County Government of West Pokot

WORLD BANK

Kenya Climate Smart Agriculture Project

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT
SUMMARY PROJECT REPORT

FOR
THE PROPOSED CHEPSEPIN WATER PAN LOCATED IN CHEPSEPIN VILLAGE, KAMUNAI SUB LOCATION, ALALAE LOCATION, ALALE WARD, ALALE SUB COUNTY, WEST POKOT COUNTY

Kenya Climate Smart Agriculture Project

NOVEMBER 2021

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FACT SHEET

Project Name	**Proposed Chepsepin Water Pan located in Chepsepin Village, Kamunai Sub location, Alale location, Alale Ward, Alale Sub County, West Pokot County**
Assignment Name	Summary Project Environmental and Social Impact Assessment (ESIA) Report
Location	Chepsepin Village, Kamunai Sub location, Alale location, Alale Ward, Alale Sub County, West Pokot County
GPS Coordinates	Latitude 2.179529° N and Longitude 35.089142° E 1,410m above sea level
Project Description	a) Excavation of the water pan, clearing of overburden materials and the top soil b) Fencing of the water pan area and construction of embankment and draw off works c) Construction of ancillary facilities (Toilet, cattle watering trap and community water site)
Proponent	Chepsepin Water Pan and Hay Farm Self Help Group
Address of the Proponent	Chepsepin Water Pan and Hay Farm Self Help Group West Pokot

CERTIFICATION

For and on behalf of:
Chepsepin Water Pan and Hay Farm Self Help Group:

This Environmental Impact Assessment (EIA) Summary Project Report was prepared in accordance with the Environmental Management and Coordination Act (EMCA) 1999 and the Environmental Impact Assessment and Audit Regulations 2003 (revised 2015 & 2019) in order to meet the statutory requirements for the implementation of projects under schedule ii. I, the undersigned, confirm that the contents of this report are a true representation of the ESIA process for the Proposed Construction of Chepsepin Water Pan located in Alale Ward, Alale Sub County, West Pokot County.

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ACKNOWLEDGMENT

We, the ESIA study team **Mr. Josphat Omari (Lead - Main)** and **Mr. Erick Orwa (Lead)** wish to acknowledge and express our profound gratitude to the West Pokot County Project Coordinating Unit (especially Ms. Agneta Aleyo, Ms. Carren Nasiaki and Mr. Willy Kiplagat) of Kenya Climate Smart Agriculture Project (KCSAP) for commissioning and coordination this ESIA SPR.

We appreciate the co-operation and contributions of all the stakeholders who we interacted with during this EIA study, without their support this study would not have been successful.

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Finally, we wish to appreciate the contributions made by the entire community for providing us with useful information and filling out questionnaires during the field visits and public participation forum**.**

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LIST OF ACRONYMS AND ABBREVIATIONS

%	Percentage
^{o}	Degrees
^{o}C	Degrees Centigrade
^{o}E	Degrees East
^{o}N	Degrees North
AIDS	Acquired Immune Deficiency Syndrome
ASAL	Arid and Semi-Arid Land
CBO	Community Based Organization
CDE	County Director for Environment
CDDC	Community Driven Development Committee
CESSCO	County Environment and Social Safeguard Compliance Officer
CHSMP	Contractor's Health and Safety Management Plan
CIAP	Community Integrated Action Plan
CIDP	County Integrated Development Plan
COC	Code of Conduct
COVID 19	Corona Virus Disease
CPCU	County Project Coordination Unit
BOQ	Bills of Quantities
EAs	Environmental Assessments
EMCA	Environmental Management and Coordination Act
ER	Emergency Response
ERP	Emergency Response Plan
ESIA	Environmental and Social Impact Assessment
ESIA/ EA	Environmental and Social Impact Assessment /Environmental Audit
ESMF	Environment and Social Management Framework
ESMMP	Environment & Social Management Monitoring Plan
ESMP	Environmental and Social Management Plan
ESS	Environment and Social Safeguards
GBV	Gender Based Violence
Ha	Hectare
HIV	Human Immunodeficiency Virus
IUCN	International Union for Conservation of Nature
ISLM	Integrated Sustainable land management
KCSAP	Kenya Climate Smart Agriculture Project
Km	Kilometers
Km^2	Square Kilometers
KSh.	Kenya Shillings
m	Meters
M	Million
m^3	Cubic Meter

MEA	Multilateral Environmental Agreements
mm	Millimeter
NEMA	National Environment Management Authority
NPoE	National Panel of Experts
PPE	Personal Protective Equipment
SEA	Sexual Exploitation and Abuse
SH	Sexual Harassment
SHG	Self-Help Group
SOPs	Standard Operating Procedure
SPR	Summary Project Report
STIs	Sexually Transmitted Infections
WB	World Bank
WHO	World health Organization
WUA	Water User Association

EXECUTIVE SUMMARY

The purpose of the proposed Chepsepin Water Pan in Alale Ward by the Chepsepin Water Pan and Hay Farm Self Help Group is to increase the supply of water for pasture production by rehabilitating the existing Chepsepin Water pan which has since desilted. The main activities include water pan rehabilitation and construction of auxiliary structures including the toilet, cattle watering trough and community watering point. The project is expected to benefit 626 farmers (275 males, 351female). The project is supported by the National Government and the County Government of West Pokot through Kenya Climate Smart Agriculture Project (KCSAP), a World Bank funded project whose main objective is increasing productivity and building resilience to climate change risks. The cost of the project is Kshs 15,000,000.

This Environmental and Social Impact Assessment (ESIA) Summery Project Report (SPR) is based on the recommendation of the County Director of Environment (CDE), West Pokot County following the environmental and social safeguard screening report which categorized the proposed project as low risk as per the 2nd schedule of Environmental Management and Coordination Act (EMCA Cap 387), amendment via legal notice no. 31 – April 2019. This ESIA-SPR has been conducted pursuant to Regulation 7 (1) of the Environmental (Impact Assessment and Audit) (Amendment) Regulations, 2019.

The assessment approach and methodology for this exercise was structured such as to cover the requirements under the EMCA, 1999 and its subsequent regulations and World Bank environmental safeguard policies. The scope of the assessment covered impacts directly or indirectly associated with the construction, operation and the decommissioning phase of the project. The consultant used both conventional and participatory approaches in identifying the potential environmental impact and mitigating measures for the proposed project.

The assessment involved largely an understanding of the project background, the preliminary designs and the implementation plan as well as commissioning. In addition, baseline information was obtained through physical investigation of the site and the surrounding areas, public consultation (which included discussions with local administration and the community), photography, as well as discussions with the Proponent. A total of **37 persons (18 Male and 19 Female) of whom twenty-two (22) were youth** participated in the public participation exercise that took place in Chepsepin Village on 27th August 2021 where a total of **14 questionnaires** were administered and completed. The process culminated in the preparation of an ESIA summary project report encompassing the details specified in the Environmental Impact Assessment/Audit Regulations (2003) and subsequent amendments (2015 &2019).

Although there are a number of justifications of why the project should be developed in the area, there are various negative impacts raised that affect the environment and social wellbeing and therefore the proposed mitigation measures will reduce the adverse impacts. The main negative impacts include; disturbance to the natural/hydrology flow of water, occupational hazards of the pan posing risk to children/animals, air quality degradation/dust emissions during construction, spread of COVID-19, loss of flora and fauna, effects on landscape & visual intrusions among others.

The suggested mitigation measures include planting of trees near the pan embankment, erection of a fence around the pan, sensitization of residents to use toilets/improve sanitation availing them to the community as per the design specifications, provision of PPEs especially during construction, observing COVID-19 protocols, adherence to occupational health and safety measures, contractor to ensure proper repair and maintenance of vehicles and equipment to minimize exhaust gases and accidental spilling of oils and lubricants and observing community policing. Also, sensitization of contraction workers and community on GBV and HIV/AIDS as well as strategies to prevent water related diseases.

An environmental and social management plan has been developed in this report to assist the proponent in mitigating and managing environmental and social impacts associated with the life cycle of the project. It is noteworthy that key factors and processes may change through the life of the project and considerable provisions have been made for dynamism and flexibility of the ESM&MP. As such, the ESM&MP should be subjected to periodic review for improvement purposes. The ESM&MP should be shared with the selected contractor(C-ESMMP) for implementation. This summary project report estimates that in addition to the contracted cost; **Ksh. 780,000** should be allocated during construction phase and at least **Ksh. 975,000 per year** during operation phase. Additionally, **Ksh. 230,000** should be allocated during decommissioning phase of the project.

Based on the assessment, the proposed project will not result to significant, cumulative, or irreversible negative impacts as all the anticipated impacts shall be mitigated through the ESMMP. The experts therefore recommend the project for approval by the National Environment Management Authority (NEMA) subject to annual environmental audits after operating for one year. The proponent should share the ESMMP with the selected Contractor for implementation. The County Environment and Social Safeguard Officer (CESSCO), Panel of Experts and NEMA officers shall monitor of the implementation of the ESMMP to ensure full compliance by responsible persons and institutions

1 INTRODUCTION

1.1 Background of the Chepsepin Water Pan

The proposed Chepsepin Water Pan project on LR No. ALALE/1548/2021/01 is an initiative of Chepsepin Water Pan and Hay Farm Self Help Group whose membership are pastoralist and small-scale irrigation farmers of Alale ward in Alale Sub-County, West Pokot County. The purpose of the project is to increase the supply of water for supplemental irrigation for the residence of Chepsepin community. The main components of the proposed project include construction of a water pan of capacity 27,870 m^3. The project is supported by the Government of Kenya and the County Government of West Pokot, through the Kenya Climate Smart Agricultural project (KCSAP), a World Bank funded project whose project development objective is to increase agricultural productivity and build resilience to climate change risks for smallholder farmers and pastoral communities. The cost of the project is Kshs 15,000, 000.

1.2 Justification of the Proposed project

The proposed project contributes to the KCSAP project development objectives by increasing the production per unit of land and enhancing the capacity of the farmers to produce throughout the year through supplemental irrigation. The project is a source of livelihood to about 626 farmers (275 males, 351female). The project offers employment opportunities to members of the community during construction and operation phases of the project implementation. Furthermore, the community has set aside 2.5 acres for the construction of the pan.

1.3 Rationale for the Environmental and Social Impact Assessment – Summary Project Report

This Environmental and Social Impact Assessment (ESIA), Summery Project Report(SPR) is based on the recommendation of the County Director of Environment (CDE), West Pokot County following the Environmental and Social Safeguards Screening report as outlined in the KCSAP Environmental and Social Management Framework(ESMF). According to National Environmental Management Authority (NEMA) categorization of project based on risk levels, the proposed Chepsepin ***Water Pan*** is a low risk project and therefore requires the preparation of Summery Project Report(SPR).

1.3.1 Objectives of the ESIA –Summery Project Report

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

National Environmental Management Authority (NEMA) Environmental Impact Assessment and Audit Regulations and guidelines.

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

i. Describe the proposed project including the technology to be used.
ii. Collect, collate and present baseline information (Physical environment; Biological environment and Socioeconomic and cultural environment)
iii. Identify impacts, both positive and negative, the direct, indirect, cumulative, irreversible, short- term and long-term effects anticipated; and identify mitigation measures.
iv. Carry out stakeholders' participation and consultations to collect the concerns, expectations, and opinions of affected, concerned and interested stakeholders.
v. Prepare a comprehensive Environmental and Social Management Plan (ESMP)
vi. To present results of the ESIA in such a way that they can guide in informed decision-making.

1.4 Methodology of ESIA-Summery Project Report

The Consultant first undertook environmental screening and scoping to avoid unnecessary data. The data collection was carried out through questionnaires (See sample, ***Appendix II***), observations and photography, site visits, desktop environmental studies and scientific tests where necessary in the manner and criteria specified in Part V (section 31-41) of the Environmental (Impact Assessment and Audit) Regulations, 2003. The report applied an inter alia approach incorporating environmental, social, cultural, economic, safety and health impacts of the project. The integrated nature of the impacts review ensured all possible negative impacts were identified and adequately mitigated. Given that nature and magnitude of the proposed Chepsepin Water Pan project, a summary environmental impact assessment project report, was opted for to ensure comprehensiveness and completeness of the assessment. The methodology followed during the assessment was as follows:

1.4.1 Environmental and Social Screening

According to the 2nd schedule of Environmental Management and Coordination Act (EMCA Cap 387) – amendment via legal notice no. 31 – April 2019, the proposed Construction of Chepsepin Water Pan project lies within Category (1) ***Low Risk Projects***. The screening process revealed that anticipated environmental issues would be minimal. Therefore, the proponent – Chepsepin Water Pan and Hay Farm Self Help Group through the Environmental Consultant undertook an Environmental Impact Assessment to submit a **Summary Project Report (SPR)** pursuant to Regulation 7 (1) of the Environmental (Impact Assessment and Audit) (Amendment) Regulations, 2019. Further, World Bank project classification was also considered since the proposed Chepsepin water pan will be financed by World Bank (WB) or with financial participation of, the World Bank, through the KCSAP. The WB classifies its projects into four environmental assessment categories (A, B, C, and FI) according to the likely impacts on the environment. The proposed project was found to be under World Bank Category B classification since the project impacts will be site specific, few if any of them are irreversible; and in most cases adverse effects, will be limited (some minor including

dust, noise and health and safety impacts during construction and operational phases) and mitigation measures can be designed. Such impacts have been clearly identified both at screening stage and in this SPR report with comprehensive mitigation measures being fully designed and described in ESM&MP.

1.4.2 Desktop Study

Desktop study included documents review on the nature of the proposed activities, project documents including designs, policy and legislative framework as well as the environmental setting of the area among others. Key documents reviewed included the following: Kenya policies, strategies and guidelines; National and County laws and regulations; applicable Multilateral Environmental Agreements (MEAs) and World Bank policies safeguards.

1.4.3 Physical Inspection of the Site and Surrounding

Physical inspection of the proposed site which included field investigation at site and surrounding areas was done in on **27th August 2021**. The field investigations were meant for physical inspections of the site characteristics and the environmental status of the surrounding areas to determine the anticipated impacts from the project.

1.4.4 Public Participation

Public participation via the use of public meetings & questionnaires, key stakeholder and informant interviews were carried out during the exercise. To ensure adequate public participation in the ESIA process, questionnaires were administered to: the project stakeholders, project site neighbours to the proposed Water Pan and other surrounding enterprises (***appendix II***). The information gathered was subsequently synthesized and incorporated into the ESIA Summary Project Report. Given the nature of the project and anticipated impacts, a public meeting was conducted targeting respective members of the CBO and the neighbouring community on 27th August 2021 at Chepsepin Villages where 37 participants attended (see attendance list-***appendix VI*** and minutes of the public consultation meeting -***Appendix III***). This was done in order to incorporate the concerns and views of all persons and individuals in the project neighbourhood. Further, key informant interviews/consultations were conducted to incorporate views from key stakeholders as described in chapter 4.

1.5 Data Analysis and Documentation

The Environmental Impacts Assessment report was compiled from the findings in accordance with the EIA guidelines issued by NEMA for Summary Project Report. The Consultant ensured constant briefing of the proponent during the exercise. The exercise culminated with the production and documentation of this summary project report designed to ensure that the proposed development complies with the Environmental Management and Coordination Act (EMCA, Cap 387).

1.6 Report Structure

This Summary Project Report is organized into nine substantive chapters. Chapter one present the introductory chapter, Chapter 2 gives nature of the project, Chapter 3 gives the location of the project, chapter 4 presents the outcome of the public consultation and participation process, Chapter 5 identifies and discusses the anticipated impacts and mitigation measures of the project , Chapter 6 presents the environmental and social management and monitoring plan (ESMMP), while Chapter 7 wraps with the conclusions and recommendation followed by references and annexes.

2 NATURE OF THE PROJECT

2.1 Introduction

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

2.2 Project Description

The siting, design concept and criteria were developed in accordance with the general guidelines and standards used in the design of small earth dam and water pan structures in Kenya and are in line with international standards for best practice by the County Government of West Pokot, through the Kenya Climate Smart Agriculture Project (KCSAP). The project design drawn to scale and approved by a registered engineer is attached in the appendices section of this report (***Appendix IX***).

2.2.1 Design

The main works to be undertaken under this Contract comprise the following:

- Excavation of the 27,870 m^3 water pan, clearing of overburden materials and the top soil
- Fencing of the dam and construction of embankment and draw off works
- Construction of ancillary facilities (toilet, cattle watering trap and community water site)

2.2.2 Materials, Equipment and Labour

The project will be constructed using modern construction material and procedures while ensuring that the safety of the neighboring communities and the environment is not compromised. These materials that will be used shall be locally and internationally accepted and shall meet the threshold public health, occupational safety and health as well as environmental standards. The main construction materials, equipment and workforce for this project will include but not limited to:

- Pan excavation to accommodate 27,870m^3 water storage;
- Construction of embankment with excavated soils with slopes of 2:1 upstream and 2:1 downstream crest of 4m;
- Construction of spillway to accommodate evacuation of excess runoff from the pan;
- Construction of 1.0 m freeboard to protect water overtopping the pan embankment;
- Construction of draw-off system to allow water abstraction to livestock/community water points;
- Construction of delivery pipeline with accessories

- Construction of livestock water trough and community water point;
- Construction of silt-trap to reduce silt entering the pan;
- Construction of inlet and outlets gabion mattress and stone pitching to reduce pan and silt-trap erosion;
- Environmental /grass planting to reduce erosion on pan embankment and surrounding areas;
- Fencing to discourage animals/human entering the pan eroding and reduce danger of drowning;
- Provision of sanitation facility to reduce water contamination and diseases.

2.3 Proposed Project Activities

The activities associated with the proposed project have been categorized under four phases of project implementation namely; planning, construction, operation, and closure/decommissioning as discussed in the following subsections.

2.3.1 Planning Phase Activities

The main activities considered during this phase are: community mobilization, tendering services as required by procurement regulations, site hand over, handover of drawing and building plans and site layout.

2.3.2 Construction Phase Activities

The following works will generally be followed during the construction of the project:

- ***Mobilization:*** The contractor will provide access for the Construction Camp. He will be required to clear and level the site by: cutting and clearing existing vegetation; removing stumps; leveling the site by grading and filling; and installing site drainage;
- ***Setting out:*** Once the camp, material storage and parking areas are established, the next task will involve setting out the works, marking and pegging for particular activities;
- ***Site clearance and topsoil stripping:*** These tasks will be done together with setting out and as per design requirements;
- ***Earthworks, excavations, filling of structures, fencing, drainage works:*** The above tasks involving excavating, and grading and soil control erosion measures will be done as per the approved design.
- ***Handing Over:*** At the completion of the works, all structures and equipment not required for the operation and maintenance are removed from the site and the work areas prepared for re-vegetation.

Construction Materials: Construction input material will include gravel, rock, cement, sand, ballast, structural steel, reinforced steel, paint, timber, fuel and lubricants. Consumable materials will include lubricants, greases, chemicals, reagents, resins and others. The construction of the pan will utilize earth fill materials that are available from the pan area within the project site.

2.3.3 Operation Phase Activities

On project completion the facilities would be utilized for the intended purpose. The project operational activities will include: operationalizing a water trough, draw off system, a community water point and a water kiosk.

2.3.4 Decommissioning Phase Activities

Decommissioning of the water pan will become necessary if or when the project goals change, when the need arises, climatic conditions or change of government policy as regards the land use. Once this occurs, the affected structures will be demolished. Non-reusable materials will be sold to licensed scrap metal dealers. The closure of the project will involve stopping all activities and demolishing the built structures and any fences. The affected land shall be, landscaped and replanted with suitable indigenous grass and tree species.

2.4 Project Cost and Implementation Schedule

Based on the technical design's bills of quantity (BOQ) for the project implementation, the project is estimated to cost **Kenya Shillings 15,000,000 (**excluding the cost of the ESM&MP).

3 LOCATION OF THE PROJECT

3.1 Introduction

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

3.2 Project Location

The proposed sub-project will be located 15km from Alale Township and will be put up within an 8.5 Ha land proposed for Chepsepin Water Pan and a Hay Farm. Part of this land will be used for construction of Chepsepin Water Pan which will be constructed on a 1 Ha / 2.5 acres of land. The project location can be well described as shown in Table 3.1 below.

Table 3.1: Project Location

Area	Project Location
County	West Pokot
Sub County	Alale
Ward	Alale
Location	Alale
Sub Location	Kamunai
Village	Chepsepin

The proposed project is located on **Latitude 2.179529° N** and **Longitude 35.089142° E 1,410m** above sea level. Figure 3.1 below shows an administrative location of the project area.

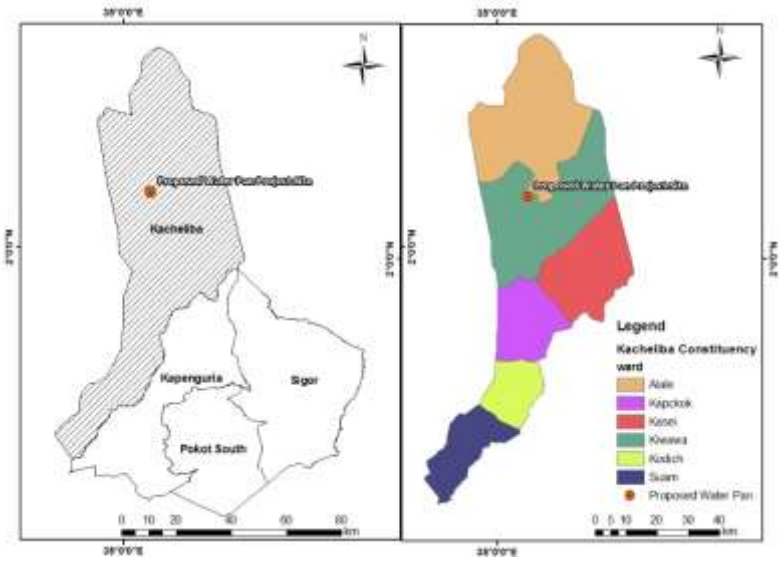

Figure 3.1: Alale Ward in Kacheliba Constituency

A geographical satellite image of the project location showing the proposed project site is shown in figure 3.2 below. The proposed water pan project is 110 km to the North of Kapenguria town.

Figure 3.2: Satellite location of Chepsepin Water Pan

3.3 Land Ownership

The land proposed for the sub project belongs to the community. **Chepsepin Water Pan and Hay Farm Self Help Group** are allowed to utilize 2.5 acres (a portion of the 8.5 Ha) to construct a water pan on behalf of the community ***(See approved PDP in Appendix VI).*** There are no environmentally sensitive areas within the project location. The proposed sub project is a pastoralist community area and is in line with the physical planning zonation.

3.4 Availability of Supportive Environmental Infrastructure

The proposed project site is near a lagga and is centrally and geographically situated to harvest rain water from the adjacent catchment area. The proposed design includes an ablution block to be built at the project site, a water trough and a community drinking water point (water kiosk). There is no existing portable water for domestic use by the locals.

3.5 Conformity to Existing Land Use Plan/Zonation

The project will be located in Chepsepin Village where land is communally shared. The proposed project conforms to the needs of the local residents as the area has no existing water infrastructure to serve both domestic and livestock use. The proposed project is thus in keeping with the surrounding environment as it is in line with the physical planning zonation.

3.6 Description of Environmentally sensitive areas

There are **NO** environmentally sensitive areas within the project location. There are no sensitive ecosystems that will be affected by the proposed Construction of Chepsepin Water Pan project. There are no protected areas in close proximity to the proposed project. Additionally, there were no known flora or fauna listed in International Union for Conservation of Nature (IUCN) red list that are likely to be affected by the proposed project.

3.7 Physiographic and Natural Conditions

3.7.1 Physical & Topographic Features

The highest altitude within the surrounding location is at 2737 metres above sea level. The area consists of patches of medium gradient hills while the lowest point is on the western section of the ward consisting plains as low as 583 metres above sea level. The proposed Chepsepin Water Pan Project Latitude 2.179529° N and Longitude 35.089142° E 1,410m above sea level. The project area predominantly comprises plains with pockets of ridges and medium gradient hills (figure 3-3). The high-altitude areas are characterised medium gradient hills to the central and western parts of Alale and Kiwawa wards.

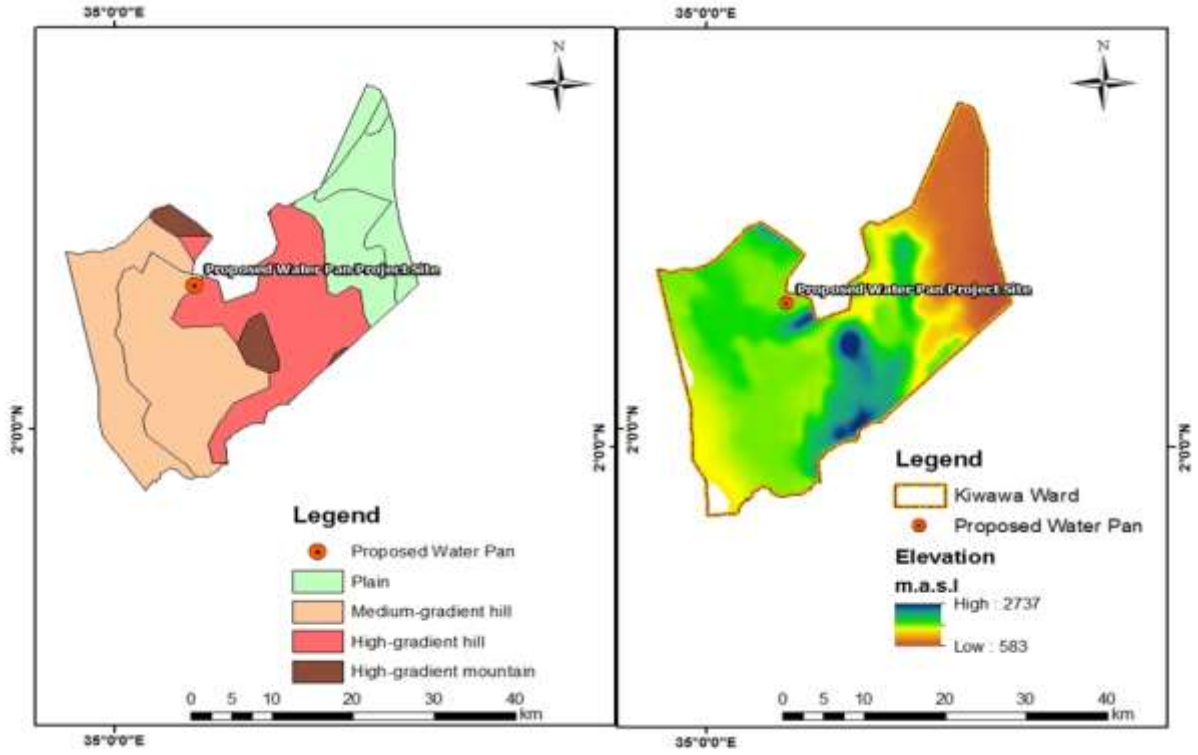

Figure 3.3: Topography of the area

3.7.2 Geology and Soils

Alale and Kiwawa wards basement system rocks of granite and acidic metamorphic rock and other parts of the ward consist pockets of gneiss and migmatite rocks. The area structural geology shows that it faulted and the hills mark the fault line. The contact between the volcanic and the basement rocks is also of concern because it may constitute the one flood water infiltrates to the ground.

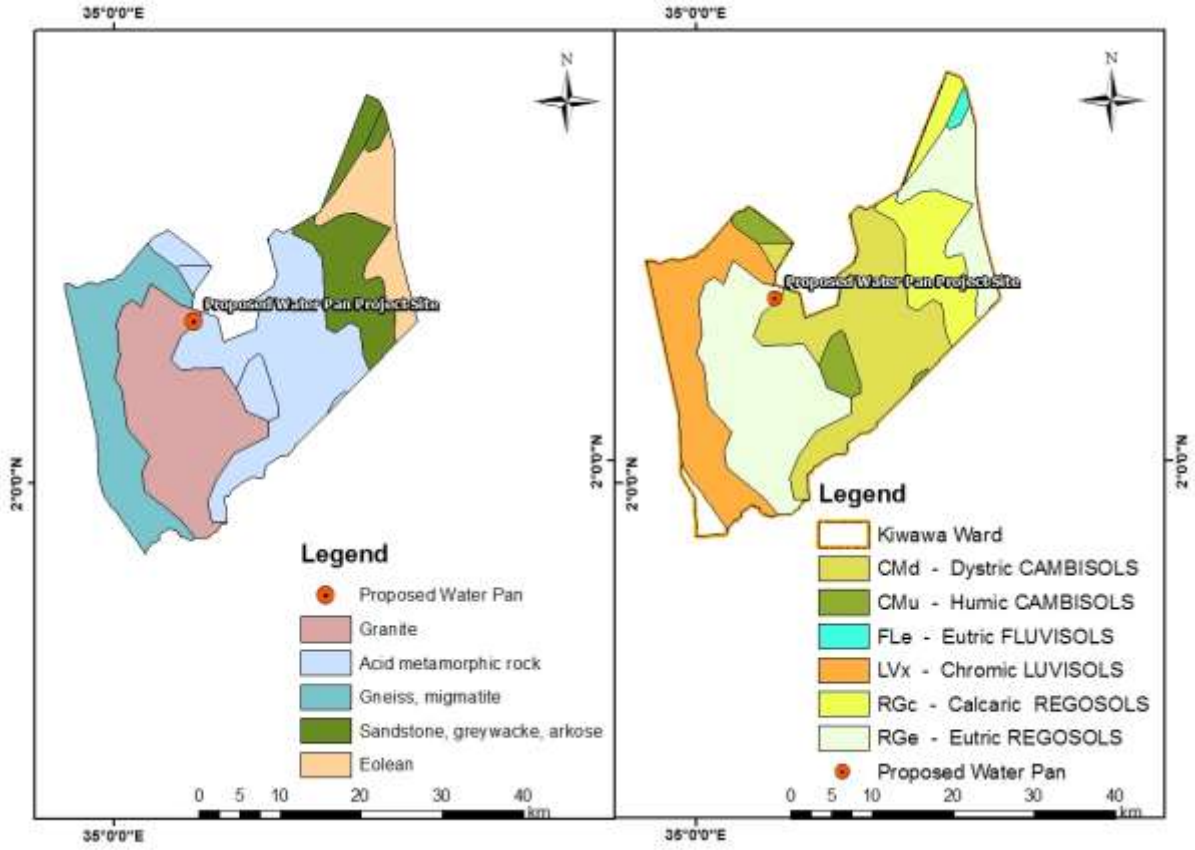

Figure 3.4: Lithology of the project area

The main soil type in the project area comprises Dystric Cambisols and and Eutric Regosols (figure 3-4). The soils of the area fall within class C of the FAO soil classification. The land is also virgin since it had not been cultivated earlier.

3.7.3 Climatic Conditions

Alale ward has a moderately warm and moist climate throughout the year. The average annual temperature ranges quite a bit throughout the county from around 15°C in the south to above 25°C. There is a strong south to north gradient of decreasing precipitation with southern parts of the sub county receiving greater than 1500 mm of precipitation per year, whereas areas is the far north of the sub county receive less than 250 mm. A majority of the county receives between 500-1000 mm of precipitation. Due to these strong gradients in both temperature and precipitation throughout the county, flooding, dry spells, and heat stress, are all hazards that contribute to agricultural risk in the area.

Historic analysis of weather in the area shows that dry spells are greatest and most variable in second half of the year, ranging between approximately 65 and 80 consecutive number of moistures stressed days. The first half of the year (January-June) consistently experienced 60 to 65 consecutive days of moisture stress. Extreme precipitation and flood risks have tended to increase. While this extreme precipitation occurs throughout the year, it tends to occur more during the first half of the year, for which about 60% of the years had at least one day with greater than 20mm/day of precipitation. The records also suggest that there has been

increasingly greater variability in the start and end of rainfall, and thus more variable cropping seasons.

Climate has been observed to only change very slightly in the area. Since 1981, the first wet season no significant changes or detectable trends in either temperature or precipitation. The second wet season experienced a very mild (~0.2°C) increase in temperature, and a slight tendency for increasing precipitation.

3.7.4 Land and Land Use

The dominant land use is open grazing. The dominant land cover is grassland and open scrubland mostly the acacia. The sub county has experienced conflicts related to land use from colonial period when they were displaced from their grazing land in Trans-Nzoia County (Nangulu, 2009). Land use conflicts are more pronounced in agriculturally productive and settled places and also along riverine areas where crop farming/furrow irrigation is practiced in West Pokot County (Pkalya, et al. 2004). The competition over land, pasture and water by nomadic pastoralists and agro-pastoralists coupled with different types of land tenures systems has intensified violent conflicts in West Pokot County. Huho (2012) analyzed the intractable and protracted conflicts in West Pokot County. Despite the many strategies put in place to manage conflicts, they were still persisting. The land upstream is low lying hills and the location of the catchment is convergence of several short length streams.

4 STAKEHOLDER CONSULTATION AND PUBLIC PARTICIPATION

4.1 Introduction

The Kenyan government has enshrined the need for human societies' involvement in project development in the Constitution. This has been set out in the EMCA, 1999 and Environmental (Impact and Audit) Regulations, 2003. The proposed project has incorporated public consultations in order to understand the local impacts, needs and wishes of the community and eventually incorporate them into the final designs and operations of the project.

4.2 Objectives of Public Participation and Stakeholder Consultation

The key objectives of the consultation and public participation for proposed Construction of Chepsepin Water Pan located in Alale Ward, Alale Sub County, West Pokot County was to:

i. Disseminate and inform the public and stakeholders about the project with special reference to its key components and description
ii. Create awareness among the public on the need for the ESIA for the proposed project
iii. Gather comments, suggestions and concerns of the interested and affected parties
iv. Incorporate the information collected in the ESIA
v. Build community consensus and acceptance of the proposed project.

4.3 Methodology of Public Participation and Stakeholder Consultation

Public participation for the proposed project was conducted through the public consultative meetings and admission of questionnaires to allow for systematic understanding and interaction of the project beneficiaries, neighbours, local community members/surrounding enterprises and any other would be affected/interested parties.

4.3.1 Public Consultation Questionnaires

ESIA questionnaires were administered, to gather information from key stakeholder and the members of the public. This was done using structured questionnaires to assess the environmental and socio-economic views of the respondents. A total of 14 questionnaires were administered in the project area. Samples of filled questionnaires administered in the project area are appended to this report (***Appendix II***).

4.3.2 Key Informant Interviews

Key stakeholder interviews and consultations were conducted between 26th and 27th August 2021. The key stakeholder engagements were conducted to foster better and mutual understanding of public concerns as well as incorporate key stakeholders' opinions to this report.

4.3.3 Public Consultation Meetings

In seeking the views of the key stakeholders, and any other would be affected/interested parties the consultant organized a consultative meeting targeting the Chepsepin Community Water Pan members, the administration and the proponent key staff at County and sub-county level, the ward representatives on 27th August 2021 at Alale Ward. The meeting was used to publicize the proposed Construction of Chepsepin Water Pan and the anticipated effects and benefits.

The table 4-1 below presents a summary of the participants of the public consultation meeting. The list of participants is appended to this report (***Appendix VI***).

Table 4.1 Summary of Public Consultative Meeting

S/No.	Venue	Number of Participants			The Youth		Date of Meeting
		Female	Male	Total	Female	Male	
1	***Chepsepin Village***	19	18	37	**9**	**13**	**27th July 2021**
	TOTAL	***19***	***18***	***37***	**9**	**13**	

A total of 37 participants attended the stakeholder consultative meeting. During the public participation meeting, stakeholders had a chance to interact with the proponent represented by the ESIA expert and ministry of agriculture officials at county and sub-county level. The findings are incorporated into this report and captures the issues, suggestions, concerns and recommendations from public meetings on site. The meetings were well attendend and the attendees participated actively during the meetings (Plate 4-1 and 4-2).

Plate 4:1: Public Consultation at Chepsepin Village

Plate 4:2: Area elder addressing the residents of Chepsepin Village

4.4 Consultation and Disclosure Outputs

The Appendices present the information on the public consultations undertaken under the environmental impact assessment for the proposed Construction of Chepsepin Water Pan project. This information includes selected responses as detailed in the minutes (***Appendix III***). It was noted that members lauded the project and were eager to see the start of the project. However, there were a few areas that the members sought clarity. A summary of the key concerns raised by the participants is provided in table 4-2 below:

Key Issues from Public Participation Forum (Baraza)

Table 4.2: Summary of Issues Raised by the Community and Stakeholders and Response

Key Issue	Stakeholder concerns	Technical Team Response
1. Dust/Emissions	**Esther Todonyang'** raised concern about emissions and dust during excavation and transportation of the borrow material, noting that there could be emission of dust from the excavation sites and also from the vehicles transporting the borrow material.	The technical team responded that dust masks will be provided to all workers at the site to reduce against occupational health risks of inhaling exhaust gases and dust. The team also assured residents that there will be minimum impact of dust pollution to the surrounding as the contractor will ensure minimum vehicular traffic, moving only in designated paths and at prescribed speed limits; and that all vehicles/motorised equipment will be properly maintained to minimize exhaust fumes.

2. **Vibrations/Noise Impacts**	The attendants also wanted to know the impact of the noise emitted by the machines and whether it could disrupt learning of pupils at the nearby Chepsepin Primary School.	The Technical team responded that the contractor will restrict blasting, use machines with minimum vibrations and ensure available practices on-site to minimize occupational noise levels. The technical team also pointed out that Chepsepin Primary School was more than half a kilometre from the site and therefore was less prone to the impact of noise and vibrations if any.

4.5 Opinion on Project implementation

It is clear from the questionnaires received back that the proposed Construction of Chepsepin Water Pan will serve an important role of providing the community with both domestic and livestock water. This will also reduce trekking distances and enable women and children more time at home performing other chores. All the residents admitted that they were interested in this project more solely for their increased resilience during drought periods and generally improved agricultural productivity.

4.6 Suggestions and comments from public consultations

- The group to encourage the beneficiaries to plant trees within their farms and support them by providing seedlings for fruit trees
- The ESMP should include the need for appropriate PPE such as gloves, gumboots to prevent injuries and accidents
- Ensure the workers/employees of the proposed project are insure through WIBA for adequate compensation due to injury while at work.
- Jobs opportunities that will arise during the construction of Chepsepin Water Pan should be reserved for the residents of the project areas.
- Construction work should strictly observe standards of Occupational Health and Safety including the following;
    - Usage of safety gear and equipment by construction workers
    - Erection of safety signage along the construction route
    - Provision of sanitation facilities, clean water and food to construction workers
- The contractor should also strive to use high quality construction materials as detailed in the design
- Education and awareness creation on COVID-19, HIV aids control and prevention measures including adherence to MOH guidelines.
- The management should be continously trained on accountability and resource management

- The constitution that binds the group and its by-laws should be continouly reviewed for smooth running of the cooperative.

5 ANTICIPATED IMPACTS AND PROPOSED MITIGATION MEASURES

5.1 Introduction

This chapter identifies both positive and negative environmental impacts likely to be occasioned by the project's construction/installation, operation and decommissioning phases.

5.2 Positive Impacts during construction

5.2.1 Employment Creation

The project will create employment opportunities in the construction phase for both skilled and unskilled and casual and contractual work. In the rehabilitation works for the catchment youths will be engaged through the youth employment programme in the project. Women will have the opportunity to supply foodstuffs to the workers.

5.2.2 Market for Construction Materials

The construction works will provide market for locally available construction materials such as cement, sand, timber, and steel, building stones and fencing materials.

5.2.3 Increase in Government Revenue

The implementation of the sub project will result in increased revenue for the county and national governments through levies, taxes and cess on the purchase of materials during construction phase.

5.3 Negative Environmental Impacts during the Construction Phase

5.3.1 Disturbance of Vegetation and Biodiversity

Site clearance will result in the removal of vegetation, pasture and biodiversity losses.

Mitigation measures

- Site clearance to be limited to the project demarcated area and selective removal of vegetation or trimming of trees to be exercised where possible.
- Local community to be allowed to harvest areas of natural vegetation that are to be cleared prior to clearing.
- The proponent to support establishment of a community tree nursery for indigenous trees
- Compensatory planting of trees or other appropriate vegetation after construction works
- Construction workforce to be sensitized on environmental and ecological conservation

5.3.2 Soil Erosion

Activities undertaken during the preparation and the construction stage of the water pan such as clearance/disturbance of vegetation, excavation and tramping by people and machineries/vehicles may result in soil erosion.

Mitigation measure

- Contractor to avoid construction during the wet season.
- Contractor to limit excavation to the marked boundaries of the project site.
- Contractor to ensure proper compaction at recommended soil moisture where required.
- Contractor to provide designated routes for vehicles.
- Where possible the contractor to exercise selective removal of mature, indigenous trees.
- Compensatory planting of trees or other appropriate vegetation after construction
- Sensitization of construction workforce on environmental and ecological conservation and protection.

5.3.3 Noise and Vibration Generation

Continuous exposure to noise levels above 85 dB may cause hearing problems leading to occupational deafness. Noise and vibration produced during construction may have some temporary negative impacts to the immediate residents. Sources of noise pollution include excavation and earth moving machines and during mobilization of the construction materials to the site. The impact is low risk as the nearest dwelling units are over 1km away.

Proposed mitigation and management measures.

- Avoid idling of machinery or engine when not in use.
- Restrict activities that create noise to daytime only.
- Workers to be provided with ear muffles.
- Contractor to ensure the use of well-maintained machineries and vehicles.

5.3.4 Air pollution (Motor vehicle emissions and dust generation)

The potential sources of air pollution include traffic, emission from bulldozer/excavator and material supply vehicles. This is a short-term negative impact and will last within the actual excavation period and ferrying of materials. This impact is considered low risk as there are no residential units nearby.

Mitigation measures

- Ensure that maintenance on all machinery is done regularly to avoid the emission of noxious gases.
- Drivers and machine operator to avoid unnecessary running of motor vehicle engines and machinery when not in use.
- Provision of dust masks to workers and ensure their use.
- Locating haul roads, tips, and stockpiles away from sensitive receptors, considering prevailing wind directions.
- Contractor to instruct the drivers to avoid unnecessary speeding near settlements in the project area
- Contractor to make sure water sprays and mist are applied as dust suppression measures on loose soils and stockpiles.

5.3.5 Oil Spills

Oils and grease spillage on the ground may cause contamination to the soil and surface water making the water to be unsuitable for use by both people and livestock.

Mitigation measures

- Proper maintenance of vehicles and other equipment (using petroleum products) to avoid fuels and lubricants spills at the project site.
- The contractor should properly handle, store, and dispose off oils and greases and their wastes during construction by ensuring that servicing is strictly done at designated servicing yard or external petroleum stations.
- Site staff to be sensitized on safety procedures for fuel storage and re-fuelling should be well understood and implemented by site staff.

5.3.6 Solid Waste Generation and Accumulation

The volume of solid waste generated from the construction of water troughs, latrines and any other masonry structure and packaging materials such as cement bags will be small with low impact. Single used COVID-19 PPEs are also expected to contribute to the volume of waste generated.

Mitigation measures

- The contractor to exercise waste segregation and to ensure waste not reusable or recyclable is cleared from the project site and disposed off as per NEMA and County Government regulations
- Contractor to provide temporal waste disposal receptacles in site including separate bin for Covid 19 used PPE.
- Contractor to engage a licensed waste collector to routinely collect and dispose the waste

5.3.7 Earth Excavated Material & Desilted Silt

The debris from excavation and desiltation is expected to be of a large volume and would be washed back in to water channels and surface water storage structures if not handled well.

Mitigation measures

- Contractor to dump unused excavated materials and debris in designated places as directed by the supervising engineer.
- Contractor to use excavated soil for construction of the water pan wall/embankment.
- Excavated silt can be incorporated with compost for use as potting media in the tree nursery.

5.4 Negative Social ~~Socio-economic~~ impacts in the construction phase.

5.4.1 Occupational Health and Safety (OHS)

During the excavation and construction stage of the water pan accidents may result caused by the moving part of the excavator. Accidents may also occur in the construction of the auxiliary structures (latrine, livestock troughs) and other masonry structures caused by falls in

excavated sites or injuries by wrongly placed equipment, tools or other construction materials.

Mitigation measures

- The sites to be protected or fenced off from unauthorized intrusions and warning signs; barricades should be properly displayed and strictly adhered to.
- All workers to be provided with full protective gear (PPEs) and trained on appropriate use
- Workers to be trained on first aid & a fully equipped First Aid Kit provided at site.
- The contractor to have Incident and Accident Registers on site for recording of injuries or any OHS incidence.
- Contractor to prepare an emergency management and preparedness plan for accident response & avail Emergency contacts for police, ambulance, etc.
- Contractor to appoint a qualified health and safety person to manage OSH issues.
- Tools and equipment to be placed in a safe place when not in use.
- All machines to be operated by skilled personnel only.

5.4.2 Risk of Accidents to the Community

Hauling of equipment (plant and machinery) and other materials and supply to the project site may pose a potential risk of accidents to animals, people, especially children.

Mitigation measures

- Contractor to sensitize the community on the project and the project period and what caution to be taken by the community.
- Restrict access to the construction site for community members unless where necessary.
- Contractor to employ qualified drivers/machine operators.
- Drivers to be instructed to observe required speed limits.
- Installation of warning sign boards at the construction site and identified risk areas.
-

5.4.3 Increase in incidences of HIV/AIDS and STIs

The inflow of people may bring communicable diseases to the sub project area, including sexually transmitted infections (STIs), or the incoming workers may be exposed to diseases to which they have low resistance. Disposable income amongst the construction workers makes the possibility of sexual irresponsible behaviour a likely possibility especially where workers are away from their families for extended periods. This provides room for spread of diseases such as HIV with women at higher risk as they bear the burden of poverty.

Mitigation measures

- Contractor to sensitize workers and community members on HIV/AIDS and other communicable diseases.
- Contractor's Health and Safety Management Plan (CHSMP) to be enforced through the Directorate of Occupational Health & Safety (DOSH)
- Controlled access to Contractor's Workforce Camps by outsiders.

- Contractor to provide standard quality condoms at the construction site during the construction period.

5.4.4 Health Impact- spread of COVID19 among construction workers at work sites

The World Health Organization 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 March 13th 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, among others.

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

Recently, the WHO has warned that the virus is here to stay for a long time and might persist and become our new way. 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:

COVID-19 – Mitigation Measures against spread of COVID-19 amongst workers:

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

- Mandatory provision and use of appropriate Personal Protective Equipment (PPE) shall be required for all project personnel including workers and visitors;
- Avoid concentration of more than 15 workers at one location. Where there are two or more people gathered, maintain social distancing of at least 2 meters;
- All workers and visitors accessing worksites every day or attending meetings shall be subjected to rapid Covid-19 screening which may include temperature check and other vital signs;
- The project shall put in place means to support rapid testing of suspected workers for covid-19;
- Install handwashing 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.

5.4.5 Labour Risks including Labour Influx

The excavation work will be mechanical and the labour required for the construction of auxiliary structures (water troughs, fencing, latrines) will mostly use the local labour force. Influx of labour from nearby towns such as Nakinglas and Burgich and parts of Turkana may cause an increase in illicit behaviour and crime and/or a perception of insecurity by the local community. Such illicit behavior or crimes can include theft, physical assaults, substance abuse and prostitution.

M**itigation measures**

- The proponent adherence to national labour code and WB policies through incorporating the same in the Procurement and Contract Agreement document for implementation by the contractor.
- All workers engaged in the project to be sensitized on the national code of conduct and the World Bank policies
- Local community members will be given priority in employment opportunities, in casual and unskilled labour.
- Train the community on the project requirements and product.
- The Contractor to ensure that comprehensive data on all workers involved in the project during construction is kept (register of all workers kept on site).
- Training of PMC, SAIC, CESSCOs and community policing of the project

5.4.6 Risk of social conflict

Conflicts may arise between the local community and the construction workers, which may be related to cultural, or ethnic differences, or based on competition for local resources. Tensions may also arise between different groups within the labor force, and pre-existing conflicts in the local community may be exacerbated.

Mitigation measures

- The proponent adherence to national labour code and WB policies through incorporating the same in the Procurement and Contract Agreement document for implementation by the contractor.
- Contractor to sensitize the workers on code of conduct (COC)
- Recruit unskilled workforce from the community
- Offer adequate remuneration for specified tasks as per labour laws and/or as per the prevailing market rates
- Have equitable distribution of labour opportunities to both men and women
- Develop and implement local hiring rules in consultation and partnership with the local community.
- Train workers and the project management committee and rank members on conflict management and resolution

5.4.7 Child Labor and School Dropout

The proposed project may result in increased opportunities for the sale of goods and services to the incoming workers, which can lead to child labor to produce and deliver these goods and services, which in turn can lead to enhanced school dropout.

Mitigation measures

- The proponent to sensitize the community on national children welfare policies, children's laws and World Bank policies on the protection of children and the importance of children being educated.
- The Proponent to ensure the Contractor complies with national and WB policies and rules on welfare of children.
- Control to ensure there is no child labour at the construction. This can be done by using Identification Cards to verify the age of the workers and casuals.

5.4.8 Gender Based Violence (GBV)

This impact is triggered during Project Construction Phase when the Contractor fails to comply with gender inclusivity requirements in hiring of workers and entire Project Management as required by Gender Policy 2011 and 2/3 gender rule. Failure to protect human risk areas associated with disadvantaged groups, interfering with participation rights, and interfering with labour rights may also result in GBV.

Mitigation Measures of Human Rights and Gender Requirements are:

- The contractor will implement provisions that ensure that GBV at the community level is not triggered by the Project, including effective and on-going community engagement and consultation, particularly with women and girls.
- Review of specific project components that are known to heighten GBV risk at the community level e.g., hiring procedures and remuneration.
- The contractor shall develop specific plan for mitigating these known risks, e.g.,

sensitization employment.

- The contractor will ensure adequate referral mechanisms are in place if a case of GBV at the community level is reported related to project implementation.

5.4.9 Sexual Exploitation and Abuse (SEA)

There is a risk of sexual exploitation 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

- Sensitize the community against sexual abuse and exploitation
- Institute localized deterrent punishment for sexual offenders
- Report all cases of sexual exploitation and abuse to the local administration

5.4.10 Sexual Harassment (SH)

This is a most likely social impact in this project since women/girls who are engaged indirectly in the project especially those selling foodstuffs to construction workers are susceptible to SH.

Mitigation Measures

- Sensitize the community against sexual harassment
- Institute localized deterrent punishment for sexual harassment offenders
- Report all cases of sexual harassment to the local administration

5.4.11 Risk of Cultural Resource/Property Chance Find

Since the project involves excavation, there is high likelihood of chance find of cultural resources. In case this happens, then a chance find procedure will be applied. This is a project-specific procedure that outlines actions required if previously unknown heritage resources, particularly archaeological resources, are encountered during project construction or operation. This process prevents chance finds from being disturbed until an assessment by a competent specialist is made and actions consistent with the requirements are implemented.

Mitigation Measures

Use the standardized find chance procedure as outlined below. If any person discovers a physical cultural resource, such as (but not limited to) archaeological sites, historical sites, remains and objects, or a cemetery and/or individual graves during excavation or construction, the following steps shall be taken:

1. Stop all works in the vicinity of the find, until a solution is found for the preservation of these artefacts, or advice from the relevant authorities is obtained.
2. Immediately notify site foreman. The foreman will then notify the Construction Manager and the Environment Officer (EO)/Environmental Manager (EM);
3. Record details in Incident Report and take photos of the find;
4. Delineate the discovered site or area; secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities take over;

5. Preliminary evaluation of the findings by archaeologists. The archaeologist must make a rapid assessment of the site or find to determine its importance. Based on this assessment the appropriate strategy can be implemented. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage such as aesthetic, historic, scientific or research, social and economic values of the find;

6. Sites of minor significance (such as isolated or unclear features, and isolated finds) should be recorded immediately by the archaeologist, thus causing a minimum disruption to the work schedule of the Contractor. The results of all archaeological work must be reported to the Ministry/Agency, once completed.

7. In case of significant find the agency/ministry (National museums of Kenya) should be informed immediately and in writing within 7 days from the find

8. The onsite archaeologist provides the Heritage team with photos, other information as relevant for identification and assessment of the significance of heritage items.

9. The Ministry must investigate the fact within 2 weeks from the date of notification and provide response in writing.

10. Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restoration, and salvage.

11. Construction works could resume only after permission is granted from the responsible authorities.

12. In case no response received within the 2 weeks period mentioned above, this is considered as authorisation to proceed with suspended construction works.

5.5 Positive Environmental and Social Impacts during operation phase

5.5.1 Soil Conservation in Project Area

The rehabilitation and expansion of the Chepsepin water pan will support upstream soil conservation measures by acting as a draining point for cut-off drains constructed in the watershed.

5.5.2 Replenish Groundwater

The storage of a large volume of water in the pan will replenish groundwater in the dry period in the project area.

5.5.3 Flood Control

The water pan will be a safe discharge of excess flood water from the catchment. This will reduce flooding on the downstream farms thus livelihoods and preventing losses.

5.5.4 Improved Livestock Production & Profitability

Supply of water for livestock farming will lead to increase in livestock numbers and productivity thus raising farmers income levels.

5.5.5 Increased Drought Resilience

Considering the size of the water pan it will be able to hold enough water which will provide a reliable water supply throughout the year. This will increase the community resilience to drought.

5.5.6 Improved Food Security

Availability of water will contribute to livestock productivity. This will enhance food security and nutrition beside income through local sale.

5.5.7 Livelihood Diversification

The proposed project will enhance livelihood diversification e.g., to beekeeping, poultry keeping, as a result of water supply. This will be possible through the increased volume of water in the water pan. Diversification will contribute towards employment creation, income generation and food security in the project area.

5.5.8 Improved Public Hygiene

The proposed construction of sanitary facilities latrines in the project and fencing of the Chepsepin water pan will mean less contamination and pollution of the water and the environment. All this will result in improved sanitation and public hygiene in the area.

5.5.9 Increased Household Income

Rehabilitation and expansion of the water pan will ensure there is reliable water for crop farming and livestock use. This will result in increased agricultural productivity to households resulting in high incomes at the household level. This will also lead to lowering of poverty in the community.

5.6 Negative Environmental and Mitigation Measures during the Operation phase

5.6.1 Surface and Ground Water Pollution

Water pollution may be from several sources. Pollution of the water could make the water unsuitable for the proposed use in the project. This could be from: watering of animals directly from the water pan, unattended oil spillage during the construction period, poor farming technologies upstream, use of agrochemicals and destruction of catchment. Leaching of agrochemicals would result to ground water pollution.

Mitigation measures include the following:

- The water pan should be fenced as indicated in the BQ and having only one controlled entrance.
- The users should draw off water from the designated sites only.
- The Contractor to clear the site of all solid wastes, construction materials and any spills after completion of the construction works.
- The Proponent to ensure proper use and maintenance of sanitation facilities at all times.

- The Proponent to develop and implement (through sensitization of farmers) an ***Integrated Pest Management Plan*** (IPMP)
- Proponent to ensure regular monitoring of water quality.

5.6.2 Soil Erosion and Siltation of the Water pan

Concentration of many livestock in the project area as they come for watering and poor farming practices will result in soil erosion. Overstocking of livestock in the project area will also result in overgrazing and soil erosion. The erosion of the inlet water course and the degradation of the water pan catchment will result in the siltation of the water pan resulting in increased water turbidity and reduced volume of the water pan.

Mitigation measures

- Construction of silt traps along the inlet water course as will be guided by the supervising engineer (see annex 5 on Bill of Quantities)
- Regular maintenance of the check dam/silt traps by the community
- The embankment to be grown with suitable grass as outlined in the design plan.
- The proponent to ensure the implementation of the developed ***Integrated Sustainable Land Management (ISLM)*** plan.
- The catchment community to be sensitized on the ISLM & to be trained on farm SLM practices e.g., terracing, minimal tillage, agroforestry crop rotation, intercropping.
- Regular desilting should be undertaken (removal of silt from the reservoir using manual labour can be periodically organized during the dry season).
- The proponent to consider piping water to other sites in future to avoid animal concentration and overgrazing in the project area.
- Sensitize the community on appropriate stock rate.

5.6.3 Water pan breaking its walls and associated risks

Above normal rains over a longer period, damage of the water pan walls and lack of maintenance could result in the water pan walls breaking and suddenly discharging its water. The outcome may be destruction of property, land degradation and risk to the people living downstream.

Mitigation measures

- The Proponent should develop the Chepsepin Water Pan Crisis Action Plan (CAP). The CAP should contain the details for Water pan CAP.
- A qualified Water Resource Professional should inspect the site every year and at least at the end of every rainy season and come up with an action plan.
- Undertake regular (continuous) monitoring and assessment of the water pan and project site especially with the current climate change, before and after the rainy season.
- Proper inspection should be done once in 3 years to a maximum of once in 5 years by a qualified professional
- The inspection forms should be properly filled, maintained and action recommended.

- Train the project management committee and the local administration (local technical team) on scouting which will lead to early detection and responding to any risk situation.
- An Emergency Action Plan (EAP) should always be maintained by the operation and maintenance team and this should be done during the routine preventive maintenance by the local technical team.
- Undertake Environmental Audit for the Chepsepin water pan annually as required by NEMA.
- Proponent to implement the recommendations on the action plan effectively and efficiently.
-

5.6.4 Solid Waste Generation

Due to the farming activities, there would be generation and accumulation of wastes including wrapping and packaging materials and containers. Some of the packaging/wrapping and containers will be from agrochemicals which if not properly disposed off would result in toxicity in the environment.

Mitigation measures

- Sensitization of the farmers on the disposal of used agrochemical wrappings, containers and packages.
- Proponent to ensure wastes from farming activities are sorted before disposal
- Proponent to provide litter/waste bins in the project area for temporal storage of waste.
- Engage a NEMA registered waste collector, transporter and disposer.

5.6.5 Risk of drowning

The water pan filled with water presents the risk of drowning to people or animals that may stray into the perimeter fence of the Chepsepin water pan or can be used in self-suicide.

Mitigation measures

- The risk has been significantly reduced through the proposed fencing and installation of a gate.
- The gate to be always locked with a padlock.
- The community be sensitized on the potential risk of drowning.
- Involvement of the whole community members in ensuring that the perimeter fence is maintained and not destroyed (encourage community policing).
- Employ a person to guard the water pan through the water users' association (WUA) to ensure regular monitoring.

5.6.6 Impacts on River Regime and Downstream Users

The unnamed natural drainage, like all the drainage channels in the sub basin is ephemeral and only flows during the rains and a shortly thereafter. The construction of the water pan will enable the harvesting of the flood water which would otherwise be lost, and use it for

economic activity within the area. The development of the storage facility is therefore not expected to have an adverse impact on the river flow and the downstream community.

5.7 Negative Social and Economic Impacts

5.7.1 Outbreak of Livestock Diseases

Livestock converging in one watering point from different sites/regions increase the chance for the spread of livestock pest and diseases. If unchecked will lead to poor animal health, reduced livestock productivity and even livestock loss.

Mitigation measures

- Regular disease surveillance by the veterinary department and community.
- Sensitization of the community on disease spread, monitoring and control.
- A livestock disease management plan be put in place by the veterinary department to ensure disease incidences are promptly responded to and addressed.

5.7.2 Human Health Impacts e.g., Malaria and schistosomiasis, water borne diseases.

The presence of standing water provides good breeding ground for disease vectors especially with malaria and increase in schistosomiasis. Further, due to water scarcity in the area, the community may be tempted to use the water pan water for drinking purposes without treatment. The two scenarios carry possibility of increasing diseases given malaria prevalence is at 46.9% in the county while diarrhoea and typhoid are at 7.6% (KNBS, 2018)

Mitigation measures

- Sensitize the community on malaria prevention through use of mosquito nets, local and indoor residual spraying and bush clearing near households.
- Malaria surveillance programme to be maintained.
- Establish community-based health education committee that facilitate malaria control programme facilitated and coordinated through public health department
- Sensitize the community on water purification methods.

5.7.3 Spread of COVID-19 amongst community members during consultations

During implementation of the ESMMP, various consultative activities will be undertaken. For efficient and meaningful engagement, a wide range of individual participants, groups in the local community and other stakeholders will be involved. If carried out conventionally, these activities would lead to close interaction between the proponent and the community members leading to a high risk of spreading COVID-19 amongst community members during the consultation process.

Mitigation Measures against spread of COVID-19 amongst community members are.

- Electronic means of consulting stakeholders and holding meetings shall be encouraged whenever feasible.
- SOPs to be developed for engagements including training materials.
- Avoid concentrating of more than 15 community members at one location. Where two or more people are gathered, maintain social distancing of at least 1.5 meters.

- The team carrying out engagements within the communities on one-on-one basis will be provided with appropriate PPE for the number of people they intend to meet.
- Use traditional channels of communications (TV, newspaper, radio, dedicated phone-lines, public announcements, and mail) when stakeholders do not have access to online channels or do not use them frequently. Allow participants to provide feedback and suggestions.
- In situations where online interaction is challenging, disseminate information through digital platform (where available).
- Ensure online registration of participants, distribution of consultation materials and share feedback electronically with participants.

5.7.4 Water use Related Conflict

Low rainfall or failure may result in inadequate water supply to the water pan. Unprecedented increase in land acreage under irrigation would also mean increase water demand for irrigation. Dependency on the Chepsepin pan for domestic, irrigation and livestock may result on water use related conflicts.

Mitigation measures

- Develop and implement a community users' development plan in consultation and partnership with the local community and existing WRUAs
- Formulation of local by-laws to guide the use of water in the project area
- Sensitize the community/beneficiaries on efficient water use to avoid wastage.
- Raise community awareness on the benefits of the project for more cooperation.

5.7.5 Poor Leadership and Management Problems

Poor leadership, lack of transparency and accountability would result in the mismanagement of the will result into the project not meeting its intended goals.

Mitigation includes;

- Training of PMC on water project management, financial management and promotion of accountability & accountability.
- Sensitization of project beneficiary/community members on project management.

5.7.6 Child Labour and School Drop Out

The irrigation project may attract to children to engage in the sale of crops produced in the area such as tomatoes. The children may engage in vending of the crops harvested interfering with their educations and their welfare and children rights beside exposing them to other social evils.

Mitigation measure

- Train village volunteer child monitors to work closely with the office of the chief and the department of children on issues of child protection
- Sensitize the community on child protection issues relating to the project.

5.8 Decommissioning phase

The proposed Chepsepin water pan project is expected to operate for several years. After this period depending on the prevailing situation of the time, decommissioning of the project could be undertaken. This could be due to various reasons such as a new bigger source of water being developed in the area therefore, the water pan being abandoned, or the water pan becoming completely silted or creating a risk to the community.

5.8.1 Positive Environmental and Social Impacts

The positive impacts associated with the decommissioning of the water pan are direct employment for those involved in the demolition work, restoration of the land for other productive purposes and reduction in the risk associated with the water pan.

5.8.2 Negative Environmental and Social Impacts

The main negative impacts of decommissioning are reduction in crop and livestock productivity, reduction in indirect employment opportunities, reduction in household income, the community and livestock to continue to walk for long distances in such of water and pasture, increased soil erosion and land degradation from the excessive run off and increased burden for the women to get water for households, increased in water borne diseases due to inadequate source of fresh water and increased poverty and reduced community adaptive capacity to climate change effects.

5.8.3 Mitigation Measures for the Decommissioning of the Water pan

Depending on the reason for the decommissioning the report recommends that an environment and social impacts assessment be undertaken with the terms based on the prevailing scenario and baseline conditions and the nature of the decommissioning. However, if the decommissioning will be because of the complete abandonment of the water pan the land should be restored to its original state.

6 ENVIRONMENTAL AND SOCIAL MANAGEMENT AND MONITORING PLAN (ESM&MP)

6.1 Introduction

The review of this ESIA is undertaken during the Coronavirus disease (COVID-19) pandemic outbreak. The preparation of the ESIA including the relevant consultations have been undertaken in strict compliance with guidelines for infection prevention and control in the country. Additionally, specific mitigation measures have been introduced to prevent the spread of the pandemic during the construction period. Moreover, consultations required as part of the mitigation measures, such as during training on E&S issues, also pose a risk of infection to communities. For this reason, the risk of contracting the virus during consultations will be avoided, minimized and mitigated with specific measures (wearing of face masks, use of hand sanitizers/ hand washing with soap, keeping a social distance of 1.5-2m in meetings and gathering not more than 15 people for meetings) to ensure national requirements on social distancing and recommendations on how to minimize contact are adhered to.

The project proponent acknowledges that the proposed project activities will have some impacts on the biophysical environment, health and safety, and socio-economic well-being of Chepsepin Water Pan Community and other community stakeholders. Thus, the main focus will be on reducing the negative impacts and maximizing the positive impacts associated with the project activities for continuous improvement. An environmental and social management plan has been developed to assist the proponent in mitigating and managing environmental and social impacts associated with the life cycle of the project. It is noteworthy that key factors and processes may change through the life of the project and considerable provisions have been made for dynamism and flexibility of the ESM&MP. As such, the ESM&MP should be subjected to periodic review for improvement purposes.

Tables 6-1 form the core of this ESM&MP for the construction, operational and decommissioning phases of the proposed Rehabilitation of Chepsepin Water Pan. In general, the tables outline the potential environmental, socio-economic, health and safety risks associated with the project and details all the necessary mitigation measures, their financial costs, as well as the persons responsible for their implementation and monitoring. The ESM&MP should be used as checklist in the initial environmental audit of the project.

It worth noting that the key responsibilities regarding compliance to the proposed ESM&MP during the construction period rest on the Contractor whereas those in operation stage will be the responsibility of the proponent. **The ESM&MP should be shared with the selected contractor(C-ESM&MP) for implementation.** It is important that the project proponent ensures adequate monitoring and evaluation for the Contractor for non-conformances and adequate resources are allocated for operational stage.

Environmental and Social Management and Monitoring Plan
Table 6.1: Environmental and Social Management and Monitoring Plan (ESM&MP)

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
NEGATIVE ENVIRONMETAL IMPACTS IN THE CONSTRUCTION PHASE						
Disturbance of Vegetation	○ Site clearance to be limited to the project demarcated area and selective removal of vegetation or trimming of trees to be exercised where possible. ○ Local community to be allowed to harvest areas of natural vegetation that are to be cleared prior to clearing. ○ The proponent to support establishment of a community tree nursery for indigenous trees ○ Compensatory planting of trees or other appropriate vegetation after construction works ○ Construction workforce to be sensitized on environmental and ecological conservation	○ Area cleared of vegetation ○ Number of tree nursery established. ○ Number sensitization meetings for workers held	Proponent Supervising engineer/Contractor PMC	M & E reports Engineer's report Photographs	4 months	**150,000** Tree nursery establishment
Soil Erosion	○ Contractor to avoid construction during the wet season. ○ Contractor to limit excavation to the marked boundaries of the project site. ○ Contractor to ensure proper compaction where required. ○ Contractor to provide designated routes for vehicles. ○ Where possible the contractor to exercise selective removal of mature, indigenous trees.	○ Time of excavation ○ Area of land excavated ○ Designated site for stock pile available ○ Number of compactions runs made ○ Marked routes for	Contractor/supervising engineer Proponent Dept. of Agriculture Dept. of Environment Community	Engineers' reports Photographs Attendance register Sectoral Field reports CESSCO reports	8 months	**Factored above**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
	○ Compensatory planting of trees or other appropriate vegetation after construction ○ Sensitization of construction workforce on environmental and ecological conservation and protection.	vehicles available ○ Number of sensitization meetings held ○				
Noise and vibration generation	○ Avoid idling of machinery or engine when not in use. ○ Restrict activities that create noise to daytime only. ○ Workers to be provided with ear muffles. ○ Contractor to ensure the use of well-maintained machineries and vehicles.	○ Number of PPEs purchased. ○ Number of workers using PPEs. ○Number of vehicles and machinery not on idling when not in use. ○Time of operation	Contractor/Supervising engineer/work manager	Local purchase orders Reports Receipts Available servicing cards/receipts	4 months	**10,000 Ear muffs**
Air Pollution (Dust & Machinery and motor vehicle emissions)	○ Ensure that maintenance on all machinery is done regularly to avoid the emission of noxious gases. ○ Drivers and machine operator to avoid unnecessary running of motor vehicle engines and machinery when not in use. ○ Provision of dust masks to workers and ensure their use. ○ Locating haul roads, tips, and stockpiles away from sensitive receptors, considering prevailing wind directions.	○ Frequency of machinery/ vehicle maintenance ○ No / frequency of water sprays and mists ○ No. of designated hauling/stockpiles areas ○ No of PPEs procured/	Contractor/Supervising engineer/work foreman NEMA	LPOs Reports Signed contracts between Contractor & employees	4 months	**100,000 Water sprays**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
	○ Contractor to instruct the drivers to avoid unnecessary speeding near settlements in the project areas ○ Contractor to make sure water sprays and mist are applied as dust suppression measures on loose soils and stockpiles.	Proportion of workers with requisite PPEs ○ No of drivers trained/advised due diligence on machine/vehicle operation				
Oil spills	○ Proper maintenance of vehicles and other equipment (using petroleum products) to avoid fuels and lubricants spills at the project site. ○ The contractor should properly handle, store, and dispose off oils and greases and their wastes during construction by ensuring that servicing is strictly done at designated servicing yard or external petroleum stations. ○ Site staff to be sensitized on safety procedures for fuel storage and re-fueling should be well understood and implemented by site staff.	○ Designated site for disposal of contaminated materials available ○ Number of sensitization meetings held ○ Number of motor vehicle servicing undertaken ○ Number of vehicles serviced	Contractor/supervising engineer	Servicing receipts/cards Reports Attendance registers	8 months	**30,000**
Solid waste generation & accumulation	○ The contractor to exercise waste segregation and to ensure waste not reusable or recyclable is cleared from the project site and disposed off as per NEMA and County Government regulations ○ Contractor to provide temporal waste disposal	○ No of litter bins installed ○ Licensed waste handler in place ○ No of trainings on	Contractor/Project Manager	Receipts Attendance Register Photos	4 months	**5,000 For bins**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
	receptacles in site. ○ Contractor to liaise with licensed waste collector to routinely collect and dispose the waste	waste management ○ NO. of bins for handling COVID 19 waste				
Excavated earth materials & silt	○ Contractor to dump unused excavated materials and debris in designated places as directed by the supervising engineer. ○ Contractor to use excavated soil for the water pan wall/embankment. ○ Excavated silt can be incorporated with compost for use as potting media in the tree nursery.	○ Presence of designated site for unreusable earth materials. ○ Volume of reused earth materials ○ Volume of silt to be used in tree nursery	Contractor/Supervising engineer	Engineers report Photos	4 months	**10,000**
	Sub Total	○				***305,000***
○ **NEGATIVE SOCIAL IMPACTS IN THE CONSTRUCTION PHASE**						
Occupational Health and Safety (OHS)	○ The sites to be protected or fenced off from unauthorized intrusions and warning signs; barricades should be properly displayed and strictly adhered to. ○ All workers to be provided with full protective gear (PPEs) and to use them ○ Workers to be trained on first aid & a fully equipped First Aid Kit provided at site. ○ The contractor to have Incident and Accident Registers on site for recording of injuries or any OHS incidence.	○ No of Labels and warning signs installed ○ No of workers using PPEs on use by those involved at the site ○ No of staff/ workers trained on first-aid ○ No of First-aid Kits installed	Contractor/ Supervising engineer/work foreman Work foreman Directorate of Occupational Health and Safety	Purchase receipts Reports Attendance register Records of testimonials of drivers	4 months	**50,000**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
	○ Contractor to prepare an emergency management and preparedness plan for accident response & avail Emergency contacts for police, ambulance, etc. ○ Contractor to appoint a qualified health and safety person to manage OSH issues. ○ Tools and equipment to be placed in a safe place when not in use. ○ All machines to be operated by skilled personnel only. ○ Workers on contract to be insured	○ No of incidences/ accidents reported ○ NO. of emergency plan for accident response in place ○ Emergency contacts at the site ○ No of persons insured	(DOSH)			
Risk of Accidents to the community	○ Contractor to sensitize the community on the project and the project period and what caution to be taken by the community. ○ Contractor to employ qualified drivers. ○ Drivers to be instructed to observe required speed limits. ○ Installation of warning sign boards at the construction site and identified risk areas.	○ Number of drivers instructed ○ No. of signage in identified risk areas ○ No. of community sensitizations on project implementation, risks and safety measures	Contractor/Supervising engineer	Photographs Attendance register Site visits	4 months	**15,000**
Increase in incidences of HIV/AIDS and STIs	○ Contractor to sensitize workers and community members on HIV/AIDS and other communicable diseases. ○ Contractor's Health and Safety Management Plan (CHSMP) to be enforced through the Directorate of	○ Number of worker and community sensitized ○ No of condom dispensing equipment	Contractor Proponent Public Health	Attendance registers Site visits	8 months	**27,870**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
	Occupational Health & Safety (DOSH) ○ Controlled access to Contractor's Workforce Camps by outsiders. ○ Contractor to provide standard quality condoms at the construction site during the construction period.	installed ○ Number of meetings held for workers and community				
Spread of COVID-19 amongst construction workers	○ The Contractors will develop SOPs for managing the spread of Covid-19 during project execution in line with the World Bank guidance on COVID-19, Ministry of Health Directives and site-specific project conditions; ○ Mandatory provision and use of appropriate PPE) shall be required for all project personnel including workers and visitors; ○ Concentration of more than 15 people in a location to be avoided. ○ Maintain social distancing of at least 1.5 meters where two or more people gathered, ○ Subject workers and other people visiting the site to rapid Covid-19 screening which may include temperature check and other vital signs; ○ Install hand-washing facilities with adequate running water and soap, or sanitizing facilities at entrance to work sites including consultation venues and meetings;	○ No of SOP(s) developed, ○ No of training material developed, ○ No of PPE purchased and used, ○ No of installed handwashing equipment installed.	All the Project components Supervising Eng. & Contractor(s)	SOPs Project assessment reports Purchase orders/receipts Photos	8 months	**50,000**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
	○ Ensure routine sanitization of shared social facilities.					
Labor risks including labor influx	○ Local community members will be given priority in employment opportunities, in casual and unskilled labour. ○ Train the community on the project requirements and product. ○ Training of PMC, SAIC, CESSCOs and Community policing of the project	○ Number of trainings for PMC, SAIC, CESSCOs and Community policing of the project ○ NO. of community members trained on project requirements	Contractor/ CPCU/	Training reports Workers register local administration report on GBV incidences monitoring, assessment	1 month	**50,000**
Risk of social conflict	○ The proponent adherence to national labour code and WB policies through incorporating the same in the Procurement and Contract Agreement document for implementation by the contractor. ○ Contractor to sensitize the workers on code of conduct (COC) ○ Recruit unskilled workforce from the community ○ Offer adequate remuneration for specified tasks as per labour laws and/or as per the prevailing market rates ○ Have equitable distribution of labour opportunities to both men and women	○ No of tenders with specific clause on WB policies such as equality in employment ○ No of signed code of conduct by the workers ○ Community user's development plan developed ○ NO. of PM, SAIC, &	Contractor/Works foreman CPCU Local Project management committee	Minutes Reports Attendance registers	1 months	**10,000**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
	○ ○ Develop and implement local hiring rules in consultation and partnership with the local community. ○ Train workers and the project management committee and rank members on conflict management and resolution	administration trained on GBV				
Child labor and school dropout	○ The proponent to sensitize the community on national children welfare policies, children laws and World Bank policies on the protection of children and the importance of children being educated. ○ The Proponent to ensure the Contractor complies with national and WB policies and rules on welfare of children. ○ Control to ensure there is no child labour at the construction. This can be done by using Identification Cards to verify the age of the workers and casuals.	○ No. of sensitizations on children welfare ○ No of registered workers ○ No of workers who have signed the code of conduct	CPCU	Signed agreements attendance registers copies of ID. Card No. of workers	Construction phase	**10,000**
Gender-based Violence (GBV) at the community level	○ The contractor will implement provisions that ensure that GBV at the community level is not triggered by the Project, including: ○ Effective and on-going community engagement and consultation, particularly with women and girls. ○ Review of specific project components that are known to heighten GBV risk at the community level.	○ Number of engagements with women & girls ○ Code of conduct prepared ○ NO. of GBV risk factor identified	Supervision Consultant GBV Expert Local NGO/CBO	GBV plans Attendance registers GBV action plans	1 year	**100,000**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
	○ The contractor shall develop specific plan for mitigating these known risks, e.g. sensitization employment. ○ The contractor will ensure adequate referral mechanisms are in place if a case of GBV at the community level is reported related to project implementation.	○ NO. of plans to mitigate risks developed. ○ NO. of Referral mechanisms in place.				
Sexual Exploitation and Abuse by project workers against community members	○ Proponent to develop and implement a SEA action plan with an Accountability and Response Framework as part of the C-ESMP. ○ The SEA action plan will include how the project will ensure necessary steps are in place for: ○ Prevention of SEA through including Code of Conduct (CoC) and ongoing sensitization of staff on responsibilities related to the COC. ○ Response to SEA by including survivor-centered coordinated multi-sectoral referral and assistance to complainants according to standard operating procedures. ○ Engagement with the community & development of confidential community-based complaints mechanisms discrete from the standard GRM. ○ Integration of SEA in job descriptions, employments contracts, performance appraisal systems, etc.;	○ NO. of SEA Action Plans ○ NO. of workers signed COC ○ Number of community members engaged on developing community-based complaint mechanism. ○	Supervision Consultant GBV Expert	SEA action plan Attendance registers	1 year	**150,000**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
	development of contract policies related to SEA.					
	Sub Total	○				***475,000***
	○ Total	○				***780,000***
NEGATIVE ENVIRONMETAL IMPACTS IN THE OPERATION PHASE						
Surface & Ground water pollution	○ The water pan should be fenced as indicated in the BQ and having only one controlled entrance. ○ The users should draw off water from the designated sites only. ○ The Contractor to clear the site of all solid wastes, construction materials and any spills after completion of the construction works. ○ The Proponent to ensure the construction of pit latrines in the site as provided in the BOQ at a safe distance from water sources. ○ The Proponent to develop and implement (through sensitization of farmers) an Integrated Pest Management Plan (IPMP) ○ Proponent to ensure regular monitoring of water quality.	○ No of animals drinking from water troughs ○ No of community members drawing water from communal drawing points constructed ○ Acreage fenced ○ NO. of pit latrines constructed ○ NO. of IPMP developed & implemented ○ NO. of farmers sensitized on IPMP ○ Frequency of water quality testing.	Proponent Dept. of Livestock and agricultural officers Proponent Community in catchment area	Designs & BQs Reports Photographs Attendance Registers Training manuals	6 months	**150,000 IPMP development & implementation.**
Soil erosion & Siltation	○ Construction of silt traps along the inlet water course as will be guided by the supervising engineer	○ No of silt traps constructed along the	PMC Proponent	Designs & BQs	8 months	**75,000 sensitiza**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
	○ Regular maintenance of the check dam/silt traps by the community ○ The embankment to be grown with suitable grass as outlined in the design plan. ○ The proponent to ensure the implementation of the developed integrated sustainable land management (ISLM) plan. ○ The catchment community to be sensitized on the ISLM & to be trained on farm SLM practices e.g., terracing, minimal tillage, agroforestry crop rotation, intercropping. ○ Regular desilting should be undertaken (removal of silt from the reservoir using manual labour can be periodically organized during the dry season). ○ The proponent to consider piping water to other sites in future to avoid animal concentration and overgrazing in the project area. ○ Sensitize the community on appropriate stock rate.	inlet water course ○ Acreage of land under catchment management and conservation through SLM ○ No of trainings on SLM ○ Area of embankment planted with grass. ○ NO. of additional cattle troughs. ○ NO. of community members sensitized on stock rate. ○ NO. of gabions constructed ○ Frequency of desiltation. ○	Community Director Department of agriculture	Training manuals Attendance Registers Photographs		**tion**
Water pan breaking its walls and associated	○ The Proponent should develop the Chepsepin Water Pan Crisis Action Plan (CAP). The CAP should contain the details for Water pan CAP as shown under Annex 9.	○ CAP in place ○ number of inspections conducted/ frequency of inspection.	Local project management committee Chief/Village	Inspection reports CAP Training	1 year	**250,000**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
risks	○ A qualified Water Resource Professional should inspect the site every year and at least at the end of every rainy season. ○ Undertake regular (continuous) monitoring and assessment of the water pan and project site especially with the current climate change, before and after the rainy season. ○ Proper inspection should be done once in 3 years to a maximum of once in 5 years by a qualified professional ○ The inspection forms should be properly filled, maintained and action recommended. ○ Train the project management committee and the local administration (local technical team) on scouting which will lead to early detection and responding to any risk situation. ○ An Emergency Action Plan (EAP) should always be maintained by the operation and maintenance team and this should be done during the routine preventive maintenance by the local technical team ○ Undertake Environmental Audit for the water pan annually as required by NEMA. ○ Implement recommendations and action plans effectively and efficiently	○ No of trainings for PMC ○ No of annual inspections conducted by engineers ○ Number of seasonal monitoring and assessment of the water pan ○ No of Environmental Audit for the water pan annually ○ Presence of Emergence Response Plan (ERP)	Administrator CPCU/County Government	manuals Attendance Registers Audit Reports ERP Periodical M & E reports Photographs		

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
Solid waste generation	○ Sensitization of the farmers on the disposal of used agrochemical wrappings, containers and packages. ○ Proponent to ensure wastes from farming activities are sorted before disposal ○ Proponent to provide litter/waste bins in the project area for temporal storage of waste. ○ Use of a NEMA registered waste collector, transporter and disposer.	○ NO. of famers sensitized on agrochemical waste disposal ○ NO. of waste bins provided. ○ NO. of registered waste collectors engaged	Proponent Director agriculture & livestock CPCU	Attendance register Training manuals Reports	once	**27,870 training & waste bins**
Drowning Risk	○ The risk has been significantly reduced through the proposed fencing and installation of a gate. ○ The gate to be always locked with a padlock. ○ The community be sensitized on the potential risk of drowning. ○ Involvement of the whole community members in ensuring that the perimeter fence is maintained and not destroyed (encourage community policing). ○ Employ a person to guard the water pan/through the water users' association (WUA) ensure regular monitoring.	○ Length of perimeter fence constructed ○ No. of sensitized ○ No. of entrances ○ No. of persons responsible for policing	PMC	BQs Reports Photographs Signed agreements with community policing team	1 year	**60,000**
	○ Sub Total	○				***575,000***
NEGATIVE SOCIAL IMPACTS IN OPERATION PHASE						
Outbreak of livestock	○ Regular disease surveillance by the veterinary department and community.	○ Number of disease surveillance	CPCU	Surveillance reports	1 year	**100,000**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
diseases	○ Sensitization of the community on disease spread, monitoring and control. ○ A livestock disease management plan be put in place by the veterinary department to ensure disease incidences are promptly responded to and addressed.	○ No of Sensitization meetings held on disease control ○ A livestock disease management plan put in place		Training reports Attendance Registers Disease Management Plan		
Human health impacts e.g. Malaria and schistosomiasis	○ Sensitize the community on malaria prevention through use of mosquito nets, local and indoor residual spraying and bush clearing near households. ○ Malaria surveillance programme to be maintained. ○ Establish community-based health education committee that facilitate malaria control programme facilitated and coordinated through public health department ○ Sensitize the community on water purification methods.	○ No/ Proportion of households with mosquito nets ○ No of people trained on malaria & water borne diseases control ○ Record of disease incidence ○ No of households practicing safety rules	CPCU Department of Public Health	Photographs Attendance Registers	2 weeks	**50,000**
Spread of COVID-19 amongst community members during consultations	○ Electronic means of consulting stakeholders and, holding meetings, whenever possible, shall be encouraged whenever feasible. ○ SOPs to be developed for engagements/training materials etc. ○ Avoid concentrating of more than 15 community members at one location. Where there are two or	○ No of SOP(s) developed, ○ No of training material developed, ○ No of PPE purchased and used, ○ No of installed	All the Project components Communications/Stakeholder	SOPs, training manuals Attendance registers Project assessment	1 year	**100,000**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
	more people gathered, maintain social distancing at least 1.5 meters ○ The team carrying out engagements within the communities on one-on-one basis will be provided with appropriate PPE for the number of people they intend to meet. ○ Use traditional channels of communications (TV, newspaper, radio, dedicated phone-lines, public announcements, and mail) ○ In situations where online interaction is challenging, disseminate information through digital platform (where available) like Facebook and WhatsApp & Chat groups. ○ Ensure online registration of participants, distribution of consultation materials and share feedback electronically with participants.	handwashing equipment installed ○ No. of participants registered on online digital platform such as WhatsApp. ○ No of electronic media used for information dissemination/engagement e.g. printed electronic mails, addresses of video links created etc.	Engagement Expert.	reports		
Water use related conflict	○ Develop and implement a community users' development plan in consultation and partnership with the local community and existing WRUAs ○ Formulation of local by-laws to guide the use of water in the project area ○ Sensitize the community/beneficiaries on efficient water use to avoid wastage. ○ Raise community awareness on the benefits of the	○ NO. of community water users plan developed & implemented ○ NO. of bylaws developed and implemented ○ NO. of community	CPCU Proponent WRA Department of Water	Attendance register Training manual Reports	Quarterly	**75,000**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
	project for more cooperation.	members educated on water conservation				
Poor leadership and management problems	○ Training of PMC on water project management, financial management and promotion of accountability & accountability. ○ Sensitization of project beneficiaries/community members on project management.	○ NO. of PMC trained ○ NO. of trainings ○ NO. of community members trained on project management.	CPCU Proponent	Attendance register Reports	Quarterly	**50,000**
Child labour and school drop out	○ Train village volunteer child monitors to work closely with the office of the chief and the department of children on issues of child protection ○ Sensitize the community on child protection issues relating to the project.	○ NO. of village volunteer's child monitors trained. ○ NO. of community members trained on child protection.	CPCU Proponent Chief	Attendance register Reports	Quarterly	**25,000**
	Sub Total	•				**400,000**
	Total					**975,000**
DECOMMISSIONING PHASE						
Decommissioning Impacts	○ Proponent to undertake environmental and social impacts of the proposed decommissioning	○ Duration of investigation ○ NO. of Decommissioning Plans ESMP developed	Proponent	Decommissioning report Decommissioning Plan ESMP	1 months	**200,000**
Conflict Management	○ Proponent to notify all the Project Affected Persons (PAP)	○ NO. of methods of notification	Proponent	Notification notice	1 week	**30,000**

Environment / Social Impact	Proposed Mitigation Measure	Monitoring Indicator	Responsibility	Means of Verification	Time Frame	Estimated cost (Kshs)
		○ NO. of PAPs notified				
	Sub Total					***230,000***
TOTAL						**1,985,000**

7 CONCLUSION AND RECOMMENDATION

7.1 Conclusions

The proposed Chepsepin Water Pan project will result in several positive impacts to the beneficiary community. Furthermore, appropriate specific mitigation measures have been proposed for the identified negative impacts as outlined in the comprehensive environmental and social management and monitoring plan (ESMMP). The proponent and the contractor should ensure strict implementation of the proposed mitigation measures during the construction and operation phases of the project implementation.

7.2 Recommendations

Based on the assessment the experts recommend that the proposed project be allowed to proceed since it would not result to significant, cumulative, or irreversible negative impacts. The experts further recommend the project for approval by the National Environmental Management Authority (NEMA) provided the outlined mitigation measures are implemented as outlined in the ESM&MP**. On approval, t**he ESMMP should be shared with the Contractor who will implement the Contractor-Specific Environmental and Social Management and monitoring Plan (C-ESMMP). The County Environmental Social Safeguards and Compliance Officer (CESSCO) in consultation with other relevant stakeholder's and institutions should monitor the implementation ion the ESMMP in all the phases of implementation to ensure full compliance.

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APPENDICES

Appendix I: Certificate of Registration Chepsepin Water Pan Community

Certificate No. 0085200

Republic of Kenya

MINISTRY OF LABOUR AND SOCIAL PROTECTION
STATE DEPARTMENT FOR SOCIAL PROTECTION
DEPARTMENT OF SOCIAL DEVELOPMENT

SELF HELP GROUP(SHG)

This is to Certify that

KATUMATAI WATER PAN AND HAY FARM GROUP

Group Name / Project: KATUMAI/ ALALE

Sub-Location / Ward: ALALE

Location: ALALE

Division: POKOT NORTH

Sub-County: KACHELIBA

Constituency: WEST POKOT

County:

Registration No.: PZ/2021/56

Date of Issue: 27/09/2021

Is registered with the Department of Social Development by:

Name: DORCAS TELES

County / Sub County Social Development Officer

Signature

27/09/2021

Date of Issue

SUB COUNTY SOCIAL DEVELOPMENT OFFICE WEST POKOT P.O. BOX 37, KAPENGURIA

Kenya VISION 2030

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

Appendix II: Sample Copies of Filled Public Consultation Questionnaires

Environmental and Social Impact Assessment of the Proposed Sub Project

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (SPR) FOR THE PROPOSED CHEPSEPIN WATER PAN IN ALALE SUB COUNTY, ALALE WARD, ALALAE LOCATION, KAMUNAI SUB LOCATION

SUMMARY PROJECT REPORT (SPR) QUESTIONNAIRE

PROPOSED DEVELOPMENT OF CHEPSEPIN WATER PAN AT ....CHEPSEPIK.....

Pursuant to the provisions of the Environmental Management and Co-ordination Act (1999), and the Environmental (Impact Assessment and Audit) Regulations (2003) revised in 2015, World Bank's Safeguard Policies, Public Health Act and Legal Supplement 2003; an Environmental and Social Site Assessment for ESIA is being conducted for the proposed **Development of Chepsepin Water Pan in West Pokot County.**

RESPONDENT'S DETAILS

Name....SIMATIA Lokwaki Lar.....

ID No. ....26 944032..... **Mobile No.**....0714837 4156.....

County....WEST POKOT..... **Location**....kalingonyong.....

Sub County....POKOT North..... **Sub Location**....Kabunai.....

Ward....Alale Ward..... **Village**....kalingonyong 4kms.....

(Please note that these details are required for the purposes of authenticity in relation to the proposed Sub Project)

1. Are you aware of the proposed development of **Chepsepin Water Pan?** Yes ☑ No ☐
2. How far is your house/land from the proposed sub-project site (in kms) ....4 kms...
3. Are you familiar with the activities that would be involved in the proposed **Development of Chepsepin Water Pan** Sub-Project?

   Yes ☑ No ☐

Page 1 of 2

If YES, do you expect any interference as a result of the proposed sub-project implementation

Yes ☐ No ☑

4. What are the **main challenges /negative impacts** that may be associated with the proposed sub-project? *(Major impacts during the project implementation phases).*

Leaps Mosquitoes

5. Do you think this proposed ***Chepsepin Water Pan*** sub-project is suitable and compatible with the surrounding developments?

Yes ☑ No ☐

6. Within this area, are there similar sub-projects?

Yes ☐ No ☑

If YES how far are they from the proposed sub-project site (in Kms) N/A

7. What are some of the **positive impacts** you can attach to this sub-project?

Reduce conflicts between communities
Reduce livestock theft
Reduce distances search for water

Are there any sensitive ecosystems within the area?

Yes ☐ No ☑

If yes Specify N/A

8. Do you support the proposed construction of ***Chepsepin Water Pan*** Sub Project?

Yes ☑ No ☐

9. Any other comments/suggestions you would like to make in relation to this proposed sub-project.

No comment

Signature ..... **Date** 26/8/2021

THANK YOU FOR YOUR RESPONSE

Page 2 of 2

Environmental and Social Impact Assessment of the Proposed Sub Project

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (SPR) FOR THE PROPOSED CHEPSEPIN WATER PAN IN ALALE SUB COUNTY, ALALE WARD, ALALAE LOCATION, KAMUNAI SUB LOCATION

SUMMARY PROJECT REPORT (SPR) QUESTIONNAIRE

PROPOSED DEVELOPMENT OF CHEPSEPIN WATER PAN AT ...CHEPSEPIN.....

Pursuant to the provisions of the Environmental Management and Co-ordination Act (1999), and the Environmental (Impact Assessment and Audit) Regulations (2003) revised in 2015, World Bank's Safeguard Policies, Public Health Act and Legal Supplement 2003; an Environmental and Social Site Assessment for ESIA is being conducted for the proposed **Development of Chepsepin Water Pan in West Pokot County.**

RESPONDENT'S DETAILS

Name.....CHEPTAPALAL LOKWABONG.....

ID No. 34089811 **Mobile No.**.....

County.....WEST POKOT..... **Location**.....ALALE.....

Sub County.....POKOT NORTH **Sub Location**.....KAMUNAI.....

Ward.....ALALE..... **Village**.....CHEPSEPIN.....

(Please note that these details are required for the purposes of authenticity in relation to the proposed Sub Project)

1. Are you aware of the proposed development of **Chepsepin Water Pan?** Yes ☑ No ☐
2. How far is your house/land from the proposed sub-project site (in kms) .....500meter D/S
3. Are you familiar with the activities that would be involved in the proposed **Development of Chepsepin Water Pan** Sub-Project?

   Yes ☑ No ☐

Page 1 of 2

If YES, do you expect any interference as a result of the proposed sub-project implementation

Yes ☐ No ☑

4. What are the **main challenges /negative impacts** that may be associated with the proposed sub-project? *(Major impacts during the project implementation phases).*

- Drowning of Animals / Children.
- Water borne Diseases

5. Do you think this proposed *Chepsepin Water Pan* sub-project is suitable and compatible with the surrounding developments?

Yes ☑ No ☐

6. Within this area, are there similar sub-projects?

Yes ☐ No ☑

If YES how far are they from the proposed sub-project site (in Kms).....

7. What are some of the **positive impacts** you can attach to this sub-project?

- Employment to youth
- Reduced distance to water points

Are there any sensitive ecosystems within the area?

Yes ☐ No ☑

If yes Specify.....

8. Do you support the proposed construction of *Chepsepin Water Pan* Sub Project?

Yes ☑ No ☐

9. Any other comments/suggestions you would like to make in relation to this proposed sub-project.

Signature ..... **Date** 26/8/2021

THANK YOU FOR YOUR RESPONSE

Page 2 of 2

Environmental and Social Impact Assessment of the Proposed Sub Project

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (SPR) FOR THE PROPOSED CHEPSEPIN WATER PAN IN ALALE SUB COUNTY, ALALE WARD, ALALAE LOCATION, KAMUNAI SUB LOCATION

SUMMARY PROJECT REPORT (SPR) QUESTIONNAIRE

PROPOSED DEVELOPMENT OF CHEPSEPIN WATER PAN AT ....CHEPSEPIN.....

Pursuant to the provisions of the Environmental Management and Co-ordination Act (1999), and the Environmental (Impact Assessment and Audit) Regulations (2003) revised in 2015, World Bank's Safeguard Policies, Public Health Act and Legal Supplement 2003; an Environmental and Social Site Assessment for ESIA is being conducted for the proposed **Development of Chepsepin Water Pan in West Pokot County.**

RESPONDENT'S DETAILS

Name...CHEPOSIRKOI ANGORIAI.....

ID No. ...24572630..... **Mobile No**.....

County...WEST POKOT..... **Location**...ALALE.....

Sub County...POKOT NORTH..... **Sub Location**...KAMUNAI.....

Ward...ALALE..... **Village**...KALINGANTANG...

(Please note that these details are required for the purposes of authenticity in relation to the proposed Sub Project)

1. Are you aware of the proposed development of **Chepsepin Water Pan?** Yes ☐ No ☐
2. How far is your house/land from the proposed sub-project site (in kms) .....1Km...
3. Are you familiar with the activities that would be involved in the proposed **Development of Chepsepin Water Pan** Sub-Project?

   Yes ☑ No ☐

Page 1 of 2

If YES, do you expect any interference as a result of the proposed sub-project implementation

Yes ☐ No ☑

4. What are the **main challenges /negative impacts** that may be associated with the proposed sub-project? *(Major impacts during the project implementation phases).*

#Breeding of mosquitoes
#Drowning

5. Do you think this proposed ***Chepsepin Water Pan*** sub-project is suitable and compatible with the surrounding developments?

Yes ☑ No ☑

6. Within this area, are there similar sub-projects?

Yes ☐ No ☑

If YES how far are they from the proposed sub-project site (in Kms).....

7. What are some of the **positive impacts** you can attach to this sub-project?

#Reduce distance
#Promote good health

Are there any sensitive ecosystems within the area?

Yes ☐ No ☑

If yes Specify.....

8. Do you support the proposed construction of ***Chepsepin Water Pan*** Sub Project?

Yes ☑ No ☐

9. Any other comments/suggestions you would like to make in relation to this proposed sub-project.

Signature ..... **Date** 26/8/2021

THANK YOU FOR YOUR RESPONSE

Page 2 of 2

Appendix III: Minutes of Public Consultation Meetings

MINUTES OF ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT FOR THE PROPOSED CHEPSEPIN WATER PAN IN ALALE SUB-COUNTY, ALALE WARD, ALALE LOCATION, KAMUNAI SUB-LOCATION, WEST POKOT COUNTY HELD ON 27 AUGUST 2021 AT CHEPSEPIN VILLAGE AT 2:00 PM.

MEMBERS PRESENT

Attached as an Appendix – List of Participants

AGENDA

1. Introductions and opening remarks
2. Purpose of the meeting
3. Chepsepin Water Pan Project Brief
4. Concerns, Questions and Responses
5. Way forward
6. A.O.B. & adjournment

PRELIMINARY

The meeting started with a word of prayer from Rebecca Sinamoi at 14:00hrs. The meeting was held at Chepsepin Trading village on 27 August 2021. The meeting was hosted and chaired by area Assistant Chief. A total of 34 community members attended the ESIA public meeting. The meeting started at 14:20hrs.

MIN. 1 - 08/27/2021: INTRODUCTION & OPENING REMARKS

The area Assistant Chief Mrs. Selinah Chepkemei welcomed the attendants for a round of introductions starting by highlighting the need to put in place measures for covid-19 prevention by adhering to Ministry of Health guidelines that included wearing of appropriate masks, washing hands regularly or using alcohol-based sanitizer and social distancing. Mrs. Selinah also emphasized that the water-pan project will be owned by the community and hence the need for active involvement of community members.

Thereafter she welcomed Kenya Climate Smart Agriculture Project (**KCSAP**) County Environment and Social Safeguard Officer (**CESSCO**) Agneta Aleyo to introduce herself, to highlight the purpose and significance of that day's meeting. Ms. Agneta explained the need of conducting ESIA and emphasized that public participation was a statutory requirement as per the Constitution of Kenya. She assured the residents that this meeting signified that the project was about to commence, subject to issuance of Licence from NEMA. Ms. Agneta then introduced the ESIA team and welcomed the Lead Consultant to take over.

MIN. 3 – 08/27/2021: PROJECT BRIEF

The ESIA lead Consultant started by briefing the community members about the proposed project. He explained that the proposed water pan will have a capacity of 27,870m^3 of water

and occupy an area of 1 Ha or 2.5 acres of land. He explained that the project activities will include site clearance, excavation and construction of the pan embankment and excavation of the spillway. He also explained that the water pan will be fenced-off and a draw off system provided for with a communal water point and watering trough. He also mentioned that VIP toilets will be constructed, each with a bathroom attached for both male and female. He also emphasized that the project will be owned by the community and called upon members to support the efforts of the project management committee to ensure sustainability.

MIN. 2 - 08/27/2021: PURPOSE OF THE MEETING

The consultant explained to the participants that consultation and public participation process is a requirement by the Kenyan Constitution and a mandatory procedure stipulated in the Environmental Management and Coordination Act (EMCA) CAP 387 Section 58. According to section 59, and the second schedule of EMCA (Amendments 2019) new projects like the proposed Chepsepin water-pan, must undergo Environmental and Social Impact Assessment that includes conducting public meetings for the stakeholders, project affected persons, local community/ surrounding enterprises or interested and affected parties. The resulting summary project report must be submitted to the National Environment Management Authority (NEMA) for public and technical review, approval and subsequent issuance of relevant license to enable commencement of project implementation. The consultant also underscored the fact that the project will be funded by World Bank and the need to meet the operational safeguards which require that the project submits a summary project report prior to facilitation.

The main objective of the consultation meeting was to

1. Gather comments, suggestions and concerns of the interested and affected parties in the proposed project, and incorporate them in the summary project report (SPR).
2. Disseminate and inform the public and stakeholders about the project with Special reference to its key components and description
3. Create awareness among the public on the need for the ESIA for the proposed project

The ESIA team Leader then welcomed the attendants to raise their comments, concerns and suggestions in regard to the proposed water pan project.

MIN. 4 –08/27/2021: POSITIVE IMPACTS ANTICIPATED BY MEMBERS FROM THE MEETING

The community welcomed the project. They particularly noted that the residents suffered a severe shortage of water in the area for both domestic and livestock use.

Some of the positive impacts raised by members are listed below:

1. **Susan Siwalem**: Was optimistic that the proposed construction of sanitary facilities and provision of water drawing points will ultimately result in improved sanitation, public hygiene and reduction out-breaks of typhoid which was common in the village.

2. **Longuratukei Komolkapel**: Was hopeful that the project will provide temporary job opportunities to the youths in the area through such tasks as clearing the site, loading and offloading of construction materials and deliveries.
3. **Chemnangar Logwale:** Pointed out that the project will enable community members to establish a vegetable garden which will improve nutrition and create additional income for the households.
4. **Monica Siwalem:** Said that the project will reduce trekking distance in search of water for women and children and therefore save time for other productive activities.
5. **Moses Lolibo:** Added that upon completion the project will result to a more reliable source of water for the community domestic use and for livestock.

MIN 5 - 08/27/2021: CONCERNS, QUESTION & ANSWER SESSION AND RESPONSES

The Consultant gave community members opportunity to raise questions and concerns on the project and their possible impacts with translations done by the Assistant Chief where native Pokot language was used. The Lead consultant and KCSAP officer were available to answer and provide relevant explanations to the satisfaction of participants where possible. The feedback is summarized in the Table below.

Table 1.1 Concerns by ESIA meeting attendants and Responses by Consultants and KCSAP

Key Issue	Stakeholder concerns	Technical Team Response
1. **Dust/Emissions**	**Esther Todonyang'** raised concern about emissions and dust during excavation and transportation of the borrow material, noting that there could be emission of dust from the excavation sites and also from the vehicles transporting the borrow material.	The technical team responded that dust masks will be provided to all workers at the site to reduce against occupational health risks of inhaling exhaust gases and dust. The team also assured residents that there will be minimum impact of dust pollution to the surrounding as the contractor will ensure minimum vehicular traffic, moving only in designated paths and at prescribed speed limits; and that all vehicles/motorised equipment will be properly maintained to minimize exhaust fumes.
2. **Vibrations/Noise Impacts**	The attendants also wanted to know the impact of the noise emitted by the machines and whether it could disrupt learning of	The Technical team responded that the contractor will restrict blasting, use machines with minimum vibrations and ensure available practices on-site to minimize occupational noise levels. The

	pupils at the nearby Chepsepin Primary School.	technical team also pointed out that Chepsepin Primary School was more than half a kilometre from the site and therefore was less prone to the impact of noise and vibrations if any.

MIN 6 - 08/27/2021: SUGGESTIONS FROM MEMBERS IN ATTENDANCE

- The members recommended that unskilled and semi-skilled workers needed for the construction of the water-pan be recruited locally. Skilled workers can be recruited from outside the project area.
- The ESMP should include the need for appropriate PPE such as gloves, gumboots to prevent injuries and accidents
- Ensure the workers/employees of the proposed project are insured through WIBA for adequate compensation due to injury while at work.

MIN 7-08/27/2021: WAYFORWARD

All members present applauded the proposed water-pan project and unanimously agreed that it should be implemented.

MIN8– 08/27/2021: A.O.B AND ADJOURNMENT

There being no other business, the meeting ended with a word of prayer from Siwareng Lotukon at 15:30hrs.

Signed by: _____

Erick O. Orwa, ESIA Lead Expert

_____ ____27/07/2021_____

Sign *Date*

Appendix IV: List of Attendants for Public Consultation

ASST. CHIEF KAMUNAI SUB-LOCATION P O Box 1-30600 KAPENGURIA

Project Title: ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (SPR) FOR THE PROPOSED CHEPSEPIN WATER PAN IN ALALE SUB COUNTY, ALALE WARD, ALALAE LOCATION, KAMUNAI SUB LOCATION

Date: 27/8/2021 Venue: ALALE - CHEPSIPIN

PUBLIC PARTICIPATION ATTENDANCE LIST

NO	NAME	DESIGNATION / VILLAGE	Gender M/F	Below 35 Years	Above 35 Years	ID NO. / P No.	TELEPHONE NUMBER	SIGNATURE
1	JACOB LORIPO	ALALE WARD ADMIN	M	✓		25111461	0726562529	[signature]
2	ACHIPA MUSA	ALALE WARD TEACHER	M	✓		28200369	0748254101	[signature]
3	Benson [illegible]	Teacher	M	✓		12674166	0721530561	[signature]
4	KARAIKWANK ROBERT	Bed bails [illegible]	M	✓		11281918	076497768	[signature]
5	REBECA SINAMOI	Chepsipin	F		✓			[thumbprint]
6	CHEMNANGAR LOGWALE	CHEPSIPIN	F	✓		34089769	0743365763	[thumbprint]
7	REGINA LUKABANG	CHEPSIPIN	F	✓				[thumbprint]
8	CHEPORALE CHEMANORWA	CHEPSIPIN	F		✓			[thumbprint]
9	PHILIP NG'URAKAMAR	CHEPSIPIN	M	✓		26744066	0792161865	[thumbprint]
10	SELINA NG'URA	CHEPSIPIN	F	✓				[thumbprint]

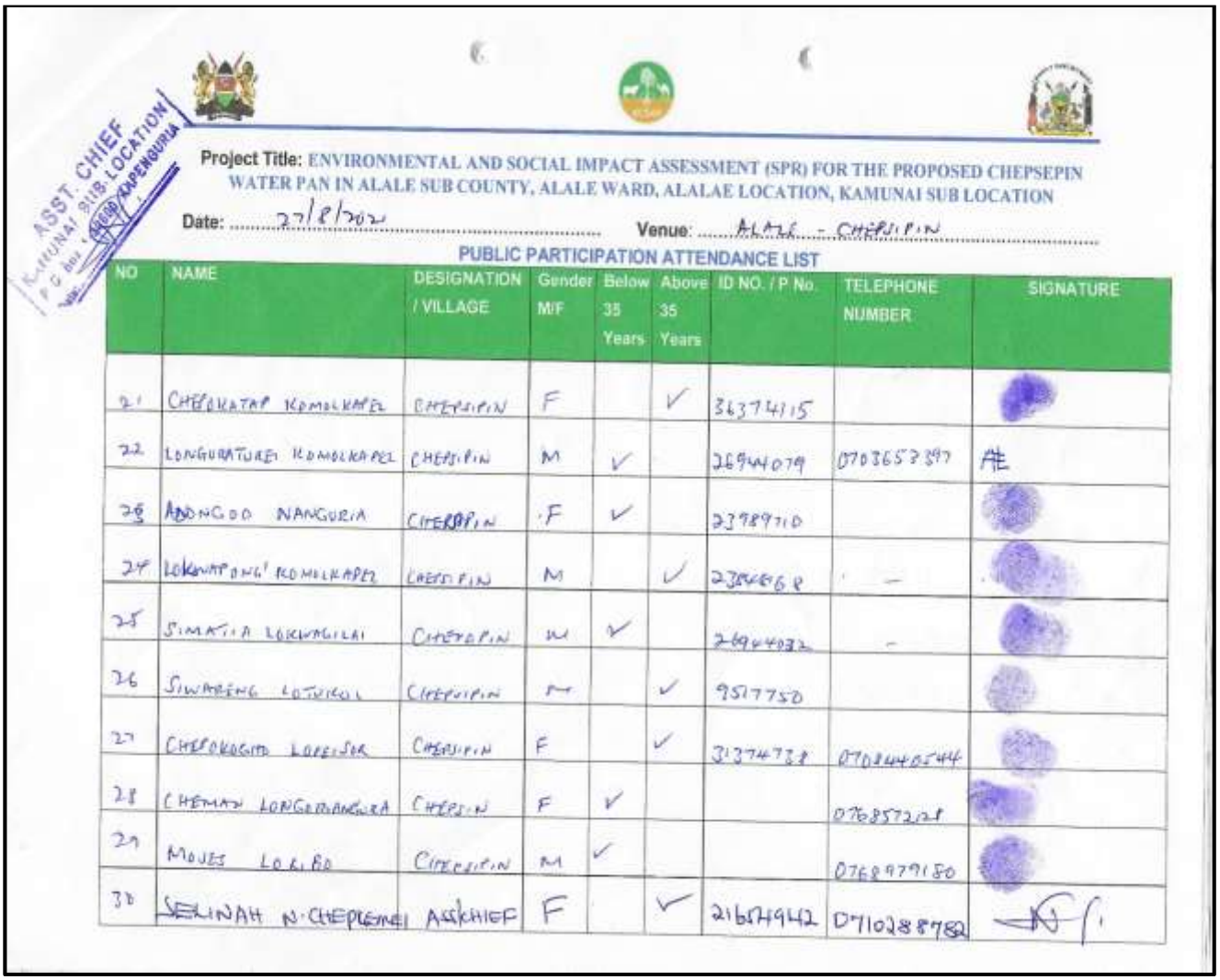
ASST. CHIEF KAMUNAI SUB LOCATION P.O BOX 30600 KAPENGURIA

Project Title: ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (SPR) FOR THE PROPOSED CHEPSEPIN WATER PAN IN ALALE SUB COUNTY, ALALE WARD, ALALAE LOCATION, KAMUNAI SUB LOCATION

Date: 27/8/2021 **Venue:** ALALE – CHEPSIPIN

PUBLIC PARTICIPATION ATTENDANCE LIST

NO	NAME	DESIGNATION / VILLAGE	Gender M/F	Below 35 Years	Above 35 Years	ID NO. / P No.	TELEPHONE NUMBER	SIGNATURE
11	SIWARENG LOTUKOA	CHEPSIPIN	M		✓	9517750	–	
12	LONGOLE SAKCHI	CHEPSIPIN	M		✓			
13	JACKLINE LOKWAPANG'	CHEPSIPIN	F	✓				
14	MONICA SIWALEM	CHEPSIPIN	F		✓			
15	CHEPOCHEN LOMAILUK	CHEPSIPIN	F	✓		26743243		
16	MONICA ABRAHAM	CHEPSIPIN	F	✓				
17	ESTHER TODONYANG'	CHEPSIPIN	F		✓			
18	SUSAN SIWALEM	CHEPSIPIN	F	✓				
19	CHEPOKAPTOYOY LONGURATUKET	CHEPSIPIN	F	✓		29516888		
20	CHEPTANU AMKALEL	CHEPSIPIN	F		✓	34041431		



ASST. CHIEF KAMUNAI SUB LOCATION P.O. BOX KAPENGURIA

Project Title: ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (SPR) FOR THE PROPOSED CHEPSEPIN WATER PAN IN ALALE SUB COUNTY, ALALE WARD, ALALAE LOCATION, KAMUNAI SUB LOCATION

Date: 27/8/2021 **Venue:** ALALE - CHEPSIPIN

PUBLIC PARTICIPATION ATTENDANCE LIST

NO	NAME	DESIGNATION / VILLAGE	Gender M/F	Below 35 Years	Above 35 Years	ID NO. / P No.	TELEPHONE NUMBER	SIGNATURE
21	CHEPKWATAP KOMOLKAPEL	CHEPSIPIN	F		✓	36374115		
22	LONGURATUREI KOMOLKAPEL	CHEPSIPIN	M	✓		26944079	0703653397	
23	ADONGOO NANGURIA	CHEPSIPIN	F	✓		23989710		
24	LOKWAPONG' KOMOLKAPEL	CHEPSIPIN	M		✓	23[illegible]68	-	
25	SIMATIA LOKWAGILAI	CHEPSIPIN	M	✓		26944032	-	
26	SIWAPENG LOTUKOL	CHEPSIPIN	M		✓	9517750		
27	CHEPKOGEI LOPESOR	CHEPSIPIN	F		✓	31374738	0708440544	
28	CHEMAN LONGOLANGURA	CHEPSIN	F	✓			0768572128	
29	MOSES LOKIRO	CHEPSIPIN	M	✓			0768979180	
30	SELINAH N. CHEPLENGEI	ASSTCHIEF	F		✓	21654942	0710288782	

ASST. CHIEF KAMUNAI SUB LOCATION P.O. Box [illegible]

Project Title: ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (SPR) FOR THE PROPOSED CHEPSEPIN WATER PAN IN ALALE SUB COUNTY, ALALE WARD, ALALAE LOCATION, KAMUNAI SUB LOCATION

Date: 21/8/2021 **Venue:** ALALE - CHEPSEPIN

PUBLIC PARTICIPATION ATTENDANCE LIST

NO	NAME	DESIGNATION / VILLAGE	Gender M/F	Below 35 Years	Above 35 Years	ID NO. / P No.	TELEPHONE NUMBER	SIGNATURE
1	AGNETA ALEYO	KAPENGURIA	F		✓	23292294	0723640710	
2	DOUGLAS MBURA	EXPERT	M		✓	24573673	0720616945	
3	ERICK O. ORWA	ESIA EXPERT	M		✓	24077629	0721178504	
	LOBIL RITEI	MEMBER	M	✓			0759184633	
	SIWARENG CORRE	MEMBER	M	✓			0718969977	
	LONTARENG LOWARDONG	MEMBER	M	✓			0741387663	
	LOKWALILAI LOMAKURA	SECRETARY	M	✓		26944032	0748374456	

Appendix V: List of Key Informants Interviewed

REPUBLIC OF KENYA

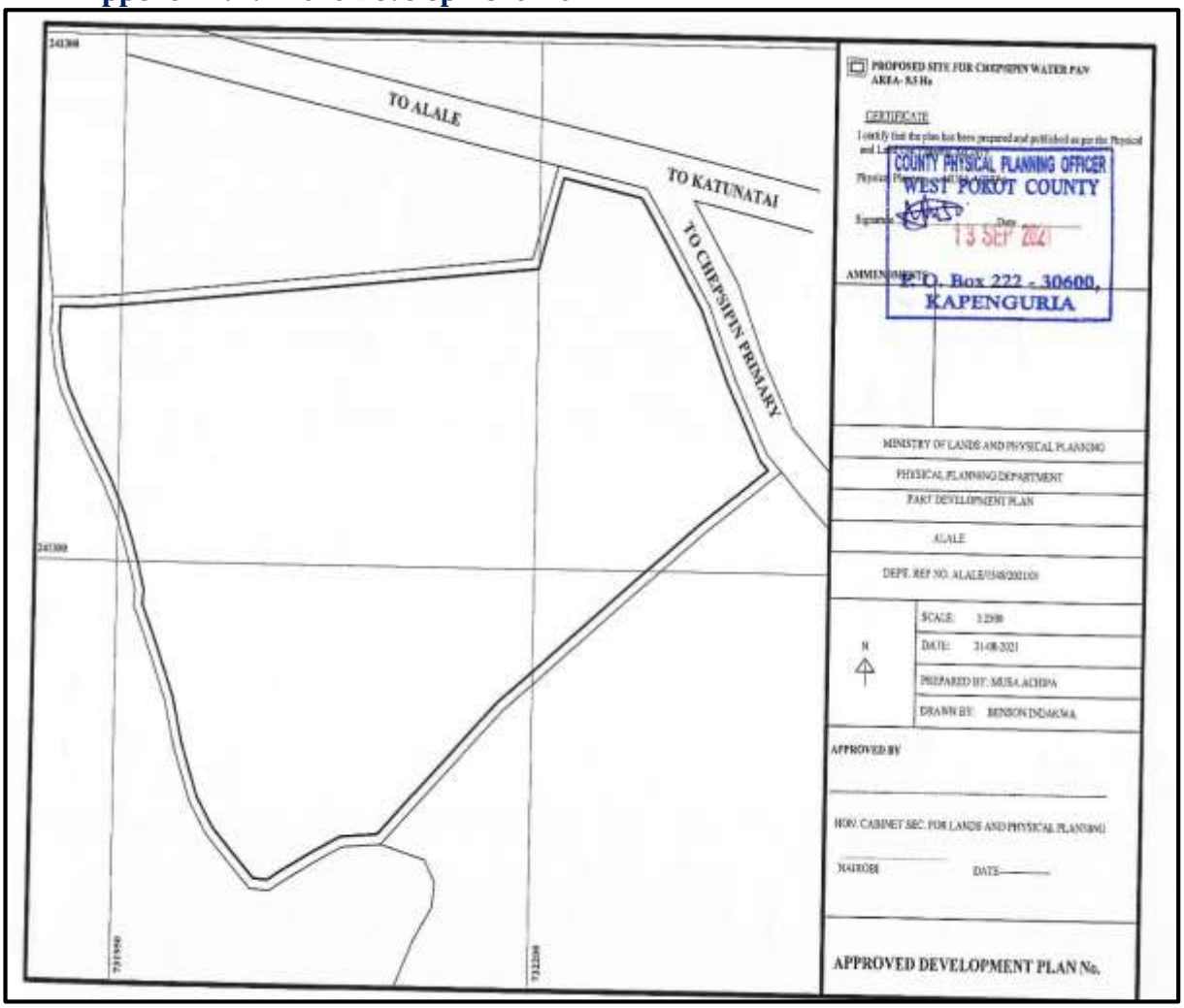
KCSAP
Kenya Climate Smart Agriculture Project

ATTENDANCE LIST

Activity: STAKEHOLDER CONSULTATION FOR WATER PAN Date: 30/8/2021 Venue: Alale/Katnefai

No	Name	Gender	Design	Station	Phone No	Email address	Signature
01	Jacob Loripo	M	Ward Admin	ALALE	0726562529	Loripojacob.40@gmail.com	[illegible]
02	SELINAH N' CHEPKEMEI	F	Ass/CHIEF	ALALE	0710288782	Selinahluka79@gmail.com	[illegible]
3	P.M. KODWARAN	M	SCAO	W/PKT	0719671343	...@yahoo.com	[illegible]
4	SEMINAR PTISO	M	ENGINEER	W/PKT	0728735973	SeminarPtiso@gmail.com	[illegible]
5	WILLY K. KIPLAGAT	M	CASO	WEST PKT	0720936905	kiplagatkw@gmail.com	[illegible]
6	AGNETA AKEYO	F	CEDSCO	W/POKOT	0723670718	akeyo964@gmail.com	[illegible]

Appendix VI: Part Development Plan



REPUBLIC OF KENYA

COUNTY GOVERNMENT OF WEST POKOT.

DEPARTMENT OF LANDS, PHYSICAL PLANNING, HOUSING AND URBAN DEVELOPMENT

When replying please quote
Email: ocs@westpokot.go.ke
Website: www.westpokot.go.ke

OFFICE OF THE COUNTY EXECUTIVE COMMITTEE
P.O BOX 222-30600
KAPENGURIA

9TH SEPTEMBER 2021

KENYA CLIMATE SMART AGRICULTURE PROJECT,
P.O BOX 222-30600.
KAPENGURIA

RE: LAND RESERVATION

This is to bring to your attention that the below listed facilities are situated in West Pokot County. The parcels for the facilities were surveyed and part development plans prepared in accordance with the Physical and Land Use Planning Act 2019.

As you are aware, the community of the areas had unanimously agreed to reserve the land for the purposes for their benefit.

S/no	Name of facility	Purpose	Location	Acreage(Ha)
1.	Kambi Ndege	Water pan/Hay farming	Chesegon	11.22
2.	Kodera	Water pan	Konyao	2.5
3.	Kikin	Water pan & Water Tanks	Tamugh	1.08
4.	Chepsipin	Water pan/hay farming	Alale	8.54
5.	Lomut farmers' cooperative	Cereals cooperative	Lomut centre	0.13

Therefore, the land has been reserved exclusively for the above purposes and there is no change in whatsoever unless public participation views be sorted when need to change the user arise.

Thank you.

COUNTY EXECUTIVE COMMITTEE MEMBER
LANDS, HOUSING & PHYSICAL PLANNING
09 SEP 2021
WEST POKOT COUNTY
P. O. Box 222-30600,KAPENGURIA

AUGUSTINE MONGES
COUNTY EXECUTIVE COMMITTEE MEMBER,
LANDS, PHYSICAL PLANNING, HOUSING AND URBAN DEVELOPMENT
WEST POKOT COUNTY

Appendix VII: NEMA Practicing License (Lead Expert)

FORM 7 (s.15(2))

nema

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/14132

Application Reference No: NEMA/EIA/EL/18547

M/S **JOSPHAT OMARI**
(individual or firm) of address

P.O. Box 1500-00600, Nairobi

is licensed to practice in the

capacity of a (Lead Expert/Associate Expert/Firm of Experts) **Lead Expert**
registration number **7645**

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

Issued Date: **2/18/2021** Expiry Date: **12/31/2021**

Signature.....

(Seal)
Director General
The National Environment Management Authority

P.T.O.

ISO 9001: 2008 Certified

Appendix VIII:ESS Screening Checklist

Annex 12A: Environmental and Social screening Check list

ESM Sub-projects Screening Checklist (Prototype)

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

Section A: Background information

Name of County West Pokot County

Name of CPCU /Researcher P. P Tingaa - CPC

Sub-project location Alale ward, Alale location, kamunai sub location

Name of CBO/Institution KCSAP

Postal Address: P.O Box 245. Kapenguria

Contact Person P.P Tingaa Cell phone: 072

Sub-project name KATUMATAI WATER PAN & PASTURE PRODUCTION

Estimated cost (KShs.) 3.1.16.523

Approximate size of land area available for the sub-project 22 acres

Objectives of the sub project

- Provide water for domestic and livestock production
- Increase livestock production
- Reduce land degradation

Activities/enterprises undertaken Excavation of water pan & ancillary works, Construction of hay shade and establishment of pasture farm

How was the sub-project chosen? Through PLA & Community consultations

Expected sub project duration: 1 year

Section B: Environmental Issues

Will the sub-project:	Yes	No
Create a risk of increased soil erosion?	✓	
Create a risk of increased deforestation?	✓	
Create a risk of increasing any other soil degradation soil degradation?		✓
Affect soil salinity and alkalinity?		✓
Divert the water resource from its natural course/location?		✓
Cause pollution of aquatic ecosystems by sedimentation and agro-chemicals, oil spillage, effluents, etc.?		✓
Introduce exotic plants or animals?		✓
Involve drainage of wetlands or other permanently flooded areas?		✓

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Cause poor water drainage and increase the risk of water-related diseases such as malaria?	✓	
Reduce the quantity of water for the downstream users?		✓
Result in the lowering of groundwater level or depletion of groundwater?		✓
Create waste that could adversely affect local soils, vegetation, rivers and streams or groundwater?		✓
Reduce various types of livestock production?		✓
Affect any watershed?		✓
Focus on Biomass/Bio-fuel energy generation?		✓

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

Section C: Socio-economic Issues

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

Section D: Natural Habitats

Will the sub-project:	YES	NO
Be located within or near environmentally sensitive areas (e.g. intact natural forests, mangroves, wetlands) or threatened species?		✓
Adversely affect environmentally sensitive areas or critical habitats – wetlands, woodlots, natural forests, rivers, etc.)?		✓
Affect the indigenous biodiversity (Flora and fauna)?		✓

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

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

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
	2 4 D	weeds	1	April
	Glyphosate	weeds	1	April

If No, WHY?

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

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Application location: Yes..... No..✓...
Date of application: Yes..... No..✓...
Pesticide product trade name: Yes...No..✓...
Operator name: Yes..... No..✓...
If No, WHY? I Dont know about records because I cannot write ad read

How do you decide when to use the pesticides (tick all that apply)?
We use pesticides at regular intervals throughout the season(calendar)
We use pesticides when we see pests in the field(control)
Weusepesticidesafterfieldsamplingandfindingacertainnumberofpestsora certain level of damage (scouting
Told by someone to apply(specify who) ✓ Agriculture officer
Other(specify)

d) Do you use a knapsack sprayer? Yes ✓ No
If yes,

(i) Do you own it Yes No
Do you rent it Yes No
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:
.....
.....
.....
.....
.....

Do you use any kind of protective clothing while applying or handling pesticides? Yes No ✓ Why? I dont know where to get. because I am not aware.
If YES, what kind?

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

Do you read labels on the pesticide container before using?

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Sometimes Always Never ✓

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?

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

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 storey our pesticides?

Why do you store them there? Have. I do not have the store.

i) What do you do with your pesticide containers after they are empty?

Throw them away in a pit

j)Do you know of any beneficial insects(insects that eat harmful insects)?

Yes..... No..... ✓

[redacted] Extension & Value chain Development Manual | 2018

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k)If yes, name them:

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

b) Persons working in fields sprayed with pesticides

Sometimes ✓ Always Never

c)Persons harvesting the produce

Sometimes Always Never ✓ 4.Options to Pesticides

a)From your experience, are you aware of other methods for controlling insects diseases and/or weeds besides pesticides?

Yes....✓..... No.....

b)If yes, describe the practices:

i) weeding by hand.

ii) Use of ash

iii)

iv

5.Information

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

Training on production

6.Training

a)Have you ever received any training on any of the following topics related to crop production?

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Appendix IX: Project Design Layouts

OBJECTIVES:

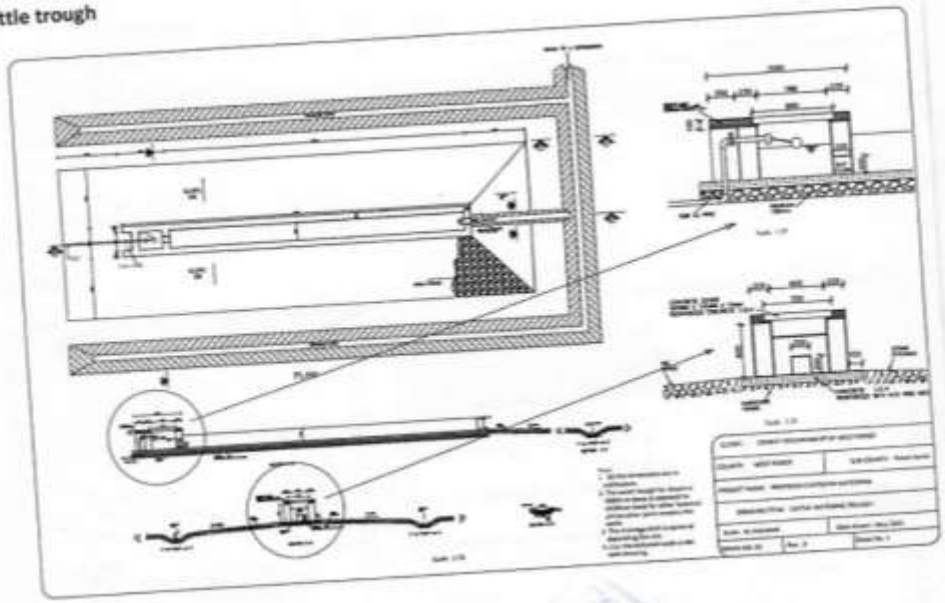
- Design of katunatai water pan and hay shed
- Bill of quantities

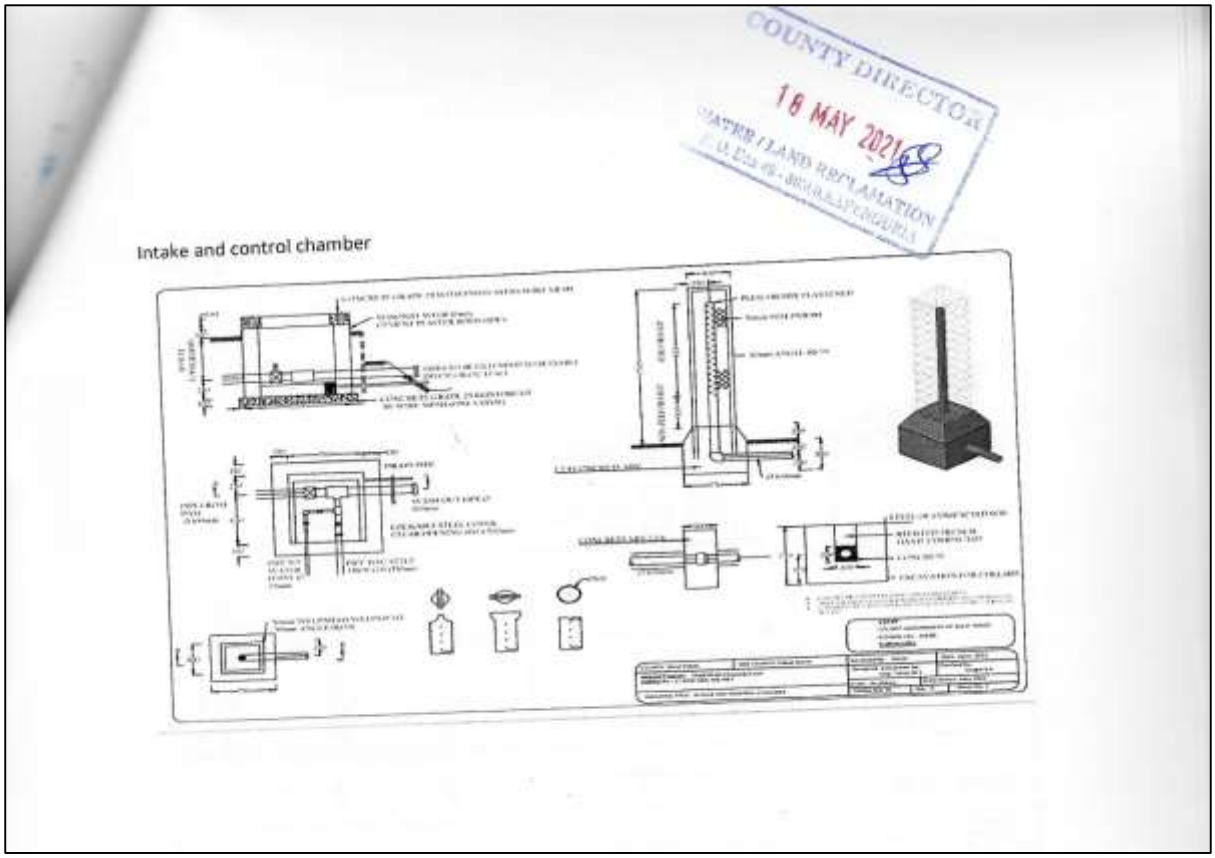
Activity report

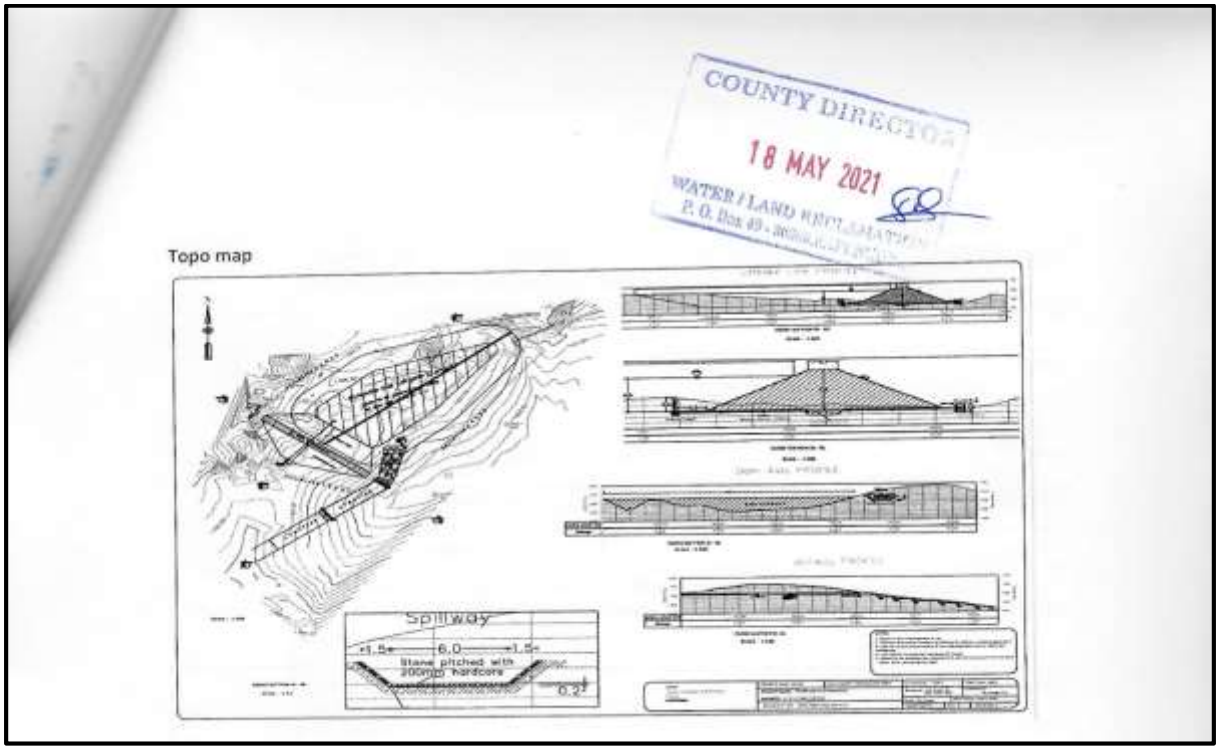
The activity involved developing the katunatai chepsipin water pan and hayshed design that was to take five days. The purpose was to interpret the survey data collected and translating into design drawings and bill of quantities calculated in order to guide procurement process. The design is also meant to guide the environmental and social impact assessment.

The design report developed is as shown below

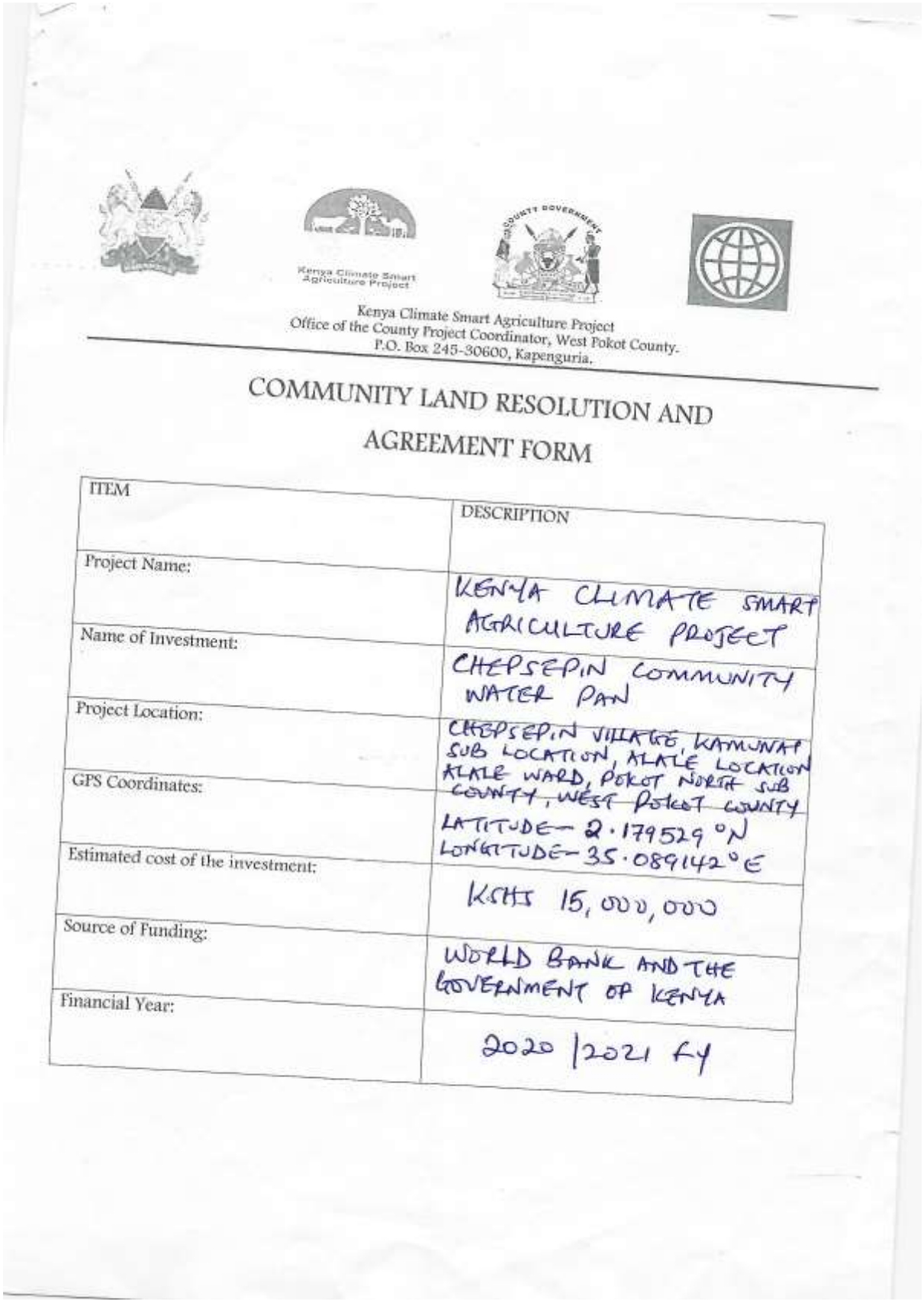
Cattle trough




COUNTY DIRECTOR
18 MAY 2021
WATER / LAND RECLAMATION
Intake and control chamber


COUNTY DIRECTOR
18 MAY 2021
Topo map
Spillway
6.0
Stone pitched with 200mm hardcore

APPENDIX X: Filled Land Resolution and Agreement Form



Kenya Climate Smart Agriculture Project
Office of the County Project Coordinator, West Pokot County.
P.O. Box 245-30600, Kapenguria.

COMMUNITY LAND RESOLUTION AND AGREEMENT FORM

ITEM	DESCRIPTION
Project Name:	KENYA CLIMATE SMART AGRICULTURE PROJECT
Name of Investment:	CHEPSEPIN COMMUNITY WATER PAN
Project Location:	CHEPSEPIN VILLAGE, KAMUNAT SUB LOCATION, ALALE LOCATION ALALE WARD, POKOT NORTH SUB COUNTY, WEST POKOT COUNTY
GPS Coordinates:	LATITUDE- 2·179529 °N LONGITUDE- 35·089142° E
Estimated cost of the investment:	KSHS 15,000,000
Source of Funding:	WORLD BANK AND THE GOVERNMENT OF KENYA
Financial Year:	2020/2021 FY

TERMS OF THE AGREEMENT

1. We the residents/users of the investment area (specify)
   .....CHEPSEPIN VILLAGE.....
   .....CHEPSEPIN..... discussed and agreed that,
   proposed .CHEPSEPIN COMMUNITY WATER PAN..... Shall be site of the
2. We all are aware of the Kenya Climate Smart Project and this proposed sub-project at .....CHEPSEPIN.....VILLAGE.....and that:
3. We all are aware that the land set aside for the investment is community land and no one is claiming individual ownership because it belongs to all of us and negative impacts on particular individuals using the land will be addressed by the community, and no alternative claims will be made later on the land.
4. We all have no problem with the site of the investment and its conversion to public land.
5. We have all agreed unanimously that the project implementation should continue.
6. We will all allow other neighboring and cross-border communities access to the investment as agreed between elders of both communities.
7. We all shall strive to peacefully resolve any conflicts with other communities concerning the investment and that we would strive to peacefully co-exist and resolve any conflict arising out of the investment facility following due process provided by the laws of Kenya.
8. The land to be donated was identified in consultation with all residents and users of the land?
9. We all understand the likely impacts of proposed activities on donated land.
10. We all understand that the community could have refused this investment.
11. We all agreed to this investment and donation of the land without coercion, manipulation, or any form of pressure on the part of public or traditional authorities.
12. We all agreed that we not require any monetary or non-monetary benefits or incentives as a condition for the donation.
13. The land being donated will not reduce the remaining land area to a level below that required to maintain the livelihoods of occupiers and users of land at current levels and will not require the relocation of any household.
14. If any structure will be moved or any access to land be limited as a result of the sub project, the individual affected will be compensated so their livelihood will be unaffected.
15. The land is free of encumbrances or encroachment and is not claimed by any individual and its ownership is not contested.

We have been designated by the community of (CHEPSEPIN)

Confirm the above information to be true and that we have resolved to abide by ALL terms of this agreement. (Please attach minutes of community meeting, where the community agreed to the use and conversion of this land for this purpose).

S/NO.	NAME	VILLAGE/LOCATION	ID/NO.	SIGNATURE
1.	SWAREN NKURA-KAMAR	CHEPSEPIN - ALALE	9517750	
2.	LONGURATUKEI KOMO-LKAPEL	CHEPSEPIN - ALALE	24560655	
3.	CHEPT ILAC CHEPTARALAL LOKODO NKOLE	CHEPSEPIN - ALALE	27104891	
4.	ATODONKORIA LOKAPELIO	CHEPSEPIN - ALALE	25555288	
5	CHEMNANKAR LOGWALE	CHEPSEPIN ALALE	34089569	

Witnessed on this 14 Day of NOVEMBER in the Year 2019 by:

1. Area Chief

S/NO.	NAME	ID/NO.	SIGNATURE & R /STAMP
1	SELINAH N CHEPT-EMEI	21654942	ASST. CHIEF KAMUNAI SUB-LOCATION P. O. Box 1-30600 KAPENGURIA

2. Ward Administrator

S/NO.	NAME	ID/NO.	SIGNATURE & R /STAMP
1	JACOB LORIPO	25111461	WARD ADMINISTRATOR ALALE WARD 14 NOV 2019 COUNTY GOVERNMENT OF WEST POKOT P. O Box 222-30600, KAPENGURIA

3. County Government (Physical Planning Department)

S/NO.	NAME	ID/NO.	SIGNATURE & R /STAMP
1	CHEPKITHETO EMILLY	22280106	COUNTY EXECUTIVE COMMITTEE MEMBER LANDS, HOUSING & PHYSICAL PLANNING 08 NOV 2019 WEST POKOT COUNTY P.O. Box 222-30600,KAPENGURIA

4. Kenya Climate Smart Agriculture Project , Coordinator

S/NO.	NAME	ID/NO.	SIGNATURE & R /STAMP
1	PHILIP P. TINGOK	7103492	COUNTY PROJECT COORDINATOR WEST POKOT KENYA CLIMATE SMART AGRICULTURE PROJECT P.O. Box 245-30600 KAPENGURIA Date: 18/11/2019

5. County Department Relevant to the project e.g. Water/Livestock Production etc.

S/NO.	NAME	ID/NO.	SIGNATURE & R /STAMP
1	ABRAHAM POWOR	7690806	COUNTY DIRECTOR OF WATER 07 FEB 2022 WEST POKOT COUNTY P.O. Box 49-30600, KAPENGURIA