

**SUMMARY PROJECT REPORT**  
**for**  
**THE PROPOSED ONDISORE KAGOLA SORGHUM**  
**AGGREGATION & VALUE ADDITION CENTRE LOCATED IN**  
**AHERO WARD, KISUMU COUNTY.**  
**LOCATION (COORDINATES)-0.138315, 34.219216)**



Proponent: ONDISORE KAGOLA COMMUNITY BASED ORGANIZATION

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## Certification

### CERTIFICATION

This Environmental & Social Impact Assessment project report was prepared by JECKTONE OMBUOR AND ELVIN NYAGAKA (registered and licensed EIA /EA Lead Expert No.8969 AND 7069 respectively) in accordance with the Environmental Management and Coordination Act (EMCA) Amended 2015 and the Environmental (Impact Assessment) and Audit regulations 2003 that requires that every development project must have an ESIA report prepared for submission to the National Environmental Management Authority (NEMA). We the undersigned, certify that the contents of this report are accurate and righteous to the best of our knowledge.

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## **Acknowledgement**

First and foremost, I would like to express my special gratitude to the residents of Kakola and Kochogo locations, specifically group members of Ondisore Kagola Community Based Organization, for their unwavering and positive support towards the development of this ESIA report. I found their commitment and contribution very useful during the public participation. They made my work easier and their valuable comments and views helped enriched the report

I would also like to recognize and appreciate the ministry of interior and coordination, particularly Mr. Raymond Ojoro the area chief for Kakola location for his dedication and mobilization of community members and provision of security throughout the period.

I would wish to recognize the good work National government for scaling down Kenya Climate Smart Agriculture to the county. Further, I would wish to appreciate The County Government of Kisumu for working hard to bring the project to the community. Again, appreciation goes to the County Project Coordinating Unit who run day to day activities of the project.

Finally, special appreciation to World Bank for supporting the proposed project to help the community enhance their production

## **ABBREVIATIONS AND ACRONYMS**

CADP: County Annual Development Plan

CSA: Climate Smart Agriculture

CIDP: County Integrated Development Plan

CPCU: County Project Coordinating Unit

EA: Environmental Audit

EIA: Environmental Impact Assessment

EMCA: Environmental Management and Coordination Act

ESIA: Environmental and Social Impact Assessment

ESS: Environmental Social Safeguards

ESMP: Environmental and Social Management Plan

GBV: Gender Based Violence

HACCPs: Hazard Analysis Critical Control Points

HIV: Human Immunodeficiency Virus

KCSAP: Kenya Climate Smart Agriculture Project

KSH: Kenya Shillings

M&E: Monitoring and Evaluation

MoV: Means of verification

NEMA: National Environment Management Authority

NPCU: National Project Coordinating Unit

NPGAD: National Policy on Gender and Development

OHS: Occupation Health and Safety

OSHA: Occupational Safety and Health Act

PDO: Project Development Objective

PPE: Personal Protective Equipment

STDs: Sexually Transmitted diseases

WRA: Water Resource Authority

WRMA: Water Resource Management Authority

## **EXECUTIVE SUMMARY**

The proponent, Ondisore Kagola CBO through the support of Kenya Climate Smart Agriculture Project (KCSAP) proposes to set up a sorghum aggregation and value addition center at Ahero town, Nyando Sub- County. The proposed project will be financed by KCSAP under the third window of Climate Smart Agriculture investments (Producer Organizations) and is meant to support farmer groups and sorghum value chain beneficiaries to market their produce.

In supporting Ondisore Kagola CBO, KCSAP endeavors to achieve its development objectives of increasing agricultural productivity, building resilience to climate change risk and reducing greenhouse gas emissions.

The proponent therefore contracted the services of a registered EIA expert to conduct environmental social impact assessment as a way of complying with NEMA and World Bank ESS requirement for projects of such magnitude.

To undertake the exercise and develop this report, the expert applied various strategies to collect data. First, a reconnaissance visit was conducted to familiarize themselves with the project site. Then a site visit where the expert was able to better understand the biological, physical and social environment of the project site. The expert conducted a desktop review/literature review to get more information on pre-existing data. The expert concluded with public participation where various community members gave their views and inputs which are well captured in this report.

Key concerns raised during the public meeting was quality assurance concern (contamination of sorghum grains with aflatoxin, sand particles and high moisture contents), solid waste generation and increase of social vices such as theft, conflicts and child labor. Mitigation measures are well stipulated in chapter six of the report. Positive impacts include increased incomes and job creation amongst others.

The Environmental Social Management Plan has been comprehensively developed covering all the potential phases of the project namely construction, operation and decommissioning phase. The ESMP will make implementation of the mitigation measures trackable with assigned responsibilities and a supporting budget.

The cost of implementing the ESMP is estimated to cost KSH 168,500

The experts are convinced that the potential positive impacts outweigh the negative and as such are of the opinion that the report be approved and proponent adhere to all the recommended mitigation measures.

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## **Chapter One: Introduction**

The Kenya Climate Smart Agriculture Project (KCSAP) is a World Bank and Government of Kenya co-founded project that aims at increasing agricultural productivity, building resilience to climate change risk of smallholder farming and providing immediate and effective response

in case of emergency or eligible crisis. The project is in twenty-four counties, (Kisumu included) and finances Climate Smart Agriculture investments under three windows of funding; Micro projects, subprojects and Producer Organizations.

According to the project documents, producer organizations are registered farmer marketing cooperatives that support prioritized value chains by marketing farmers produce.

In Kisumu, Sorghum is one of the three value chains prioritized by the project with a total of 152 farmer groups expressing interest to be supported by the project during the PICD under micro projects investments. All groups are supported with extension services provided by service providers, while some groups are given CSA grants disbursed in tranches. These groups are supported to market their produce with the help of producer organizations.

Ondisore Kagola CBO was identified as a sorghum producer organization in Kisumu County.

### [1.1 Ondisore Kagola aggregation CBO](#)

The County Government of Kisumu intends to fund Ondisore Kagola CBO to put up an aggregation center for sorghum produced by Common Interest Groups (CIGs), Vulnerable and Marginalized Groups (VMGs) and sorghum out growers. The group has been aggregating sorghum and selling to East Africa Maltings Limited and Farm to Market Alliance Company. The Organization was formed in the year 2001 and later registered by the Ministry of East Africa Community, Labour and social protection on 28<sup>th</sup> October 2002 under registration number NDO/CBO/051046. The project supported them with inclusion grant (Ksh 970,000) to recruit new members, widen their market linkages and conduct capacity building activities. The proposed project is designed to enhance economy of scale through aggregation activities and improved income to farmers.

### [1.2 KCSAP Project Objective](#)

KCSAP broad PDO objective is to “increase agricultural productivity, build resilience to climate change risks in targeted smallholder farming and in the event of an Eligible Crisis or Emergency, provide immediate and effective response.” The proposed project intends to support farmers to have higher productivity through improved income and reduced agricultural losses. This is in line with the project broader objectives.

### [1.3 Justification of the project](#)

Ondisore Kagola CBO Enterprise Development Plan Proposal worth Ksh 10 Million was approved by the Project National Technical Advisory Committee on 21<sup>st</sup> September 2021. The Plan proposed to establish value addition and aggregation center in the project wards for purpose of assisting the sorghum beneficiaries to have economy of scale, improved storage of produce and increased incomes achieved through value addition. They project that they will have



increased profitability as evidenced by financial computations indicating an IRR of 14% and NPV of 118,193.11

#### 1.4 Methodology

The approach to this exercise was structured so as to comply with the requirements of EMCA CAP 387 as well as the EIA regulations (both the Gazette Notice No. 56 of 13<sup>th</sup> June 2003 and regulations of 2003). To develop this ESIA report, the expert applied various tools to collect data. First, a reconnaissance visit was conducted to familiarize with the project site. Afterwards, the expert visited the site to gather data on biological, physical and social environment of the project site.

The expert conducted a desktop review/literature review to get more information on the proposed project. In the process various community members gave their views and inputs which were well captured in this report. Key informant interviews were carried out of which the group leadership were interviewed. The line county staffs and representatives of national government were also engaged for in-depth information on the project.

##### 1.4.1 Desktop study

This was conducted to get more understanding of pre-existing information. Data such as project design, map and plan, ecological information such as market dynamics, population, supportive infrastructures, hydrology and geology were analyzed and compiled.

Documents that were referred to were; Kisumu County CIDP, Census report of 2019, World Bank safeguard policies and procedures, EMCA Act of 1999 and its subsidiaries.

##### 1.4.2 Environmental Screening

ESS checklist was administered by the consultant to get information on thematic areas. The checklist was submitted to NEMA, who after going through the scope of work recommended that the proponent undertake project summary report.

##### 1.4.3 Public Engagement

This was done to get the views and input of the people affected and interested in the project. Questionnaires were administered and a public baraza held in the presence of the local administrators enabling the experts to get important information from the perspective of the locals. Ministry of health protocol on COVID-19 was strictly adhered to. **(Questionnaires and minutes attached as annex)**

##### 1.4.4 Comparative Study

Similar works done elsewhere were analyzed to assist the expert project potential impact.

#### 1.5 Organization of Chapters

The report has a total of seven chapters, Chapter one gives a broad introduction of the project

while Chapter two describe the nature of the project both social and physical components. Chapter three give information on the project location while chapter four narrate public participation. Chapter five give an account of the potential impacts, chapter six cover the proposed mitigation measures and monitoring plans while the last chapter, chapter seven concludes the report outlining the experts' final recommendations

## **Chapter Two: Nature of the Project**

### 2.1: Introductions

Sorghum is considered as one of the drought resistant crops in Kenya. It has the potential of replacing maize flour as the preferred household staple food. It can be blended with maize flour (fortification) and sold as either porridge or ugali flour. It can as well be used to brew beer. Ondisore Kagola CBO proposes through their EDP proposals to conduct value addition and aggregation to assist sorghum farmers earn more income from sales of sorghum grains. They have a running contract with East African Molting Limited to supply 500 metric tons of sorghum and another one with world food program to supply 300 metric tons per season. On account of their EDP proposal, the County Government of Kisumu intends to fund Ondisore Kagola Sorghum aggregation outlet. They intend to put up mills, storage facilities, drying floor, packaging lot and skewers. This will address pre- and post- harvest sorghum losses and create over 1000 formal and informal jobs within Ahero and its environs.

### 2.2: Mode of operation

The project is designed to support farm produce collection and storage. Three fabricated containers will be erected at convenient and strategic locations to enhance accessibility by the beneficiaries. To ensure economic feasibility, the producer organizations have thirty-five farmer groups in their fold mobilized with the support of inclusion grants. The group members will supply sorghum. Quality assurance will be assured through thorough assessment of supplies in terms of weight, moisture and sand content.

### 2.3 Quality Control

The aggregated sorghum will first be weighed and threshed by a mobile thresher to separate chaff from the grains. The chaff will be used to make briquettes and animal feeds. The grains will be destoned to remove sand particles and later dried to reduce moisture content. The processed grain will be assessed using a moisture meter to ascertain moisture content and detect aflatoxins. Thereafter it will be milled to sorghum flour and packaged in branded hematic sacks. The sacks will be placed on raised racks to prevent moistening. For traceability, the sacks will have batch numbers and the proponent commits to comply to HACCPs

### 2.4: Coverage

The proposed project will establish mini aggregation stores in the designated sites within the project wards. The business entity and the implementation scope are within Kisumu East, Nyando and Nyakach Sub Counties traversing the six wards securing markets to the VMG and CIGs sorghum producers.

### 2.5: Distribution

The current mode of operation is collection and supply to the brewing companies; this has

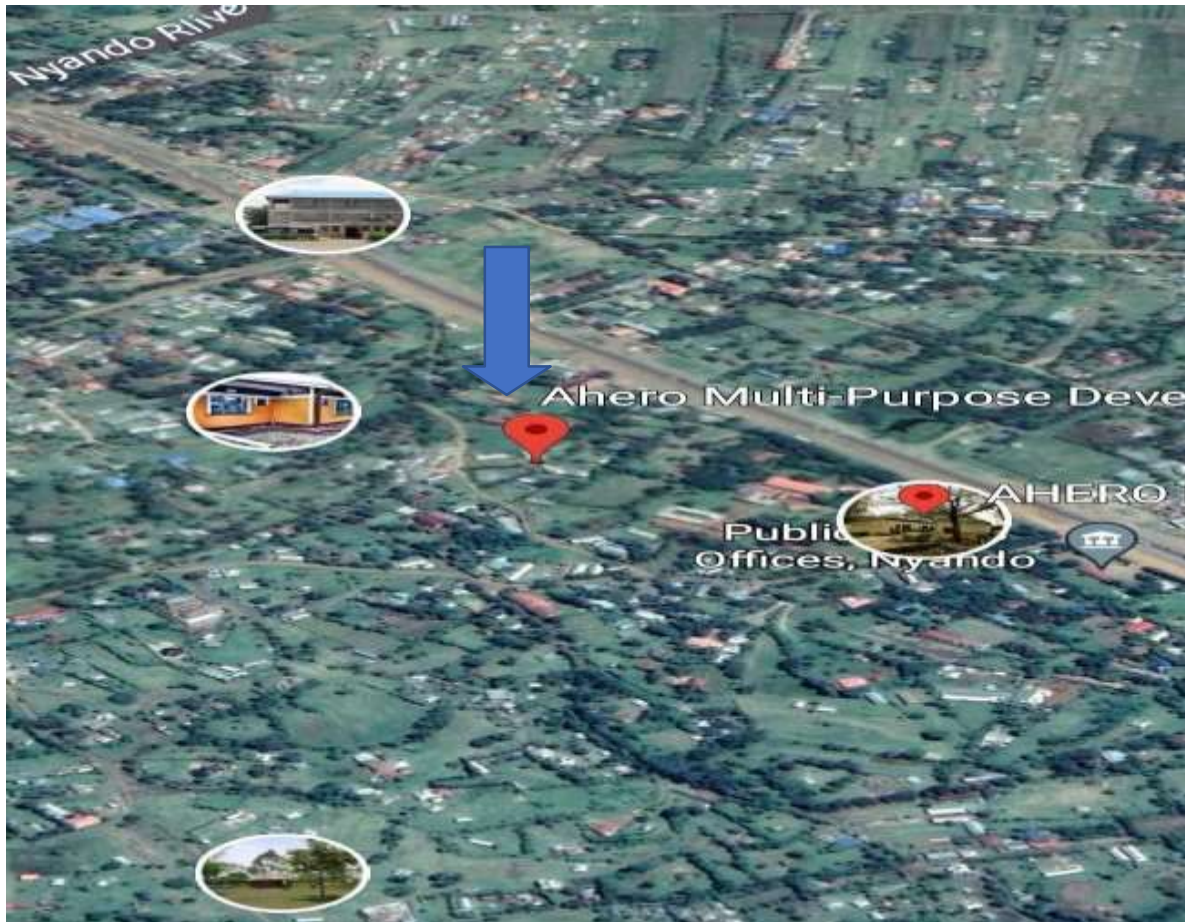
however restricted farmers to producing only white sorghum which is mostly eaten by birds. However, with the coming of the project, the group has intention of putting up a floor mill which will mill red sorghum with a mixture of cassava and maize, then package, brand and sell in local supermarkets.

#### 2:5 Land ownership

The proposed aggregation center lies on a private land with a lease agreement (attached)

## Chapter Three: Location of The Project

The proposed project site is located at Ahero Town, GPS Coordinates: (-0.11112S, 34.5619 E) However, the target farmer holders are spread across 3 sub counties of Kisumu East, Nyando, and Nyakach sub counties



Pic 2. Google earth photo of the proposed project site location.

### 3.1: Climatic Conditions

The sub county is generally warm with minimal monthly variation in temperatures between degrees 23<sup>0</sup>C and 33<sup>0</sup>C Centigrade throughout the year. The average annual rainfall varies from 1000-1800mm during the long rains and 450-600mm during the short rains. The altitude in the sub county is 1,144 meters above the sea level. It lies on the Kano plains. The warm climate will promote quicker vaporization of moisture from the sorghum grains

### 3.2: Ecological Conditions

Kano Plains where the proposed project is located, has predominantly black cotton soil which is poorly drained and unstable though suitable for rice, horticulture and sugarcane production. Black cotton soil is problematic during construction hence more resources required to set up the aggregation centers

### 3.3: Vulnerable and Marginalized Groups (VMGs)

The KCSAP PAD recognizes VMGs as the unemployed youth, elderly women and men, widows and orphans and people living with HIV/AIDS. Vulnerability is driven largely driven by the HIV/Aids related mortalities, climate change risks and unemployment as well as environmental degradation. However, in project wards, there are extensive network of community care givers who provide psycho-social support to the people living with HIV/AIDS and victims of the same.

### 3.5 Flora

The sub project area is mainly a plain grassland with scattered trees dominated by *Cassiasiamea* and *Ficus sycomorus*. Other plants include *Acacia polycartha*, *Aeschenomene schimperi* and *Cyperus papyrus*, *Pennisetum* species.

### 3.6 Fauna

The fringes of the Sango wetlands are ecologically sensitive as they offer breeding grounds for various types of aquatic fauna including;lung fish, mad fish and tilapia. In addition, they also provide suitable sites for bird perching and nesting, and browsing ground for large animals like hippopotamus during floods. The birds are largely attracted to the sorghum farms hence need for bird scaring.

### 3.7 Socio-Economic Activities

Most of the community members are Christians (Protestants, Catholics and indigenous churches) whose spread and distance varies. The main livelihood activities in this area are: rice farming, horticultural farming, transport services (boda-boda) mainly for the youths, livestock rearing, and small-scale businesses.

### 3.8 Demography

The population of the county according to the 2019 census was 1,155,574 with the land area of 2085.9 km<sup>2</sup> with most of the population concentrated within Ahero Town.

### 3.8 Education/Literacy

Kenya adult literacy rate was at level of 81.5 % in 2018, up from 78.7 % in 2014. The literacy level of the county as per 2018 was 85%. The project site is at adjacent to the gate of a secondaryschool. The area is mostly populated by learning institutions both public and private, Including Ahero Multi Purpose Centre. Ahero Vocational College, among others.

### 3.9 Commerce

The main trading centre in the region is Ahero market. The centre is fast developing due to decongestion of Kisumu city. There are also satellite markets such as Ayweyo, Nyangande, Rabuor and Awasi. The markets often face accessibility issues due to impassable roads especially during floods. These markets are known selling fresh produce from the adjacent

farms and other areas beyond Ahero Town.

## Chapter Four: Public Participation & Stakeholder Consultations

### 4.0 Introduction

The Environment Management and Co-ordination Act 1999 states that every person in Kenya is entitled to a clean and healthy environment. Section 3 (5) (a) of EMCA 1999 as well as the ~~Constitution~~ Government Act, 2012 stipulates the principle of public participation in development of policies, plans and procedures for the management of the environment and service delivery respectively. Section 17 (1) of the Environmental (Impact and Audit) Regulations 2003 states that an ESIA shall “seek the views of persons who may be affected by the project”. Of relevance to environmental audits is Section 35 (2) (j) of the Environmental (Impact and Audit) Regulations 2003

### 4.1 Objectives of the public consultation

The overall goal of the public consultation is to engage key stakeholders to provide their inputs into the planned development and especially on those impacts that directly affect the area community livelihoods. The specific objectives of the public participation and consultation in this ESIA are to;

- *Comply to the constitutional requirement of chapter four on public participation*
- *Create public awareness on the project design, implementation and ownership*
- *Build up confidence between the stakeholders and the proponent to minimize the risk of delays in the implementation of the project.*
- *Help the project proponent to make informed assessment of public opinion about the project, and the nature and extent of opposition likely to occur during the implementation stage.*
- *Bring out the contentious issues and give a chance to those who may be affected by the proposed project with a view to minimize negative impacts to give their views.*

### 4.2 Methodology

A combination of tools including interviews, Focus Group discussions, key informant interviews, administering of questionnaires and community meetings (public barazas) held on 30<sup>th</sup> May, 2021 for environmental and social impact assessment. Various stakeholders were incorporated into the consultation processes. A stakeholder identification analysis and involvement based on various needs, interest and potential influence to the project was used. The stakeholders consulted were; the direct project beneficiaries or directly affected (primary stakeholders) and those indirectly affected by the project but influence development departments and local administration (secondary stakeholders). A total of 50 participants were present 20 female (of which 7 were youths) and 30 male (of which 11 were youths). Public consultations took off from the scoping stage once the ESIA process was commenced with the main objective of involving the public in to the design of the project so as to identify and



mitigate the likely negative project effects and promote the positive ones. Discussions and interviews with key informants provided relevant information using the following process:

1. Resource person/ key informants who involved interviews with the proponent, the group executive
2. Administration of simple questionnaires to the community. Filled questionnaires are annexed to this report.
3. Public baraza at the project site 30/05/2021 - this was attended by the community including the immediate members to the site, chief, Village Administrators, Area MCA representatives, Land surveyor and Engineer, Kisumu County Environment officers and KCSAP officials.

One formal consultation meeting was held for technical persons from the key county and national government departments and another one for the panel of experts during the pre-planning phase of the project. This culminated in the environmental and social screening in the project pre planning phase. The pre-project engagement and feedback from the community and stakeholders was used to inform the scope of the ESIA and in minimization of the significant predicted impacts.

#### 4.3 Concerns and issues raised

##### 4.3.1 Positive impacts and issues arising from public participation

During public participation, the community pointed out that the project will have positive impacts in their lives. They included: -

- *Increased in food production,*
- *Reduced crime rate in the area,*
- *Adoption of climate smart farming practices,*
- *Economic growth and empowerment especially the women, youth and PWD,*
- *Availability of water will mean continuous production*
- *Create employment opportunities, and*
- *Enhanced food security and nutrition.*

##### 4.3.2 Negative issues arising from public participation

In general, there was no community objection to project implementation during the consultative process. However, the community members were concerned on how the following issues will be dealt with and this has been addressed on the ESMP.

- *Air pollution*
- *Increase in social evils like theft, conflicts among the farmers, child labor, sexual immorality;*
- *Increase in air borne diseases.*

## **Chapter Five: Anticipated Impacts and Mitigation Measures.**

### 5.0: Introductions

This section outlines potential impacts during construction, operation and decommissioning phase of the project on the environment and social well-being of the community. The impacts of the proposed project on the environmental and social elements are both positive and negative.

### 5.1 Anticipated Positive Environmental and Social Impacts During Preparatory Phase

- Creation of employment- it is anticipated that both skilled and unskilled workers will be engaged to set up the fabricated containers. Masons and electricians among other professionals will be recruited. The contractor will try as much as possible to source labour from the local community
- Increased Economic activities and Revenue generation – the contractor is expected to boost the local economy through purchase readily available materials and items from the neighborhood. Other vendors such as food kiosk will also benefit. County Government of Kisumu and national government will also benefit through business permits and licenses
- Increased opportunities for new business ventures- there will be new business ventures such as food kiosk, transport and health sector
- Technology transfer- it is also anticipated that the local community shall gain knowledge and skills from the skilled workers
- Livelihood diversification- community around the proposed project will have all season income by providing services and labour around the sorghum value chain, hence break the dependency on the current one off rice production per season

### Anticipated Negative Environmental Social Impacts

- Solid waste Generation- there will be generation of debris, plastic particles and used cement bags waste that needs proper management
- Air pollution- dust particles will be emitted into the atmosphere as a result of drilling, demolition, transportation of building materials and opening of cement bags
- Rise of social vices such as theft, grievances- if unchecked, vices such as gender based violence, theft and drug abuse will increase
- Grievances- due to interaction and intermingling of people, it is inevitable that grievances will arise

### 5.3 Anticipated Positive Environmental and Social Impacts During Operation Phase

- Creation of employment- the project will create opportunities for both skilled and

unskilled workers in different nodes of sorghum value chain e.g transportation, production, marketing and processing

- Increased Economic activities and Revenue generation – the proponent will help the government raise revenue by paying tax and statutory deductions
- Increased opportunities for new business ventures- there will be new business ventures such as food kiosk, transport and health sector
- Livelihood Diversification- community around the proposed project will have all season income by providing services and labour around the sorghum value chain, hence break the dependency on the current one off rice production per season
- Improved market access for farmers- through the project, farmers will have opportunity to value add their produce and therefore have a diverse and ready market that will be attracting competitive price
- Carbon sequestration- the proponent commits to reuse chaff to make briquettes and animal feeds and therefore reduce dependency on wood fuel as energy source. Sorghum plant will also absorb carbon from the atmosphere
- Improved Scenic Value- the design and art work of the project will be appealing to the eye and improve the aesthetic value of the environment

#### Anticipated Negative Environmental Social Impacts

- Solid waste Generation- waste will be generated during threshing and destoning of the sorghum. There will also be waste from packaging materials and contaminated grains
- Air pollution- sorghum threshing will result in emission of particles in the atmosphere
- Contamination of grains by aflatoxin- if not properly stored, the aggregated grains will be susceptible to aflatoxins
- Rise of social vices such as theft, grievances- there is risk of vices such as theft, gender based violence and drug abuse increasing due to improved income and income stratification

## 6.0 Environmental Social Management and Monitoring Plan (ESMMP)

Likely impact	Mitigation measures	Performance monitoring Indicator	Means of verification	Responsibility	Time frame	Estimated cost(ksh)
<b>6.1 Environmental Impacts during Construction phase</b>						
Solid waste generation	<ul style="list-style-type: none"> <li>Encourage segregation of waste</li> <li>Provide for clearly marked dustbins to serve the specified use.</li> <li>Ensure that wastes generated are efficiently managed through recycling, reuse and proper disposal procedures.</li> <li>Establish compost pad</li> <li>A private NEMA licensed company to be contracted to handle solid</li> </ul>	No of segregation waste bins erected  Quantity of waste recycled, reused  No of private firms engaged	Report  Contract agreement	Proponent	continuous	10,000
Air pollution	<ul style="list-style-type: none"> <li>Regular cleaning of dust prone areas such as driveways and corridors</li> <li>Comply with EMCA (Air Quality regulations) 2014</li> </ul>	No of respiratory complains registered	Reports	proponent	continous	10,000
Water contamination	<ul style="list-style-type: none"> <li>Proper maintenance of drainage structures</li> <li>Inspection and maintenance of water harvesting facilities</li> <li>Collection of excess storm water into underground tanks for reuse e.g. garden irrigation or car washing</li> </ul>	Km of drainage cleared	Reports	contractor	Continuous	13,000

Occupational Injuries	<ul style="list-style-type: none"> <li>o Sensitize the all workers on occupational health and safety</li> <li>o Provide adequate first-aid facilities in the project sites to handle medical emergencies during construction</li> <li>o Discourage unauthorized idlers at the site</li> <li>o Provide adequate PPE's to workers during construction</li> <li>o Comply with the National and International Labor laws</li> <li>o Comprehensive HIV/AIDS sensitization program for workers and the local community</li> <li>o Appropriate handling of vaccines and drugs</li> </ul>	<ul style="list-style-type: none"> <li>- No. of first aid facilities</li> <li>- No. of condom dispensers</li> <li>- No of Labels and warning signs</li> <li>- No of workers using PPEs</li> <li>- Contingency plan for accident response in place</li> <li>- Emergency contacts at the site</li> <li>- No of persons insured</li> </ul>	Reports	contractor	one week	10,000
Re-vegetation And comprehensive landscaping	<ul style="list-style-type: none"> <li>• Put in place an appropriate re-vegetation programme to restore the site to its original status</li> <li>• During the re-vegetation period, appropriate surface water run off controls will be taken to prevent surface erosion;</li> <li>• Monitoring and inspection of the area for indications of erosion will be conducted and appropriate measures taken to correct any occurrences;</li> <li>• Fencing and signs restricting access will be posted to minimize disturbance to newly-vegetated areas;</li> </ul>	Area re-vegetated	reports	Contractor	Two months	15,000

6.2 Social Impacts during Construction phase						
GBV/SH	<ul style="list-style-type: none"> <li>- Develop a human resources policy against sexual harassment</li> <li>- Develop a Code of Conduct</li> <li>- Create awareness on the dangers associated with GBV/SH and the need to take precautions against them</li> <li>- Establish a GRM</li> </ul>	No of GBV cases reported No of awareness meeting held	Reports GRM register Attendance list	proponent	Continuous	2,000
Child abuse and/or child labor	<ul style="list-style-type: none"> <li>• Develop and implement a Children Protection Strategy</li> <li>• Ensure all staff and workers sign, contracts which clearly defines what is and is not acceptable behavior</li> <li>• Do not hire underage at the site as provided by Child Rights Act (Amendment Bill) 2014</li> </ul>	No of staff trained No of cases reported	Reports contracts	Contractor/proponent	Continuous	1,500
Risk of spread of COVID-19	<ul style="list-style-type: none"> <li>• Put in place measures to prevent and manage the spread of the COVID-19</li> <li>• Develop SOPs for managing the spread of COVID-19</li> <li>• Provide and enforce and use of appropriate PPE by project personnel</li> </ul>	No of PPEs issued	Reports Attendance list	contractor	continuous	8,000
6.3 Environmental impacts during operation phase						
Dust from transport, loading and packaging.	<ul style="list-style-type: none"> <li>-Workers to wear dust mask.</li> <li>-off road collections to be done in trailers</li> <li>Watering to be frequently done in the compound to reduce the dust.</li> </ul>	-Reported cases of dust complaints	Health inspectionreport	Proponent	Continuous	20,000

Weevil infestation in the region.	Use weevil proof sacks. Mount weevil trap in the stores.	weevil infestation	-Project report	Proponent	Continuous	Project cost
Infections from aflatoxin	Mount adequate ventilators and heat supplies in the store.	Reported cases of aflatoxin infection.	Health records from department of health and sanitation.	Proponent	Operations	Project cost

Loss of vegetation at storage site and along the roads leading to farms	-only existing access roads to be considered during collection. Limit tree cutting while expanding the store. Facilitate farmers to plant agro- forestry trees bordering their farms.	-tree cover in the project region	- project report	Project officer	Immediate	2,000
Solid waste Generation	-Provide facilities for proper handling and storage of construction materials.  -Ensure adequate collection, evacuation and disposal of waste from project site.  - Use durable, long-lasting transport and packaging materials	-Number of designated waste collection facilities. Number of private waste collectors engaged Quantity of waste produced.	-Waste collection contract. o Registration details of the waste collector -Waste handling and storage facilities. Solid waste service providers report.	contractor during construction.       Report from environment department	Construction phase	50,000



	that will not need often replacement. The chaff that will remain will be packed and given to farmers as supplementary feeds to poultry.	The quantity of waste produced	Solid waste service providers report.	Project officer		
Noise Pollution	The back-up generator and milling machine will be fixed in an enclosed room with sound absorbing devices.	- Noise complaint reports.	- environmental audit report	Proponent	Operation phase	5,000
Operation Health and Safety (OHS) Risks	- Provide the workers with adequate full PPEs and monitor regularly to ensure they are replaced on time when they wear out, in addition, they are provided with the right tools and operational instruction manuals. - Enforce and ensure that the workers comply with occupational health and safety requirements	- Number of occupational health and safety training sessions conducted  - Number of reported accidents and injuries of workers	- Safety records health records.  - Training reports	Ward disease surveillance officer  Environment officer	Continuous  Continuous	10,000

	<p>-Provide First Aid Kit and train one of the workers on how to use them.</p> <p>- Food handlers should have necessary training and certificate</p> <p>- Place visible and readable signs around where there are risks.</p>	<p>-Number of workers equipped with proper PPEs</p>				
--	--	---	--	--	--	--

6.4 Social impacts during operation phase

<p>Social Evils And Security Threats</p>	<p>-Enhance Education and sensitization of workers and the local communities including youths and school going children on the dangers and prevalence of disease.</p> <p>-Hire security guards within the property to provide security in a 24-hour basis.</p>	<p>-Number of people's complaints and cases/disputes filed and solved.</p> <p>-Security mechanism in Place</p>	<p>Complaints Records</p>	<p>Chiefs/Community Leaders</p>		<p>10,000</p>
--	--	--	---------------------------	---------------------------------	--	---------------

	<ul style="list-style-type: none"> <li>-Provide regular sensitization campaigns and monitoring of the spread diseases.</li> <li>-Install lighting strategically as well as security alarms and backup systems.</li> <li>-Public education on conflict resolution to avoid family disputes, dangers of drug use, gender-based violence issues and sensitizing workers on good traits to avoid GBV.</li> </ul>	<ul style="list-style-type: none"> <li>-Grievance committee in place.</li> <li>-Number of bylaws developed</li> <li>Number of people reached</li> </ul>	<ul style="list-style-type: none"> <li>Project report</li> <li>Project report</li> <li>Attendance list</li> </ul>	<ul style="list-style-type: none"> <li>Proponent</li> <li>Proponent</li> </ul>	<ul style="list-style-type: none"> <li>Continuous</li> <li>Operation phase</li> </ul>	
<b>COVID-19 spread</b>	<ul style="list-style-type: none"> <li>-Ensuring COVID-19 measures are observed by everyone in the project site.</li> <li>-Sensitizing workers on the COVID-19 simple precautions.</li> <li>-Place hand wash soap and water at every entry point of the site.</li> </ul>	<ul style="list-style-type: none"> <li>-Number of work related COVID-19 infections.</li> <li>- Availability of SOP(s), Training material, PPE, sanitizing facilities</li> </ul>	<ul style="list-style-type: none"> <li>-Health records</li> </ul>			2,000

		-Number of sensitization meetings held				
<b>TOTAL</b>						<b>168,500</b>

### 6.5 Decommissioning Phase

Decommissioning is the formal process of removing something from the operational status. It is the final phase in the project cycle and requires time in order to properly deal with potential hazards and risks that may be experienced. In the event that the project will have outlived its usefulness, then the proponent through a consultant shall undertake a decommissioning process.

Positive impacts of decommissioning a project include, but are not limited to Site restoration: Upon decommissioning of the proposed project, rehabilitation of the project sites will be carried out to restore the site to its original status or to a better state than it was originally. This will include ground levelling and re-vegetation which will lead to improved visual quality of the area among others. This may present positive environmental opportunities and the cessation of impacts associated with operational activities. Materials from the site during decommissioning may be reused for other project or sold to companies carrying out similar activities.

## **7.0 CONCLUSION AND RECOMMENDATIONS**

The following recommendations have been listed to ensure that significant adverse impacts that may emanate from the proposed project are mitigated. They include:

- i. National Environmental Management Authority (NEMA) is advised to license the project subject to it following the proposed compliance with various statutory requirements the project subscribes to and EMP.
- ii. Annual environmental audits should be carried out on the project in order to ensure compliance of the project with the mitigation measures outlined in the Environmental Management Plan (EMP).
- iii. The proponent should collaborate with key stakeholders/collaborators in environment, water, health, Sensitization and grievance/dispute resolution among others to ensure successful implementation and monitoring of mitigation measures.
- iv. Ensure that worker's occupational health and safety standards are maintained through capacity building, proper training, and providing protective clothing.

## REFERENCES

1. *FAO, "Agro-Ecological zoning guidelines: FAO Soils Bulletin No. 73."* Land and Water Development, Division, FAO, Rome, Italy, 1996.
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5. *Kenya gazette supplement No. 56. Environmental impact assessment and audit regulations 2003. Government Printer-Nairobi*
6. *UN, "Transforming the world: the 2030 Agenda for Sustainable Development," New York, A/RES/70/1, 2015*
7. *Kenya gazette supplement Acts 2000, EMCA 1999, Government printer-Nairobi*
8. *Kenya gazette supplement Acts land planning Act. Government Printer-Nairobi*
9. *United Nations Environment Programme Division of Technology, Industry and Economics Cleaner Production Assessment in Fish Processing*
10. *United Nations Environment Programme (UNEP), 2012, Avoiding future famines. Strengthening the ecological foundation of food security through sustainable food systems, UNEP, Nairobi, Kenya*

# Certificate of registration

  
Republic of Kenya

Certificate No. **51046**

**MINISTRY OF EAST AFRICA COMMUNITY, LABOUR AND SOCIAL PROTECTION**  
**DEPARTMENT OF SOCIAL DEVELOPMENT**

**Certificate of Registration of Community Based Organization (CBO)**

*This is to Certify that*

**ONDISORE KAGOLA COMMUNITY BASED ORGANIZATION**

<b>NDO/CBO/051046</b> <small>Registration No.</small>	<b>NYANDO</b> <small>Division</small>	<b>30/05/2006</b> <small>Date of Registration</small>
<b>KOCHOGO SOUTH</b> <small>Sub-location / Ward</small>	<b>NYANDO</b> <small>Constituency</small>	<b>NYANDO</b> <small>Sub County</small>
<b>KOCHOGO</b> <small>Location</small>	<b>is registered with the Department of Social Development Office as a Community Based Organization (CBO)</b>	<b>KISUMU</b> <small>County</small>
Name: <b>SYLVIA O OYUGI</b> <small>County / Sub County Social Development Officer</small>		Signature: 
<b>06/05/2020</b> <small>Date of Issue</small>		

Note: The Contents of this Certificate should not be erased, altered or defaced in any way.



**APENDIXES**

NEMA EIA Expert License

FORM 7  0-1/2010

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

**ENVIRONMENTAL IMPACT ASSESSMENT/AUDIT (EIA/EA) PRACTISING LICENSE**

License No. *JKM/EA/ENV/1/2021*  
Place of Issue/Expiry Date *NYAMIRA/21/12/21*

*For Samon P.O. Box 46-40500, NYAMIRA County*

**M/S. ELVIN OCHI NYAGAKA**  
(individual or firm) of address  
P.O. Box 46-40500, NYAMIRA

is licensed to practice in the  
capacity of a (Lead Expert) *Lead Expert* Firm of Experts. Lead Expert  
registration number *7046*

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

Issued Date: 1/13/2021  
Expiry Date: 12/31/2021


*Stamp: NEMA EXPERT PRACTISING LICENSE, ELVIN OCHI NYAGAKA, REG. NO. 7046, THE P.O. BOX 46-40500, NYAMIRA, EXP: 12/31/2021*

  
Signature  
(Seal)  
Director General  
The National Environment Management Authority

  
FTO  
ISO 9001:2008 Certified




Public Participation Attendance List



**Kenya Climate Smart Agriculture Project  
(KCSAP)**

**KISUMU CPCU**



ACTIVITY ESIA FOR ONDISORE KAGOLA PUBLIC CONSULTATION FOR SORGHUM AGGREGATION

VENUE Ahero multipurpose DATE 30/5/2021

ATTENDANCE LIST

S/NO	NAME	GENDER	ORGANIZATION	DESIGNATION	TELEPHONE	EMAIL ADDRESS	SIGN
	Ruby Akinyi	F	ONDISOIG	Chairperson	0710254450		<i>[Signature]</i>
	Silverio Ongudi	M	CSK	Bio-consultant	0710917766		<i>[Signature]</i>
	Technic Ombui	M	Consultant	ESIA expert	0715325934		<i>[Signature]</i>
	Maxwell Ochieng	M	Member	Members	07100140314		<i>[Signature]</i>
	Dora Akinyi	F	-	-	0711012214		<i>[Signature]</i>
	Daniel Ochieng	M	-	-	0799270211		<i>[Signature]</i>
	Peter Okaria	M	-	-	0726150142		<i>[Signature]</i>
	Raymond Ojoro	M	-	-	0745194264		<i>[Signature]</i>
	Rita Odhiambo	F	-	-	0710232442		<i>[Signature]</i>
	Kennedy Odhiambo	M	-	-	0723102121		<i>[Signature]</i>
	Peter Okumu	M	-	-	07231402107		<i>[Signature]</i>
	Collins Gogo	M	-	-	0710231812		<i>[Signature]</i>
	Daniel Ochieng	M	-	-	0791230102		<i>[Signature]</i>
	Joseph Oloye	M	-	-	0721010237		<i>[Signature]</i>
	Demack Ochieng	M	-	-	0721023014		<i>[Signature]</i>
	Uchris Akhuch	-	-	-	072304023		<i>[Signature]</i>
	Christina Ongere	-	-	-	070102301		<i>[Signature]</i>
	Alice Mwangi	F	-	-	0710231120		<i>[Signature]</i>
	Stella Mwangi	F	-	-	0736751617		<i>[Signature]</i>
	Josce Kerei	F	-	-	072141012		<i>[Signature]</i>
	Marcy A. Mwangi	F	-	-	0714020472		<i>[Signature]</i>
	Charles Odhiambo	M	-	-	0721000421		<i>[Signature]</i>
	John Ombui	M	-	-	0711071027		<i>[Signature]</i>
	Collins Odhiambo	M	-	-	0723001421		<i>[Signature]</i>
	Kennedy Ochieng	F	-	-	0710231120		<i>[Signature]</i>
	Kennedy Odhiambo	M	-	-	0711001212		<i>[Signature]</i>
	Steve Obino	M	-	-	07102161301		<i>[Signature]</i>
	Conceita Mwangi	F	-	-	074311042		<i>[Signature]</i>
	Hensbire Ngere	-	-	-	0719220613		<i>[Signature]</i>
	Erick Okawa	M	Yem-Kee	Member	0718704296		<i>[Signature]</i>
	Samuel Adony	M	-	Member	0716469420		<i>[Signature]</i>
	Sath Ombui	M	-	-	0728670260		<i>[Signature]</i>
	ERICK OJICA	M	-	-	0758725954		<i>[Signature]</i>
	Kemdy Mwangi	M	-	-	0797235024		<i>[Signature]</i>
	Isat Akinyi	F	-	-	0721436027		<i>[Signature]</i>
	Daniel Ombui	M	-	-	071601570		<i>[Signature]</i>
	Barbara Ombui	F	-	-	0715941220		<i>[Signature]</i>
	Susan Mwangi	F	-	-	0710917542		<i>[Signature]</i>
	Antonia Mwangi	F	-	-	0721413100		<i>[Signature]</i>
	Stephen Mwangi	M	-	-	0719223104		<i>[Signature]</i>
	Patric Njoro	M	-	-	0711044010		<i>[Signature]</i>
	Jessica Mwangi	F	-	-	0714252110		<i>[Signature]</i>
					071001123		<i>[Signature]</i>

R PAN

**MINUTES FOR THE PUBLIC CONSULTATIVE AND PARTICIPATION FOR THE PROPOSED ONDISORE KAGOLA CBO SOGHUM AGGREGATION CENTRE 30<sup>th</sup> - May- 2021 FROM 11.00AM at AHERO MULTIPURPOSE HALL**

**MEMBERS PRESENT**

**Members Present list are attached.**

**AGENDA**

1. Introduction of the CBO officials, Government officials and the ESIA Consultants.
2. Community briefing on the proposed project
3. Identification of Negative and positive impacts of the proposed Project
4. Community views and concerns
5. AOB

**Minute 1/30/05/2021: Introduction.**

The meeting began with a prayer from Eric Okowa . County government officers introduced themselves to the members of the community present. The ESIA experts and members of the community were given a chance to introduce themselves and familiarize with one another.

**Minute 2/30/05/2021: Briefing Community members on the proposed Project.**

Kisumu County officer present explained what putting up of the sorghum aggregation center would involve as follows

1. Outlet units
2. Mills
3. Storage facility
4. Drying floor
5. Packaging lot
6. skewers

**Minute 3/30/05/2021: Identification of Negative and Positive Impacts of the Proposed Project by the community.**

Members of the community were given a chance to identify some of the positive impact of the proposed activities and here are their responses:

1. The proposed project will create job opportunity for local community youths who are currently affected by unemployment.
2. Promote food security within the area.
3. Improvement of infrastructure in the area.
4. Improved security in the area.

5. Promotion of local economy through value addition sorghum
6. Improvement of standard of living standards of farmers.

Members of the community were also asked whether they had consented to the establishment of the proposed sorghum aggregation Centre, and all community members present gave green light to the proposed project.

**Some of the identified negative impact by the community members were as follows,**

1. Air pollution
2. Social evils like theft
3. Weevil infestation
4. Aflatoxin infection
5. Loss of vegetation
6. Noise pollution

Proposed mitigation measure for the foreseen negative impact during the meeting were as follows;

1. Frequent watering around the site and use of PPE such nose masks
2. Employment of the security guards at site
3. Use of weevil proof sacks for storage
4. Mounting of ventilators and heat suppliers
5. Planting of agroforestry trees around the site
6. The back-up generator and milling machine will be fixed in an enclosed room with sound absorbing devises

**Minute 4/30/05/2021 Community Issues of concern on the proposed project.**

The issues of concerns from the community perspective were as follows;

- Giving priority to the local when it comes to employment opportunity.
- Proper management of solid waste
- Concern over airborne diseases
- The contractor who will be carrying construction work to maximize on the use of locally available material that is required for the construction of the proposed project in order to promote local economy

**AOB**

There being no other business, the meeting was closed by a word of prayer from Mercy Misachi.

SIGNED BY  NAME Rolly Akwasi DATE 3rd JUNE 2021

**ANNEX 10: ENVIRONMENTAL AND SOCIAL SCREENING CHECK LIST**

**(Sub-projects screening process by benefitting communities/Agencies)**

**Section A: Background information**

Name of County... KISUMU.....
Name of CPCU/Monitoring Officer/Researcher ...VINCENT...D.DHAMBDO
Sub-project location... AHERO TOWN.....
Name of CBO/Institution... DNDISORE KAGOLA CBD.....
Postal Address:..... N.....
Contact Person... ROLLY AKINTI..... Cell phone:.....
Sub-project name... SORGHUM AGGREGATION & VALUE ADDITION CENTER
Estimated cost (KShs.)... 10,000,000/=.....
Approximate size of land area available for the sub-project.....
Objectives of the sub project..... ---TO assist farmers Market sorghum produce..... ---To aggregate sorghum..... ---To value add sorghum.....
Activities/enterprises undertaken... aggregation & value addition
How was the sub-project chosen?... Application by the PO
Expected sub project duration:.. 5 years.....

**Section B: Environmental Issues**

Will the sub-project:	Yes	No
Create a risk of increased soil erosion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Create a risk of increased deforestation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Create a risk of increasing any other soil degradation soil degradation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Affect soil salinity and alkalinity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Divert the water resource from its natural course/location?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cause pollution of aquatic ecosystems by sedimentation and agro-chemicals, oil spillage, effluents, etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Introduce exotic plants or animals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Involve drainage of wetlands or other permanently flooded areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cause poor water drainage and increase the risk of water-related diseases such as malaria?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Reduce the quantity of water for the downstream users?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- Sometimes  Always \_\_\_\_\_ Never \_\_\_\_\_
- e) After spraying, do you wait 12 hours before entering the field?  
 Sometimes  Always \_\_\_\_\_ Never \_\_\_\_\_
- f) Do you store pesticides in a secure, sound and well-ventilated location?  
 Sometimes  Always \_\_\_\_\_ Never \_\_\_\_\_
- g) Do you make a cocktail before applying the pesticides? (i.e., mix more than one chemical and apply them at once?)  
 Sometimes  Always \_\_\_\_\_ Never \_\_\_\_\_
- h) Where do you store your pesticides? house  
 Why do you store them there?  
It is convenient
- i) What do you do with your pesticide containers after they are empty? \_\_\_\_\_  
Throw them away
- j) Do you know of any beneficial insects (insects that eat harmful insects)?  
 Yes.......... No .....
- k) If yes, name them: Cats  
 i) \_\_\_\_\_ ii) \_\_\_\_\_ iii) \_\_\_\_\_

### 3. Pesticides and Health

- a) Do you find that pesticide application is affecting the health of: Persons regularly applying pesticides?  
 Sometimes  Always \_\_\_\_\_ Never \_\_\_\_\_
- Persons working in fields sprayed with pesticides  
 Sometimes  Always \_\_\_\_\_ Never \_\_\_\_\_
- Persons harvesting the produce  
 Sometimes  Always \_\_\_\_\_ Never \_\_\_\_\_

### 4. Options to Pesticides

- a) From your experience, are you aware of other methods for controlling insect's diseases and/weeds besides pesticides?  
 Yes..... No .....
- b) If yes, describe these practices:  
 i) \_\_\_\_\_ ii) \_\_\_\_\_ iii) \_\_\_\_\_ iv) \_\_\_\_\_

### 5. Information

- a) What information do you think you need for improving your crop production and marketing?  
 \_\_\_\_\_  
 \_\_\_\_\_

### 6. Training

Date of application Yes..... No .....  
Pesticide product trade name  
Yes..... No .....  
Operator name Yes..... No .....

If No, WHY? *lack of knowledge*

- c) How do you decide when to use the pesticides (tick all that apply)?
- (i) We use pesticides at regular intervals throughout the season (calendar)
  - (ii) We use pesticides when we see pests in the field (control)
  - (iii) We use pesticides after field sampling and finding a certain number of pests or a certain level of damage (scouting)
  - (iv) Told by someone to apply (specify who) \_\_\_\_\_
  - (v) Other (specify) \_\_\_\_\_

d) Do you use a knapsack sprayer? Yes \_\_\_ No

If yes,

- (i) Do you own it Yes \_\_\_ No \_\_\_
- (ii) Do you rent it Yes \_\_\_ No \_\_\_
- (iii) Do you borrow it Yes \_\_\_ No \_\_\_

e) From your experience, are there any negative/harmful effects of using pesticides?  
Yes  No \_\_\_\_\_

f) If yes, list the negative effects:

- (i) *...Breathing...complication*.....
- (ii) .....
- (iii).....
- (iv).....
- (v) .....

g) Do you use any kind of protective clothing while applying or handling pesticides? Yes \_\_\_ No   
Why? \_\_\_  
a) If YES, what kind? \_\_\_

## 2. Knowledge of pesticide handling and storage (tick one in each row)

- a) Do you read labels on the pesticide container before using?  
Sometimes  Always \_\_\_\_\_ Never \_\_\_\_\_
- b) How often do you wear protective clothing and other accessories like nasal mask, eye goggles, and boots when applying the pesticides?  
Sometimes  Always \_\_\_\_\_ Never \_\_\_\_\_
- c) Do you mix pesticides with your hands?  
Sometimes  Always \_\_\_\_\_ Never \_\_\_\_\_
- d) Do you observe the pre-harvest waiting periods after applying the pesticides?

Affect the aesthetic quality of the landscape?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Reduce people's access to the pasture, water, public services or other resources that they depend on?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Increase human-wildlife conflicts?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will the sub-project:	<input type="checkbox"/>	<input type="checkbox"/>
Involve the use of pesticides or other agricultural chemicals, or increase existing use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cause contamination of watercourses by chemicals and pesticides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cause contamination of soil by agrochemicals and pesticides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Experience effluent and/or emissions discharge?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Export produce? Involve annual inspections of the producers and unannounced inspections?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Require scheduled chemical applications?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Require chemical application even to areas distant away from the focus?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Require chemical application to be done by vulnerable group (pregnant mothers, chemically allergic persons, elderly, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Use irrigation system in its implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

If the answers to any of the above is 'yes', please include an EMP with sub-project application.

### Section E: Pesticides and Agricultural Chemicals

This questionnaire will be used with the farmers groups for purpose of implementing the IPMF

#### 1) Pest Control practices

a) Do you use any pesticides to control pests (Insects, diseases, weeds) of crops each season?

Yes___ No If yes, name them:	Name of pesticide	Name of pest, disease, weed controlled	Number of times applied/ season	When did you apply (growth stage or month) Quantity purchased
	Rats		On need basis	Dependant on infestation
	Rodents			

If No, WHY? \_\_\_\_\_

b) If you use any of the above pesticide types, do you keep records of the:

Application location Yes..... No .....

Result in the lowering of groundwater level or depletion of groundwater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Create waste that could adversely affect local soils, vegetation, rivers and streams or groundwater?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Reduce various types of livestock production?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Affect any watershed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Focus on Biomass/Bio-fuel energy generation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*If the answers to any of the above is 'yes', please include an EMP with sub-project application.*

### Section C: Socio-economic Issues

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

*If the answers to any of the above is 'yes', please include an EMP with sub-project application.*

### Section D: Natural Habitats

Will the sub-project:		
Be located within or near environmentally sensitive areas (e.g. intact natural forests, mangroves, wetlands) or threatened species?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Adversely affect environmentally sensitive areas or critical habitats – wetlands, woodlots, natural forests, rivers, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Affect the indigenous biodiversity (Flora and fauna)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cause any loss or degradation of any natural habitats, either directly (through project works) or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>



archaeological sites; and

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

Completed by: [type here]

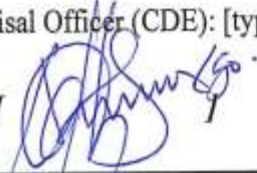
Name: [type here] Rolly Akinyi

Position / Community: [type here] Chair person

Date: [type here]

Field Appraisal Officer (CDE): [type here]

Signature: [



Date: [type here]

**Note:**

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

Use land that is currently occupied or regularly used for productive purposes (e.g. gardening, farming, pasture, fishing locations, forests)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Displace individuals, families or businesses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Result in temporary or permanent loss of crops, fruit trees and pasture land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Adversely affect small communal cultural property such as funeral and burial sites, or sacred groves?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Result in involuntary restriction of access by people to legally designated parks and protected areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Be on monoculture cropping?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

#### **Section H: Proposed action**

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

#### **(iii) Recommended Course of Action**

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

- CPCUs and County Director of Environment (CDE) will provide detailed guidance on mitigation measures as outlined in the ESMF; and
- Specific advice is required from CDE and CPCUs regarding sub-project specific EIA(s) and also in the following area(s)
  - All sub-project applications/proposals MUST include a completed ESMF checklist. The KCSAP-CPCU and CDE will review the sub-project applications/proposals and the CDEs will sign off;
  - The proposals will then be submitted to KCSAP PIU for clearance for implementation by communities in the proposed subprojects.

#### **Expert Advice**

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

Recommends SPR

- a) Have you ever received any training on any of the following topics related to crop production?
- b) Integrated Pest Management Yes.......... No .........  
 yr. .........
- c) No. of times/past
- d) b).Pesticide Usage Yes.......... No .........  
 yr. .........
- e) No. of times/past
- f) Pesticide Safety Yes.......... No .........  
 yr. .........
- g) No. of times/past
- h) Insect Identification Yes..... No .....  
 yr. ....
- i) No. of times/past
- j) Disease Identification Yes..... No .....  
 yr. ....
- k) No. of times/past
- l) Quality aspects of production Yes..... No .....  
 yr.....
- m) No. of times/past

7) *Is there anything else that you want us to know about your crop production?*

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

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

Are there:	Yes	NO
People who meet requirements for OP 4.10 living within the boundaries of, or near the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Members of these VMGs in the area who could benefit from the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VMGs livelihoods to be affected by the sub project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

**Section G: Land Acquisition and Access to Resources**

Will the sub-project:	Yes	No
Require that land (public or private) be acquired (temporarily or permanently) for its development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Lease Agreement

I FREDRICK OTIENO MAINA ID/NO 20212869  
Of Kochogo South Sub-Location Kochogo Location NYANDO  
Division, which is in NYANDO District

I hereby do swear and state that I have leased the ~~whole~~ part of my land parcel  
No KM/Kochogo/2048 measuring            acre(s) or            by            meters to  
Mr./Mrs./Miss ONDICERE KAGOLA CBO of <sup>REG</sup> ID No 480/C80/051046 of  
Kochogo South Sub Location Kochogo Location NYANDO Division, which is  
in NYANDO District.

The said area of land, which cost the sum of Kenya Shillings TWO THOUSAND  
KENYA SHILLINGS MONTHLY  
(KSH 2000) months as from today 12/12/2018 day of DEC 2018

The agreement is meant for TEN YEARS (10YRS) harvesting season(s) of sugarcane.  
The payment was made in the presence of and witnessed by the following persons:-

FARM OWNER FREDRICK OTIENO MAINA ID/NO 20212869  
SIGN F

LEASER CHARLES OLIWENDO OPIA (ON BEHALF OF ONDICERE KAGOLA CBO)  
ID/NO 25705021  
SIGN [Signature]

1st  
← Rolly  
- 12/12/18

WITNESS ROLLY ACHIENG OTIENO ID/NO 26981288  
SIGN [Signature]

2nd  
→ Rose

WITNESS ROSE OTIENO OROM ID/NO 24354263  
SIGN ROSE

3rd  
→ Clinton

WITNESS CLINTON OCHIENG KAMETE ID/NO 36781715  
SIGN [Signature]

4th  
→ Ferto

WITNESS FERTO SEWE OBIERO ID/NO 8910533  
SIGN [Signature]

BEFORE THE AREA ASSISTANT CHIEF









