



**INITIAL ENVIRONMENTAL & SOCIAL AUDIT
FOR
TIMOR COOPERATIVE SOCIETY- MILK COLLECTION
POINT AND YOGHURT PROCESSING PLANT SITUATED AT
TIMOR SHOPING CENTRE ALONG NAIBERI - KAPCHORWA
ROAD KEIYO SOUTH SUB COUNTY, ELGEYO MARAKWET
COUNTY**



Coordinates: Latitude 0.236461N; Longitude 35.494582E

PROPONENT

KAMET COOPERATIVE UNION

P.O BOX 60-30129

CHEPKORIO.



DECLARATION

CONSULTANT

Befcon environmental consultants P.O Box 1830-3100 ELDORET submit this Environmental Social Audit for Timor cooperative society. We certify to the best of our knowledge that the information contained in this report is accurate and a truthful representation as presented by the client.

Signed by: Ruto Christopher

Designation: LEAD EXPERT-NEMA REG NO. (6116)

Contacts: 0727489471

Signed:  _____ Date:30/12/2021

LIST OF PARTICIPATING ENVIRONMENTAL EXPERTS

NAME	POSITION	CONTACTS
RUTO CHRISTOPHER	LEAD EXPERT	0727489471
AGUI BEN TANUI	ASSOCIATE EXPERT	0724763181

PROPONENT:

Timor Cooperative society certify that the information contained in this report is accurate and a truthful representation.

Name: Sila Ronoh

Designation: Chair Person.

Signed:  _____ Date:30/12/2021

ACKNOWLEDGEMENT

The team of experts would like to sincerely thank Kamet Cooperative Union for this opportunity to serve them in producing this report.

Many thanks to Mr. Kibor, CESSCO, KCSAP, Elgeyo Marakwet County and the entire CPCU for guiding the process and reviewing the report. We also want to appreciate KSCAP, NPCU for directions and the write clinics that we benefited from.

To my colleagues; thank you for hard work and support. We are ready to do more.

EXECUTIVE SUMMARY

This Environmental social audit was carried out at Timor Cooperative Society located at Kabiemit ward, Keiyo South Sub County, Elgeyo Marakwet County at coordinates Latitude 0.236461N; Longitude 35.494582E. The property is situated in plot number; Uasin Gishu/Kipkabus settlement scheme /1533.

Timor Cooperative Society is one of the cooperative societies forming the larger Kamet Cooperative Union. Kamet Cooperative Society is currently running a milk chilling plant of 5,000 litre capacity. However, the plant receives about 2,000 litres of milk daily which normally chilled and sold to bigger processing plants.

Kamet Cooperative Union has put up a yoghurt processing plant premise at Timor Cooperative Society that will house a yoghurt processing equipment with a maximum capacity of 3,000 litres. However, it is expected to process 1,000 litres of yoghurt using milk received in the chilling plant within the cooperative society. This development has received assistance from World Bank through The Kenya Climate Smart Agriculture Project, Elgeyo Marakwet to a tune of Ksh 9.9 million to install the yoghurt processing equipment. The building which will house the yoghurt processing equipment was built by Kamet Cooperative Union.

Timor Cooperative Society is an ideal place for yoghurt processing venture due to availability of raw material (milk), proximity to markets and good road network. This project will also improve livelihoods of the community who are mainly dairy farmers. Milk from these farmers will be value added to attract better markets and prices. Yoghurt has longer shelf life and can compete favourably in the market.

The project has increased job opportunities in the area, stimulate growth of other businesses including dairy farming, financial ventures such as mobile money transfers, retail shops and eateries.

The initially identified negative impacts such as air pollution, soil erosion, and contamination of milk, traffic congestion and pressure on water demand among others are still a challenge. In addition, the An influx of population to the area such as construction workers and business people may also increase disease incidences such as COVID-19, HIV/AIDS and social ills such as Gender Based Violence (GBV) and Sexual Exploitation and Abuse (SEA).

Mitigation measures such as use of water to reduce dust, sensitization of workers on environmental issues, soil erosion control measures and water conservation have been suggested among others.

Sensitization of workers and local administration on GBV, HIV/AIDS and other social ills have been suggested to curb negative impacts. A grievance redress process has also been suggested to reduce wrangles within the community.

A public participation meeting involving – men and – women was held to receive views of the community. The community pointed out the need to fence off the site, pave the area around the cooling plant to reduce dust.

With the recommended mitigation measures in place, it was unanimously agreed that the proposed project should proceed and that the ESMP of Ksh1,65,000 provided should be adhered to by the proponent.

LIST OF ABBREVIATIONS

EIA	Environmental Impact Assessment
ESA	Environmental Social Audit
ESMP	Environmental Social Management Plan
NEMA	National Environmental Management Authority
EMCA	Environmental Management Coordination Act
HIV/AIDS	Human Immuno-Virus/Acquired Immuno-Deficiency Syndrome
Covid-19	Corona virus pandemic
GBV	Gender Based Violence
SEA	Sexual Exploitation & Abuse
Ksh	Kenya shillings.
NEC	National Environmental Council
GRM	Grievance Redress Mechanism
SH	Sexual Harassment.
SGBV	Sexual Gender Based Violence

PROJECT DETAILS	
PROPONENT	Kamet Farmers' Cooperative Union
LOCATION	Eldoret - Ainabkoi road on coordinates: Latitude; 0.236683°N: Longitude. Longitude 35.494582°E.
ADDRESS	P.O BOX 158 AINABKOI
PERIOD	June, 2021
CONTACT PERSON	Helen Kiriswo – 0729 916 574
LEAD EXPERT	Ruto Christopher

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CHAPTER ONE: INTRODUCTION

1.0 BACKGROUND INFORMATION

Environmental and social concerns form an integral part of planning for sustainable development. Environmental Social Audit (ESA) is undertaken when the project is running in order to establish the impacts of the project on the environment and social aspects. This enables the project managers to mitigate the negative impacts and enhance positive effects of the project.

It is a Kenyan government policy that ongoing projects and programs that are out of character from the immediate environment needs to undergo Environmental Social Audit. The proponent therefore understands the need for compliance with the laid down regulations and policies.

1.1 Justification for conducting Initial Environmental Social Audit

Environmental Social Audit is conducted to provide information and understanding of a project that is operational to allow for possible adjustment so as to comply with environmental requirements. This Environmental Social Audit (ESA) will assist the proponent ascertain whether the operations of the milk collection activities and the additional activity of yoghurt processing are in line with EMCA regulations and to point out possible negative impacts and the positive impacts related to the operations of the project.

The report will provide mitigation measures for the negative impacts as well as suggesting ways to maximize the benefits of the positive impacts.

Environmental issues are dynamic. Consequently, ESA reports are meant to capture current environmental issues that are related to an on-going project. This ESA report includes an Environmental Social Management Plan (ESMP) which will assist the proponent in mitigating negative environmental impacts and enhance positive impacts. The ESMP provided is flexible to consider the dynamic nature of environmental issues.

1.2 Objectives of the Environmental Audit (ESA)

The following were the objectives of carrying out an ESA for Kamet Cooperative Union (Timor) milk collection center: -

1. To ascertain whether the collection centre complies with government policies, laws and the EMCA (1999) regulations on the environment and the Environmental Audit regulations of 2003.
2. To identify the positive and the negative impacts of the project on the environment and provide recommendations.
3. Develop an Environmental Social Management Plan (ESMP) to mitigate negative effects and promote the positive impacts.
4. Produce an Environmental Social Audit report and submit to NEMA

1.3 Terms of Reference

The terms of reference were as follows:

- Provide detailed project description

- Describe the current environmental state of the project
- Interpret relevant legal framework and policies related to the project
- Determine impacts of the project on the environment
- Develop an Environmental Social Management Plan (ESMP) for the project

1.4 Environmental Audit Methodology

Several methods were used to obtain data, analyze and present the report. These methods included review of existing documents (secondary data), field visit by a team of consultants, discussions with relevant persons, observation and photography.

Secondary data search focused on areas such as laws and regulations covering milk processing, relevant policies, possible environmental impacts and their mitigation measures. This information was obtained from reports of similar projects, government of Kenya reports and maps.

Primary data was collected during field visits. These included data on land use and baseline information about the milk collection centre. Identification of possible environmental impacts was carried out through observation, group discussions and interviews. Photographs were taken during field visits to illustrate and complement discussions.

The study included the following tasks:

- A baseline survey of the project site to determine present status and identify impacts of the project.
- Analysis' of ongoing project designs and determine their suitability in line with environmental standards requirements.
- Conduct a survey around the existing project site to collect views of the public for inclusion in the report.
- Compile an ESA report of the milk collection centre.
- Submit the report to NEMA

CHAPTER TWO

2.0. PROJECT DESCRIPTION

2.1 Description of the project

Raw milk destined for processing is first received at the chilling plant following the Kenya Dairy Board protocol for quality and health concerns. About 1,000 litres of this good quality milk is then taken to the yoghurt processing plant, which is adjacent to the chilling plant for pasteurizing, culturing and thickening before the process of flavouring, sweetening and colouring in about 12 hours. The product is then packed and transported to markets which include local centres and larger markets such as Eldoret and Ravine.

The processing plant includes a simple machine to pack and seal plastic pouches for yoghurt. These packets of yoghurt are then stored in a cold room to await transportation to markets.

2.2 Scope of the project

The scope of the technical works for Timor yoghurt building involved excavation and foundation development, reinforcement, form/structure works, carpentry, masonry, plastering, plumbing, electrical works and painting and installation of the yoghurt processing plant.

2.3 Location

The yoghurt house is located at Kabiemit ward, Keiyo South Sub – County, Elgeyo Marakwet County. The project site is located at Latitude 0.236683°N; Longitude 35.493704° E

2.4 Objectives of the Audit Report

The main objective of this initial audit is to determine potential negative and positive impacts of the project. These identified impacts will inform on possible mitigation measures to mitigate the negative impacts as well as suggest ways to enhance the positive impacts.

The report will also provide guidance to the management to ensure sustained environmental social protection which is also cost effective.

Specific objectives of the report

The specific objectives of the report include determination of environmental impacts of the project, determination of mitigation measures and development of Environmental Management Plan for the project.

2.5 Project Cost

World Bank through The Kenya Climate Smart Project, Elgeyo Marakwet County, is funding the project Ksh 9.9 million. This amount is meant to procure a yoghurt processing machine. However, the building to house the yoghurt equipment has been done by Kamet Cooperative Union (photo 1)



Photo 1: Building to house yoghurt processing activity

2.6 Milk reception

This is the point where milk is received from farmers. Necessary tests to ascertain the quality of milk such as acid test is carried out before the milk is accepted by the Cooperative. Milk producers (members) around Kamet (Timor), Elgeyo Marakwet County, deliver their milk to this milk collection centre. Farmers carry their milk using pickups and motor bikes. The Cooperative Society receives milk in the morning only. The project proposes that 1,000 litres of this milk is then channelled to yoghurt processing part for value addition into yoghurt and the product sold in the nearby markets. Payments are made to farmers through the Cooperative Union

2.3 Washing the Equipment and Milk Cans

This is an important activity of the milk process at the milk collection centre. The suppliers are responsible for the washing of their emptied cans. When milk cans are not cleaned, the milk quality is reduced. Cleaning of the assembly line and the floor should be done on daily basis. The floor should be as dry as possible thus the floor slopes should be adequate for easy drainage. Washings may use chemicals and/or hot water as necessary. The two common chemicals used for cleaning include chlorine (25ppm) and caustic soda.

The facility, however, has not designated a place for washing and drying milk cans (photo 2)



Figure 2.3: The facility has no washing and drying stand for milk cans

3.0. BASELINE DATA OF THE PROJECT SITE

3.1. Background Information

Timor Cooperative Society is situated at coordinates 0.236461°N 35.494582°E. It is one of the market centres in Elgeyo-Marakwet County but close to Uasin Gishu County boundary. The facility is within a rich milk catchment area within Elgeyo Marakwet County and across at Uasin Gishu County.



Photo 3: Location of Timor Cooperative Society

3.2. Climate

The temperatures in Metkei are cool with average annual temperatures range from a minimum of 14 °C to a maximum of 24 °C. Rainfall ranges annually from 400 to 1,400 mm. The wind systems are static with prevailing East-west winds. The winds are not strong with an average gust of less than 12km/hr. annually.

3.3. Topography

Timor area is generally flat with a gentle slope towards the South – Eastern part. The underlying geology mainly consists of gneisses from the basement system.

3.6. Socio - Economic characteristics

The major economic activities in Timor area include small businesses such as retail shops, eateries and carpentry workshops. The surrounding areas are farm lands where the most important activity is dairy farming, horticultural farming especially vegetables and tea farming. The population growth on site and its surrounding environment has been attributed to natural growth, small scale rural-urban and road net-work. The urban population is still ethnically homogeneous because it is not well developed in terms of urbanization.

The urban space consists of entertainment joints, shops, carpentry workshops and groceries. The project has and will continue to improve incomes to the dairy farmers in the area as well as stimulate growth of other businesses including eateries, retail shops and agro stores among others. This project, which will be enhanced, has provided equal opportunities in employment and this will be expanded in the proposed subproject.

Gender Based Violence is not a common issue in the area. However, as the population increases, GBV can arise. The management should sensitize the community and workers on the issues of GBV and how to deal with them.

3.7. Water supply

The site is supplied with piped water flowing by gravity from a spring in a nearby farm. This water is not treated. The quality of this water especially turbidity is not satisfactory because the source is used by both livestock and humans. The quantity is not adequate because of increasing population. The proponent should explore other sources of water such as wells and roof catchments to supplement the existing water supply and to improve on quality.



Figure 3.7: Water storage tanks at Timor Cooperative Society

3.8. Electricity

The area is adequately supplied with a three-phase electricity line. The proponent already has electricity connected to the premise.

3.9. Effluent treatment

The area has no sewerage system. However, the proponent is planning to construct a septic tank and a soak pit to manage liquid waste from the facility. The septic tank should be positioned conveniently near access road to facilitate exhausting when almost full. A soak pit is already in place.

3.10. Security

Currently, the surrounding environment is not adequately secured. The fence in place should be repaired and if possible done with stone or iron sheets. The Cooperative Society should also employ guards (day and night).



Figure 3.8: A solid fence e.g. brick wall or iron sheet fence should be constructed to replace this fence

3.11. Noise

The place is fairly quiet apart from occasional roar of vehicles plying the Eldoret – Ainabkoi road which was recently carpeted. Market area which would otherwise be a source of noise is about half a kilometer away from the site.

3.12. Air quality

The air is not heavily polluted. There is no much dust. The industries are few in the town. There is no heavy traffic and therefore impurities from fuel combustion are negligible. However, the area around the facility is not paved causing a concern in terms of dust and mud. The proponent should consider paving the area with concrete or gabbro to reduce dust and mud.

3.13. Land tenure

The beneficiary (KAMET Cooperative Union) owns the land where the project is situated. The document of land ownership is attached to the report (see annex one on Land title deed).



Figure 3.13: The area around the facility

CHAPTER FOUR

4.0. POLICY, LEGAL AND LEGISLATIVE

4.1 Environmental Management and Coordination Act

Environmental Management and Coordination Act (EMCA) 1999, provides a legal and institutional framework for the management of environmental related issues. In order to manage the environment holistically, the Act has established two administrative bodies: The National Environmental Council (NEC) which has the responsibility of formulating, setting national goals and promoting cooperation among stakeholders. The second body is the National Environmental Management Authority (NEMA) which supervises and coordinates matters related to the environment. It is the principal instrument for implementation of all policies related to the environment.

The project required approval of NEMA through issuance of an environmental license which falls under part VI section 58 (1) and (2). This section states;

- 1 Notwithstanding any approval, permit or license granted under the act or any other law in force in Kenya, any person, being the proponent of a project, shall, before financing, commencing, proceeding with, carry out, executed or conducted by another person any undertaking specified in the second schedule to this act, submit a project report to the authority in the prescribed information and which shall be accompanied by the prescribed fee.
- 2 The proponent of the project shall undertake or cause to be undertaken at his own expense an Environmental Audit report to the authority.

4.2 Environmental Impact Assessment (ESIA)

The Environmental Management Coordination Act, 1999 (EMCA) describes the Environmental Impact Assessment as a systematic examination conducted to determine whether or not a programme, activity or project will have any adverse impacts on the environment; section 58(5), 1999. The Environmental Social Impact Assessment (ESIA) consists of a multidisciplinary approach combining the evaluation of the economic aspects of a project, based on cost-benefit ratios, with the environmental consequences of undertaking the project.

ESA process is used to identify and eradicate adverse environmental social impacts that emerge as a result of ongoing operation of the project. Environmental and social issues are dynamic and therefore some of the impacts can be established after the project is running. It assists in minimizing the negative impacts as well as enhancing the positive impacts. EA is therefore used to achieve the following:

1. Assess whether or not the operation of the project has significant impacts – both positive and negative.
2. Determine whether the negative impacts identified could be mitigated.
3. Give recommendations on preventive and mitigation measures.
4. Identify and assess any other alternative to the proposed policy, project or activity and associated activities.

4.3 Physical Planning Act

The local authority act empowers local authorities under section 29 of the act to reserve and maintain all land planned for open space, parks, urban forest and green belts. The same section

also prohibits or control use and development of land and buildings in the interest of proper and orderly development of the area.

Section 30 states that any person who carries out development without permission will be required to restore the land to its original condition. It is also states that no other licensing authority shall grant license for commercial or industrial use or occupation of any building without a development permission granted by the respective local authority.

4.4 The Occupational Safety and Health Act, 2007

This emphasizes that the occupier shall ensure safety, health and welfare at work of all persons while working in his workplace.

The act caters for the general safety of employees. It states that warning signs indicating the degree of danger should be in form readily understood by the employees. It should be marked on, attached to, or posted nearby any risk area.

Hazardous areas should be confined and conditions for access to these areas should be posted.

The act provides for the provision of first aid facilities and for protective clothing and appliances for employees in any process involving exposure to wet or to any other injuries or offensive substance.

The act also brings in new aspects of Safety and Health policy statement and annual audit.

4.5 Electricity Power Act No. 11 of 1997

The Electricity Power Act No. 11 of 1997 deals with the generation, transmission, distribution, supply and use of electric energy as well as the legal basis for establishing the systems associated with this purpose. Under schedule 3 of the electric power (licensing) Regulation 2003, it is mandatory to comply with all safety, health and environmental laws.

4.6 The EMCA Water Quality Regulations (2006)

These regulations were formulated with the aim of protecting water sources from pollution and setting the standards for wastewater disposal. Section 12 (1) requires that every local authority or person operating a sewerage system or owner or operator of any trade or industrial undertaking obtain an effluent discharge license as stipulated under the EMCA and shall comply with the standards set out in the third and fourth schedule to these regulations. A discharge monitoring record shall be maintained by the proponent and evaluated on an annual basis. Any person discharging wastewater into public sewer or aquatic ecosystem is required to obtain a discharge license and regularly monitor quality of effluent. The proponent is advised to construct a septic tank and a soak pit for the management of liquid waste to protect the water quality.

4.7 Water Act (2002)

The Water Act requires that any effluent discharge in any water body should contain no poisonous matter or substances that are likely to be injurious directly to public health, to livestock, crops, orchards and gardens irrigated with such water. It also prohibits disposal of effluent or drainage from factory in a manner likely to contaminate groundwater. Part II, section 18, of the Water Act, 2002 provides for national monitoring and information systems on water resources. Sub-section 3 allows the Water Resources Management Authority (WARA) to demand from any person or institution, specified information, documents, samples or materials

on water resources. Under these rules, specific records may require to be kept by a facility operator and the information thereof furnished to WRMA.

Section 73 of the Act allows a person with license (licensee) to supply water to make regulations for purposes of protecting against degradation of water sources. Section 75 and sub-section 1 allows the licensee to construct and maintain drains, sewers and other works for intercepting, treating or disposing of any foul water arising or flowing upon land for preventing pollution of water sources within his/her jurisdiction. The waste water regulation, 2006 states that; No person shall abstract ground water or carry out any activity near any lakes, rivers, streams, springs and wells that are likely to have any adverse impact on the quality or quantity of the water without an EIA license issued.

4.8 Occupier Liability Act Cap 34

The act regulates the duty that an occupier of premises owes to his visitors in respect to the dangers due to the state of the premises or to things done or omitted to be done on them.

It requires that the occupier warns the visitor of the likelihood of dangers within his premise to enable the visitors take reasonable care of themselves. The proponent is advised to ensure that workers are sensitized on safety issues and that appropriate signs are put in place to inform, caution and warn visitors, on any dangers within the site.

4.9 Public Health Act Cap. 242

The act prohibits any accumulation of deposition of refuse or other matter, which is offensive or injurious or dangerous to health. It makes it an offence to emit or release any noxious matter or waste water into any place, land, or water course not approved for reception of such substances. The proponent is advised to construct a septic tank and a soak pit to comply with this regulation. Should also ensure there is efficient management of household solid waste.

4.10. Energy Act, 2006

The Energy act of 2006 is meant to promote and develop prudent national energy efficiency and conservation as well as promoting and developing the use of renewable energy. The proponent is advised to try as much as possible to conserve energy and use it efficiently.

4.11. Land Acts 2011

The act of parliament to give the effect to article 68 of the constitution, to revise, consolidate and rationalize land laws; to provide sustainable administration and management of land and land based resources, and for connected purposes. The proponent should therefore comply with this

4.12. The Food, Drugs and Chemical Substances (Food Labeling, Additives and Standards) Regulations

PART XI- MILK PRODUCTS Section 140: Standard Milk: Milk or whole milk shall be the normal mammary secretion free from colostrum, obtained from the mammary glands of a healthy cow and shall-

- a. Contain no added water or preservatives or any other substances; and
- b. Conform to the following composition;
 - I. Not less than 3.25 per cent milk fat; and
 - II. Not less than 8.5 percent non-fat milk solids.

4.13 Policy Papers Relevant to the Project

Policy papers are statements and principles, which provide the broad and general framework within which government intentions is geared to. It is the basis within which laws and regulations are formulated to actualize the policies.

a) The National Environmental Action Plan (NEAP)

The NEAP was a deliberate policy effort to integrate environmental considerations into the country 's economic and social development. The integration process was to be achieved through a multi-sectorial approach to develop a comprehensive framework to ensure that environmental management and conservation of natural resources are an integral part of societal decision-making. Issues of environmental integrity have been addressed by this project as part of a wider approach to respond to the goals of the National Environmental Action plan (NEAP).

b) Vision 2030

Kenya Vision 2030 is a development blueprint for the country, which is motivated by collective aspiration for a much better society than the one we have today, by the year 2030. The aim of Kenya Vision 2030 is —the globally competitive and prosperous country with a high quality of life by 2030. It aims at transforming Kenya into —a newly industrializing, middle income country providing a high quality of life to all its citizens in a clean and secure environment. The Vision is anchored on three key pillars: Economic; Social; and Political Governance. The economic pillar aims to achieve an economic growth rate of 10 per cent per annum and sustaining the same till 2030 in order to generate more resources to address the Millennium Development Goals (MDGs).

c) Environment and Development Policy (Sessional Paper No.6 of 1999)

The aim of this policy is to harmonize environmental and development goals to ensure sustainability. The paper provides comprehensive guidelines and strategies for government action regarding environment and development.

d) The Constitution of Kenya, 2010

The Constitution of Kenya, 2010 contains a comprehensive bill of rights – article 43, which guarantees all Kenyans their economic, social and cultural rights. It asserts the right for every person to social security including persons who are unable to support themselves. The management of the Cooperative Union should identify people with needs and accord them the necessary consideration for equity. It also contains other social rights such as rights to access clean and safe water in adequate quantities, security and freedom from hunger and access to adequate food of acceptable quality. The plant should ensure there is adequate supply of water which does not cause conflict with other users. The product, yoghurt, should be of good quality.

e) Kenya National Social Protection Policy

This policy is based on leadership integrity, good governance, gender mainstreaming, equity and social justice. It encourages good practices such as public participation, flexibility and responsiveness to changing circumstances among others. The Cooperative Union should always up hold the culture of disclosing issues to members and good governance as well.

f) County Government Policy on Sexual and Gender Based Violence, 2017 (SGBV)

The purpose of this policy is to put in place a framework to accelerate implementation of laws, policies and programmes for prevention and response to SGBV. The management should be aware of this policy and therefore position the plant to receive and channel such cases if the future.

CHAPTER FIVE

5.0 METHODOLOGY

Methodology describes the ways used to collect the required data for the report. The following methods were used to carry out The Environmental Social Audit for the project:

5.1. Desktop search

Desktop research involved review of relevant literature on the project area and it included review of various documents such as relevant legislations on similar projects.

5.2. Public Meetings

Two public meetings were held between the proponent (KAMET Dairy Union) and the consultants to discuss the way forward on the milk collection centre and compliance with environmental laws and social regulations. The meeting was attended by 31 stakeholders, mainly farmers, management of the Cooperative Society and teachers from nearby schools. There were 22 men and 9 women during the discussions (Refer to Annex 2). This number excluded the two environment experts. Public Health protocols on COVID-19 were observed. This public engagement meeting was also meant to enhance participation of stakeholders in growing the producer organization. Regular meetings with stakeholders should be encouraged to monitor the progress of the project.



Figure 5.2: Public participation exercise

5.3 Site visit

The consultants' team visited the site to discuss with the proponent management and to observe current activities and their impacts on the environment. The visits were also useful in understanding the project in depth.

5.4. Photography

Photographs were taken to show the areas of concern and any other information which were important in the compilation of the report.

CHAPTER SIX 6.0. FINDINGS OF THE AUDIT

6.1. Introduction

Environmental Sustainability and conservation is the major goal and fundamental concern of all developments, this is established through conducting an ESIA and ESA. The project is currently generating and will generate desirable and undesirable environmental social impacts and hence the need to subject the project to an environmental social audit and subsequent annual audits.

This section identifies and analyses the existing and potential impacts of the project-milk collection activities and yoghurt processing activities in the environment and social aspect. The negative environmental and social impacts were identified as they are in the facility and mitigation measures proposed to minimize the negative impacts observed.

Nature of the structures

The society is housed in a concrete floored office. The structure is in a good state and is recommended for present use.

6.2. Positive impacts

1. The project has created employment, the managing staff, Support Staff such as cleaners and security staff. The additional activity will increase employment opportunities
2. The whole facility has stimulated growth of other sectors such as transport, eateries and small businesses.
3. The facility has brought dairy farmers together to benefit from Cooperative movement. This has improved incomes through increased milk production. Yoghurt processing will expand the opportunities and therefore increased incomes.
4. Provided market for milk in the region.

6.3. Public and Occupational Safety and Health

The facility is fairly good. However, the following conditions should be addressed.

1. The area is not secured in terms of fencing
2. The area around the facility can be dusty and muddy during dry and wet seasons respectively
3. There is a toilet for use by workers and visitors of the plant. However, it is not adequate
4. There is no first AID box in place
5. The staff in place have not been sensitized on matters health

Mitigation measures

- Fence the site preferably with stone or iron sheets and plant more trees around the fence. This will reduce noises and dust
- The path ways to the facility should be paved with either tar or gabbro to reduce dust and muddy conditions

- The management should enforce speed limits for vehicles and motorcycles delivering milk to the cooperative society reception point to reduce dust and accidents
- The staff should be sensitized on OHS matters
- A fully equipped first AID box should be placed at a visible place within the facility

6.4. Solid Waste management

Currently, the premise does not generate a lot of solid waste. However, the operation of yoghurt processing plant will add on the solid wastes in terms of spoilt pouches, paper, cartons and plastic wrappings. There are wastes resulting from food handling for the staff and general management paper work. The proponent is however advised to put waste bins at strategic location of the premise to ensure management of the generated wastes from daily operation. The proponent is also advised to ensure disposal of solid waste in a manner that is acceptable environmentally and approved by NEMA.

Other noticeable wastes were bricks and building materials from previous construction activities. These wastes could be re-used for other projects. In the meantime, they should be stacked at the corner of the property.



Figure 6.4 : Building materials littering the facility

Mitigation measure

The concept of reducing, recycling and re-use of trash including paper should be implemented by the management. Currently the premise does not do recycling as the waste generated is little but

with future expansion the waste generated will increase. Provision of solid waste bins in strategic position within the site. Solid waste generated from operations of the cooperative society should be dumped at the dumpsite approved by NEMA. All workers should be sensitized on solid waste management.

6.5. Health Impact- spread of COVID-19 among construction workers at work sites

The World Health Organization (WHO) declared COVID-19 a global pandemic after assessing both its alarming levels of spread and severity, and the alarming levels of inaction. Consequentially, WHO issued various guidance and measures to prevent the spread of the virus. The measures have been adopted worldwide. Similarly, the Kenyan government has since then issued several guidance and directives after the first case was registered on 13th March, 2020. These included complete cessation of movement to and from areas considered hot spots and night curfew, social distancing guidelines, closure on non-critical and essential enterprises, closure of places of worship and public gatherings, mandatory use of masks in public places and calls for vaccinations among others. These guidelines were observed during the audit period.

Recently, WHO has warned that the virus is here to stay for a long time and might persist and become our new normal. The Government of Kenya has also lifted some of the initial movement controls and allowed the resumption of business, with certain industry specific guidelines being enforced. The duty of care has now been transferred to individual citizens and enterprises. Recognizing the potent risk this may present, it is difficult to clearly outline exhaustive mitigation measures under the mitigation impacts. As such, there is need for the client and the contractor to develop and adopt COVID-19 Standard Operating Procedure (SOPs) in line with the World Bank guidance, Ministry of Health Directives and site-specific project conditions. These SOPs need to be communicated to all workers and enforced to the latter without fail. In addition to the requirement of the SOPs, the following mitigation measure shall also be adopted.

The facility has not put thermo-guns in place. There are no hand wash sites seen.

6.6) COVID-19 – Mitigation Measures against spread of COVID-19

- The management should ensure workers and visitors should put on surgical masks at all times
- Install hand-washing facilities with adequate running water and soap, or sanitizing facilities at entrance to work sites including consultation venues and meetings and ensure they are used;
- Ensure routine sanitization of shared social facilities and other communal places routinely including wiping of workstations, doorknobs, handrails etc.
- Thermo-guns should be used at the gate to screen for suspected cases
- Electronic means of consulting stakeholders and holding meetings should be encouraged whenever feasible

Avoid concentrating of more than 15 community members at one location. Where two or more people are gathered, maintain social distancing of at least 2 meters;

6.7 Management of Sewer and Waste Water

Timor Cooperative Society does not have waste water and liquid waste management system. This might have been attributed by low volume of milk it has been handling. Presently, milk

received has increased and therefore, there is need to have a system of managing this type of waste. The main septic waste management facility available is a pit latrine and this is used by the workers and visitors.



Figure 6.7. Existing pit latrine on site

Other solid wastes such as building materials litters the area around the facility.

Mitigation measures

The proponent should construct a soak pit to receive liquid wastes from the yoghurt processing facility and the increased volume of milk.

One additional toilet could do to serve the workers. Other materials such as building materials should be stacked neatly away from the face of the unit.

6.8 The site surface and soil erosion

The surface of the site handling milk is earthy and therefore likely to become muddy in rainy seasons and dusty during dry seasons. The dust could pollute the air and contaminate milk.

Mitigation

The surface around the facility and all the way to the gate should be paved with gabbro material to reduce dust and muddy conditions. This should be combined with adequate drainage to discharge water safely.

Speed of vehicles within the facility should be controlled to reduce noise and dust from polluting the environment.

6.9 Management of Surface and Ground Water

There is need for an effective management of surface water as it will help ensure the surface and ground water is not polluted. The proponent is advised to put up the necessary strategy such as oil interceptors in areas where oil spillage can occur e.g. vehicle parking area and milk offloading area.

Mitigation measures

Transporters and plant operators should be sensitized on proper maintenance of machines to reduce oil leakages especially within the site.

Adequate drainage should be provided to capture all waste water especially at incoming milk handling point.

In case a borehole will be needed in future, it should be noted that the boreholes and septic tanks should be at least 60 meters apart

Other mitigation measures include servicing of machinery and equipment at a designated place with a paved surface and oil interceptors, proper labeling of containers holding hazardous substances e.g. cleaning agents and proper storage, handling and disposal of oil and oil wastes.

6.10. Security

The area is fairly secure. However, there is need to improve the perimeter fence. A 24-hour security surveillance should be in place to monitor visitors and overall security at the facility.

6.11. Energy management

The premise is connected to electricity mains by Kenya power Company. The management is advised to embrace environmentally friendly sources of light in their structures. The workers should be encouraged to practice energy saving practices such as switching off unnecessary lights.

The management should ensure prudent energy use through regular energy saving tips to members of staff.

6.12. Water demand and conservation

The source of water for the operations such as cleaning is sourced from a shared spring at the neighboring farm. Tanks have been installed at the site for storage of water and therefore reduce scarcity. This water is poor in quality and often not adequate. The management should encourage use of water conserving taps.

6.13. Noise/Vibration

The place is relatively quiet with less traffic on the road. The neighborhood is not heavily populated as is more rural and agriculture is the dominant activities. However, traffic may increase as the newly carpeted road is now open for traffic.

The processing equipment will also generate some noise and vibrations but minimal. Cans of milk and workers will also generate minimal noises.

Management of Noise Level

Noise levels within the facility can be further reduced by doing a solid fence between the road and the premise, confining milk deliveries within the day, limiting speed of vehicles within the facility and discouraging hooting and prolonged running of engines. Where necessary, use of

PPEs is recommended. Equipment including transport vehicles should be well maintained and fitted with effective mufflers to reduce noise.

Workers should be cautioned against making unnecessary noises such as shouting and clanking milk cans.

6.14. Air quality/odour

The air is relatively clean apart from little dust from bare grounds at the site especially during dry seasons. There are no obnoxious gases. This environment should be enhanced by planting trees especially along boundaries to reduce external sources of noise and dust.

6.15 Management of Safety and Fire Risk

There are no notices on speed limits within the facility. This can lead to accidents due to know speed limits sign in the main road.

Mitigation measures

Accidents and fires can be mitigated through appropriate PPEs, placement of signs such as speed limits and presence of heavy traffic, training of workers on health, safety and first AID, provision of adequate fire-fighting equipment, regular maintenance of equipment, training workers on fire fighting and occasional inspection of electrical installations. Burning of solid wastes within the site should be discouraged.

6.16 Sexual Exploitation and Abuse (SEA)

This impact refers to sexual exploitation and abuse 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. 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).
- The SEA action plan will include how the project will ensure necessary steps are in place for:
 - Prevention of SEA: including COCs and ongoing sensitization of staff on responsibilities related to the COC and consequences of non-compliance; project-level IEC materials;
 - Response to SEA: including survivor-centered coordinated multi-sectoral referral and assistance to complainants according to standard operating procedures; staff reporting mechanisms; written procedures related to case oversight, investigation and disciplinary procedures at the project level, including confidential data management;
 - Engagement with the community: including development of confidential community-based complaints mechanisms discrete from the standard GRM; mainstreaming of Sexual Exploitation and Abuse (SEA) awareness-raising in all community engagement activities; community-level IEC materials; regular community outreach to women and girls about social risks and their SEA-related rights;
 - Management and Coordination: including integration of SEA in job descriptions,

employments contracts, performance appraisal systems, etc.; development of contract policies related to SEA, including whistle-blower protection and investigation and disciplinary procedures; training for all project management; management of coordination mechanism for case oversight, investigations and disciplinary procedures; supervision of dedicated PSEA focal points in the project and trained community liaison officers.

6.17 Sexual Harassment (SH)

Sexual Harassment is a social evil that can occur and the proponent should sensitize all the relevant stakeholders on this issue. The management should produce pamphlets on SH and SEA to reinforce the sensitization. These flyers should be accessible to visitors and clients visiting the facility. There was no case reported as at the time of this audit. However, production of pamphlets sensitizing the public on the evils of SH may generate cases in future.

6.18 Employment Opportunities

KAMET Union has both male and female employees. These employees were sourced from the locality and perform various duties including transporters, laboratory services, clerical services and security among others. The Union is advised to source labor from the community as much as possible and to give opportunities to people living with disabilities (PLWD). However, the management should observe the law on child labor. The union does not discriminate against any social category in terms of pay and opportunity.

6.19 Grievance Redress mechanism (GRM)

The Union does not have a visible GRM in place such as complain boxes and a committee to receive and act on complains. However, Instance of emergence of conflicts, dissatisfaction and complaints will emerge during project implementation and their resolution will require the setting up of a framework for handling complaints and grievances. The mechanism will be simple, accessible, representative and culturally appropriate. It will also be administered as far as possible at the local level to facilitate flexibility and open to various scrutiny. The process of grievance redress will require to be outlined and the affected individuals be informed of the process for expressing dissatisfaction and to seek redress. The GRM will have the objective of solving disputes at the earliest possible time and implicitly discourage referring such matters to the courts, which would otherwise take a considerably longer time.

6.20 Gender Based Violence (GBV) issues.

The increased economic activities due to presence of an income stream between community members and households may result to GBV resulting from access and use of resources.

Mitigation Measures

- Awareness creation and sensitization of the local communities on the associated with GBV
- Establishment of grievance redress mechanisms

CHAPTER SEVEN

7.0. ENVIRONMENTAL SOCIAL MANAGEMENT MONITORING PLAN (ESMMP)

An Environmental Social Management/Monitoring Plan has been developed to reduce or avoid the negative impacts resulting from the operation of Timor Cooperative milk collection and yoghurt processing centre as well as increase the benefits of the positive impacts.

The factors considered in assessing the negative and the positive impacts are dynamic and may change over time. Consequently, flexibility is included in developing this ESMP.

7.1 ENVIRONMENTAL SOCIAL MANAGEMENT PLAN-OPERATION

Table 1. ESMP OPERATION

Impacts	Proposed mitigation measures	Monitoring Indicators	Responsibility	Means Of Verification	Time Frame/ Frequency of Monitoring	Cost(Ksh)
Environmental Impacts						
Soil erosion	<ul style="list-style-type: none"> • Ensure Cabbro paving or cover ground with ballast • Provision of suitable storm water drainage channels to effectively discharge water; and control any chance of soil 	<p>Percentage of the ground covered by gabbro to reduce soil erosion.</p> <p>The number of erected structures to control storm water drainage.</p>	Proponent Soil conservation officer	Report on soil erosion	By January, 2023	500,000

	movement.					
Energy consumption	<ul style="list-style-type: none"> • Switch off lights during the day. • Sensitize staff on energy management. • Regular servicing of equipment and machinery; • Switch off idle machinery/devices; • Use efficient energy consuming equipment • Use energy saving bulbs 	<p>The number of trainings of staff on energy saving methods in the premise</p> <p>The use of energy saving bulbs and machines</p>	Management	Report on sensitization on energy saving to staff and the number of bulbs and machinery used that are energy saving in the premise.	By April, 2022	20,000
Solid wastes	<ul style="list-style-type: none"> • Carry out waste separation • Provide adequate bins with covers in the compound. They should be emptied, washed and disinfected regularly. • No burning of waste papers and 	Presence of waste separation and waste bins with covers in the facility.	Management	The number of solid waste bins established in the compound for use.	February, 2022	5,000 per month

	<p>plastics at the site. These wastes should be collected disposed through municipal dumpsters.</p>					
Increased demand for water	<ul style="list-style-type: none"> • Encourage use of water conserving taps • Avoid water wastage. • Develop an alternative water sources such as wells and roof catchments 	<p>The presence of water taps to control water flow and reduce wastage.</p> <p>Established roof catchment structure for collecting and storing rain water.</p>	Administrator	Report on water harvesting and storage in the co-operative.	By January 2022	500,000
Waste oils and other spillages	<ul style="list-style-type: none"> • Proper labeling of containers for holding hazardous materials • Servicing of machinery and equipment to be done at a designated place with a paved surface and oil spills should be reduced. • Fuels and lubricants used on 		management		By February, 2022	20,000

	site should be stored safely to avoid contamination of the environment					
Sewerage and waste water	<ul style="list-style-type: none"> • Construction of storm water drainage system • Ensure regular checks of the drainage system to avoid blockages 	Presence of constructed drainage system	Management	The number of drainage system established in the premise	By January, 2022	200,000
Noise and vibration	<ul style="list-style-type: none"> • Any modification in Construction in future to be carried out during daytime (8am to 6pm); • Use of Personal Protective Equipment; • Regular maintenance of equipment to ensure good working condition • Sensitize workers on noise pollution • Provide ear muffs where noise levels 	Presence of PPEs that workers use like ear muffs	Management	Report on use and number of PPEs used by staff or workers.	By December, 2021	50,000

	is high, such as construction sites					
Social Impacts						
Occupational health and safety	<ul style="list-style-type: none"> • Personnel training, equipment maintenance, testing and inspection. • Personal protective equipment should be worn always during loading and offloading of milk • Provide first aid kits • Train the workers on first aid and fire safety. • Develop a fire action plan and post it in strategic points in the site. • Maintain high standards of hygiene 	<p>Trainings and sensitization done to personnel</p> <p>Presence of PPEs for personnel to use when working</p> <p>Presence of First Aids kit in the facility for use in case of an accident.</p>	Proponent	<p>Report on number of trainings and sensitizations done on occupational health and safety and use of First Aid Kit.</p> <p>Number of Fire extinguishers placed at a strategic place and labels for exit in case of fire outbreak in the premise with clearly marked fire assembly points.</p>	By March,2022	200,000

	<ul style="list-style-type: none"> • The signage should be displayed clearly throughout the site. • The management should provide fire extinguishers and place them strategically. 					
Health impact on spread of COVID-19 among workers and community	<ul style="list-style-type: none"> • Electronic means of consulting stakeholders and holding meetings shall be encouraged whenever feasible. One-on-one engagements for the PAPs while observing social distance and adhering to PPE wearing shall be enforced; • Avoid concentrating of more than 15 community members at one location. Where two or more 	<p>Provided PPEs to contain Covid-19 spread among workers and community</p> <p>Number of sensitizations done to workers and community on covid-19 protocols</p>	Management Public Health Officer	<p>Report on trainings and sensitizations done on covid-19 spread on workers and the community.</p> <p>Number of Face masks and sanitizers bought to control spread of corona virus.</p>	January 2022	40,000

	<p>people are gathered, maintain social distancing of at least 2 meters</p> <ul style="list-style-type: none"> • Hold meetings in small groups, mainly in form of FGDs • Use of digital platform (where available) like Facebook and WhatsApp & Chart groups. 					
Sexual Harassment (SH)	<p>The management should produce pamphlets on SH and SEA to reinforce the sensitization. These flyers should be accessible to visitors and clients visiting the facility.</p> <ul style="list-style-type: none"> • 	<p>Presence of pamphlets on SH that are accessible to clients and visitors.</p> <p>Established register for SH records</p>	<p>Management Ministry of interior/Gender and social services</p>	<p>The number of pamphlets used and accessible to the public</p> <p>Number of registered cases of SH in SH register</p>	By June, 2022	30,000
Sexual Exploitation & abuse (SEA)	<ul style="list-style-type: none"> • Engagement with the community: including development of confidential community-based complaints 	<p>Pamphlets available and accessible for use on SEA</p> <p>Established boxes for use to report SEA to increase confidentiality.</p>	<p>Management Chiefs Ministry of interior/Social services</p>	<p>Number of registered cases of SEA in SEA register</p>	By June, 2022	30,000

	<p>mechanisms discrete from the standard GRM; mainstreaming of Sexual Exploitation and Abuse (SEA) awareness-raising in all community engagement activities and outreach to women and girls about social risks and their SEA-related rights;</p> <ul style="list-style-type: none"> • 	<p>Number of trainings/awareness on SEA</p>				
Grievance Redress mechanism (GRM)	<ul style="list-style-type: none"> • Putting up GRM in place such as complain boxes, register and a committee to receive and act on complains. 	<p>Established GRM register and committee to handle any grievance from the public</p> <p>GRM box in the facility for use.</p>	<p>Management</p> <p>CESSCO KCSAP</p>	<p>Report on grievances made.</p>	<p>By February, 2022</p>	<p>30,000</p>
Gender Based Violence	<ul style="list-style-type: none"> • Training the project beneficiaries on human rights and consequences of gender-based violence • Sensitize the community of 	<ul style="list-style-type: none"> • No beneficiaries trained <p>Cases of gender-based violence reported to local chief</p>	<p>Social services officer Management</p>	<p>Incidence Report Attendance list Site Report</p>	<p>By June, 2022</p>	<p>30,000</p>

	<p>importance of sharing resources in the family to reduce tension</p> <ul style="list-style-type: none">• Awareness creation and sensitization of workers and the local communities on the associated dangers and preventive measures					
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7.2 ESMP DURING DECOMMISSIONING PHASE

7.2.1 Introduction

Decommissioning is an important phase in the project cycle and comes last to wind up the operational activities of a particular project. It refers to the final disposal of the project and associated materials at the expiry of the project lifespan. If such a stage is reached, the proponent needs to remove all materials resulting from the demolition/ decommissioning from the site.

7.2.2. Purpose and objectives of decommissioning

The generally accepted reason of decommissioning is to make way for the release of valuable assets such as buildings and sites for alternative use, recycling and reuse of materials and the restoration of environmental amenity. In all cases, the basic objective is to achieve an end-point that is sensible in technical, social and financial terms, that properly protects workers, the public and the environment and, in summary, goes along with the basic principles of sustainable development.

7.2.3 Social aspects

The long-term safety, environmental and social implications of the decommissioning activity need to be carefully considered. In Kenya, there are well-developed mechanisms for involving stakeholders in the planning of activities that affect such social and environmental issues. Developers are bound by the terms of directives of EMCA 1999 and Environmental (Impact Assessment and Audit) Regulations 2003 that require an Environmental Impact Assessment in circumstances like this. This requires detailed assessment of a wide range of factors including impact on amenities, landscape, noise, transport provisions, general nuisance, effects of accidents and contribution to promotion of sustainable development as well as the more specific issues of waste management and impact on the environment as such. Most importantly, they make specific provision for informing and involving the public and neighbouring communities. The table below shows a detailed decommissioning plan for this project.

Table 2. ESMP decommissioning

Project activity	Possible impacts	Mitigation measures	Time schedule	Costs	Responsible person	Monitoring indicators
Dismantling of the building and removal of machines from the site	<ul style="list-style-type: none"> • Generate waste as broken wood, metal etc. • Noise and vibration will be generated 	<ul style="list-style-type: none"> • All, machinery, equipment, structures and partitions that will not be used for other purposes must be removed and recycled/reused. • Dispose solid wastes such as broken wood in the designated places, preferably to be recycled e.g. used as fuel wood. • Recycle and or re-use materials from the dismantling activities where necessary. • Workers encouraged to use earplugs/earmuffs • Restrict operations to day time as a way of reducing noise disturbance at night. 	At decommissioning	0	Proponent	E.A report
2.Rehabilitation of project site		Remove all the facilities that were not originally			Plant Proponent	E.A reports

		<p>on the site. Plant trees to restore the site characteristics.</p> <p>Break the hard ground surface to restore water infiltration</p> <p>Plant grass on the loose surface</p>				
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CHAPTER EIGHT

8.0. CONCLUSION AND RECOMMENDATION

8.1. CONCLUSION

The Audit established that there are both positive and negative impacts though the negative impacts can easily be managed. The institution is therefore advised to adhere to the mitigation measures outlined in the ESMP in order to comply with the environmental standard that are required by law. The positive impacts that were identified included employment opportunities, Market for milk and milk products, and growth of other businesses.

However, the project has some negative environmental impacts. These include increased demand for shared resources especially water, fumes and noise, soil erosion, increased solid waste generation among others.

The study has identified several mitigation measures that could reduce these negative impacts. These include proper disposal of wastes, adherence of the players to the legal issues and sensitization of the stakeholders on environmental issues.

Impacts are dynamic and may change from time to time. The EMP provided is designed to be flexible to cater for the dynamic nature of environmental issues. The negative impacts identified will easily be mitigated by following the EMP provided. It is therefore our recommendation that Timor Cooperative Society continues its operations of milk collection and yoghurt processing subject to adherence to the EMP provided to mitigate the negative environmental impacts.

REFERENCE

Building code (1997), Local Government Regulations (1963).

Environmental Management and Coordination Act (EMCA) 1999.

Public Health Act Chapter 242 Laws of Kenya.

Session Paper No 6 of 1999 on Environmental and Development, 1999

Water Act Law of Kenya. Kenya Gazette supplements no. 107 (Acts No 9) Nairobi October, 2002

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Kenya gazette supplement Acts Public Health Act (Cap. 242) government printer, Nairobi

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Kenya gazette supplement number 56. Environmental Impact Assessment and Audit Regulations 2003. Government printer, Eldoret District Development plan (2004-2008). Ministry of Planning and National Development. Government printers, Nairobi

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Electricity Power Act No. 11 of 1997 Laws of Kenya.

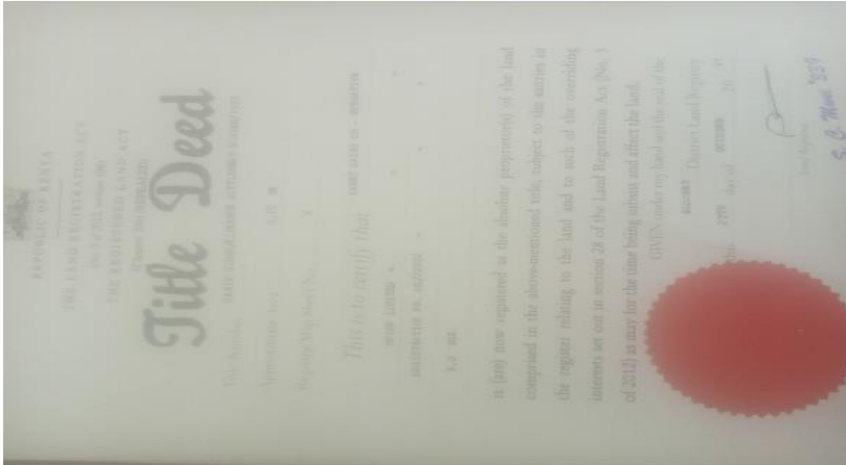
Occupier Liability Act Cap 34 Laws of Kenya.

Energy Act, 2006 Laws of Kenya.

Land Acts 2011 Laws of Kenya.

ANNEXES.

Annex one. Land Title deed for the Kamet PO



Annex 2: List of participants during public audit meeting

ATTENDANCE LIST			
PUBLIC PARTICIPATION ON PROPOSED INSTALLATION OF			
TODDURT PROCESSING PLANT AT KAMET TIMOR ON 11/06/2021			
	NAME	I.D / CONTACT	SIGN
1	JUDITH KIPROO	24484378 / 0746904886	<i>[Signature]</i>
2	HELLEN KARISNO	02852136 / 0729916574	<i>[Signature]</i>
3	SILA RONDO	7372714 / 0900148707	<i>[Signature]</i>
4	JULES CHEPONEA	4125755 / 0722948202	Customer
5	Moses KIPROO	1119505 / 0724861746	<i>[Signature]</i>
6	Edno Kiplaga	13148785 / 0223 325 880	<i>[Signature]</i>
7	BEATRICE MUREY	20626194 / 0116702433	<i>[Signature]</i>
8	EMILY KIPROS	23774702 / 0716669877	<i>[Signature]</i>
9	PURITH TANAM	36356405 / 0723807241	<i>[Signature]</i>
10	DANIEL LOMIE	13207523 / 0726124827	<i>[Signature]</i>
11	JAMES TAPAM	7144905 / 0720962760	<i>[Signature]</i>
12	NELSON LAPAT	3312178 / 0718787011	<i>[Signature]</i>
13	JOEL K. RUTICH	1799440 / 0721616154	<i>[Signature]</i>
14	KIPROO KIPROO	1283032 / 0721535946	<i>[Signature]</i>
15	ALFARO KIGEN	0559468 - 0722432744	<i>[Signature]</i>
16	STANLEY K. MOIY	3147060 - 072032218	<i>[Signature]</i>
17	KEVIN KIPLAGAN	022320496 - 0725683311	<i>[Signature]</i>
18	Charles Kuto	4908769 / 0728304783	<i>[Signature]</i>
19	Reuben K. Chervigot	24255209 / 0723095784	<i>[Signature]</i>
20	JAMES K. CHERUMOT	2325881 / 0724881352	<i>[Signature]</i>
21	James K. Chervigot	2325881 / 0724881352	<i>[Signature]</i>
22	AISREO K. KIMELI	31647390 / 0722106229	<i>[Signature]</i>
23	Robert KOTI	3670507 / 0720722304	<i>[Signature]</i>
24	Jonah Kuman	11062654 / 0721430655	<i>[Signature]</i>
25	Caleb Kimutai	30083237 / 0710909050	<i>[Signature]</i>
26	HOSEA RONDO	27100642 / 0726771565	<i>[Signature]</i>
27	AMOS K. SOREN	28205720 / 0711394582	<i>[Signature]</i>
28	DATRICK BUAKEL	22884548 / 0720772840	<i>[Signature]</i>
29	GRACE MANKICH	4181013 / 0724239816	<i>[Signature]</i>
30	EUNICE BUNDOFICH	8771438 / 0727722419	<i>[Signature]</i>
31	Gladys K. SOREN	11363441 / 0714120056	<i>[Signature]</i>

Annex three: NEMA practising Licence

FORM 7

(r.15(2))



**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/15135

Application Reference No: NEMA/EIA/EL/20075

M/S **CHRISTOPHER KIPTANUI RUTO**
(individual or firm) of address

P.O. Box 111, KAPSOWAR

is licensed to practice in the


capacity of a (Lead Expert/Associate Expert/Firm of Experts) **Lead Expert**
registration number **6116**

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

Issued Date: **5/24/2021**

Expiry Date: **12/31/2021**

Signature..... 


(Seal)
Director General
**The National Environment Management
Authority**

