



Submitted to: Retort Charcoal Producers (Pty) Ltd
Attention: Mr Colin Lindeque
P O Box 30098,
Windhoek
Namibia

REPORT:

IRRIGATION SYSTEM FOR AN AGRICULTURE PROJECT ON FARM GAI KAISA NO. 159, OTJOZONDJUPA REGION, NAMIBIA

PROJECT NUMBER: ECC-118-579-REP-02-D

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Client Name: Mr Colin Lindeque

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ENVIRONMENTAL COMPLIANCE CONSULTANCY CONTACT DETAILS:

We welcome any enquiries regarding this document and its content. Please contact:



Environmental Compliance Consultancy (Pty) Ltd
PO Box 91193, Klein Windhoek, Namibia
Tel: +264 81 669 7608
Email: info@eccenvironmental.com

Quality Assurance

Authors:

A handwritten signature in black ink, appearing to be 'Kelly Ochs', written over a horizontal line.

Kelly Ochs
Environmental Compliance Consultancy

Checked By:

A handwritten signature in black ink, appearing to be 'Samuel Shinyemba', written over a horizontal line.

Samuel Shinyemba
Environmental Compliance Consultancy

Approved By:

A handwritten signature in black ink, appearing to be 'Jessica Bezuidenhout', written over a horizontal line. To the right of the signature, the text 'pp L. Towers' is printed.

Jessica Bezuidenhout
Environmental Compliance Consultancy

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EXECUTIVE SUMMARY

Environmental Compliance Consultancy (Pty) Ltd (ECC) has been engaged by Retort Charcoal Producers (Pty) Ltd (hereinafter referred to as “Retort” or the “Proponent”) to prepare the environmental clearance certificate application for the irrigation scheme of the agriculture production project on Farm Gai Kaisa No. 159, Otjozondjupa Region, Namibia. The environmental clearance certificate application is accompanied by the scoping plus impact assessment report (this report) and an environmental and social management plan (ESMP) (Appendix A).

The Proponent proposes to expand their current operation to include irrigation. The proposed Project is required to support continued crop (biomass) production to support their charcoal and biochar operations. Irrigation is planned to be implemented in two (2) phases, each comprising ~135 hectares (ha) of cultivated area consisting of maize and fodder. Phase one (1) will require an estimated ~1 million cubic meters (Mm³) of water per annum, while phase two (2) will expand the total cultivated area to approximately 260 ha, resulting in a total groundwater requirement of ~2 Mm³ per annum. Furthermore, a four (4) ha portion will be set aside for the cultivation of perennial crops (fruit trees, grapes, pecans and avocado) on farm Gai Kaisa No. 159. This approach is further discussed in the test pumping analysis (Appendix C) and the groundwater study (Appendix D).

As defined by the EMA and its associated Regulations, the submission of a scoping with impact assessment report is sufficient for the Environmental Commissioner (EC) in consultation with the Department of Water Affairs (DWA) to provide a record of decision (RoD) on the Project.

SCREENING PHASE

The EMA and its 2012 Regulations, stipulate that all projects must be screened against the listed activities in the EMA and its associated regulations to determine if any of the activities of the project triggers the requirement of an environmental clearance certificate.

The screening phase determined that the most likely potential environmental and social impacts could include:

- Crop production (food security);
- Employment creation; and
- Procurement of goods and services
- Land-use efficiency;
- Soil impacts;
- Groundwater and surface water impacts;
- Biodiversity; and
- Waste management.

The Scoping plus impact assessment and appendices was submitted to I & AP's and the public for a 7-day public review period from 02 February 2026 to 09 February 2026. No comments, questions and concerns were submitted during this time. The final scoping plus impact assessment and appendices is submitted to MAFWLR (the competent authority) and MEFT for a RoD.

The phases of the scoping plus impact assessment phases are provided in Figure 1.

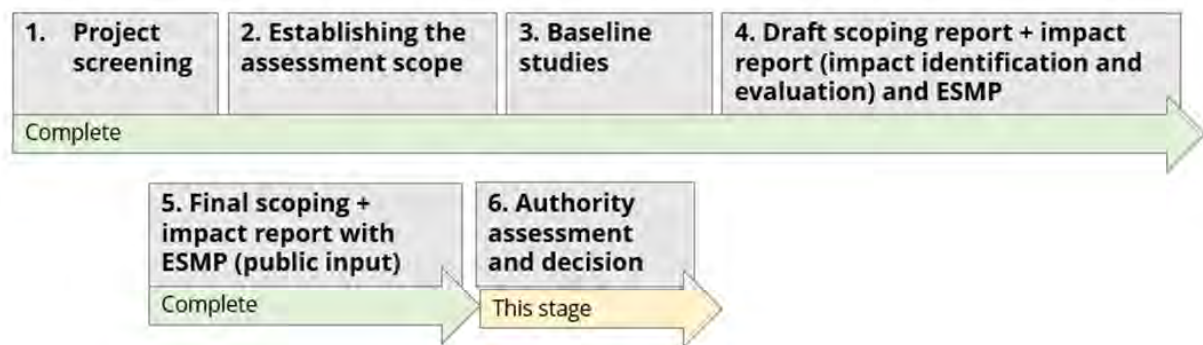


Figure 1 - Simplified scoping plus impact assessment of the Agriculture Project on Farm Gai Kaisa No. 159

TABLE OF CONTENTS

1	Introduction	11
1.1	Background information	11
1.2	Purpose of the report.....	13
1.3	Proponent's details	14
1.4	Screening phase - environmental legislative requirements	14
2	Approach to the assessment.....	16
2.1	Purpose and scope of the scoping with impact assessment.....	16
2.2	The assessment process	16
2.3	Scoping and the environmental assessment.....	19
2.4	Baseline studies.....	19
2.5	Public consultation.....	19
2.5.1	Identification of key stakeholders and interested and affected parties (I&APs).....	20
2.5.2	Newspapers and advertisements	20
2.5.3	Site notices	20
2.5.4	Public meeting	21
2.5.5	Summary of issues raised	21
3	Review of the legal framework.....	25
3.1	National regulatory framework	26
3.2	National policies and plans.....	28
3.3	Environmental permits and licence (s).....	29
4	Project description	31
4.1	Need for the Project	31
4.2	Alternatives considered	31
4.2.1	No-go alternatives.....	32
4.3	Proposed Project activities	32
4.3.1	Equipment and materials.....	32
4.3.1	Water supply	33
4.3.2	Power supply	33
4.3.3	Work force and accommodation	33
4.3.4	Waste management.....	33
5	Summary of the baseline environment.....	34
6	Impact identification and evaluation methodology	37
6.1	Introduction	37

6.2	Assessment guidance	40
6.3	Limitations, uncertainties and assumptions	40
6.4	Cumulative impacts	41
6.4.1	Cumulative impacts assessment method.....	41
6.5	Mitigation	42
7	Environmental and social impact assessment	44
7.1	Introduction	44
7.2	Impacts deemed as not significant.....	44
7.3	Significant impacts	46
7.3.1	Socioeconomic impacts.....	46
7.3.1.1	Employment creation	46
7.3.1.2	Procurement of goods and services	46
7.3.2	Social impacts	47
7.3.2.1	Cultural heritage – chance find of heritage sites, objects and/or artifacts.....	48
7.3.2.2	Increased crop productivity resulting in local food security.....	48
7.3.3	Biophysical impacts	49
7.3.3.1	Increased land-use efficiency.....	51
7.3.3.2	Increased soil health.....	51
7.3.3.3	Impacts on soil structure and increased compaction	51
7.3.3.4	Unintentional introduction of alien invasive species.....	52
7.3.3.5	Potential over abstraction of groundwater and depletion of water resources.....	52
7.3.3.6	Agricultural products impact on water sources	53
7.4	Cumulative impacts	55
7.4.1	Intraspecific cumulative impact	56
7.4.1.1	Cumulative Impact of general solid waste and organic waste on the biophysical and social environment	56
8	Conclusion.....	58

LIST OF TABLES

Table 1 - Report outline	14
Table 2 – Proponent details	14
Table 3 - Activities triggered by the proposed Project	15
Table 4 - Comments, concerns and questions raised by I&APs during the scoping and impact assessment process.....	22
Table 5 - Details of the regulatory framework as it applies to the proposed Project	26
Table 6 - National policies and plans applicable to the proposed Project.....	28
Table 7 – Permits and licences required for the proposed Project.....	30
Table 8 - Summary of the baseline environment	34
Table 9 - Limitations, uncertainties and assumptions	41
Table 10 - Table of non-significant impacts.....	44
Table 11 - Socioeconomic impact assessment findings.....	47
Table 12 – Social impacts	49
Table 13 - Biophysical impact assessment findings	53
Table 14 - Intraspecific cumulative impacts on the Irrigation system for the Agriculture Project on Farm Gai Kaisa No. 159	57
Table 15 - Summary of the significance rating before mitigation for the expected impact.....	58

LIST OF FIGURES

Figure 1 - Simplified scoping plus impact assessment of the Agriculture Project on Farm Gai Kaisa No. 159.....	5
Figure 2 – Location of the Project site (Farm Gai Kaisa No. 159).....	12
Figure 3 - The full scoping with impact assessment process	18
Figure 4 - ECC ESIA methodology based on IFC standards	40
Figure 5 - Overview of the socioeconomic impacts.....	46
Figure 6 - Overview of social impacts	47
Figure 7 - Overview of the biophysical impacts	50
Figure 8 - Overview of the intraspecific cumulative impacts	56

LIST OF APPENDICES

Appendix A – Environmental and social management plan	60
Appendix B – Environmental clearance certificate for mechanised bush thinning operations on Farm Gai Kaisa No. 159 (ECC-2402040).....	61
Appendix C - Test pumping analysis.....	62
Appendix D – Groundwater study	63
Appendix E – Newspaper advertisement.....	64
Appendix F – Site notices.....	66

Appendix G – Stakeholder letters	67
Appendix H – Archaeological assessment	69

ABBREVIATIONS

Abbreviations	Description
°C	degree Celsius
%	percent
<	less than
BE	bush equivalents
CIA	cumulative impact assessment
cm	centimetre
DEAF	Department of Environmental Affairs and Forestry
DWA	Department of Water Affairs
E	east
EC	Environmental Commissioner
EC	electrical conductivity
ECC	Environmental Compliance Consultancy (Pty) Ltd
e.g.	example
EMA	Environmental Management Act, No. 7 of 2007
ESIA	environmental and social impact assessment
ESMP	environmental and social management plan
etc	et cetera
FNSP	Food & Nutrition Security Policy
GDP	the gross domestic product
ha	hectares
I&APs	interested and affected parties
IFC	International Finance Corporation
km	kilometre
km ²	square kilometre
L	litres
Ltd	limited
m	metre
mm	millimetre
Mm ³	million cubic meters
NAP	Namibia Agricultural Policy
NDP	National Development Plan
No.	number
NE	northeast
NW	northwest

Abbreviations	Description
mbsl	metres above mean sea level
MAFWLR	Ministry of Agriculture, Fisheries, Water and Land Reform
MEFT	Ministry of Environment, Forestry and Tourism
ORC	Otjozondjupa Regional Council
Pty	propriety
RoD	record of decision
S	south
SE	southeast
SW	southwest
TDS	total dissolved solids
TE	tree equivalents
ToR	terms of reference

1 INTRODUCTION

1.1 BACKGROUND INFORMATION

Environmental Compliance Consultancy (Pty) Ltd (ECC) has been engaged by Retort Charcoal Producers (Pty) Ltd (hereinafter referred to as “Retort” or the “Proponent”) to prepare the environmental clearance certificate application for the irrigation scheme of the agriculture production project on Farm Gai Kaisa No. 159, Otjozondjupa Region, Namibia. The environmental clearance certificate application is accompanied by the scoping plus impact assessment report (this report) and an environmental and social management plan (ESMP) (Appendix A).

The Proponent currently holds an environmental clearance certificate for mechanised bush thinning operations on Farm Gai Kaisa No. 159 (ECC-2402040). This environmental clearance certificate was approved by the Department of Environmental Affairs and Forestry (DEAF) on 05 December 2024 and is valid until 05 December 2027 (Appendix B). The Proponent currently produces charcoal and biochar from the harvested biomass obtained through bush thinning.

The Proponent proposes to expand their current operation to include irrigation. The proposed Project is required to support continued crop (biomass) production to support their charcoal and biochar operations. Irrigation is planned to be implemented in two (2) phases, each comprising ~135 hectares (ha) of cultivated area consisting of maize and fodder. Phase one (1) will require an estimated ~1 million cubic meters (Mm³) of water per annum, while phase two (2) will expand the total cultivated area to approximately 260 ha, resulting in a total groundwater requirement of ~2 Mm³ per annum. Furthermore, a four (4) ha portion will be set aside for the cultivation of perennial crops (fruit trees, grapes, pecans and avocado) on farm Gai Kaisa No. 159. This approach is further discussed in the test pumping analysis (Appendix C) and the groundwater study (Appendix D).

The Project site (i.e. Farm Gai Kasa No. 159) is located approximately 30 km southeast (SE) of the Kombat settlement and approximately 42 km southwest (SW) of Grootfontein town and can be accessed via the D2804 district road that branches out from the B8 main road in the Otjozondjupa Region (Figure 2).

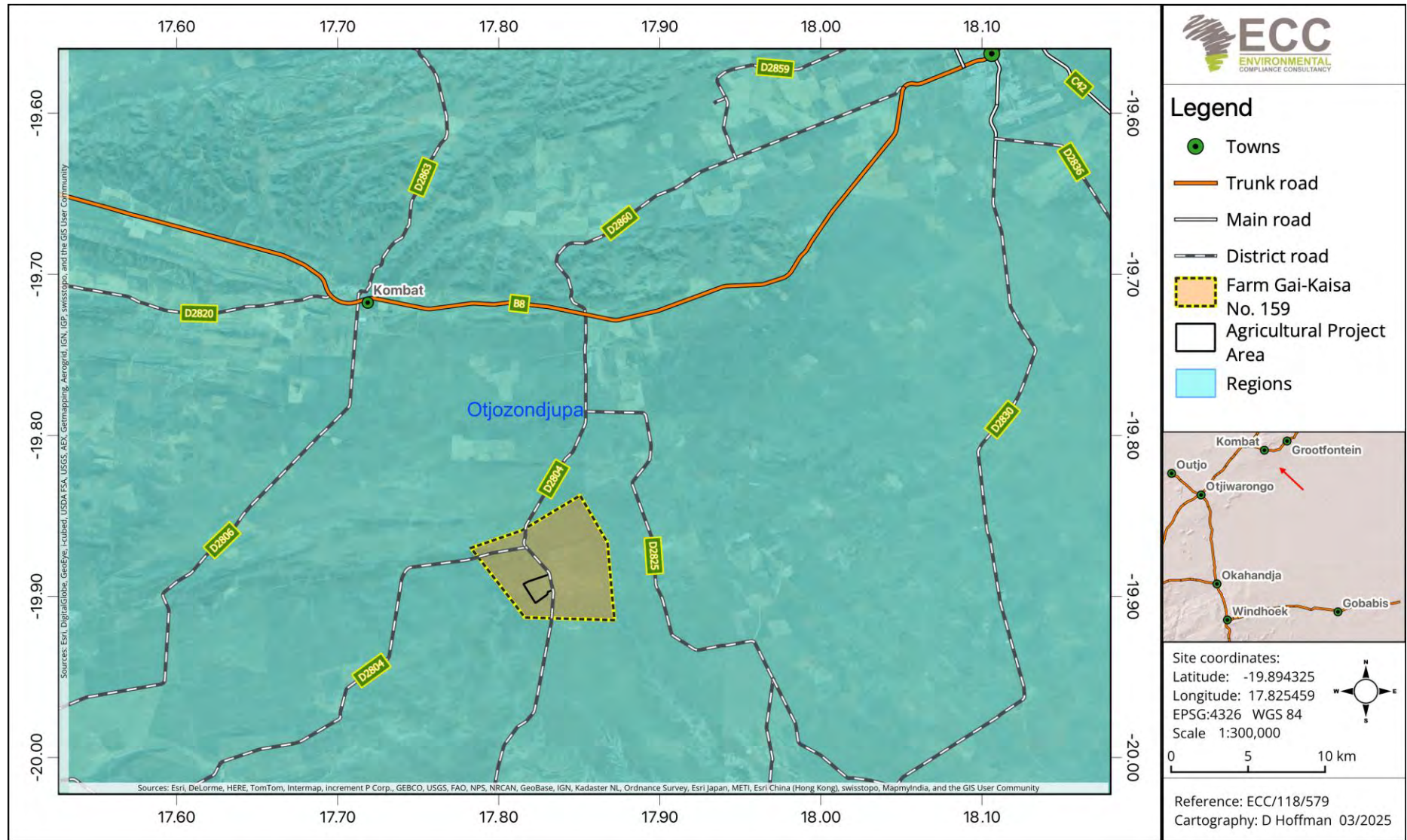


Figure 2 – Location of the Project site (Farm Gai Kaisa No. 159)

1.2 PURPOSE OF THE REPORT

As per the Environmental Management Act, No. 7 of 2007 (EMA) and its associated 2012 Regulations, any activity that triggers a listed activity requires an environmental clearance certificate. The Act defines a listed activity as a project or activity that is identified as having a significant potential impact on the environment and therefore requires an environmental clearance certificate before the activity can be undertaken. This scoping plus impact assessment report is required to assess the impact of the proposed irrigation system on the surrounding biophysical and social environment.

As part of the application for an environmental clearance certificate, an environmental and social impact assessment (ESIA) process needs to be conducted, and an environmental and social management plan (ESMP) needs to be compiled. However, before an ESIA can be conducted, the Project needs to be screened against the requirements on the Ministry of Environment and Forestry (MEFT) portal, and the scope of the assessment needs to be outlined. This includes determining the baseline biophysical and social environment and determining if there are any gaps in the available information, requiring the need for further specialist studies. This is then developed into a scoping report, which form the terms of reference (ToR) for the ESIA.

The proposed Project activities are then assessed against the social and biophysical baseline environment to identify and assess potential impacts (positive or negative) on the receiving baseline environment and how the identified impacts may impact sensitive receptors. An ESMP is then developed as a mitigation and management tool to reduce the negative or enhance the beneficial impacts of the ESIA. The ESMP becomes a legally binding document once approved by MEFT.

A standalone scoping report which is then preceded by an ESIA with multiple detailed specialist studies is not required for this Project, as the Project's activities are deemed non- or minimally invasive due to the foreseen project activities. Furthermore, the impacts of Projects such as this are usually non-significant or low. Therefore, as defined by the EMA and its associated Regulations, the submission of a scoping with impact assessment report is sufficient for the Environmental Commissioner (EC) in consultation with the Department of Water Affairs (DWA) to provide a record of decision (RoD) on the Project.

The outline of this report is shown in Table 1.

Table 1 - Report outline

Chapter	Contents
Chapter 1	Introduction to the proposed Project and scoping with impact assessment report.
Chapter 2	Provides details about the scoping with impact assessment approach, including the role of the public and specialists (if required).
Chapter 3	Provides details on the legal environment and requirements based on the Project.
Chapter 4	Provides sufficient technical details about the Project activities to identify and assess potential impacts.
Chapter 5	Provides a summary of the biophysical and social baseline environment.
Chapter 6	Provides an overview of the methodology for identifying and evaluating impacts.
Chapter 7	Details the assessment of the potential impacts before mitigation and may also provide mitigation measures, if warranted.
Chapter 8	Concludes the report, summarising the findings and providing recommendations.

1.3 PROPONENT'S DETAILS

The Proponents' details are provided in Table 2.

Table 2 - Proponent details

Company representatives	Contact details:
Mr Colin Lindeque Director of Retort Charcoal Producers and Managing Director of Carbon Capital (Pty) Ltd	Retort Charcoal Producers (Pty) Ltd P O Box 30098, Windhoek Farm Gai Kaisa No. 159 Otjozondjupa Region, Namibia +264 81 343 3424
Stefan Falk Chief Executive Officer of Retort Charcoal Producers	stefan@charcoal.com.na +264 81 316 5539

1.4 SCREENING PHASE - ENVIRONMENTAL LEGISLATIVE REQUIREMENTS

The EMA and its 2012 Regulations, stipulate that all projects must be screened against the listed activities in the EMA and its associated regulations to determine if any of the activities of the project triggers the requirement of an environmental clearance certificate. The Project has been screened and has been found to trigger the listed activities outlined in Table 3.

Table 3 - Activities triggered by the proposed Project

Listed activity	As defined by the Regulations of the Act	Relevance to the Project
8. Water resource developments	(8.1) The abstraction of ground or surface water for industrial or commercial purposes. (8.7) Irrigation schemes for agriculture excluding domestic irrigation	- Water abstraction from five (5) boreholes on Farm Gai Kaisa No. 159 will be required for the Project. The groundwater demand has been estimated at a maximum of 1 Mm³/a per phase of cultivation. A groundwater assessment has been conducted, and a report of the findings has been developed for the Project (Appendix D). - The water abstraction licences will be obtained from Ministry of Agriculture, Fisheries, Water and Land Reform: Department of Water Affairs (MAFWLR: DWA) prior to the commencement of the Project as per the Water Resource Management Regulations of 2023, Water Resources Management Act, Act No. 11 of 2013.

2 APPROACH TO THE ASSESSMENT

2.1 PURPOSE AND SCOPE OF THE SCOPING WITH IMPACT ASSESSMENT

This scoping with impact assessment aims to scope the available data and identify any gaps that need to be filled. Thereafter, impacts that are deemed likely to be significant are identified, and the spatial and temporal scope of the assessment is outlined. Thereafter, the assessment methodology is developed, and the potential significant impacts are assessed.

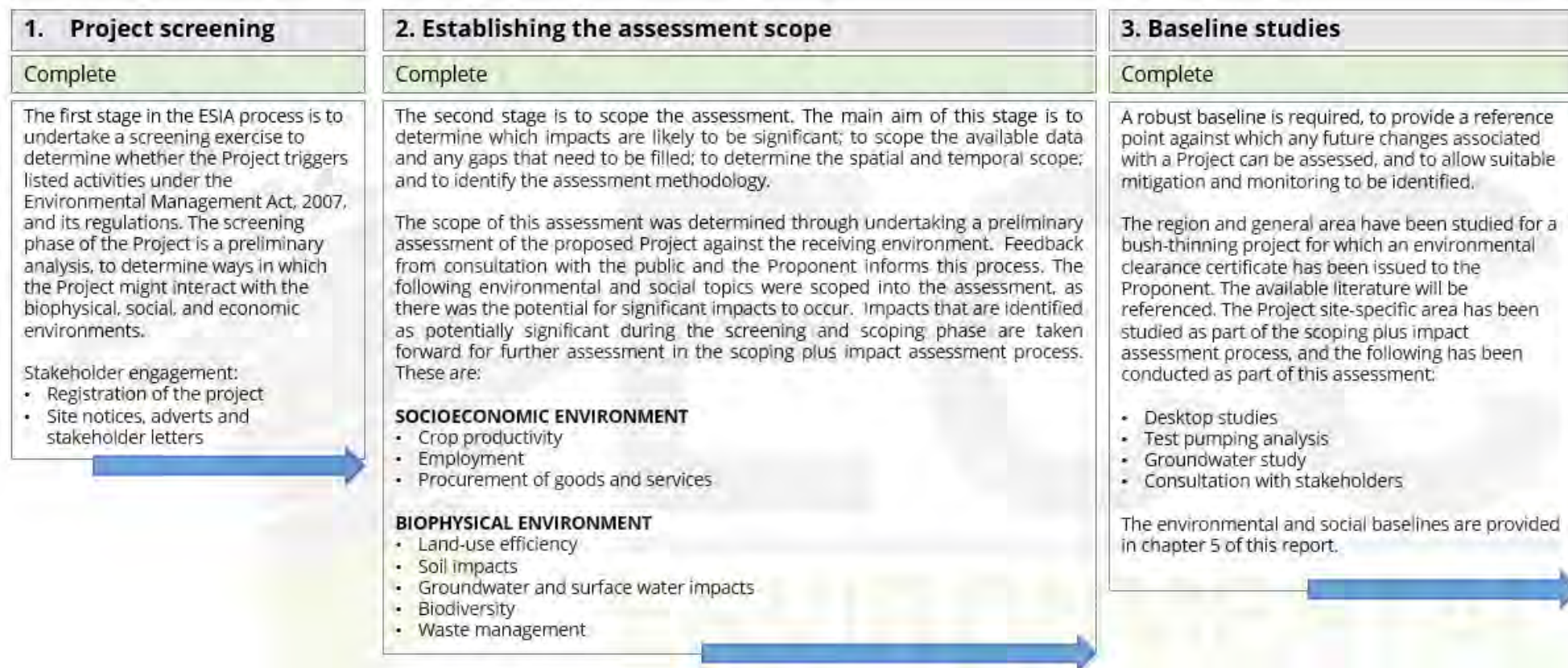
The spatial and temporal scope of the assessment was determined by undertaking a preliminary assessment of the proposed Project against the receiving baseline environment, obtained through a desktop review of the area and available site-specific literature.

2.2 THE ASSESSMENT PROCESS

The methodology applied to this assessment was developed using the International Finance Corporation (IFC) standards and models, in particular, Performance Standard 1, 'Assessment and management of environmental and social risks and impacts' (International Finance Corporation, 2017) (International Finance Corporation, 2012), which establishes the importance of:

- Integrated assessment to identify the environmental and social aspects, impacts and opportunities of Projects;
- Effective community engagement through disclosure of Project-related information and consultation with local communities on matters that directly affect them; and
- The Proponent's management of environmental and social performance throughout the life of the Project.

Furthermore, the Namibian Draft Procedures and Guidance for ESIA and ESMP (Republic of Namibia, 2008), as well as international and national best practice, and over twenty-five (25) years of combined ESIA experience, were also drawn upon in the developing the assessment methodology. This scoping with impact assessment is a formal process in which the potential effects of the Project on the biophysical, social and economic environments are identified, assessed and reported on so that the significance of potential impacts can be taken into account when considering whether to grant approval, consent or support for the proposed Project. The full scoping plus impact assessment process is described in Figure 3.



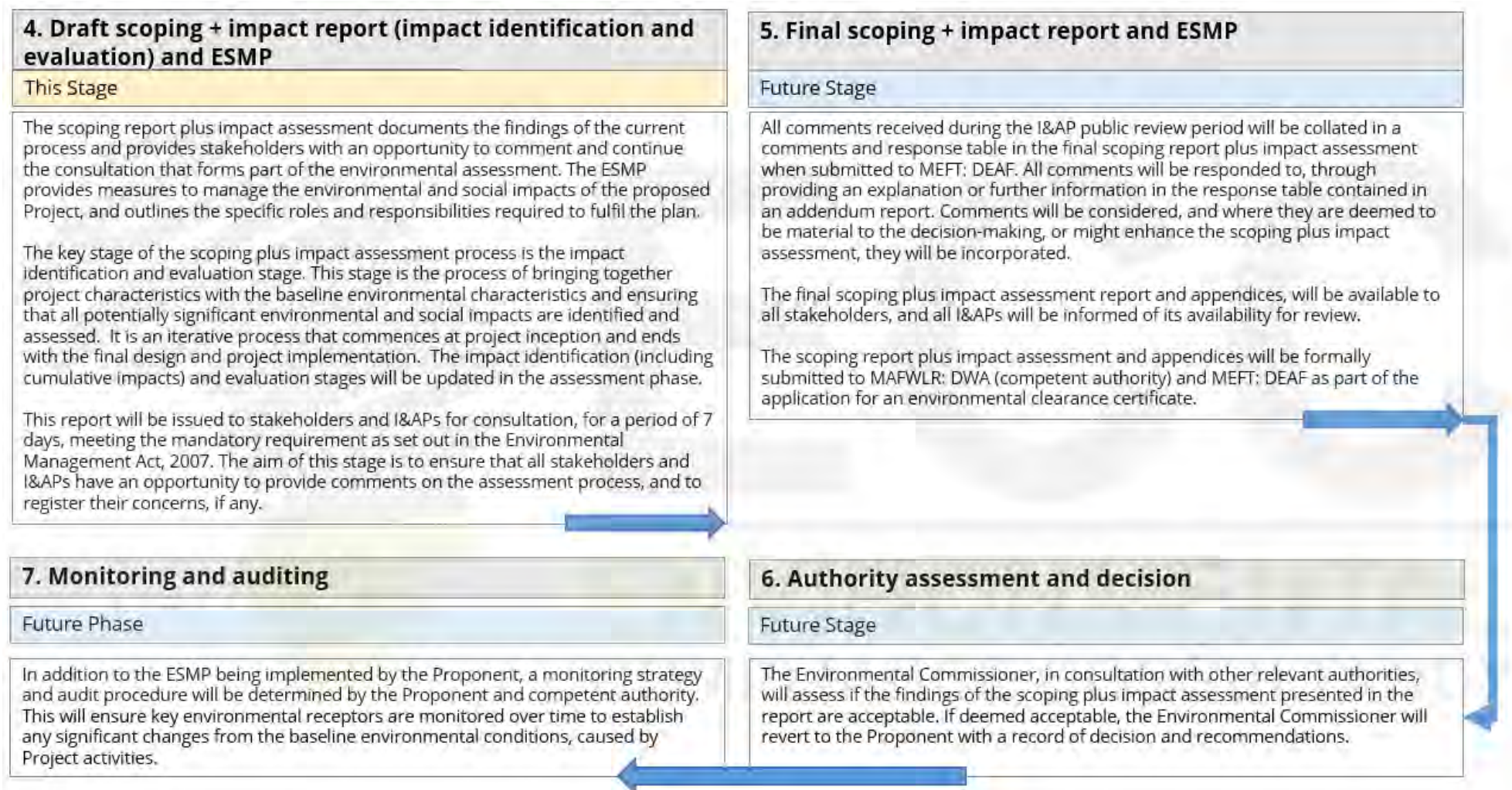


Figure 3 - The full scoping with impact assessment process

2.3 SCOPING AND THE ENVIRONMENTAL ASSESSMENT

The scoping phase of the Project is a preliminary analysis to determine ways in which the Project interacts with the biophysical, social and economic environment. Potential impacts are identified and the significance are assessed during the impact assessment phase. The detailed assessment methodology and impact assessment of significant impacts are described in chapters 6 and 7 of this report, respectively. Feedback from consultation with the Proponent and stakeholders also informed the assessment and ratings of the impacts. The following environmental and social aspects were considered for this scoping with impact assessment process, including cumulative impacts:

SOCIO-ECONOMIC ENVIRONMENT

- Crop production (food security);
- Employment creation; and
- Procurement of goods and services.

BIOPHYSICAL ENVIRONMENT

- Land-use efficiency;
- Soil impacts;
- Groundwater and surface water impacts;
- Biodiversity; and
- Waste management.

2.4 BASELINE STUDIES

Baseline studies are undertaken as part of the scoping phase, which involves collecting all pertinent information from the status of the receiving environment. This provides a baseline against which changes that occur because of the proposed Project can be measured. For the proposed Project, baseline information was obtained through a desktop study and consultation with stakeholders. The baseline information collected focused on the social and environmental receptors that could be affected by the proposed Project and was verified through site-specific information received from the Proponent. The baseline information is covered in chapter 5.

2.5 PUBLIC CONSULTATION

Public participation and consultation are a requirement of any ESIA conducted and environmental clearance certificate application submitted in Namibia. This is stipulated in the Environmental Impact Assessment Regulations (Regulations 21 and 23) of the EMA. Furthermore, consultation is a compulsory and critical component of the scoping plus impact assessment process to aid in achieving transparent decision-making and can provide further

insight on a potential project that may not have come out of the desktop studies. Consultation occurs throughout the entire process up until the application is submitted for assessment, review and RoD.

The objectives of the public participation and consultation process are to:

- Determine the relevant government, regional and local regulating authorities;
- Listen to and understand community issues, record concerns and questions; and
- Explain the process of the scoping with impact assessment and the timeframes involved; and
- Establish a platform for ongoing consultation.

2.5.1 IDENTIFICATION OF KEY STAKEHOLDERS AND INTERESTED AND AFFECTED PARTIES (I&APS)

A stakeholder mapping exercise was undertaken to identify individuals or groups of stakeholders that may be interested or affected by the Project, in order to inform them and keep them abreast of relevant information as the Project develops. The method by which they were engaged during the scoping with impact assessment process is outlined in section 2.5.2 to section 2.5.4. Additionally, stakeholders were also engaged through direct communication (letters and phone calls), the national press and directly via email.

A summarised list of stakeholders for this Project is given below:

- The neighbouring farm owners;
- The general public with an interest in the Project;
- Ministry of Environment, Forestry, and Tourism (MEFT);
- Ministry of Agriculture, Fisheries, Water & Land Reform (MAFWLR);
- Otjozondjupa Regional Council (ORC) as the custodian responsible for the management and administration of the Kombat settlement; and
- Grootfontein Municipality.

2.5.2 NEWSPAPERS AND ADVERTISEMENTS

Notices regarding the proposed Project and associated activities were circulated in three (3) newspapers, namely the 'Republikein, the Namibian Sun and Allgemeine Zeitung' on 13 January 2026 and 20 January 2026 (Appendix E). The purpose of this was to commence the consultation process by informing the public about the Project and enabling I&APs to register any comments and interest raised for the Project.

2.5.3 SITE NOTICES

Site notices ensure neighbouring properties and stakeholders are made aware of the proposed Project. The notices were placed at the boundary and access road to Farm Gai Kaisa No. 159 as illustrated in Appendix F.

2.5.4 PUBLIC MEETING

In terms of Section 22 of the Environmental Management Act, No. 7 of 2007 and its regulations, a public meeting is not a requirement of public consultation.

However, public meeting may sometimes be held depending on the scale and type of project being conducted. No public meetings were held for the Project as the scale of the Project is relatively small and is not located in an ecologically sensitive area. The nature of the proposed Project is similar to other small-scaled and medium scaled agricultural production projects in other parts of the country. It was concluded that a public meeting was not required. As a result, the I&APs were engaged directly and invited to register their comments in writing to the EAP. Neighbouring farmers were engaged and consent letters were signed (Appendix G).

2.5.5 SUMMARY OF ISSUED RAISED

During the scoping and impact assessment process, and all comments, questions and concerns received are recorded in Table 4.

Table 4 - Comments, concerns and questions raised by I&APs during the scoping and impact assessment process

Stakeholder name and method through which feedback was received	Declaration of Interest	Comments/Questions Received	Response/Clarification								
Sonja Stephanie Schneider Neighbouring farm owner – Received via ECC website as a registered I&AP	1. To whom it may concern, I, Sonja Stephanie Schneider, hereby submit this Declaration of Interest in terms of Section 23 of the Environmental Management Act (EMA) Regulations, in relation to the proposed extensive irrigation scheme by the neighbouring farm, GAIKAISA, which is reported to involve the abstraction of approximately one to two million (1,000,000 - 2,000,000) cubic metres of water per annum. I am the owner/occupier/representative of Farm Osombusatjuru, a neighbouring property that may be directly and indirectly affected by the proposed development. My interest arises from the proximity of the proposed abstraction area to my property and our reliance on sensitive groundwater-dependent resources, including naturally occurring fountains/springs. Of particular concern is the risk that large-scale groundwater abstraction may result in a lowering of	1. Concern regarding the proposed large-scale groundwater abstraction for an extensive irrigation scheme on Farm GAIKAISA and its potential impact on neighbouring Farm Osombusatjuru. The proposed abstraction may cause groundwater drawdown, leading to reduced or lost spring/fountain flows, negative effects on existing lawful water uses, groundwater-dependent ecosystems, and tourism activities. Request for full participation as an Interested and Affected	1. The detailed hydrological report (Appendix D), in combination with the pump testing data (Appendix C) - taken with a high degree of conservativeness - concludes that the planned extraction volumes are sustainably achievable, given aquifer properties and the conservative abstraction rates. The hydrological report's recommendations will form the basis of the Environmental and Social Management Plan, a legally binding set of management requirements, which will include the following adaptive monitoring measures to be taken; <table><tr><td>Category</td><td>Requirement</td></tr><tr><td>Abstraction rates</td><td>Weekly monitoring</td></tr><tr><td>Abstraction volumes</td><td>Weekly + monthly collation</td></tr><tr><td>Groundwater levels</td><td>Twice daily</td></tr></table>	Category	Requirement	Abstraction rates	Weekly monitoring	Abstraction volumes	Weekly + monthly collation	Groundwater levels	Twice daily
Category	Requirement										
Abstraction rates	Weekly monitoring										
Abstraction volumes	Weekly + monthly collation										
Groundwater levels	Twice daily										

Stakeholder name and method through which feedback was received	Declaration of Interest	Comments/Questions Received	Response/Clarification	
	the groundwater table (groundwater drawdown). Any significant or sustained decline in groundwater levels could: Reduce or eliminate flow from the fountains on Farm Osombusatjuru; Negatively affect groundwater availability for existing lawful uses; Cause irreversible damage to groundwater-dependent ecosystems; Undermine current and planned tourism activities that rely on these natural water features; and Result in cumulative impacts when considered together with other existing or future abstractions in the area. The fountains on Farm Osombusatjuru are environmentally sensitive, economically valuable, and central to our long-term sustainable land-use planning. Protecting their quantity and quality is therefore of critical importance. I am concerned that, without adequate hydrogeological assessment, monitoring, and enforceable abstraction limits, the	Party, including access to hydrogeological assessments, groundwater modelling, monitoring measures, and enforceable abstraction limits to prevent cumulative and irreversible impacts.	Yield review	Mandatory after 6 months
			Rest period	≥24 hours/week per borehole
			Borehole interference	Monitor during separate & combined pumping
			Water quality	Bi-annual sampling
			Regulatory readiness	Maintain auditable records
			This adaptive approach is designed to detect and prevent over-abstraction early.	
			In the case that there is clear evidence to suggest that over-abstraction is taking place, we will be prepared to scale down our abstraction plans accordingly.	
Additionally, we are taking a phased development approach, scaling up over time, which again will allow us opportunities to adapt plans if necessary.				

Stakeholder name and method through which feedback was received	Declaration of Interest	Comments/Questions Received	Response/Clarification
	proposed irrigation scheme may compromise these resources. I therefore request to be formally registered as an Interested and Affected Party (I&AP) and to participate fully in the Environmental Impact Assessment process. This includes access to all relevant reports, particularly hydrogeological and groundwater modelling studies, as well as notification of all public participation opportunities and decisions. This declaration is submitted in good faith to ensure responsible environmental management, protection of shared groundwater resources, and sustainable development within the catchment area. Kindly acknowledge receipt of this declaration and confirm my registration as an Interested and Affected Party. Yours faithfully, Sonja Schneider		

3 REVIEW OF THE LEGAL FRAMEWORK

This chapter outlines the regulatory framework applicable to the proposed Project. As previously stated in chapter 1, an environmental clearance certificate is required for any activity listed in the Government Notice No. 29 of 2012 of the EMA. A thorough review of relevant national legislations has been conducted for the proposed Project. Table 5 identifies relevant legal requirements specific to the Project, Table 6 provides the national policies and plans and Table 7 specifies permits(s) and licence(s) required for the proposed Project.

3.1 NATIONAL REGULATORY FRAMEWORK

Table 5 - Details of the regulatory framework as it applies to the proposed Project

National regulatory regime	Summary	Applicability to the Project
Constitution of the Republic of Namibia (1990)	The constitution defines the country's position about sustainable development and environmental management. The constitution states that the State shall actively promote and maintain the welfare of the people by adopting policies aimed at the following: "Maintenance of ecosystems, essential ecological processes and biological diversity of Namibia, and the utilisation of living, natural resources on a sustainable basis for the benefit of all Namibians, both present, and future."	The Proponent is committed to the sustainable use of the environment and has aligned its corporate mission, vision and objectives with this ambit of the Constitution of the Republic of Namibia (1990).
Environmental Management Act, 2007 (Act No. 7 of 2007) and its regulations (2012), including the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2011)	The Act aims to promote sustainable management of the environment and the use of natural resources. The Act requires certain activities to obtain an environmental clearance certificate prior to Project development. The Act states that an EIA should be undertaken and submitted as part of the environmental clearance certificate application process. The MEFT is responsible for the protection and management of Namibia's natural environment. The	This scoping report with impact assessment documents the findings of the scoping phase and includes an environmental and social impact assessment sufficient for the project's activities. The process has been undertaken in line with the requirements of the EMA and its regulations.

National regulatory regime	Summary	Applicability to the Project
	DEAF, under the MEFT, is responsible for the administration of the EIA process.	
Labour Act, No. 11 of 2007	The Labour Act, No. 11 of 2007 (Regulations relating to the Occupational Health & Safety provisions of Employees at Work, promulgated in terms of Section 101 of the Labour Act, No. 6 of 1992 - GN156, GG 1617 of 1 August 1997)	The Proponent must adhere to all labour provisions and guidelines, as enshrined in the Labour Act.
Water Resources Management Act, 2013 (Act No. 11 of 2013) and associated Water Resource Management Regulations, No.269 of 2023	Regulation 66 (1) states that a person who intends to apply for a licence under section 72 of the Act must apply to the Executive Director on a form approved by the Minister, which form is obtainable from the offices or official website of the Ministry	Water abstraction from nearby five (5) boreholes will be required for the project. The relevant water abstraction licences will be obtained from MAFWLR: DWA prior to the commencement of the Project.
Soil Conservation Act, No. 76 of 1969 (as amended)	This Act makes provision for the prevention and control of soil erosion, and for the protection, improvement, and conservation of soil and vegetation.	During the Project, the soil structure may be impacted due to soil compaction during agricultural activities. However, the Proponent intends to apply methods such as the use of biochar to improve soil productivity, water retention and nutrient holding capacity.

3.2 NATIONAL POLICIES AND PLANS

Table 6 - National policies and plans applicable to the proposed Project

Policy or plan	Description	Relevance to the Project
Vision 2030	Vision 2030 sets out the nation's development targets and strategies to achieve its national objectives. Vision 2030 states that the overall goal is to improve the quality of life of the Namibian people aligned with the developed world.	The Proponent is encouraged to meet the objectives of Vision 2030 and shall contribute to the overall development of the country through continued employment opportunities and ongoing contributions to the gross domestic product (GDP).
Sixth National Development Plan (NDP6)	The NDP6 is the sixth plan in the series of seven five-year national development plans that outline the objectives and aspirations of Namibia's long-term vision as expressed in Vision 2030. There are four pillars on which NDP6 is built, these are: - Economic growth, transformation and resilience; - Human development and community resilience; - Environmental sustainability; and - Effective governance and public service delivery.	The Proponent is encouraged to support the government's objectives of the NDP 6 through creating opportunities and drawing efforts towards environmental sustainability.

Policy or plan	Description	Relevance to the Project
Namibia's Green Plan, 1992	Namibian has developed a 12-point plan for integrated sustainable environmental management to ensure a safe and healthy environment and to maintain a viable economy.	The Proponent is encouraged to adhere to best practice throughout both phases of the proposed Project.
Namibia Agriculture Policy (2015)	The Namibia Agricultural Policy (NAP) provides the overarching framework guiding the development, management, and growth of the agricultural sector in Namibia. Its main aim is to promote sustainable, competitive, and resilient agriculture that contributes to food security, rural development and economic growth.	The proposed Project aligns with the policy as it intends to improve food security in Namibia, support sustainable land and water use and employment creation.
Food & Nutrition Security Policy 1995 (Updated version - 2021)	The Food & Nutrition Security Policy (FNSP) aims to ensure that all Namibians have reliable access to sufficient, safe, nutritious and affordable food, while strengthening national systems that support sustainable food production, distribution and consumption. The updated draft aligns with modern challenges such as climate change, economic shocks, rising food prices and malnutrition trends.	The agriculture project supports the policy objectives by increasing national food availability, improving nutrition, promoting sustainable resource use, and contributing to local livelihoods and food security resilience.

3.3 ENVIRONMENTAL PERMITS AND LICENCE (S)

Table 7 – Permits and licences required for the proposed Project

Permit or licence	Act or Regulation	Related activities requiring a permit/licence	Relevant Authority
Environmental clearance certificate	Environmental Management Act, No 7 of 2007	Required for all listed activities shown in Table 3. The environmental clearance certificate must be approved by the Environmental Commissioner (EC).	Ministry of Environment, Forestry and Tourism (MEFT): Department of Environmental Affairs and Forestry (DEAF)
Water abstraction licences	Water Resources Management Act, 2013 (Act No. 11 of 2013)	Required as water will be abstracted from five (5) boreholes within Farm Gai Kaisa No. 159.	Ministry of Agriculture, Fisheries, Water and Land Reform (MAFWLR): Department of Water Affairs (DWA)

4 PROJECT DESCRIPTION

4.1 NEED FOR THE PROJECT

Namibia still faces challenges related to food availability and nutrition, particularly in rural areas, largely due to semi-arid climatic conditions and water scarcity. Sustainable agricultural practices, such as water efficient irrigation are known to enhance the resilience of farming systems to climate variability. The sustainability and advantages of such irrigation practices to be conducted as part of the Project has been assessed in the groundwater assessment (Appendix D). Furthermore, integrated soil fertility management can improve crop yields while simultaneously reducing greenhouse gas emissions and enhancing carbon sequestration, thereby contributing to improved carbon storage as soil organic carbon.

The National Food and Nutrition Security Policy further emphasise the importance of increasing domestic food production in Namibia. Its second objective states that, “by 2030, domestic food production for local consumption should increase from 30% to 60%, alongside enhanced processing, marketing and consumption of food to improve access to nutritious and safe food for the populace of Namibia at all times” (Ministry of Agriculture, Water and Land Reform (MAWLR), 2021). Sustainable cultivation of staple foods and perennial crops directly supports this objective by increasing local food production, diversifying diets and reducing reliance on imported food products.

Additionally, the proposed Project aims to create more employment opportunities and promote research initiatives that strengthen environmentally sustainable agricultural practices within the country. This approach aligns with Namibia’s national development objectives, as outlined in the Namibia Agricultural Policy (Ministry of Agriculture, Water and Forestry (MAWF), 2015). By promoting sustainable cultivation methods, the Project is expected to deliver long-term economic benefits while supporting resilient and sustainable food production systems.

4.2 ALTERNATIVES CONSIDERED

In terms of the Environmental Management Act, No. 7 of 2007 and its Regulations, alternatives considered should be analysed and presented in the scoping plus impact assessment report. This requirement ensures that during the design evolution and decision-making process, potential environmental impacts, costs and technical feasibility have been considered, leading to the best option(s) being identified and assessed.

The Proponent intends to look at alternative methods to improve soil and water-soluble nutrient retention to enhance crop productivity while minimising nutrient losses and environmental impacts.

4.2.1 NO-GO ALTERNATIVES

Should the Project not occur, it would avoid project-related environmental disturbances. However, it would also result in the loss of potential socio-economic benefits associated with the crop production. These include increased local production of staple foods and perennial crops, contributions to national food security objectives, the creation of employment and skills development and acquisition of practical work experiences for the workforce. Additionally, opportunities to improve land productivity through the implementation of sustainable agricultural practices, such as enhanced soil fertility management, water-use efficiency and climate-resilient farming techniques would not be realised. Consequently, the no-go alternative would limit progress toward national development goals and policy objectives related to sustainable agriculture, food and nutrition security and rural economic development.

4.3 PROPOSED PROJECT ACTIVITIES

The Proponent proposes to use an irrigation system for a crop production project, whereby the crop residues will be processed into charcoal and biochar for export to national and international markets. The development of the irrigation system will be done in two (2) phases, with a combined estimated use of approximately one (1) Mm³ of water annually. The irrigation system will support approximately 270 hectares (ha) of staple foods (maize and wheat production) as well as other perennial crops (fruit trees, grapes, pecans and avocado) on farm Gai Kaisa No. 159.

4.3.1 EQUIPMENT AND MATERIALS

The Project involves centre pivot irrigation systems for crops production (maize and wheat) and drip irrigation for perennials crops. Drip irrigation is applied closer to roots systems and is preferred as it reduces evaporation, runoff and ensure deep percolation and requires water to be applied in smaller volumes. The section below differentiates the materials used in the two (2) irrigation systems:

Centre Pivot Irrigation System

- Steel or aluminium pipes;
- Electrical cabling and switchgear;
- Concrete (for foundations);
- Rubber hoses and fittings; and
- Lubricants and hydraulic fluids.

Drip Irrigation System

- PVC and HDPE pipes;
- Drip tapes or drip lines;
- Emitters and connectors;
- Fertiliser storage tanks;
- Filter media; and
- Plastic fittings and valves.

4.3.1 WATER SUPPLY

Based on existing use and the typical water requirements for these types of crops, Phase 1 has a water requirement of approximately one (1) Mm³/a. Thereafter, Phase 2 will include an increased hectareage to ~260 ha, which will need a total groundwater requirement of two (2) Mm³/a. Water will be sourced from five (5) boreholes within Farm Gai Kaisa No. 159 as depicted in Figure 14 of the groundwater study (Appendix D).

4.3.2 POWER SUPPLY

Power will be supplied from the existing PV Solar Park already used for Retort operations.

4.3.3 WORK FORCE AND ACCOMMODATION

The few employees to be hired during the Project will be accommodated on Farm Gai Kai No. 159. Employees will be provided with communal bathrooms with access to warm running water and a communal kitchen.

4.3.4 WASTE MANAGEMENT

General, solid and domestic waste shall be segregated and recycled, where feasible. The solid waste will be disposed at the Grootfontein Municipal landfill site or the nearest appropriate licenced disposal site. Effluent streams shall be directed to a designated containment to prevent the uncontrolled release into natural drainage lines.

5 SUMMARY OF THE BASELINE ENVIRONMENT

This chapter provides an overview of the biophysical and socio-economic baseline environments. It summarises the key characteristics of the biophysical environment including climate, geology, topography, soils, water, vegetation and fauna, as well as the existing socio-economic conditions such as population and healthcare as well as cultural heritage. The information presented serves to guide the identification of impacts and the associated mitigation measures as set out in chapter 7 of this report.

Table 8 provides a brief description of the area and environment pertaining to the proposed activities.

Table 8 - Summary of the baseline environment

Summary of the local environment	
Climate	Farm Gai Kaisa No. 159 receives between 500 mm to 550 mm of rain per year, with a variation coefficient of <30%. Potential evaporation is between 1 960 mm and 2 100 mm per year, meaning an average water deficit of between 1 500 mm and 1 700 mm per year. Relative humidity is low, rarely more than (>) 20% in winter but may reach 85% in summer before or after thunderstorm build-up. Maximum temperatures average around 32°C - 34°C, mainly recorded during the afternoons between November and January, while minimum temperatures are around 4°C - 6°C and are normally recorded during nights in June and July. Deviations from these averages are common, with the highest temperatures reaching 38°C - 40°C and the lowest temperatures below 0°C (Mendelsohn, Jarvis, Roberts, & Robertson, 2002).
Geology	The Project is located within the Swakop Group, which forms part of the Damara Supergroup (600 million years old – 850 million years old), show a surficial transition to the Waterberg Basin of the Karoo Supergroup (180 million years old – 300 million years old). Over millions of years, a lime and dolomite rock mass of up to 5 000 m thick was formed, which was pressed upwards and folded intensely as the result of a gigantic collision between the two mainlands, approximately 650 million years ago. To the east (E), a transition to the more recent Kalahari deposits (<70 million years old) becomes increasing apparent.
Topography and soil	There is increasing elevation towards the Otavi Mountains in the northwest (NW), reaching an elevation of almost 1 600 metres above

Summary of the local environment	
	mean sea level (mbsl). Towards the southeast (SE), the landscape flattens gradually to an elevation of 1 350 – 1 300 mbsl. The Project area is mostly dominated by mollic leptosols. Leptosols are marked by a shallow soil profile (indicating little influence of soil-forming processes) and contain large amounts of gravel. Leptosols are coarse-textured, underlain by solid rock within 30 cm from the surface. The soil is thus poorly developed and thin, lacks appreciable quantities of accumulated clay and organic material and is susceptible to erosion during the rainy season, especially in the beginning of the rainy season when vegetation cover is sparse. Eutric fluvisols (in the south (S) of the study area) are associated with the ephemeral drainage lines of the Kalahari. These soils were intensely reworked during its formation, as a result of flooding.
Hydrogeology and hydrology	Being a karst landscape, the Otavi Mountains are without any surface drainage channels. Tributaries of the Omatako River originate on or near the study area, which are ephemeral. The study area is located in the Omatako Groundwater Basin. The general direction of the groundwater flow is E and SE towards the Omatako River. Freshwater is obtained from existing boreholes. There are five (5) boreholes on Farm Gai Kaisa No. 159.
Vegetation	The study area is covered with the Northern Kalahari vegetation type of the broad-leaved tree-and-shrub savanna sub-biome, showing a transition towards the thornbush shrubland vegetation type of acacia tree-and-shrub savanna to the northeast (NE). Plant diversity is estimated to be more than 500 species in the general Kombat area. Endemism in this area is viewed as “average” with 6 - 15 species and known for its local endemics. Encroacher species include <i>Senegalia mellifera</i>, <i>Dichrostachys cinerea</i>, <i>Acacia nolitica</i> and <i>Terminalia prunioides</i>.
Fauna species	Endemic fauna species is expected to be low, although the overall terrestrial biodiversity in the study area ranges from medium to high, showing a clear increase towards the higher elevations associated with the Otavi Mountains. The number of mammal species ranges between 76 and 90, bird species range between 201 and 230, reptiles between 71 – 80 species, amphibians between 12 – 15 species and 10 – 11 scorpion (Mendelsohn, Jarvis, Roberts, & Robertson, 2002).
Socio-economic baseline	The population density of the Otjozondjupa Region, where the Project is located, is low (1.5 persons per km²). The total population

Summary of the local environment	
	of Otjozondjupa Region is estimated at 220,811 as of 2023. The economy of the Otjozondjupa Region is predominantly agriculture-based. Extensive livestock farming forms the livelihood of many people. Greater parts of the region are covered by commercial and communal farms, mainly for cattle ranching. Guest farms and hunting farms are also common. On both commercial and communal land, bush encroachment decreases the carrying capacity of the farms markedly over the last four (4) decades. The largest percentage of people in the Otjozondjupa Region utilise intermediate hospitals for medical care (45.9%) and only 25% have to rely on clinics. Less than 10% of the total population of the Otjozondjupa Region receive their medical treatment from a doctor (Namibia Statistics Agency, 2017).
Heritage	It is to be expected that more paleontological sites of the same kind may exist in the wider landscape associated with the Etjo Mountains including farm Gai Kaisa No. 159. The archaeological assessment reported that the area is not archaeologically sensitive based on the indicative value of potential surface finds and existing survey data to which the assessment was limited. However, within the Gai Kaisa Farm boundaries two grave sites were recorded as per the previous archaeological assessment (Appendix H). It should be noted that the Project is not planned to encroach on these sites.

6 IMPACT IDENTIFICATION AND EVALUATION METHODOLOGY

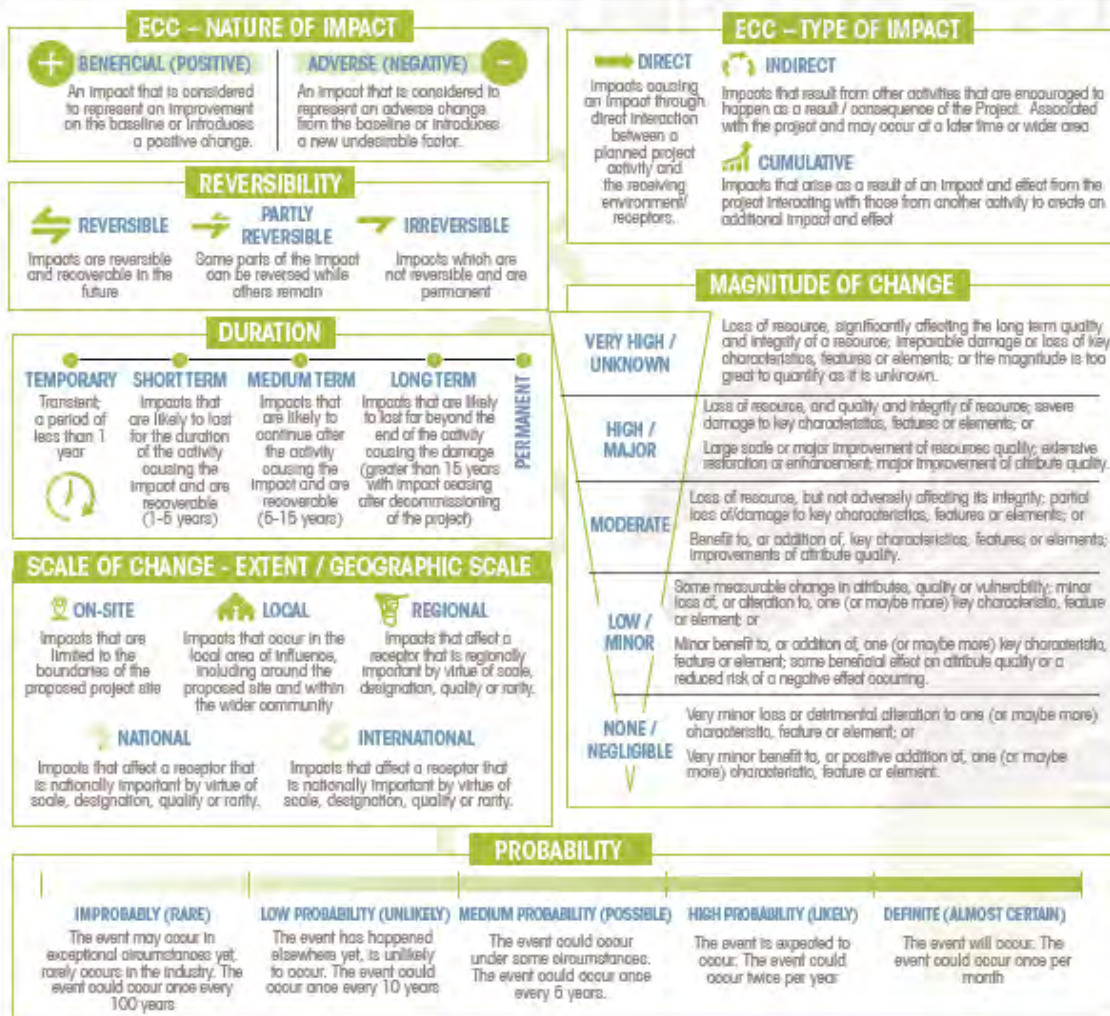
6.1 INTRODUCTION

The impact assessment methodology described in this chapter, was developed by ECC and is designed to systematically identify and evaluate potential biophysical and socio-economic impacts that may arise from the proposed Project. The methodology takes into consideration the baseline characteristics of the Project area and assesses the significance of impacts based on various factors, including the sensitivity and value of environmental and social receptors, the nature and characteristics of the potential impact and the magnitude of potential change.

This chapter further provides a structured approach for evaluating the potential impacts of the proposed Project on the environment and social aspects. The method shown in Figure 4 provides assessment guidance that is used to evaluate impacts, and it also acknowledges any limitations, uncertainties and assumptions associated with the assessment methodology. It outlines how impacts are identified and evaluated and how the level of significance is derived. The methodology also addresses the application of mitigation measures in the assessment and how additional mitigations are identified.

Overall, this chapter provides a comprehensive and systematic approach for conducting impact assessments, which can help ensure that potential biophysical and socio-economic impacts are thoroughly evaluated and addressed in the decision-making process for the proposed Project. However, it is important to note that the effectiveness of this methodology would ultimately depend on its implementation and the accuracy of the baseline data and assumptions used in the assessment, as discussed further in section 6.3.

ECC IMPACT PREDICATION AND EVALUATION METHODOLOGY



		SIGNIFICANCE OF IMPACT				
		Significance of Impact	Impacts are considered to be local factors that are unlikely to be critical to decision-making	Impacts are considered to be important factors but are unlikely to be key decision-making factors. The impact will be experienced, but the impact magnitude is sufficiently small (with and without mitigation) and well within accepted standards, and/or the receptor is of low sensitivity/value. Impacts are considered to be short-term, reversible and/or localized in extent	Impacts are considered within acceptable limits and standards. Impacts are long-term, but reversible and/or have regional significance. These are generally (but not exclusively) associated with sites and features of national importance and resources/ features that are unique and which, if lost, cannot be replaced or relocated	Impacts are considered to be key factors in the decision-making process that may have an impact of major significance, or large magnitude impacts occur to highly valued/ sensitive resources/receptors. Impacts are expected to be permanent and non-reversible on a national scale and/or have international significance or result in a legislative non-compliance
SENSITIVITY	Biophysical	Social	Low	Minor (2)	Moderate (3)	Major (4)
	A biophysical receptor that is protected under legislation or international convention (CITES), listed as rare, threatened or endangered (IUCN) species, highly valued/ sensitive resources/ receptors	Those affected people/ communities will not be able to adapt to changes or continue to maintain pre-impact livelihoods	High (3)	Minor (3)	Moderate (6)	Major (9)
	Of value, important/ rarely on a regional scale and with limited potential for substitution and/or not protected or listed (globally) but may be a rare or threatened species in the country, with little resilience to ecosystem changes, important to ecosystem functions, or one under threat of population decline	Able to adapt with some difficulty and maintain pre-impact status but only with a degree of support	Medium (2)	Low (2)	Minor (4)	Moderate (6)
	Not protected or listed as common/abundant, or not critical to other ecosystem functions	Those affected are able to adapt with relative ease and maintain pre-impact status. There is no perceptible change to people's livelihood	Low (1)	Low (1)	Low (2)	Minor (3)

SENSITIVITY AND VALUE

Low

Of value, importance or rarely on a local scale, and/or not particularly sensitive to change or has considerable capacity to accommodate a change

Medium

Of value, important or rarely on a regional scale, and with limited potential for substitution, and/or moderate sensitivity to change, or moderate capacity to accommodate a change

High

Of value, important or rarely on an international and national scale and with very limited potential for substitution, and/or very sensitive to change or has little capacity to accommodate a change

MITIGATION

Mitigation comprises a hierarchy of measures ranging from preventative environmental impacts by avoidance, to measures that provide opportunities for environmental enhancement. The mitigation hierarchy is avoidance, reduction at source, reduction at receptor level, offsetting and compensating, remediation, and enhancement.

Mitigation measures can be split into three distinct categories, broadly defined as:

Preventative measures and other best practice measures for avoiding and minimizing environmental impacts. These are considered as good practice measures.

Avoidance/prevention by the EIA process that will enter the design process. Through considering design measures that avoid, reduce or prevent an impact or minimizing the design through the inclusion of environmental features to reduce the magnitude of change. These are considered as avoidance/prevention.

Specified additional measures, or follow-up actions to be implemented to further reduce adverse impacts that remain after the implementation of embedded mitigation. These are considered as additional mitigation.

The EIA is an iterative process whereby the outcomes of the environmental and social assessments inform the project.

This EMP provides the good practice mitigation measures and specified additional measures as follow-up action ECC has recommended for the project.

SIGNIFICANCE DESCRIPTION

Low - Major Beneficial (All Scores)

Impacts are considered to be beneficial to the environment and society.

Low (negative) 0 - 25

Impacts are considered to be local factors that are unlikely to be critical to decision-making.

Minor (negative) 25 - 50

Impacts are considered to be important factors but are unlikely to be key decision-making factors. The impact will be experienced, but the impact magnitude is sufficiently small (with and without mitigation) and well within accepted standards, and/or the receptor is of low sensitivity/value. Impacts are considered to be short-term, reversible and/or localized in extent.

Moderate (negative) 50 - 75

Impacts are considered within acceptable limits and standards. Impacts are long-term, but reversible and/or have regional significance. These are generally (but not exclusively) associated with sites and features of national importance and resources/ features that are unique and which, if lost, cannot be replaced or relocated.

Major (negative) 75 - 100

Impacts are considered to be key factors in the decision-making process that may have an impact of major significance, or large magnitude impacts occur to highly valued/ sensitive resources/receptors. Impacts are expected to be permanent and non-reversible on a national scale and/or have international significance or result in a legislative non-compliance.

Figure 4 - ECC ESIA methodology based on IFC standards

6.2 ASSESSMENT GUIDANCE

The principal documents used to inform the assessment method are:

- International Finance Corporation standards and models, in particular Performance Standard 1, Assessment and management of environmental and social risks and impacts' (International Finance Corporation, 2017) (International Finance Corporation, 2012);
- International Finance Corporation CIA and Management Good Practice Handbook (International Finance Corporation, 2013); and
- Namibian Draft Procedures and Guidance for EIA and EMP (Republic of Namibia, 2008).

6.3 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS

The limitations and uncertainties associated with the assessment methodology in Namibia were observed to include the absence of topic-specific assessment guidance, with a generic methodology being applied based on IFC guidance and professional judgement. This implies that there may be limitations in terms of tailoring the assessment to specific topics or issues relevant to Namibia and that the methodology may not fully capture the unique characteristics and nuances of the local context.

The ECC impact assessment process also acknowledged the presence of uncertainties and assumptions were made based on realistic worst-case scenarios to ensure that potential environmental impacts were identified and assessed comprehensively. These assumptions and uncertainties were identified and documented during the assessment process, shown in Table 9, and are in line with best practice.

A cautious approach was applied where uncertainties existed, allowing for the identification and assessment of potential impacts based on worst-case scenarios. The limitations and uncertainties were acknowledged and described in the baseline section of the assessment (chapter 5), indicating transparency and awareness of potential limitations in the methodology.

It is important to note that the limitations and uncertainties identified in the assessment methodology may introduce potential biases or inaccuracies in the assessment results. Therefore, it is recommended to regularly review and update the methodology to address these limitations and uncertainties and to ensure that it remains robust and relevant for the specific context of Namibia. Additionally, incorporating stakeholder feedback and local

knowledge can also contribute to improving the accuracy and comprehensiveness of the assessment process.

Table 9 - Limitations, uncertainties and assumptions

Limitation/uncertainty	Assumption
Expected rainfall to support the Project	Namibia is semi-arid and rainfall is characterised by high spatial and temporal variability. Therefore, the groundwater assessment evaluates three (3) separate scenarios of taking into consideration different rainfall conditions and the efficacy of biochar application to improve soil – all of which were assessed.

6.4 CUMULATIVE IMPACTS

6.4.1 CUMULATIVE IMPACTS ASSESSMENT METHOD

Cumulative impacts may arise as a result of other Project activities, or due to the combination of two (2) or more projects in the Project area. A cumulative impact assessment (CIA) will be undertaken by applying the IFC CIA Good Practice Handbook (International Finance Corporation, 2013), which recommends that a rapid CIA is undertaken.

A rapid CIA takes into consideration the challenges associated with a good CIA process, which include a lack of basic baseline data, uncertainty associated with anticipated development, limited government capacity, and the absence of strategic regional, sectoral, or integrated resource planning schemes.

The following five-step rapid CIA process will be followed:

- **Step 1:** scoping – determine spatial and temporal boundaries;
- **Step 2:** scoping – identify valued environmental and social receptors and identify reasonably foreseeable developments;
- **Step 3:** determine the present condition of valued environmental and social receptors (the baseline);
- **Step 4:** Evaluate the significance of the cumulative impacts; and
- **Step 5:** Identify mitigation measures to avoid or reduce cumulative impacts.

The following information will be applied to the assessment in line with the above steps and IFC guidance:

- The spatial and temporal boundaries of the CIA are the extent of the Project boundaries and the duration of the exploration and rehabilitation phases of the proposed Project;

- Valued environmental and social receptors that may be affected;
- A review of existing and reasonable, anticipated and/or planned developments has been undertaken, which is based on the information presented in chapter 4;
- The predicted future conditions of sensitive and common environmental and social receptors have been taken into consideration in the assessment;
- The assessment findings are presented in the assessment chapter will have the CIA applied in combination with professional judgment and published environmental assessment reports; and
- A review of mitigation and monitoring measures will be undertaken, with any additional ones identified.

6.5 MITIGATION

Impacts that are identified throughout the scoping plus impact assessment process will be subjected to a process of impact mitigation, which is inherent in all aspects of the scoping plus impact assessment system. Embedded mitigation and good practice mitigation will be considered in the assessment. Additional mitigation measures will be identified when the significance of an impact requires it and causes the impact to be further reduced.

The principal of impact mitigation comprises a hierarchy of measures ranging from preventative environmental impacts by avoidance, to measures that provide opportunities for environmental enhancement and will be applied to all impacts associated with the proposed Project. The mitigation hierarchy is avoidance; reduction at source; reduction at receptor level; repairing and correcting; compensation; remediation; and enhancement. The ESMP for the Project provides good practice measures of the impact mitigation and specifies additional measures or follow-up action, where required. The ESMP is appended to this report (Appendix A). On completion of the impact assessment, the mitigation measures from the impact assessment and recommendations are then incorporated into the final ESMP, which forms an appendix of the final scoping plus impact assessment.

Mitigation measures can be split into three (3) distinct categories, broadly defined as:

- Actions undertaken by the scoping plus impact assessment process that influence the design process, through implementing design measures that would entirely avoid or eliminate an impact or modifying the design through the inclusion of environmental features to reduce the magnitude of change. These are considered embedded mitigation;
- Standard practices or other best practice measures for avoiding and minimising environmental impacts. These are considered good practice measures; and
- Specified additional measures or follow up actions to be implemented, to further reduce adverse impacts that remain after the incorporation of embedded mitigation. These are considered additional mitigation measures.

Where additional mitigation is identified, a final assessment of the significance of impacts (residual impacts) will be carried out, taking into consideration the additional mitigation.

The scoping plus impact assessment is an iterative process whereby the outcomes of the environmental assessments inform the environmental management of the proposed Project through the ESMP. The ESMP in Appendix A provides an outline of the good practice measures and specified additional measures or follow-up actions to be undertaken. The Project ESMP will be finalised on completion of the impact assessment process and included in the final scoping plus impact assessment report.

7 ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

7.1 INTRODUCTION

This chapter presents the findings of the impact assessment for the proposed activities, with a focus on potential significant environmental and social impacts. The design of the proposed Project and best practice measures were considered during the desktop assessment to identify likely significant impacts and recommend mitigation measures. The Proponent is advised to obtain the appropriate licences as indicated in section 3.3. A summary list of potential impacts was provided, including water (surface and groundwater), soil, landscape, socioeconomics (employment, demographics, and land use), noise, ecology (fauna and flora), air quality (emissions, pollutants, and dust), and heritage (including culture, history, archaeology, and palaeontology).

The section below presents the impact assessment findings, identify the activities that could be the source of impacts, the receptors that could be affected and the pathways between them.

7.2 IMPACTS DEEMED AS NOT SIGNIFICANT

The impacts that have been assessed as not being significant are summarised in Table 10 and are not discussed further in this report. The listed impacts are non-significant and do not render any threat to the environment in a way that adversely challenges its resilience to continue in its modified form.

Table 10 - Table of non-significant impacts

Environmental and social topic	Potential impact	Summary of assessment findings
Traffic and road impacts	Alteration of traffic flow and negative impacts on the quality of nearby roads	– Farm Gai Kaisa No. 159 has a gravel road leading up to the B8 road. The Project will not cause material changes to the existing traffic volumes, neither the quality of the road.
Community (farmers and landowners)	Social tensions and conflict due to lack of engagements and disruptions to routine movements.	– The Proponent holds an environmental clearance certificate for the mechanised bush thinning operations on the Project footprint and maintains continuous engagement with all

Environmental and social topic	Potential impact	Summary of assessment findings
		neighbouring farmers. Additionally, the planned Project activities are not expected to disrupt the normal operations of neighbouring farmers.
Air quality impacts	Potential dust generation from Project activities	The Project operations are unlikely to generate excessive aerial emissions that would not be manageable or that will significantly impact sensitive receptors (nearby farmers). Mitigations are already in place to minimise the air quality impact for the current Project.
Noise impacts	Noise impacts on nearby farmer	Noise activities on the Project sites are restricted to working hours and planned activities will unlikely generate excessive noise that would propagate and upset offsite receptors.
Cultural heritage	Destruction of and damage to heritage sites and artifacts	- Within the Gai Kaisa Farm boundaries two grave sites were recorded as per the previous archaeological assessment (Appendix H). - The two (2) identified heritage sites on the Farm will not be impacted by the Project activities.
Terrestrial ecology and biodiversity	Increased movement of transportation trucks and vehicles for construction and operation activities may results into residing, nesting and slow-	As outlined in the ESMP, existing tracks and routes will be utilised and movements will be restricted to daytime operating hours as far as reasonably practical.

Environmental and social topic	Potential impact	Summary of assessment findings
	moving organisms being disturbed, injured or killed.	

7.3 SIGNIFICANT IMPACTS

7.3.1 SOCIOECONOMIC IMPACTS

The term socio-economic impact assessment embraces both social impacts and economic impacts. Impacts include areas such as employment creation, increased productivity and profitability and procurement of goods from the local economy. The significant socioeconomic impacts are summarised in this section. Table 11 outlines the socioeconomic impact ratings (findings). An overview of the significant socio-economic, before mitigation is shown in Figure 5. Each specific impact is discussed further in this section.

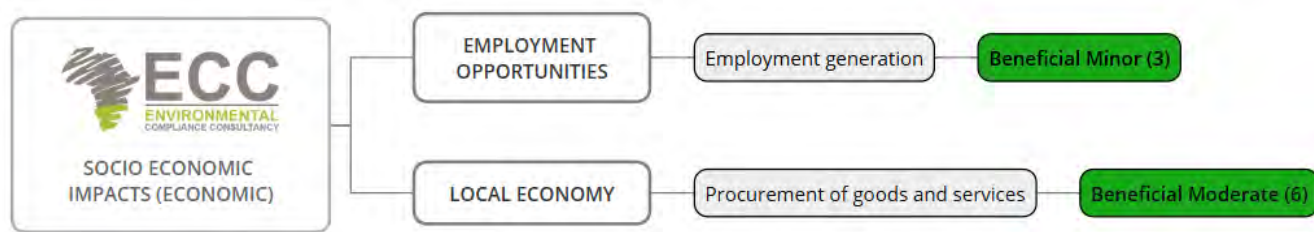


Figure 5 - Overview of the socioeconomic impacts

7.3.1.1 Employment creation

During the irrigation operations, it is expected that job opportunities will be created to ensure the Project processes function effectively. The nature of the impact is beneficial and will impact people directly, providing them with incomes that would enable them to spend in the local economy and improve their livelihoods. The impact may be reversible as jobs may be lost should the Project enter a decommissioning phase. The duration of the impact is rated medium as Project is expected to be over a period of 10-15 years. The probability of the impact is rated likely to occur as preference will be given to locals to minimise unnecessary relocation of employees. The magnitude of the change is minor as added workforce is expected to be few, and the sensitivity of receptor is rated low due to the local scale of the impact. The overall significance of the impact is beneficial minor (Table 11).

7.3.1.2 Procurement of goods and services

During the irrigation operation, sourcing of goods and services from local or regional businesses could increase economic benefits. The nature of the impact is beneficial and will impact local businesses directly. The impact is rated as reversible should business activities cease. The duration of activities may occur during a medium period (10-15 years). The impact

is likely to occur regionally due to availability, convenience and lower transport cost. The magnitude of the change is rated minor due to the minor benefit to local surrounding businesses. The sensitivity of receptor is low due to the local scale of the impact. The overall significance of the impact is beneficial moderate (Table 11).

Table 11 - Socioeconomic impact assessment findings

Activity	Receptor	Impact	Nature of impact	Value & sensitivity	Magnitude of change	Significance of impact
Operational phase	Socio-economic	Employment generation	Beneficial Direct Reversible Medium term Local Likely	Low	Minor	Beneficial Minor (3)
		Procurement of goods and services	Beneficial Direct Reversible Medium term Regional Likely	Medium	Minor	Beneficial Moderate (6)

7.3.2 SOCIAL IMPACTS

Social impacts refer to the potential effects on stakeholders, communities and the wider Namibian society. These impacts consider how the Project affects the well-being, livelihoods, culture, and social dynamics of individuals and groups. An overview of the significant social impacts, before mitigation is shown in Figure 6. The specific impact is discussed in this section.

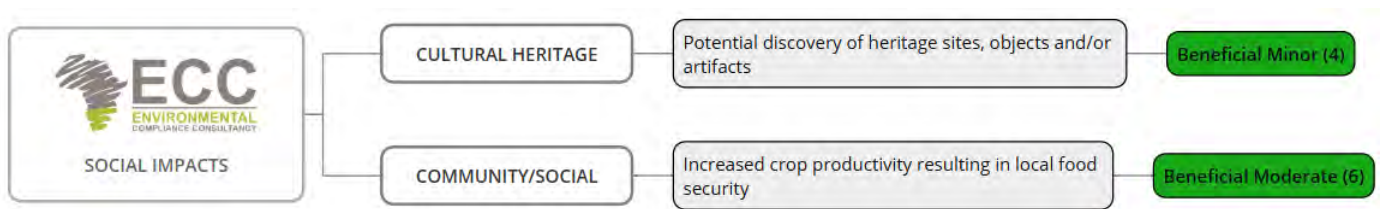


Figure 6 - Overview of social impacts

7.3.2.1 Cultural heritage – chance find of heritage sites, objects and/or artifacts

During agriculture operations, new cultural heritage sites, objects and artifacts may be discovered or unearthed within the Project footprint. In cases where heritage sites are discovered, the chance find procedure will be used as outlined in the ESMP.

The nature of the impact is beneficial, directly impacting the Namibia's national heritage register which is maintained by the National Heritage Council (NHC) under the National Heritage Act, 2004 (Act No. 27 of 2004). The impact is considered irreversible and permanent. The probability of the impact is unlikely, as the Project site has previously been surveyed during the initial environmental impact assessment study for the mechanised bush clearing activities. No major earthworks will be undertaken. However, in the likely event that any major heritage discovery is made, this may be substantial for cultural tourism as the area would warrant protection and preservation in terms of the National Heritage Act, No. 27 of 2004. The magnitude of change is rated as moderate as heritage sites hold spiritual, cultural and social significance for local communities, including traditional authorities and descendants of affected groups. Additionally, all archaeological material, graves and culturally significant sites are protected by law, regardless of whether they are formally recorded. The sensitivity of receptor is rated as medium due to the national cultural benefit associated with this impact. The significance of the impact is rated beneficial minor (Table 12). The chance find procedure is outlined in Appendix A of the ESMP.

7.3.2.2 Increased crop productivity resulting in local food security

Irrigation schemes have the ability to enhance crop yields through more consistent, steady crop production and extended growing seasons, especially in arid environments prone to drought. Increased crop productivity leads to food security and drought relief savings for the local government and assist the local economy (Mudima, 2002).

The nature of the impact is rated as beneficial and directly impact the economy and the regional community. The impact may be reversible as outcomes could be unpredictable due to variabilities in climate, moisture and other environmental factors. The duration of the Project is expected to be over a medium term (10-15 years), supporting receptors on a regional scale. The probability of the impact occurring is considered high as it is likely expected that with improved irrigation schemes, there will be improved yields. The magnitude of the change is moderate due to food availability and access to nutrition, particularly in rural areas. The sensitivity of receptor is rated medium due to the regional scale of the impact. The overall significance of the impact is beneficial moderate (Table 12).

Table 12 – Social impacts

Activity	Receptor	Impact	Nature of impact	Value and sensitivity	Magnitude of change	Significance of impact
Irrigation – operational phase	Cultural heritage	Potential discovery of new heritage sites, objects and/or artifacts	Beneficial Direct Irreversible Permanent National Unlikely	Medium	Moderate	Beneficial Minor (4)
	Community	Increased crop productivity resulting in local food security	Beneficial Direct Reversible Medium term Regional Likely	Medium	Moderate	Beneficial Moderate (6)

7.3.3 BIOPHYSICAL IMPACTS

Biophysical impacts refer to the effects of human activities or processes on the physical and biological aspects of the environment. It encompasses changes to ecosystems, species, habitats and the physical environment, such as air, water and soil. An overview of the significant biophysical impacts, before mitigation is shown in Figure 7. Each specific impact is discussed further in this section.

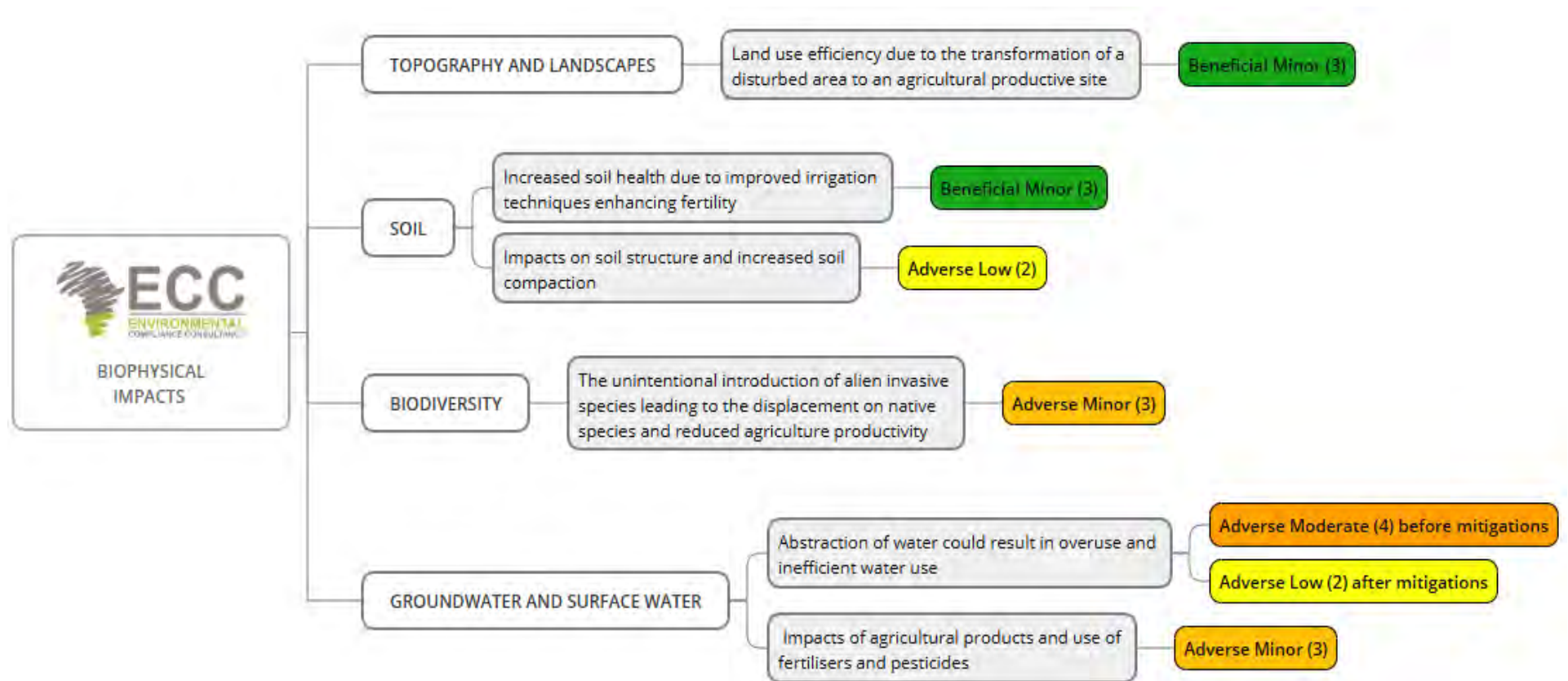


Figure 7 - Overview of the biophysical impacts

7.3.3.1 *Increased land-use efficiency*

The current Project activities involve thinning encroached bushes, often leaving the site disturbed and in extreme cases barren. The operation of the irrigation scheme will allow for the continued efficient use of the disturbed area, leading to increased yields and food security.

The nature of the impact is rated beneficial and directly impacting the landscape. The impact may be partly reversible, should the Project cease as the area may become less productive in the absence of continued management and human interventions. The duration of the Project is expected to be over a medium term (10 -15 years) and will impact the land used for the site. The magnitude of the change is rated moderate due to the sizable positive impact, while the sensitivity of receptor is rated low as the impact is restricted. The overall significance of the impact is beneficial minor (Table 13).

7.3.3.2 *Increased soil health*

Irrigation systems and planned agricultural programmes can improve soil health in various ways through preventing over-irrigation, reducing soil erosion and enforcing crop rotation and diversity (Food and Agriculture Organization of the United Nations (FAO), 2017). Through careful management programs of the irrigation scheme, the capacity of the soil to retain moisture improves and support sustained agricultural productivity.

The nature of the impact is beneficial and directly impacting the soil quality. The impact may be reversible, depending on the productivity and success of the agricultural venture. The duration of the Project is expected to be over a medium term (10-15 years) and is expected to impact the health of the soil on-site. The magnitude of the change is rated minor, and the sensitivity is low due to the impact affecting soil on-site. The overall significance of the impact is beneficial minor (Table 13).

7.3.3.3 *Impacts on soil structure and increased compaction*

Increased water use may saturate the soil, resulting in waterlogging, leaving little room for air and poor drainage. The nature of the impact is adverse, directly impacting the soil and could be reversible through measures such as limiting heavy machinery use and improving the soil through eco-friendly methods. The impact may occur over long-term as the soil may remain compacted even post operations (more than 15 years). The impact will be limited to the site. The probability of the impact occurring is rated possible due to the activities that are foreseen.

The magnitude of change is minor due to the small change it causes as the soil is already disturbed, and the sensitivity of the impact is low due to the impact occurring on-site and does not extend beyond the boundaries of the Project location. The overall significance of the impact prior to mitigation is rated adverse low (Table 13). The mitigation measures have been included ESMP (Appendix A).

7.3.3.4 Unintentional introduction of alien invasive species

The use and operation of irrigation system during the Project may unintentionally introduce or facilitate the spread of alien invasive species. This may occur through contaminated irrigation water, soil movement, or the transfer of seeds and propagules on machinery and vehicles. Disturbed areas provide favourable conditions for invasive species to establish and proliferate (Convention on Biological Diversity (CBD), 2002).

The nature of the impact is adverse, directly impact the cultivated area, vegetation and soil. The impact is partly reversible as early detection, and rapid response can effectively control invasive species. The impact may occur over a medium term, throughout the project life cycle (10-15 years). Alien invasive species may spread beyond the Project footprint and may therefore affect the local area. The probability of the impact occurring is deemed possible as increased moisture availability and disturbance promote the establishment of invasive species.

The magnitude of change is rated moderate due to potential displacement of indigenous vegetation, increased water consumption, reduced agricultural productivity and impacts on adjacent natural habitats. The sensitivity of the impact is rated low due to local scale as the spread of alien invasive species are expected to occur just beyond the site. The overall significance of the impact is rated adverse minor, prior to mitigation (Table 13). The mitigation measures have been included in the ESMP (Appendix A).

7.3.3.5 Potential over abstraction of groundwater and depletion of water resources

Over abstraction of groundwater through unsustainable use of irrigation systems may lead to reduced water levels of boreholes, especially during dry seasons and lead to water scarcity in the vicinity or could potentially lead to reduced water quality as it increases the salinity electrical conductivity (EC), and total dissolved solids (TDS) in borehole water (Food and Agriculture Organization of the United Nations (FAO), 2012). Sustainable abstraction therefore requires alignment with water use licences, accurate metering and the implementation of water-efficient irrigation systems such as the drip or centre-pivot irrigation as proposed by the Proponent. It is therefore imperative that the mitigations described under this section, the Test Pumping Analysis and Memo (Appendix C) and the groundwater study (Appendix D) should be implemented throughout the Project lifecycle.

The nature of the impact is adverse, directly impacting the biophysical and social environment and is partly reversible provided abstraction remains within sustainable limits and effective management measures are implemented. The impact may potentially occur during the life cycle of the Project which is over a medium term (10-15 years). The impact is likely to occur over a local scale as local farms may be impacted. Abstraction of water is foreseen as it is a requirement but remains variable, with higher demand during peak irrigation periods.

The magnitude of change is rated major due to the potential loss or hinderance to a significant resource. The sensitivity of the impact is rated low due to the local scale. The overall significance of the impact prior to mitigation is rated adverse moderate, before mitigation (Table 13) and has been rated adverse low, after mitigation.

Mitigation measures are listed below and are included in the ESMP (Appendix A):

- Strict adherence to the Test Pumping Analysis and Memo (Appendix C) and the groundwater study (Appendix D);
- Sustainable and water-conscious irrigation techniques that promotes water saving;
- Monitor groundwater levels or surface water availability on a regular basis;
- A water management plan should be developed in order to efficiently manage and monitor the water use and water levels throughout the Project lifecycle; and
- The relevant water abstraction licences should be obtained from MAFWLR: DWA as per the Water Resources Management Act, 2013 (Act No. 11 of 2013) and associated Water Resource Management Regulations, No.269, and its conditions must be adhered to (which also include their renewals in advance).

7.3.3.6 Agricultural products impact on water sources

Fertilisers are generally used during irrigation schemes. When fertilisers are applied to crops, excess nutrients may run off and leach into nearby surface water bodies or groundwater. Excess nutrients, especially phosphorus and nitrogen could lead to eutrophication. Eutrophication is an ecological process in which a water body becomes increasingly enriched with essential nutrients. This process can result in heavy algal blooms, reduced water clarity, oxygen depletion and negative impacts on aquatic life and human health (Smith, 2009).

The nature of the impact is adverse, directly impacting the biophysical environment and is partly reversible, provided that the application of fertilisers is carefully managed and controlled. The impact may potentially occur over a medium term during the life cycle of the Project (10-15 years). The impact is likely to occur over a local scale. The magnitude of change is moderate due to the sizable impact on water quality, which ultimately also threaten aquatic life. The sensitivity of receptor is rated low due to the localised nature of the impact. The overall significance of the impact is rated adverse minor, before mitigation (Table 13). The mitigation measures have been included in the ESMP (Appendix A).

Table 13 - Biophysical impact assessment findings

Activity	Receptor	Impact	Nature of impact	Value & sensitivity	Magnitude of change	Significance of impact
Operational phase	Topography , landscape	Land use efficiency due to the	Beneficial Direct	Low	Moderate	Beneficial Minor (3)

Activity	Receptor	Impact	Nature of impact	Value & sensitivity	Magnitude of change	Significance of impact
	and land-use	transformation of a disturbed area to an agricultural productive site	Partly reversible Medium term On-site Definite			
	Soil	Increased soil health due to improved irrigation techniques enhancing fertility	Beneficial Direct Reversible Long term On-site Likely	Low	Moderate	Beneficial Minor (3)
		Impacts on soil structure and increased soil compaction	Adverse Direct Reversible Long term On site Possible	Low	Minor	Adverse Low (2)
	Biodiversity	The unintentional introduction of alien invasive species leading to the displacement on native species and reduced agriculture productivity	Adverse Direct Partly reversible Medium term Local Possible	Low	Moderate	Adverse Minor (3)

Activity	Receptor	Impact	Nature of impact	Value & sensitivity	Magnitude of change	Significance of impact
	Resource use – surface water	Abstraction of water could result in overuse and inefficient water use	Adverse Direct Partly reversible Medium term Local Likely	Low	Major	Adverse Moderate (4)
	Surface and ground Water quality	Impacts of agricultural products and use of fertilisers and pesticides	Adverse Direct Partly reversible Medium term Local Likely	Low	Moderate	Adverse Minor (3)

7.4 CUMULATIVE IMPACTS

The Environmental Impact Assessment Regulations, 2012, state that cumulative impacts should be considered as part of the ESIA for a proposed project. Good practice requires that, as a minimum, cumulative impacts are assessed during the scoping plus impact assessment process. Cumulative impacts can arise when a single resource or receptor is affected by more than one impact from the proposed Project (intraspecific). Cumulative impacts may also arise because of the combination of two (2) or more projects (interspecific).

Cumulative impacts have a wide temporal and spatial scope and are not restricted to a local area nor need to happen at the same time. It is, therefore, crucial to identify a suitable study and assessment area, as well as a timeframe to assess. Cumulative impacts can also be vast and complicated; therefore, it is important to focus on the significant impacts.

The cumulative impacts that may arise as a result of the Project, before mitigation are presented in Figure 8, for illustrative purposes only and are outlined in Table 14.

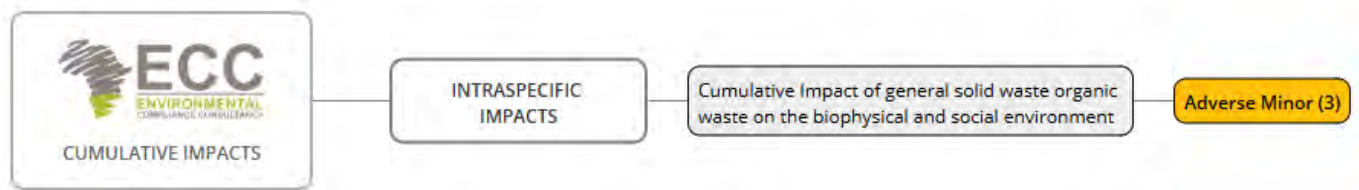


Figure 8 - Overview of the intraspecific cumulative impacts

7.4.1 INTRASPECIFIC CUMULATIVE IMPACT

This section discusses intraspecific cumulative impacts which refer to the combined effects of multiple impacts from a Project activity on a single receptor.

7.4.1.1 *Cumulative Impact of general solid waste and organic waste on the biophysical and social environment*

During Project activities, various waste streams may be generated as a result of agricultural production and routine operational activities. These include organic waste such as crop residues, spoiled or rejected produce, and plant trimmings, as well as general solid waste comprising packaging materials (fertiliser and seed bags), damaged irrigation components and domestic-type waste from on-site workers. If not appropriately managed, the accumulation and improper disposal of agricultural and general waste may lead to soil and water contamination, odour nuisance, and visual degradation of the surrounding environment.

The impact is considered adverse and cumulative due to various types of waste generated that affects the biophysical environment. The impact is reversible as waste-related effects can be eliminated through proper waste collection, treatment, and disposal. The impact will occur over a medium term during the Project operations (10-15 years). The impact is local, largely confined to the Project site and immediate surroundings including storage areas, cultivated fields and worker activity areas. The impact is considered likely as waste generation is an inevitable component of agricultural operations.

The magnitude of change is rated moderate. Although waste volumes are generally manageable when properly handled, potential mismanagement may have sizable consequences on biophysical and social aspects. The sensitivity of the impact is rated low as the impact is limited to the Project site. The overall significance of the impact is rated adverse minor, prior to mitigations (Table 14). Mitigation measures are outlined in the Project ESMP.

Table 14 - Intraspecific cumulative impacts on the Irrigation system for the Agriculture Project on Farm Gai Kaisa No. 159

Receptor	Impacts	Significance of impact	Impact management
Biophysical environment (soil, surface water and groundwater) and social aspects (potential odour and visual)	Activity: Generation of general solid waste and organic waste. Impact: Soil and water contamination, odour nuisance, and visual nuisance and degradation.	Adverse Minor (3)	– Separate waste streams at the source (organic crop residues, recyclables, hazardous containers, general solid waste) and use clearly labelled bins for different waste types; – Compost crop residues and plant trimmings where feasible to produce soil amendments; – Mulch organic waste on-site to reduce volume and return nutrients to the soil; – Avoid open burning of organic waste to prevent air pollution; – Store agrochemical containers and fertilisers in secure, designated areas; – Dispose of hazardous waste at the nearest licenced waste disposal facility; – Provide waste bins and collection points for non-organic waste (e.g., packaging, plastics, damaged irrigation components); – Solid waste should be collected and disposed at a licenced waste disposal site; – Encourage reuse and recycling where possible, e.g., repair irrigation parts, repurpose packaging materials; – Promote a “clean site” culture to prevent littering and improper waste disposal; and – Conduct periodic inspections of storage areas to ensure compliance with waste management protocols.

8 CONCLUSION

The scoping plus impact assessment study identified that no major potential risks required specialist studies. The areas of concern will need to be carefully monitored and managed according to the ESMP (Appendix A) to ensure that the significance of these impacts is reduced as far as reasonably possible. Beneficial minor to moderate socioeconomic impacts were also assessed such increased crop productivity (food security), employment creation and procurement of goods from local businesses.

Table 15 summarises the impacts after mitigation. On a scale of 1 to 12, low to high, the beneficial (B) and negative (N) impact significance is stated.

Table 15 - Summary of the significance rating before mitigation for the expected impact

Socioeconomic environment: economic		Socioeconomic Environment: social		Biophysical environment	
Employment creation	B3	Cultural heritage	B4	Topography and landscape impacts	B3
				Increased soil health – improved irrigation techniques	B3
Procurement of goods and services	B6	Increased crop productivity	B6	Adverse soil impacts	N2
				Biodiversity impacts	N3
				Groundwater and surface water	N3
				Generation of general solid waste and organic waste	N3

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APPENDIX A – ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

APPENDIX B – ENVIRONMENTAL CLEARANCE CERTIFICATE FOR MECHANISED BUSH THINNING OPERATIONS ON FARM GAI KAISA NO. 159 (ECC-2402040)

APPENDIX C - TEST PUMPING ANALYSIS

APPENDIX D – GROUNDWATER STUDY

APPENDIX E – NEWSPAPER ADVERTISEMENT

4
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NOTICE OF A SCOPING PLUS IMPACT ASSESSMENT FOR THE PROPOSED IRRIGATION AND AGRICULTURE OPERATIONS ON FARM GAI KAISA NO. 159, OTJOZONDJUPA REGION, NAMIBIA

Environmental Compliance Consultancy (Pty) Ltd (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in terms of the Environmental Management Act, No. 7 of 2007 will be made as per the following:

Applicant: Retort Charcoal Producers (Pty) Ltd
Location: Otjozondjupa Region, Namibia
GPS Coordinates: -19.894325 S, 17.825456 E

Project and the proposed activities: The Proponent proposes the operation of an irrigation project to support crop production. Irrigation is planned to be implemented in two (2) phases, each comprising ~435 ha of cultivated area consisting of maize and fodder. Phase 1 will require an estimated ~1 million m³ of water per annum. Phase 2 expands the total cultivated area to approximately 260 ha, resulting in a total groundwater requirement of ~2 million m³ per annum. Furthermore, 4 ha of high value fruit trees will be conducted.

Purpose of the review and registration period: The purpose of the review and registration period is to introduce the proposed Project and to allow interested and affected parties (I&APs) to register and comment on the scoping plus impact assessment report and environmental and social management plan (ESMP) to ensure that all issues and concerns are brought forward, captured and considered further in the environmental and social impact assessment (ESIA) process.

The registration period is open until **23 January 2026**.
I&APs and stakeholders are required to register for the Project at:
<https://eccenvironmental.com/download/irrigation-system-on-farm-gai-kaisa-no-159-of-otjozondjupa-region-namibia/> or scan the QR Code below.

Environmental Compliance Consultancy (Pty) Ltd
Registration Number: 2022/0503
Address: P.O. Box 1815, Namibia
Tel: +264 81 959 7903
E-mail: info@eccenvironmental.com
Website: <https://eccenvironmental.com/download/irrigation-system-on-farm-gai-kaisa-no-159-of-otjozondjupa-region-namibia/>




Unlock Your Future:

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Submit a written motivation, comprehensive CV, and academic records to:

MTC Head Office
Attn: Code MTCBurs
Email: hr@mtc.com.na
PO Box 20051

c/o Mase Tlokhondo & Hamutenya, Waluabera Road, Windhoek

Hurry! Applications close on 28 January 2026.

Members with outstanding academic track records who need financial assistance are encouraged to apply.

Only short-listed candidates will be contacted.



Scan QR Code



PROCUREMENT NOTICE



MTC invites companies to participate in the following procurement opportunities:

TENDER NO: MTC44-25-0

Request for proposal for the provision of a WhatsApp chatbot solution for Mobile Telecommunications Limited (MTC).

Briefing Date: 15 January 2026 @14H00PM.
Briefing Meeting: Microsoft Teams, the link will be on MTC's website.

TENDER NO: 67-25-0

Request for proposal for the supply and maintenance of a converged BSS/OSS (billing and revenue management, customer and product management, inventory management) solution for Mobile Telecommunications Limited (MTC).

Briefing Date: 15 January 2026 @15H00PM.
Briefing Meeting: Microsoft Teams, the link will be on MTC's website.

TENDER NO: MTC65-25-RFI

Request for information for a contract management solution for Mobile Telecommunications Limited (MTC).

Closing Date: Friday, 30 January 2026 by 14:30 Namibian time.

Terms of Reference are available at:
<https://www.mtc.com.na/procurement/tenders>


mtc.com.na

**NOTICE OF A SCOPING PLUS IMPACT ASSESSMENT FOR THE
PROPOSED IRRIGATION AND AGRICULTURE OPERATIONS ON
FARM GAI KAISA NO. 159, OTJOZONDJUPA REGION, NAMIBIA**

Environmental Compliance Consultancy (Pty) Ltd (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in terms of the Environmental Management Act, No. 7 of 2007 will be made as per the following:

Applicant: Retort Charcoal Producers (Pty) Ltd
Location: Otjozondjupa Region, Namibia
GPS Coordinates: -19.894 325 S, 17.8254 59 E

Project and the proposed activities: The Proponent proposes the operation of an irrigation project to support crop production. Irrigation is planned to be implemented in two (2) phases, each comprising ~135 ha of cultivated area consisting of maize and fodder. Phase 1 will require an estimated ~1 million m³ of water per annum. Phase 2 expands the total cultivated area to approximately 260 ha, resulting in a total groundwater requirement of ~2 million m³ per annum. Furthermore, 4 ha of high value fruit trials will be conducted.

Purpose of the review and registration period: The purpose of the review and registration period is to introduce the proposed Project and to allow interested and affected parties (IAPs) to register and comment on the scoping plus impact assessment report and environmental and social management plan (ESMP) to ensure that all issues and concerns are brought forward, captured and considered further in the environmental and social impact assessment (ESIA) process.

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Environmental Compliance Consultancy (Pty) Ltd

Registration Number: 2022/0582

Address: P.O. Box 1111, Khemleni, Windhoek

Tel: +264 81 690 7008

E-mail: info@eccenvironmental.com

Website: <https://eccenvironmental.com>

<https://eccenvironmental.com/services/irrigation-system-on-farm-gai-kaisa-no-159-otjozondjupa-region-namibia/>



Head Office
Sheffield Street
P.O. Box 3881
Windhoek Namibia
Tel: + (264) 61 3216400
Fax: + (264) 61 3216401

20 January 2026

NOTICE: Meatco Annual General Meeting

Meatco Annual General Meeting scheduled for 20 February 2026

By virtue of Section 14 (8) of the Meat Corporation of Namibia Act, Act 1 of 2001, notice is hereby given to all registered Members of the Meat Corporation of Namibia, that Meatco's 37th Annual General Meeting (AGM) that was deferred from 2025 will be held on **Friday, 20 February 2026, at 09:00 in Windhoek NIPAM (Executive Conference Hall).**

Date: Friday, 20 February 2026

Time: 09:00

Venue: NIPAM (Executive Conference Hall)

Submission of Motions:

Deadline: (09:00, 6th February 2026)

A member can submit a motion to be included on the Agenda on or before the above-mentioned date and time, either hand-delivered or via the e-mail below:

Attention: The Deputy Chairperson - Board of Directors
E-mail: chairperson@meatco.com.na
Hand-delivery: Meatco Head Office, 1 Simataa Khama, Northern Industrial Area, Windhoek

Consistent with Sections 13 and 14 of the Meatco Act, Act 1 of 2001, only registered Meatco Members may attend and vote at the AGM.

By virtue of a resolution passed at the 35th AGM, to qualify for registration as a member of the Corporation as per Section 17(1) of the Meatco Act 2001, a Producer must at least sell one unit of livestock to the Corporation during the period immediately preceding three (3) years for Members South of the Veterinary Cordon Fence (SVCF) and five (5) years for Members North of the Veterinary Cordon Fence (NVCF/NCA) from the date of which his/her membership is determined.

Accordingly, SVCF Producers who were Meatco Members as of 20 February 2023, and NCA producers who were Meatco Members as of 20 February 2021, are eligible to register between 07:30 and 08:30 before the AGM starts.

Directors: Ms. S.M. De Klerk (Deputy Chairperson), Mr. J. Andreas, Mr. M. J. P. Hilbert, Mr. C. Khalebe, Mr. A. Muremi, Ms. P.J. Olivier, Mr. A. Tjipangandjara, Mr. P.K. Tjipueja, Dr. D van Schalkwyk

Interim Chief Executive Officer: Ambassador A. Aochamub, **Company Secretary:** Ms. N Mhanda

EU eyes tariffs on €93bn of US goods



US President Donald Trump on Saturday announced a 10% tariff on goods from eight European countries starting February 1, rising to 25% in June, unless there's a deal for the "purchase of Greenland."

The EU is also weighing additional countermeasures beyond the tariffs but will first try to find a diplomatic solution.

JORGE VALERO AND ALBERTO NARDELLI

The European Union (EU) is in talks to potentially impose tariffs on €93 billion (\$108 billion) of US goods if President Donald Trump follows through on his threat to hit European countries with a 10% levy on February 1.

The EU is also weighing additional countermeasures beyond the tariffs but will first try to find a diplomatic solution, according to people familiar with the discussions. Representatives from the EU's 27 countries met Sunday to begin preparing options.

EU leaders will hold an emergency meeting in Brussels later this week to explore possible retaliatory measures. European Council President Antonio Costa said in a social media post Sunday that the bloc's nations were united in support of Denmark and Greenland and were ready "to defend ourselves against any form of coercion."

Trump on Saturday announced a 10% tariff on goods from eight European countries starting February 1, rising to 25% in June, unless there's a deal for the "purchase of Greenland." Trump levied the threat after the countries said they would undertake token NATO military planning exercises in the semi-autonomous Danish territory.

UK Prime Minister Keir Starmer blasted Trump's comments as "completely wrong" and Sweden's Ulf Kristersson said his country wouldn't be "blackmailed." French Prime Minister Emmanuel Macron, who called the threat "unacceptable," plans to request that the EU activate its most powerful trade retaliation tool, the so-called anti-coercion instrument.

The most immediate and tangible reaction from the EU was that it will halt approval of its July trade deal with the US, which still requires an endorsement from the European Parliament.

The European People's Party, the largest group in parliament, said it would join other parties in blocking ratification of the accord. "President Trump has triggered an avalanche that threatens to destroy decades of transatlantic cooperation," Stefan Löfven, president of the Party of European Socialists, said in a Sunday statement. The party, whose parliamentary group is the second largest in Brussels, supports suspending the trade agreement and called on the EU to examine using the anti-coercion instrument.

The trade deal, which many in Europe criticised as too lopsided in Washington's favour, saw the EU agree to remove nearly all tariffs on American products. The EU also accepted a 15% duty on most exports to the US and 50% on steel and aluminium. The US has since expanded the list of goods included in the higher 50% rate to include hundreds of additional products that contain the metals.

The EU has already approved retaliatory tariffs on €93 billion of US products but suspended their implementation. If Trump moves forward with his threat and imposes duties on the countries at the beginning of February, the EU could allow the countermeasures to be reintroduced, said the people, who spoke on the condition of anonymity.

Bloomberg



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APPENDIX F – SITE NOTICES



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APPENDIX G – STAKEHOLDER LETTERS

Environmental Compliance Consultancy (Pty) Ltd
PO Box 91193 Klein Windhoek Namibia
info@eccenvironmental.com
www.eccenvironmental.com
+264 81 669 7608



ECC-118-579-LET-09-A

30 January 2026

Identified stakeholder and potential Interested or affected party for the following Project:

RE - NOTICE OF A SCOPING PLUS IMPACT ASSESSMENT FOR THE PROPOSED IRRIGATION AND AGRICULTURE OPERATIONS ON FARM GAI KAISA NO.159, OTJOZONDJUPA REGION, AS PART OF AN ENVIRONMENTAL CLEARANCE CERTIFICATE APPLICATION

Dear Sir or Madam,

Environmental Compliance Consultancy (Pty) Ltd (ECC) (herein referred to as the environmental assessment practitioner (EAP)), has been engaged by Retort Charcoal Producers (Pty) Ltd, (herein referred to as the Proponent) to conduct a scoping plus impact assessment and compile an environmental and social management plan (ESMP) for the proposed Irrigation and Agriculture Operations on Farm Gai Kaisa No. 159, Otjozondjupa Region, Namibia.

In line with the requirements of the Environmental Management Act, No. 7 of 2007 and its 2012 associated Regulations, an environmental clearance certificate application is being compiled and will be submitted to the Department of Water Affairs (DWA) of the Ministry of Agriculture, Fisheries, Water and Land Reform (MAFWLR) (competent authority). The application will then be forwarded to the environmental commissioner (EC) at the Ministry of Environment, Forestry and Tourism (MEFT) for review and to make a record of decision (RoD) regarding the proposed Project.

The Proponent proposes the operation of an irrigation project to support crop production. Irrigation is planned to be implemented in two (2) phases, each comprising ~135 ha of cultivated area consisting of maize and fodder. Phase 1 will require an estimated ~1 million m³ of water per annum. Phase 2 expands the total cultivated area to approximately 260 ha, resulting in a total groundwater requirement of ~2 million m³ per annum. Furthermore, 4 ha of high value fruit trials will be conducted.

The Project site is located approximately 30 km southeast (SE) of the Kombat settlement and approximately 42 km southwest (SW) of Grootfontein town and can be accessed via the D2804 district road that branches out from the B8 main road in the Otjozondjupa Region (Figure 1).

The scoping plus impact assessment and environmental and social management plan (ESMP) provides further details of the Project, which can be downloaded from the link provided below:
<https://eccenvironmental.com/download/irrigation-system-on-farm-gai-kaisa-no-159-otjozondjupa-region-namibia/>

This letter serves to engage potential I&APs for the Project and to establish a communication channel with ECC for the scoping plus impact assessment process. You have been identified as a stakeholder and potential I&AP and ECC would therefore like to inform you of the opportunities available for your participation in the process.

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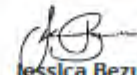


If you are unable to complete the registration form online, please contact us via email for assistance at info@eccenvironmental.com, or alternatively call our office at +264 81 669 7608.

Should you require our assistance with the details contained within this letter, please do not hesitate to contact us and we will gladly assist.

Yours sincerely,


Stephan Bezuidenhout
stephan@eccenvironmental.com


Jessica Bezuidenhout Mooney
jessica@eccenvironmental.com

Environmental Compliance Consultancy (Pty) Ltd
PO Box 91193 Klein Windhoek Namibia
info@eccenvironmental.com
www.eccenvironmental.com
+264 81 669 7608

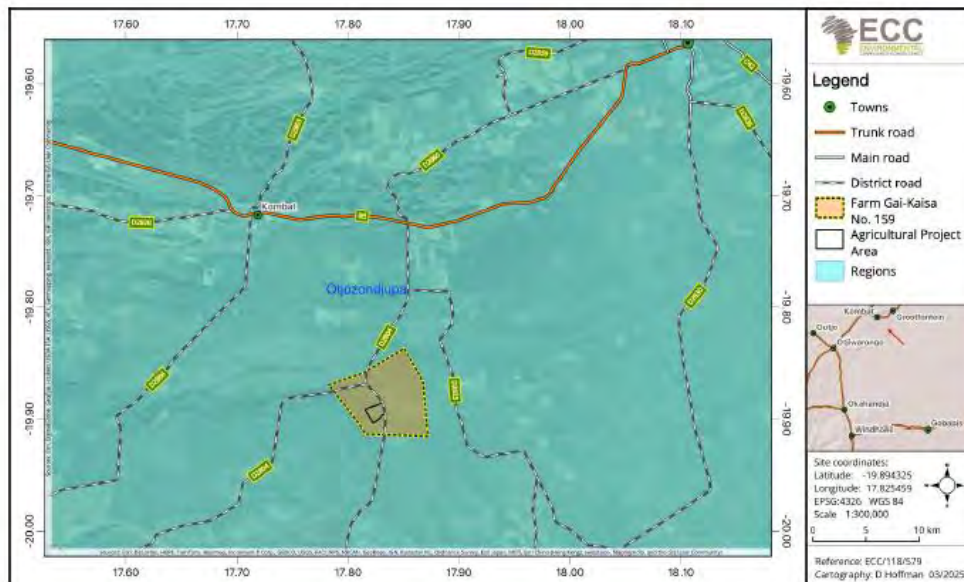


Figure 1 – Location map of the Agriculture Project on Farm Gal Kaisa No.159, Otjozondjupa Region

APPENDIX H – ARCHAEOLOGICAL ASSESSMENT