMA) Environmental Impact Assessment and Audit Regulations and guidelines.

In brief, the specific objectives of the study were to:

- 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, semi-structured questionnaires/checklist 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, dully 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

1.7 Total Project Cost

The total proposed project cost of Ksh.**12,665,714.s**

CHAPTER TWO: NATURE OF THE PROJECT

2.1 Introduction

This chapter describes the proposed project specific location, project activities including the proposed installations, materials, products and by products. The coffee processing processes have also been described in this chapter. The proposed structures have been supported with engineers' designs.

2.2 Project description

The proposed modification works is meant to re-engineer coffee production in Gathaithi Coffee Factory and take advantage of the improving coffee market and other opportunities aimed at guaranteeing the farmers their source of livelihood. The proposed project is in Gathaithi Town, Aguthi/Gakii ward, Tetu Sub County, Nyeri County. The project is along Gatitu -Mukurweini road in Tetu. The site is bounded by coordinates; latitude **-0.51019276**, and **37.00268042** longitude: respectively.

2.2.1 Project activities

The proposed project will involve a number of activities including

- Installation of eco pulper
- Installation of flood lights
- Installation of greenhouse solar drier
- Tilling of the fermentation tank and channels (supported by Coop Bank)
- Installation of metallic drying beds

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, clean coffee beans and coffee. The mitigation measures for these are outlined at the ESMMP.

2.2.3 Processes

The following processes will be carried out at the centre

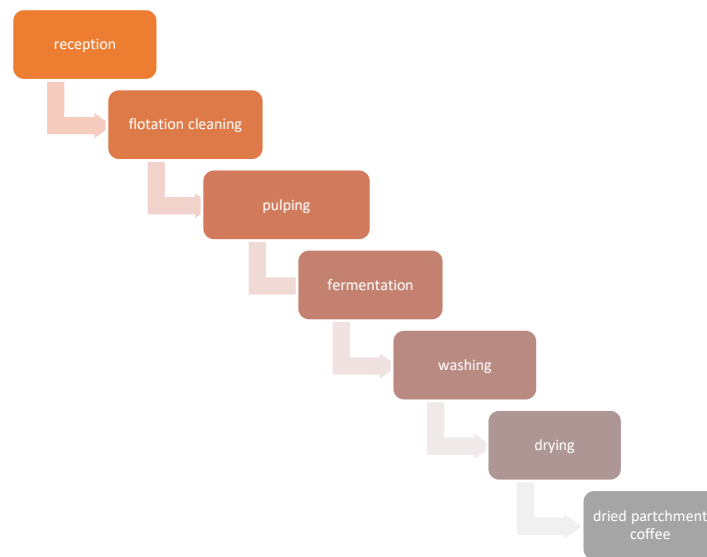


Figure 1 Flow chart showing coffee processing steps

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 Nyeri, Gatitu, and Karatina areas. and/or Tetu 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 Eco pulper installation

The machine will be purchased as a whole and installations done at the factory. The eco pulper housing facility is in existence. The specifications of the eco pulper will be given by the engineer.

2.3.2 Installation of flood lights

The lights will be installed around the factory facility for security purposes. Sites for light installation will be identified by the engineer on site. Materials for installation will be purchased as part and will be assembled on site. A recommendation has been given to the factory to budget and explore other sources of energy such as solar for lighting.

2.3.3 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 will be specified by the engineer. The byproducts should be reused for other purposes.

2.3.4 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. The designs, materials and dimensions of the greenhouse will be provided by the site engineer. A solar dryer helps to minimize the moisture contents in coffee beans and thus reducing.

2.3.5 Tilling of the fermentation tanks and channels

This will be done in partnership with Cooperative Bank. Tilling will be done on existing structures and therefore no major construction activities. Tiles designs and dimensions will be provided by the site engineer. A recommendation on the sourcing has been given that the materials will be purchased from the neighboring town.

2.3.7 Other important utilities

Water

The neighborhood get water from various sources; for domestic water the area is connected to TEWASCO, roof harvesting has been done (not the whole facility) and a storage tank available. The factory draws their processing water from Gura river which is a permanent river.



Figure 2 Roof harvesting at the factory with a storage tank

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 section describes a brief of the project location including the map area of the specific site location with land ownership details, the possibility of environmentally sensitive areas, supportive environmental infrastructures with a validation to land conformity in accordance with the existing land use plan in the area.

3.2 Location description

The proposed project is in Gathaithi Town, Aguthi/Gakii ward, Tetu Sub County, Nyeri County. The project is along Mukurweini -Gathaithi road in Tetu. The site is bounded by coordinates; latitude **-0. 51019276**, and longitude: **37.00268042** respectively. The area is historical coffee growing area with potential to sustain the proposed development. The project area is shown in the figure below



Figure 3: Map showing the proposed site and the neighborhood

3.3 Proof of Land Ownership

The proposed project site is owned by the society which is registered under the Lands Act, title number Aguthi/Gathaithi 879. (See attached Title deed in annex 4). The search has been conducted on the parcel of land accordingly. The land is fully owned by the cooperative and has no any pending encumbrances. The title deed was initially under the custody of the bank which has discharged it following completion of the loan (See annex v-discharge of Charge from the bank). The society which is yet to update the records with lands office after the discharge is advised to update them immediately to affect the land status.

3.4 Availability of supportive environmental management infrastructure

3.4.1 Transport infrastructure and communication

Access to the area is through the Nyeri-Gatitu-Mukurweini-Gathaithi (class-C70) road section that has been tarmacked. 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 area is served by main river around that's Gura. The area extracts water from Gura river for the coffee wet processing. The area is also served by Tetu Water and Sanitation Company (TEWASCO). Water harvesting both roof harvesting and storm water harvesting has also been done.

3.4.3 Description of Environmentally sensitive areas

There are **NO** environmentally sensitive areas within the project area. The proposed project location as per the zonation conforms to existing land-use and in line with the physical planning zonation. There are no sensitive ecosystems that will be affected by Gathaithi Coffee Factory project. There are no protected areas close to the proposed project. Additionally, there were no known flora or fauna listed in IUCN red list that are likely to be affected by the proposed project.

3.5 Conformity to land use or zonation plan

The proposed project conforms to the land use plan of the area because it's an existing coffee factor and the proposed project intends to renovate and modernize it for improved coffee production within the project area.

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 concerns of the stakeholders were known to the decision-makers 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 which 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 2114 (698 F,1416 M) households as direct beneficiaries (mainly local coffee farmers). The households fall under the larger Tetu Sub County whose feasibility, EDP and SPR studies have already been carried out. During the public participation session forty-five members (45) were present. The distribution of the participants was 25M and 20F. The factory committee members were also present during the focused meeting. The coffee county focal person, CTD Environment and ESS CPOE were also present.

4.3.2 Government Agencies and other organizations

Stakeholders' identification and categorization was based on the issues related to the proposed project scope of work, relevance, interest, importance, and influence of the stakeholders and the community during the project implementation throughout its life cycle. Relevance stakeholders were identified purposively based on the understanding of the proposed project and its influence on the project area. The community members involved were invited based on the understanding of the proposed project and its impact on them.

Table 1 Categorization of stakeholders engaged

STAKEHOLDER CONSULTED	RELEVANCE
National Environmental Management Authority (NEMA)	In charge of undeveloped environmental issues in the county
Department of Environment	In charge of Tetu Sub County
Department of Agriculture-Industrial Crops unit	In charge of Coffee
Department of Trade and Cooperative development	In charge of Tetu Sub County and Cooperative auditor
Department of Social Protection and Development	In charge of social matters
Ministry of Interior and Coordination of National Government	Representative of National Government- Area chief and Ass Chief

4.4 Methodology of data collection

The consultant carried out a consultative meeting that was held on the 18th of February 2022. During the participation/meeting session forty-five members (45) were present. The distribution of the participants was 25M and 20F. The factory committee members were also present during the focused meeting. The coffee county focal person, CTD Environment and ESS CPOE were also present. (*See attached minutes and attendance list*). A meeting between the Department of Agriculture -Industrial Crops Unit and Gathaiti Factory management was also done on the 17th February, 2022. Issues of project financing and project components were discussed.



Figure 4 CESCO addressing Gathaiti Farmers during a meeting

An AGM meeting was also held at the factory on 3rd March 2022 involving various the factory beneficiaries and various technical departments. During the meeting the components of the project were discussed and the beneficiaries endorsed the project and pledged full support. 234 coffee farmers were present during the meeting. (See attached minutes *Annex VIII: Minutes of PP&SC*)



Figure 5 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:

Table 2 Summary analysis of the public participation proceedings

No.	Question	Responses
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1	Are you aware of the proposed construction of	<p>Yes (100%)</p> <p>During all the meetings mentioned above the coffee factory management committee members have shown awareness of the project. The information has been communicated to the members during the AGM and other meetings.</p>
2	Do you support the proposed project in the area?	<p>Yes (100%)</p> <p>Gathaithi Coffee Factory beneficiaries are in full support of the project and aware of the financial responsibility /contribution of the factory. Through the meetings and questionnaires administered it is evident that the community is in full support of the project.</p>
3	Do you think this project is suitable and compatible with the surrounding developments	<p>Yes (100%)</p> <p>The major cash crop in the area is coffee farming which in the recent past has been very profitable (feedback from the farmers) and therefore the need for modernization of the existing factory infrastructures.</p>
4	What are some of the positive impacts you can attach to this project	<p>Increased Production of coffee, employment and Income generation, area development during the implementation and operation of the project. The factory production and security will improve with the implementation and installation of the proposed machines.</p>

5	What are some of the negative impacts you can attach to this project	Some highlights some negative impacts with proposed mitigation measures which have been included in the ESMP for implementation.
6	Are there any sensitive ecosystems within the area (e.g., Wildlife Sanctuaries, swamps, water body, forest, etc.)?	The project is not near or around a sensitive ecosystem
7	Do you think the proposed project will have any Socio- economic impacts on (i) if implemented (ii) if Not Implemented?	One of the social impacts that was highlighted is the integration of new members in the community during the implementation of the project. The factory has also put in place measures such as bylaws against child labour.

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 parchment and mbuni .
- 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 engrain a sense of project ownership within the community.

- The project will improve the coffee industry in Tetu subcounty 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 Gathaithi town 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 drive 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 leased a piece of land for construction of the project among many other contributions both in monetary and kind, in order to ensure that the project materializes. Similarly, and also fundamental is the contributions also made by the other key stakeholders namely KCSAP, ministry of Agriculture and other coffee factory. 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 all socio-economic aspects are not 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 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) Increased Household Income

Beside household income obtained from the local supply of foodstuffs and construction materials the proposed project will also benefit households through higher crop, beef and dairy yield attained by introducing improved fodder for better livestock nutrition. This will result in increased household income for the households in the project area.

d) 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.

e) 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 fencing materials. This will result in a boost in the local economy.

f) 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.

g) 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 /land is part of the community contribution. This can bring conflicts in financial contribution for leasing or buying land for 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.
- b) Full disclosure and adhering to legal provisions on purchase and leasing of land.

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

Construction/installation activities at the factory which may include use of larger volumes of water may lead to pollution of the water. The large volumes when 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 Excess Vibrations

The proposed project is likely result in noise emission as a result of machines such as electrical works, minor construction used on site during construction. 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

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;
- Contractor to ensure strict enforcement on use of 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
- 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.

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. Because of construction 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. 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 wells 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 among them:

- Use of the coffee husks waste as an input in the production of green manure for the farmers.
- Composting to utilize coffee solid wastes as bio fertilizer

d) Effluent/Liquid Waste management

The process of coffee pulping will result in release large quantities of wastewater which will require proper management through the following mitigation measures:

- Adopt Eco-pulping machine which are more environmentally friendly as opposed to old technology that uses a lot of water for pulping.
- Continuously monitor the lagoons for any discharge to the environment
- Conduct sampling and analysis of effluent
- Apply for Effluent Discharge License (EDL) on annual basis
- Separating the coffee husks from the effluent channels
- Promptly detect and repair of any leakages i.e lagoons
- Ensure proper siting of the lagoons away from the nearby river/streams

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
- Install adequate warning signages in all potentially risky i.e slippery floors, lagoon area etc.
- Fence the lagoon and mark it appropriately

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 Gathaithi 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 Social Management & Monitoring Plan						
Environmental Impact	Proposed Mitigation Measures	Indicator	Responsibility	Means of Verification	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 	<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

	<p>areas are ripped off to reduce run-off</p> <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) 	<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

	<ul style="list-style-type: none"> • Liaise relevant agencies for the 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 	<ul style="list-style-type: none"> • Number of PPEs purchased. 	<ul style="list-style-type: none"> • Contractor/Supervising engineer/work foreman 	<ul style="list-style-type: none"> • Local purchase orders 	Daily and weekly	30,000

	<p>the machinery in accordance to the manufacturer's specifications</p> <ul style="list-style-type: none"> • 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"> • Number of workers using PPEs. • Available servicing cards/receipts 		<ul style="list-style-type: none"> • Reports • Receipts • Work plan 		
Occupational Health and Safety (OHS)	<ul style="list-style-type: none"> • Proper barricading of the construction site • The contractor to provide all 	<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 	<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 	Weekly	40,000

	<p>workers with full protective gear (PPEs)</p> <ul style="list-style-type: none"> • The contractor to train and provide First-aid Kit to the workers and provide Incident and Accident Registers on site for recording of injuries or any OHS incidence • Compliance with MOH COVID 19 regulations. • Displaying of OSH guidelines on site 	<ul style="list-style-type: none"> • Incidents reported • Number of COVID-19 sensitizations conducted. • Emergency contacts at the site 		accident response in place		
Increased demand for water	<ul style="list-style-type: none"> • Water saving devices such as push taps to be installed to minimize lose. 	<ul style="list-style-type: none"> • water bills paid to WRA • No. of gutters installed for water harvesting 	<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

	<ul style="list-style-type: none"> • Installation of roof rainwater harvesting systems at the premise. • Construction workers to be sensitized on appropriate water use and conservation technologies applicable. 	<ul style="list-style-type: none"> • No, of onsite tanks • Rate of metered water consumption 				
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(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 	<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

	<ul style="list-style-type: none">• Establish an effective and efficient grievance redress mechanism where all conflicts related to the project are addressed.					
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(a) Operational 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"> • Monitor the lagoons for any discharge to the environment and sample the effluent on quarterly basis 	<ul style="list-style-type: none"> • No of times maintenance done • Number of lagoons • Distance from the nearby stream 	<ul style="list-style-type: none"> • Coffee factory management 	<ul style="list-style-type: none"> • Tracking records • Licenses • Photos 	annually	70,000

	<ul style="list-style-type: none"> • Apply for Effluent Discharge Licence (EDL) on annual basis • Coffee husks can be used for mass production of branded briquettes in situ to avoid accumulation near effluent channels. • Promptly detect and repair of any leakages i.e lagoons. 					
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 	<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. 	<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 • Signages 	3 months	10,000

	<ul style="list-style-type: none"> • Provide adequate first-aid facilities in the project sites to handle medical emergencies • Label all the potentially risky areas • Fence lagoons and label them and restrict access. 	<ul style="list-style-type: none"> • Emergency contacts at the site 				
Noise pollution	<ul style="list-style-type: none"> • Provide PPEs to workers • Service the pulping machine • Shut off engines when not in use. • Enforce Restriction of pulping activities to daytime • -Ensure Noisy machines to be fitted with silencers 	<ul style="list-style-type: none"> • No. of PPEs provided • No of times machines serviced 	<ul style="list-style-type: none"> • Coffee Factory Management 	<ul style="list-style-type: none"> • Registers • LPOs 	6 months	50,000

(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 like the church in social mediation and moderation• Notify all the affected persons• Establish a grievance redress mechanism where all conflicts related to the project are addressed	<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
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	<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

	<ul style="list-style-type: none"> security guards • Ensure only authorized personnel get access to the site facility. • 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

	appraisal systems, etc.					
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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 No of times site is remediated from spills 	<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
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(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

<p>Increased risk of illicit behavior and crime</p>	<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 	<p>Contractor/Works foreman</p>	<p>Minutes Reports Attendance registers</p>	<p>6 months</p>	<p>10,000</p>
<p>Loss of employment</p>	<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 	<p>3 months</p>	<p>30,000</p>

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION

7.1 Conclusions

The reporting process acquired data through reviewing of the existing data, observation and through public participation. This report has highlighted the potential positive and negative impacts of the proposed projects. The report has also looked at the mitigation measures available to reduce the negative impacts and conclude that:

- These projects will have more positive impacts than negative impacts.
- The projects will result in huge possible positive social and environmental benefits that are in line with current development policies of this country. The social and environmental benefits will make it worthwhile to invest in environmental conservation.
- There could be probable significant negative environmental impacts, which however can be mitigated against as shown in the various phases in the ESMMP.
- The project will not have a significant interference on natural resources however resources such as water should be used sustainably.

7.2 Recommendations


- The proponent and the contractor should strictly adhere to the recommendations given in the ESMPs following the responsibilities given. 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 ensure that water is used sustainably, ensuring that effluent is well managed by sitting the waste lagoons away from water bodies, the lagoons should be well fenced and cleared and signages should be displayed.
- Effluent analysis should be done regularly to ensure that the water quality is assessed, Effluent Discharge License application should be done annually at the NEMA offices.
- The proponent should carry out land search frequently to ensure that there are no encumbrances, and in case of such issues prompt measures to resolve them are taken.
- The coffee factory management should enforce and ensure that there is smooth transition if the company changes its name and ensure proper documentation of the necessary documents.
- The proponent should carry out regular asset inventory and ensure proper documentation of the same.
- 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.

ANNEXES

Annex 1: CDE Screening Checklist

Annex II: Land Ownership (Title Deed, land search and discharge of charge)


REPUBLIC OF KENYA
THE REGISTERED LAND ACT
(Chapter 300)

Title Deed

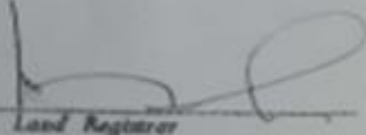
Title Number AGUTHI/GATEAITHI/879
Approximate Area 3.142 Ha.
Registry Map Sheet No. 2 & 5


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

OF P.O. Box 1812, NIGRI.

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
NIGRI District Land Registry
this 24th day of October, 2000.


Land Registrar



REPUBLIC OF KENYA
THE LAND REGISTRATION ACT
THE LAND REGISTRATION (GENERAL) REGULATIONS, 2017

Date Received Presentation Book No. Official Fees Paid Kshs.

DISCHARGE OF CHARGE

TITLE NUMBER: AGUTHI/GATHAITHI/879

Date of Discharge	13 th September, 2021
Date of Registration of Charge and Entry Number	Charge dated 16 th October 2000 ("Charge") registered in the District Lands Registry, as Number 3.
The Chargor:	Gathaithi Farmers Co-operative Society Limited of Post office Box Number 1812 Nyeri.
The Chargee	The Co-operative Bank of Kenya Limited, a banking institution duly incorporated with limited liability in the Republic of Kenya for the purposes hereof of Post Office Box Number 48231-00100, Nairobi.
The Principal Amount Secured Under the Charge	Kenya Shillings Thirteen Million Two Hundred Thousand (KSHS.13,200,000.00) ONLY

The amount secured under the Charge having been paid or being otherwise secured the Chargee HEREBY DISCHARGES, the Charge shown as [3] in the Encumbrances Section of the register of the above-mentioned Title wholly.

IN WITNESS WHEREOF, this discharge has been duly executed as a deed the date and year mentioned above.

EXECUTION:

Signed by the duly authorised attorney of the Chargee under and by virtue of Power of Attorney registered at the District Lands Registry at Nyeri as number 483/6/2019 and at the Registry of Documents at Nairobi as Number Pre No. 1013 Vol. NPA Folio 34/301 File 5101 in the presence of:

SALLY WAIGWA
 ADVOCATE
 LEGAL DEPARTMENT
 THE CO-OPERATIVE BANK OF KENYA LTD.
 P.O. Box 48231 - 00100, NAIROBI

Signature of the bank official witness

.....
 Attorney

LAWRENCE KARANJA
 Signature of Bank's Attorney

Certificate of Verification under Section 45 of the Land Registration Act

I CERTIFY that.... **LAWRENCE KARANJA**..... being the duly constituted attorney of the Chargee appeared before me on the13th day ofSeptember2021 and being known to me/being identified by of acknowledged the above signature or mark to be his/hers and that he/she had freely and voluntarily executed this instrument and understood its content.

SALLY WAIGWA
 ADVOCATE
 LEGAL DEPARTMENT
 THE CO-OPERATIVE BANK OF KENYA LTD.
 P.O. Box 48231 - 00100, NAIROBI

Name and signature of the person certifying

REPUBLIC OF KENYA

THE LAND REGISTRATION ACT
THE LAND REGISTRATION (GENERAL) REGULATIONS, 2017

CERTIFICATE OF OFFICIAL SEARCH

TITLE NO. KWATHI/GATHATHI/879

SEARCH NO. 1479/07/12

On the 27 day of July 2002 the following were the subsisting entries on the register of the above-mentioned title:

Part A – Property Section (easements, etc.)

Nature of title ABSOLUTE

Approximate area 3.142 HA (THREE DECIMAL ONE FOUR TWO) HA

Part B – Proprietorship Section

5.24.10.2000 GATHATHI FARMERS CO-OPERATIVE SOCIETY LTD

Name and address of proprietor TIDE DOCK ISSUED

Inhibitions, cautions and restrictions NOTE CHARGE ENTRY NO 4 RESERVES RIGHTS UNDER SEC 83 & 84

Part C – Encumbrances Section (leases, charges, etc.)

4.24.10.2000 CHARGE IN FAVOUR OF THE CO-OPERATIVE BANK OF KENYA LIMITED TO SECURE A SUM OF KSH 13,200,000 RIGHTS UNDER SEC 83 & 84

- (a) RESERVED
- (b)
- (c)
- (d)

The following certified copies are attached as requested:

- (a)
- (b)
- (c)
- (d)

Date 27 day July 2002

Signed by the Registrar

Seal

Name:

Signature:

N.G. Gathalya *285

Annex III: Group Registration Certificate



RENEWAL

REPUBLIC OF KENYA

MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT
DEPARTMENT OF CO-OPERATIVE DEVELOPMENT

Certificate of Registration

THE CO-OPERATIVE SOCIETIES ACT
(Cap. 490, Section 6)

REGISTRATION No. CS/9176

I hereby certify that the society under the name of
GATHAITHI FARMERS COOPERATIVE SOCIETY LIMITED
*and its by-laws have this day been duly registered by me in the Register
of Co-operative Societies, in pursuance of the provisions of the Act and
the Rules made thereunder*

Given under my hand at Nairobi

this 21ST *day of* JANUARY, 2000



F. F. ODHIAMBO
Deputy Registrar of Co-operative Societies

GPK 5318-4m-11/2000

Annex V: KRA Pin

	KENYA REVENUE AUTHORITY	Taxpayer Registration Certificate	Document Number: 4945472
General Data of the Taxpayer			
Name	GATHAIITHI FARMERS COOP. S.		
Taxpayer PIN	P051377108C	TaxPayer Category	DOMESTIC
Registration Date	Jan 20, 2012		
Activity	Others		
Contact Information			
District	NYERI SOUTH	City/Town	NYERI
Street / Road	NYERI	Building	NYERI
Area Name	61	LR Number	
P.O. Box	10100 - 12584		
Main Email Address	zndung39@yahoo.com		
Tax Obligation	Obligation Register Date		
INCOME TAX COMPANY (IT2C)	DEC 31, 2011		
*This certificate is computer generated and therefore not signed. It is valid certificate issued under the authority of KRA.			

Annex VI: Attendance List

ACTIVITY: PUBLIC PARTICIPATION FORUM SOCIETY: GATHAITHI FACTORY: GATHAITHI DATE: 12/12/2020

S.NO	NAME	MEMBER NO.	ID NO	PHONE NO.	SIGN
1.	ANTONY WAMBARE	825	21414153	0746156840	<i>[Signature]</i>
2.	James Kinondo	1358	25523724	0720873300	<i>[Signature]</i>
3.	Bernard waigara	1288	127255161	0704133837	<i>[Signature]</i>
4.	Paul M. Muxandi	324	7711469	0728786335	ROL
5.	Mony ki John	0741	3207365	072466811	<i>[Signature]</i>
6.	LYDIA NJOEI	086	9668125	070367189	<i>[Signature]</i>
7.	Venazio Kingori	1013	5488838	0714288046	M Kingori
8.	JOSHUA KABIRU	0329	5307559	072784119	<i>[Signature]</i>
9.	Lucy Wang'ani	028	5710355	0709195300	Lucy
10.	David Gachane	1089	20952158	0737066789	<i>[Signature]</i>
11.	Paul Wambere	0857	11305627	0726910607	<i>[Signature]</i>
12.	DAVID MUTHEE	1022	10644518	0721187372	<i>[Signature]</i>
13.	REGINA WANGI	0556	9671326	071150098	<i>[Signature]</i>
14.	MARGARET MUTHEE	1428	11321082	0728902180	<i>[Signature]</i>
15.	MARINA KENJI	0952	5569920	0710649035	<i>[Signature]</i>

ACTIVITY: PUBLIC PARTICIPATION FORUM

SOCIETY: GITHAITHI FACTORY: GITHAITHI DATE: 18/1/19

S.NO	NAME	MEMBER NO.	ID.NO	PHONE NO.	SIGN
1.	Jospe Idicathu	1278	072776987		
2.	Angelica	1052	2249363	072030538	
3.	Agnes wangedi	940			
4.	David Manara	969			
5.	Mary wangedi	878			
6.	Jathina Idirangi	957	0994192 0726974630	0726974630	
7.	Nancy wangedi	651	3509107	0726672118	N. wangedi
8.	Pilcika Warita	118	1527880	0712129680	Warita
9.	Juliet Waringa	066	3949369	0704714382	Juliet
10.	BETHUNA MITHONKA	0736	3725058	0720305005	BETHUNA
11.	Elizabeth Mwangi	210	21831722	0716324257	Mwangi
12.	Alice NJOI	024		0713280480	ALICE
13.	GEORGE NICHOL Ndari	1027	9165370	0721025726	
14.	RICHARD V. DANGE	299	1424111	0710705981	
15.	MARTIN WANGEDI WANGEDI	1646	23122053	0716557257	

ACTIVITY PUBLIC PARTICIPATION FORUM SOCIETY GATHITHI/FACTORY GATHITHI DATE 19/01/22

S.NO	NAME	MEMBER NO.	ID.NO	PHONE NO.	SIGN
1	JOSPHAT WAMBA	1960	1826209	0725973218	[Signature]
2	BERNARD K. WANZUA	1084	265662	0720353560	[Signature]
3	SUSAN WAMBUI	0338	0381780 0741725864	0741725864	[Signature]
4	DOMINIC NORTON	0099	3198369	0716284685	[Signature]
5	John Gachigi	0530			
6	Francis Mulo	729	3200673	0722453176	[Signature]
7	Elice Wanyuu	576	7927156		[Signature]
8	Mary Mumbui	1991	9499590	0722848112	mary
9	Leone Wothoya	929	548589 720	0724338822	10
10					
11					
12					
13					
14					
15					

ACTIVITY PUBLIC PARTICIPATION FORUM

SOCIETY GATHAIYHI FACTORY GATHAIYHI DATE 12/1/20

S.NO	NAME	MEMBER NO.	ID.NO	PHONE NO.	SIGN
1.	Joseph Wairathu	1278	072776287		
2.	Angelica	1052	22118363	0720305528	
3.	Agnes Wangeci	940			
4.	David Mataru	969			
5.	Mary Wangeci	878			
6.	Joshua Ndirangu	957	0721192 0721192	0726974650	
7.	Nancy Wangeci	651	3509107	0726670118	N. Wangeci
8.	Pilicks Wairitu	118	1527880	0712129680	Wairitu
9.	Juliet Wairima	066	3949369	0704714382	Juliet
10.	Berwara M. Thionga	0736	3725058	0720305005	
11.	Elizabeth Mwangi	210	21231722	0716324252	Mwangi
12.	ALICE NJOKI	024		0713280980	ALICE
13.	GEORGE MICHIEL Ndirani	1027	9165330	0721525726	
14.	RICHARD V. DUNGU	299	1424111	0710708581	
15.	MARTIN WANGICI WACHA	1416	23122053	071697257	

Annex VII: Public Participation Questionnaire

ESIA SPR PUBLIC PARTICIPATION QUESTIONNAIRE FOR THE GATHAITHI COFFEE COOPERATIVE SOCIETY

The EIA/EA Experts are carrying out Environmental and Social Impact Assessment Project Report for the **project**. In order to ensure environmental sustainability of the project, the proponent wishes to meet the requirements of Environmental Management and Coordination Act (EMCA, 1999) under the jurisdiction of National Environmental Management Authority (NEMA) in the object of Environmental (Impact Assessment and Audit) (Amendment) Regulations, 2019, the Legal Notice No. 32 and Schedule 2 of EMCA 1999. Kindly give us your opinion regarding the project's Environmental & Social impacts. Your comments will only be used for the purpose of this report.

SECTION 1: RESPONDENT'S DETAILS

NAME: Geophias Watar Timothy TEL: 0721238723
ID NO: 0721238723 RESIDENCE: Githitu SIGN: [Signature]

Gender: Male Female

SECTION 2: QUESTIONS ON PROJECT AWARENESS

Are you aware of the proposed upgrading of the coffee factory?

Yes No

Do you support the activities of the proposed project and should the project be implemented as proposed? Yes No

If No, Kindly state why _____

SECTION 3: QUESTIONS ON IMPACTS

What positive impacts do you think will result from the implementation of the proposed project?

Increase coffee production and improve quality
and interlinkage and reduce cost of energy

In your own view, are there any negative Social or Environmental impacts associated with the proposed project?

(a) Yes (b) No If Yes, please list them

(i) Environmental Concern

Waste disposal

(ii) Social concerns and income security

What do you suggest should be done to minimize any negative impacts during the project implementation activities?

Train farmers to increase
coffee quality and increase production

SECTION 4: OBSERVATIONS

Give any other information that may be necessary concerning the proposed Project.

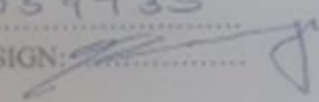
Engage more youth to benefit from the
factory

THANK YOU FOR YOUR COMMENTS

**ESIA SPR PUBLIC PARTICIPATION QUESTIONNAIRE FOR THE GATHAITHI
COFFEE COOPERATIVE SOCIETY**

The EIA/EA Experts are carrying out Environmental and Social Impact Assessment Project Report for the **project**. In order to ensure environmental sustainability of the project, the proponent wishes to meet the requirements of Environmental Management and Coordination Act (EMCA, 1999) under the jurisdiction of National Environmental Management Authority (NEMA) in the object of Environmental (Impact Assessment and Audit) (Amendment) Regulations, 2019, the Legal Notice No. 32 and Schedule 2 of EMCA 1999. Kindly give us your opinion regarding the project's Environmental & Social impacts. Your comments will only be used for the purpose of this report.

SECTION 1: RESPONDENT'S DETAILS

NAME: Eustac Karingu Wanjau TEL: 0723 059735
 ID. NO: 3370473 RESIDENCE: Githuati SIGN: 

Gender: Male Female

SECTION 2: QUESTIONS ON PROJECT AWARENESS

Are you aware of the proposed upgrading of the coffee factory?

Yes No

Do you support the activities of the proposed project and should the project be implemented as proposed? Yes No

If No, Kindly state why

SECTION 3: QUESTIONS ON IMPACTS

What positive impacts do you think will result from the implementation of the proposed project?

- Increased Production and quality of coffee
- Employment - Reduce losses - Reduce water losses

In your own view, are there any negative Social or Environmental impacts associated with the proposed project?

(a) Yes (b) No If Yes, please list them

(i) Environmental Concern

- increased solid/liquid waste

(ii) Social concerns - threat
- conflict

What do you suggest should be done to minimize any negative impacts during the project implementation activities?

* sensitization of coffee farmers
* enhance security

SECTION 4: OBSERVATIONS

Give any other information that may be necessary concerning the proposed Project.

- Employ people from the area.
- women to be given work

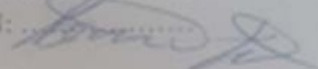
THANK YOU FOR YOUR COMMENTS

**ESIA SPR PUBLIC PARTICIPATION QUESTIONNAIRE FOR THE GATHAITHI
COFFEE COOPERATIVE SOCIETY**

The EIA/EA Experts are carrying out Environmental and Social Impact Assessment Project Report for the **project**. In order to ensure environmental sustainability of the project, the proponent wishes to meet the requirements of Environmental Management and Coordination Act (EMCA, 1999) under the jurisdiction of National Environmental Management Authority (NEMA) in the object of Environmental (Impact Assessment and Audit) (Amendment) Regulations, 2019, the Legal Notice No. 32 and Schedule 2 of EMCA 1999. Kindly give us your opinion regarding the project's Environmental & Social impacts. Your comments will only be used for the purpose of this report.

SECTION 1: RESPONDENT'S DETAILS

NAME: BERNARD K. KARIENYE TEL: 0721 60 63 82

ID. NO: 1827352 RESIDENCE: GATHAITHI SIGN: 

Gender: Male Female

SECTION 2: QUESTIONS ON PROJECT AWARENESS

Are you aware of the proposed upgrading of the coffee factory?

Yes No

Do you support the activities of the proposed project and should the project be implemented as proposed? Yes No

If No, Kindly state why N/A

SECTION 3: QUESTIONS ON IMPACTS

What positive impacts do you think will result from the implementation of the proposed project?

Improve the ways of processing coffee in the factory

In your own view, are there any negative Social or Environmental impacts associated with the proposed project?

(a) Yes (b) No If Yes, please list them

(i) Environmental Concern

Using bad coffee which had no beans

(ii) Social concerns, stealing coffee, beating, and firing

What do you suggest should be done to minimize any negative impacts during the project implementation activities?

for workers stop fighting, sit together

SECTION 4: OBSERVATIONS

Give any other information that may be necessary concerning the proposed Project.

To employ a person in a team to break the whole crew's secret within the factory

THANK YOU FOR YOUR COMMENTS

**ESIA SPR PUBLIC PARTICIPATION QUESTIONNAIRE FOR THE GATHAITHI
COFFEE COOPERATIVE SOCIETY**

The EIA/EA Experts are carrying out Environmental and Social Impact Assessment Project Report for the **project**. In order to ensure environmental sustainability of the project, the proponent wishes to meet the requirements of Environmental Management and Coordination Act (EMCA, 1999) under the jurisdiction of National Environmental Management Authority (NEMA) in the object of Environmental (Impact Assessment and Audit) (Amendment) Regulations, 2019, the Legal Notice No. 32 and Schedule 2 of EMCA 1999. Kindly give us your opinion regarding the project's Environmental & Social impacts. Your comments will only be used for the purpose of this report.

SECTION 1: RESPONDENT'S DETAILS

NAME: GEORGE D. KOSOMOGUYA TEL: 0759 68144
ID. NO: 2724 9977 RESIDENCE: GATHAITHI SIGN: [Signature]

Gender: Male Female

SECTION 2: QUESTIONS ON PROJECT AWARENESS

Are you aware of the proposed upgrading of the coffee factory?

Yes No

Do you support the activities of the proposed project and should the project be implemented as proposed? Yes No

If No, Kindly state why

SECTION 3: QUESTIONS ON IMPACTS

What positive impacts do you think will result from the implementation of the proposed project?

Solar dryer. Tiles will be given

In your own view, are there any negative Social or Environmental impacts associated with the proposed project?

(a) Yes [] (b) No [] If Yes, please list them

(i) Environmental Concern

We shall get waste product which will get manure after coffee pulping

(ii) Social concerns in the time of project is in progress there will have alot of people that need

help so they can need a watch man

What do you suggest should be done to minimize any negative impacts during the project implementation activities

SECTION 4: OBSERVATIONS

Give any other information that may be necessary concerning the proposed Project.

to be help our society we employ more women and men

THANK YOU FOR YOUR COMMENTS

**ESIA SPR PUBLIC PARTICIPATION QUESTIONNAIRE FOR THE GATHAITHI
COFFEE COOPERATIVE SOCIETY**

The EIA/EA Experts are carrying out Environmental and Social Impact Assessment Project Report for the **project**. In order to ensure environmental sustainability of the project, the proponent wishes to meet the requirements of Environmental Management and Coordination Act (EMCA, 1999) under the jurisdiction of National Environmental Management Authority (NEMA) in the object of Environmental (Impact Assessment and Audit) (Amendment) Regulations, 2019, the Legal Notice No. 32 and Schedule 2 of EMCA 1999. Kindly give us your opinion regarding the project's Environmental & Social impacts. Your comments will only be used for the purpose of this report.

SECTION 1: RESPONDENT'S DETAILS

NAME: Brian Wacui TEL: 07 09 119 947
ID. NO: 31346613 RESIDENCE: Gathithi SIGN: Brian

Gender: Male Female

SECTION 2: QUESTIONS ON PROJECT AWARENESS

Are you aware of the proposed upgrading of the coffee factory?

Yes No

Do you support the activities of the proposed project and should the project be implemented as proposed? Yes No

If No, Kindly state why _____

SECTION 3: QUESTIONS ON IMPACTS

What positive impacts do you think will result from the implementation of the proposed project?

The project will help the society during country wide lockdown and there might be workload and the side panel will help.

In your own view, are there any negative Social or Environmental impacts associated with the proposed project?

(a) Yes (b) No If Yes, please list them

(i) Environmental Concern

There might be pollution of the environment by the machine being used might pollute the environment.

(ii) Social concerns Adopt of social movement and also sex position

What do you suggest should be done to minimize any negative impacts during the project implementation activities?

They should install working signs and also hire workers to be running the factory.

SECTION 4: OBSERVATIONS

Give any other information that may be necessary concerning the proposed Project.

Conclude it employment: the youths who are not employed will get a chance through this project.

THANK YOU FOR YOUR COMMENTS

Annex VIII: Minutes of PP&SC

MINUTES OF ANNUAL GENERAL MEETING OF GATHAITHI FARMERS COOP. SOCIETY LTD HELD ON 3RD MARCH 2022 AT SOCIETY HEADQUARTER FROM 11.50 AM TO 2.45 PM.

PRESENT

- 1.E.N.K. Wanyeki - Chairman
- 2.Elias Mururu – Vice Chairman
- 3.Bernard Kangangi – Treasurer
- 4.Samuel Ndegwa –Secretary
- 5.John Kibe – Member
- 6.Simon Kingangai – Member
- 7.Ephraim Njogu – Member

INATTENDANCE:

- 1.Francis Wanyiri Kiiru – SubCounty Coop.Officer Tetu
 - 2.Anne Githinji - Cooperative Auditor
 - 3.Cleophas Wabai – Bookkeeper
 - 4.Winnie Karuku – Ass.Chief Gathaithi
 - 5.John Waruru – Ass.Chief Huho-ini
 - 6.Charles Mugo – Ass Chief Gaaki
- 234 Members Attended

Min 01/AGM/03/03/2022 OPENING

The chairman called the meeting to order and requested Mrs.Mumbi Wachira Mno.0006 to start with a word of prayer and she opened with a word of prayer at 11.50am

Min 02/AGM/03/03/2022 Introduction

The chairman welcomed all who attended the meeting and introduced the management .He called upon the visitors for self introduction.

Min 03/AGM/03/03/2022 Confirmation of previous minutes

The minutes of special General meeting held on 2/3/2021 were read by the secretary Mr.Samuel Ndegwa and were confirmed as proposed by Mr. Kuhia Wathenji Mno.0016 and seconded by Mr. Simon Thuu Mno. 1260.

Min 04/AGM/03/03/2022 Chairman's Report

The chairman read the report and the members adopted as proposed by Mr. Antony Gichohi Mno.1155 and seconded by Mr. Joshua Ndirangu Mno. 0957.

Min 05/AGM/03/03/2022 Audited Accounts Year ended 30th September 2021

The Cooperative Auditor Mrs. Ann Githinji presented the Audited Accounts for the year ended 30th September 2021 and the report was adopted as proposed by Mr. Amos Wachira Mno.0116 and seconded by Mr. Francis Weru Mno.1471

Min 06/AGM/03/03/2022 Budget For 2021/2022

The budget for the year 2021/2022 was presented by Cleophas Wabai and it was adopted as proposed by Mrs. Mary Muthoni Mno. 1052 and seconded by Geoffrey Mugothi Mno.1472.

Min 07/AGM/03/03/2022 Appointment of Auditor 2021/2022

The members recommended the ministry of Cooperative Development and Marketing as the Auditors of their accounts of 2021/2022 as proposed by Richard Wachira Mno.0183 and seconded by Margaret Mumbi mno.1428

Min 08/AGM/03/03/2022 Borrowing Power

The society's borrowing power was fixed at Kshs.15,000,000 as proposed by Francis Muriithi Waruingi Mno.0916 and seconded by Prisca Wachuka Mno.0118.

Min 09/AGM/03/03/2022 Adoption of the Amended By-Law

The sub-County Cooperative Officer Tetu Mr. Francis Wanyiri on behalf of the secretary read to members the amended sections of the By-Law and with no opposition the members adopted the amendments as proposed by Regina Muthoni Mno.0556 and seconded by Stephen Maina Mno.0070.

Min 10/AGM/03/03/2022 A.O.B.

The chairman explained to members some benefits they may reap from coffee Certification among them;

1. Sustainability Differential to be paid to farmers as cash. The amount received from donors will be paid as per what the farmer has delivered .
2. Sustainability Investment will be paid by donors and will be used in the society as an investment.
3. We have partnared with KCSAP(Kenya Climate Smart Agricultural Project) who can fund the society to finance for capital expenses ie. Eco pulper, Green house Solar drier, Tilling fermentation tanks etc. which we require for our society. This was approved by members as proposed by Mr. Amos Wachira Mno.0116 and seconded by Prisca Wachuka mno.0118.

Having no other business the meeting was closed with a word of prayer said by Mr. Elias Mururu at 11.30am.

Minutes recorded by ; Secretary

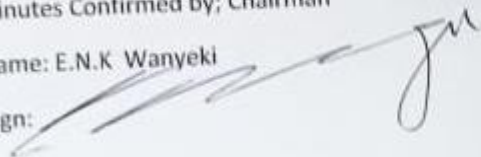
Mr. Samuel Ndegwa

Sign

Minutes Confirmed by; Chairman

Name: E.N.K Wanyeki

Sign:

A handwritten signature in black ink, appearing to be 'E.N.K Wanyeki', written over the 'Sign:' label.

MANAGEMENT OF GATHAITHI FARMERS COOP. SOCIETY LTD MEETING HELD ON 17/02/2022.

PRESENT:

- 1.E.N.K Wanyeki - Chairman
- 2.Elias Mururu – Vice Chairman
- 3.Samuel Ndegwa - Secretary
- 4.Bernard Kangangi - Treasurer
- 5.John Kibe - Member
- 6.Simon Kingangai – Member
- 7.Ephraim Njogu - Member

In Attendance:

- 1.Francis N Wanjii – Cooperative Officer
- 2.Gatoho Maina – KCSAP Nyeri
- 3.Mary Ann Maina – KCSAP Nyeri
- 4.Patrick Mwangi -Director Agriculture
- 5.Ephantus Mwangi - CPOE Nyeri
- 6.Cleophas Wabai – Bookkeeper
- 7.Flora Muthoni - Clerk

Min 20/CM/17/2/22

The chairman called the meeting to order requested Mr. Ephraim Njogu to start with a word of prayer and He said the prayer at 10.00am

Min 21/CM/17/2/22

The chairman introduced the management members and Mr.Ephantus Mwangi Director CPOE Nyeri who later introduced his team.

Min 22/CM/17/2/22

The above officers met with the management on an issue of project financing.The project is being funded by the world Bank through Kenya Government.The County Government contributes 70% while society pays 30% towards the project.

Min 23/CM/17/02/22

The society management requested the society be funded to buy Eco Pulper,Green house solar drier,Tilling fermentation tanks and for metallic drying Tables as proposed byMr.Bernard Kangangi and seconded by Mr.Ephraim Njogu.

Annex IX: BoQ

Investment Required (New Equipment, renovations and repairs)	Units/ for Society	Unit Cost	Total Cost for Society	Total Investme Gathaithi factor
IMPROVE PULPING EFFICIENCY				
Eco-Pulper: Supply installation & Commissioning 6 Tonnes	1	6,025,714	6,025,714	6,025,714
Tilling of Fermentation tanks	5	20,000	100,000	100,000
ENHANCE PARCHMENT DRYING				
Green House Solar drier 50fts x 50fts	4	800,000	3,200,000	3,200,000
Metallic Drying Tables 5fts x 150 fts	18	180,000	3,240,000	3,240,000
ENHANCED SECURITY				
SOLAR LIGHTING				
Solar high mask floodlight	5	20,000	100,000	100,000
Total Investment Required			12,665,714	12,665,714

Annex X: Experts 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

ANNEX XI: Photos of public participation and stakeholders' consultation



Factory members during public participation



The factory chairman addressing the members during the public participation



CESSCO Nyeri addressing the community during public participation