

XHARIEP EXPORT PROGRAMME AGRICULTURAL DEVELOPMENT AND ASSOCIATED INFRASTRUCTURE

Free State Province

Social Assessment

October 2022

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Prepared for:

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REPORT DETAILS

Title	:	Social Impact Assessment (SIA) Report: Xhariep Export Programme - Agricultural Development and associated infrastructure, Free State Province
Authors	:	Savannah Environmental (Pty) Ltd Nondumiso Bulunga Molatela Ledwaba
External Peer Review	:	Tony Barbour
Client	:	JN Venter Beleggings Trust
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Date	:	October 2022

When used as a reference this report should be cited as: Savannah Environmental (2022) Social Impact Assessment (SIA) Report for the Xhariep Export Programme - Agricultural Development and associated infrastructure, Free State Province

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SPECIALIST DECLARATION OF INTEREST

I, Nondumiso Bulunga, declare that –

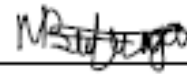
- » I act as the independent specialist in this application.
- » I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant.
- » I declare that there are no circumstances that may compromise my objectivity in performing such work.
- » I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity.
- » I will comply with the Act, Regulations and all other applicable legislation.
- » I have no, and will not engage in, conflicting interests in the undertaking of the activity.
- » I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing – any decision to be taken with respect to the application by the competent authority, and – the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority.
- » All the particulars furnished by me in this form are true and correct.
- » I realise that a false declaration is an offence in terms of Regulation 48 and is punishable in terms of section 24F of the Act.

Nondumiso Bulunga

Name

05 August 2022

Date



Signature

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ACRONYMS

DESTEA	Free State Department of Economic, Small Enterprise, Tourism and Environmental Affairs
DoE	Department of Energy
DM	District Municipality
EA	Environmental Authorisation
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
GDP	Gross Domestic Product
GNR	Government Notice
I&AP	Interested and Affected Party
IDP	Integrated Development Plan
IEP	Integrated Energy Plan
IRP	Integrated Resource Plan
km	Kilometre
LM	Local Municipality
NEMA	National Environmental Management Act (No. 107 of 1998)
NDP	National Development Plan
O&M	Operation and Maintenance
PGDS	Provincial Growth and Development Strategy
PICC	Presidential Infrastructure Coordinating Committee
PSDF	Provincial Spatial Development Framework
SDF	Spatial Development Framework
SIA	Social Impact Assessment
SIP	Strategic Infrastructure Project

1. INTRODUCTION AND PROJECT DESCRIPTION

Savannah Environmental has been appointed by JN Venter Beleggings Trust to conduct an Environmental Impact Assessment (EIA) for the proposed development of an agricultural development and associated infrastructure on a site located Southwest of Luckhoff and Koffiesfontein in the Free State Province. The development will take place on a site of ~2690ha in extent across 10 interlinked properties within the Letsemeng Local Municipality of the Xhariep District Municipality.

The potential for agricultural development (crop cultivation) is apparent as several commercial agricultural developments are already occupying the neighbouring properties. The soil and climate are suited to crops cultivation, and it is anticipated that the crops yield, and quality will be fit for export and domestic distribution.

Nondumiso Bulunga of Savannah Environmental (Pty) Ltd has been appointed as the independent social consultant responsible for undertaking a Social Impact Assessment (SIA) as part of the EIA process being conducted for the project.

Project Description

The Xhariep Export Programme - Agricultural Development and associated infrastructure is located on the following properties:

Agricultural development, including associated infrastructure	Farm Diepdraai 754 Farm Weltevreden 755 Farm Lemoen- spruit 667 Portion of the Farm Grootpoort 168
--	---

A technically feasible project site with an extent of ~ 4690ha has been identified by the JV Venter Beleggings Trust as a suitable area for the agricultural development and the associated infrastructure. The agricultural development will entail the following:

- » Developmental of centre pivot areas (cultivation and irrigation) which is planned to take approximately 2690ha or more within the project site.
- » Two irrigation water storage dams, with a combined surface area of 82ha in extent
- » Establishment of an internal irrigation pipeline network from the irrigation dams to the centre pivot areas.
- » A new pump station taking a total surface area of 549m².
- » A 5MW solar PV facility occupying an area of 10ha, and an associated overhead power line of ~6.9km in length.
- » A Battery Energy Storage System covering a surface area of 0.36ha

Details of the Independent Specialist

This SIA Report has been undertaken by Nondumiso Bulunga and Molatela Ledwaba of Savannah Environmental.

- » **Nondumiso Bulunga** – holds a Master's degree in advanced Geographical Information System and has eight years of experience in the environmental field. Her key focus is on environmental and social impact

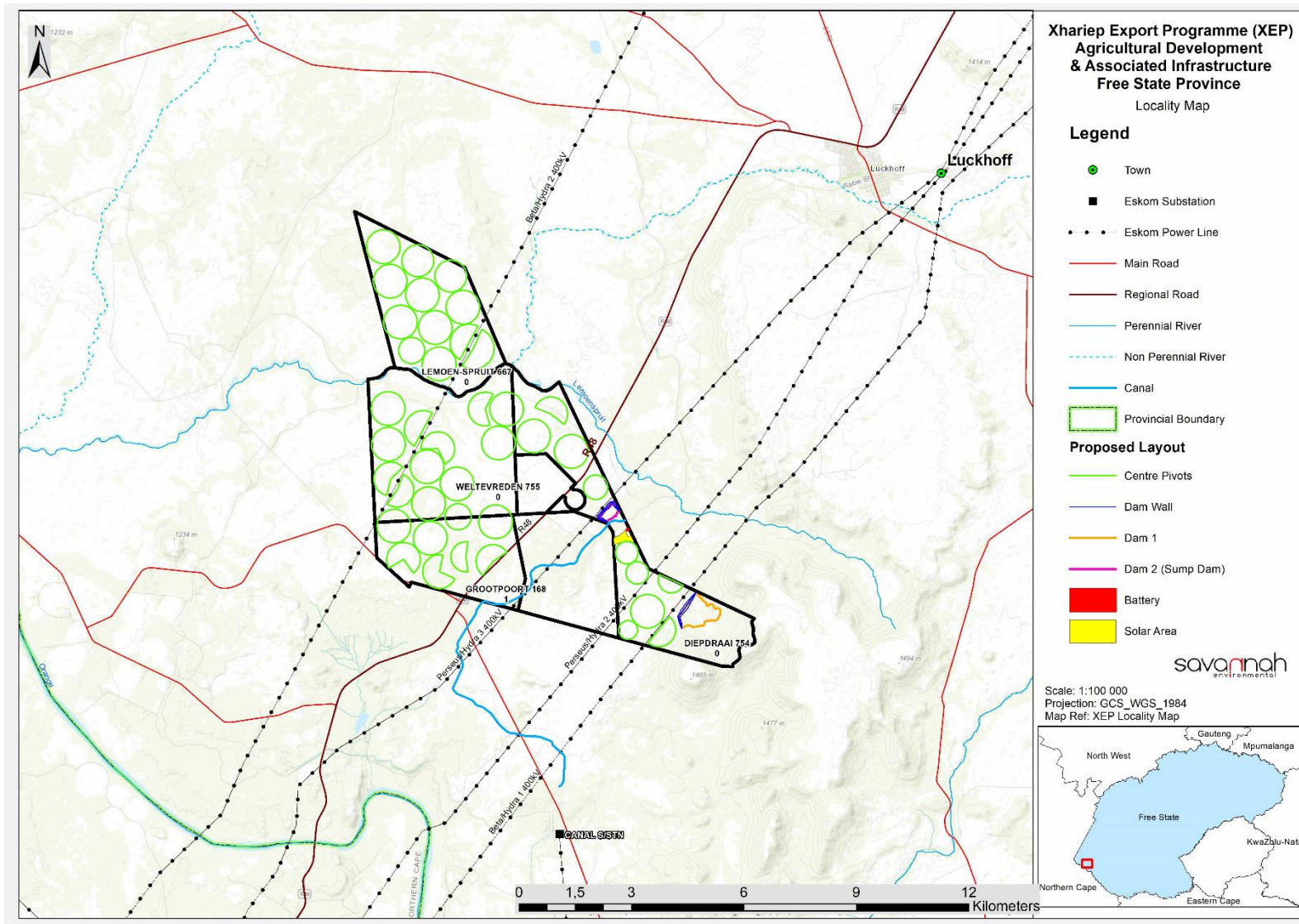
assessments, public participation, stakeholder engagement environmental management screening as well as mapping using ArcGIS for a variety of environmental projects.

» **Molatela Ledwaba** – holds a BA Environmental Management and has 13 years of experience. Her key focus is on Socio-Economic Baselines, Social Impact Assessment, public participation, stakeholder engagement, project coordination and production of maps using QGIS and ArcGIS.

»

» **Tony Barbour** is a social specialist who has undertaken in the region of 230 SIA's, including approximately 100 SIA's for a renewable energy projects, including wind and solar energy facilities. All of the SIAs have included as assessment of socio-economic issues. In addition, he is the author of the Guidelines for undertaking SIA's as part of the EIA process commissioned by the Western Cape Provincial Environmental Authorities in 2007. These guidelines have been used throughout South Africa. Tony has also undertaken a number of SIAs for PV facilities within the North West Province and is therefore familiar with the local socio-economic conditions.

Tony Barbour has undertaken an external review of this SIA and has provided an external reviewer's letter. This letter is attached as **Appendix C**.



Structure of the SIA Report

This SIA Report has been prepared in accordance with the requirements of Appendix 6 of the 2014 EIA Regulations, as amended. An overview of the contents of this SIA Report, as prescribed by Appendix 6 of the 2014 EIA Regulations (GNR 326), and where the corresponding information can be found within the report is provided in **Table 1.1**.

Table 1.1: Summary of where the requirements of Appendix 6 of the 2014 NEMA EIA Regulations (GNR 326), as amended, are provided within this Specialist Report.

Requirement	Location in Report
(a) Details of – (i) The specialist who prepared the report. (ii) The expertise of that specialist to compile a specialist report including a curriculum vitae.	Section 1
(b) A declaration that the specialist is independent in a form as may be specified by the competent authority.	Specialist Declaration of Interest
(c) An indication of the scope of, and the purpose for which, the report was prepared.	Section 2
(cA) An indication of the quality and age of base data used for the specialist report.	Section Error! Reference source not found.
(cB) A description of existing impacts on the site, cumulative impacts of the proposed development and levels of acceptable change.	Section Error! Reference source not found.
(d) The duration, date and season of the site investigation and the relevance of the season to the outcome of the assessment.	Section 2
(e) A description of the methodology adopted in preparing the report or carrying out the specialised process inclusive of equipment and modelling used.	Section 2
(f) Details of an assessment of the specific identified sensitivity of the site related to the proposed activity or activities and its associated structures and infrastructure, inclusive of a site plan identifying site alternatives.	Section Error! Reference source not found. Section Error! Reference source not found.
(g) An identification of any areas to be avoided, including buffers.	N/A
(h) A map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers	N/A
(i) A description of any assumptions made and any uncertainties or gaps in knowledge.	Section 2
(j) A description of the findings and potential implications of such findings on the impact of the proposed activity or activities.	Section Error! Reference source not found.
(k) Any mitigation measures for inclusion in the EMPr.	Appendix A
(l) Any conditions for inclusion in the environmental authorisation.	Section 0
(m) Any monitoring requirements for inclusion in the EMPr or environmental authorisation.	Appendix A
(n) A reasoned opinion – (i) Whether the proposed activity, activities or portions thereof should be authorised. (iA) Regarding the acceptability of the proposed activity or activities.	Section 0

Requirement	Location in Report
(ii) If the opinion is that the proposed activity, activities or portions thereof should be authorised, any avoidance, management and mitigation measures.	
(o) A description of any consultation process that was undertaken during the course of preparing the specialist report.	Section 2
(p) A summary and copies of any comments received during any consultation process and where applicable all responses thereto.	N/A
(q) Any other information requested by the competent authority.	N/A
2. Where a government notice gazetted by the Minister provides for any protocol or minimum information requirement to be applied to a specialist report, the requirements as indicated in such notice will apply.	N/A

2. METHODOLOGY AND APPROACH

2.1 Purpose of the Study

The International Principles for Social Impact Assessment define SIA as:

"The processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions".

The International Principles for Social Impact Assessment define social impacts as changes to one or more of the following:

- » People's way of life – that is, how they live, work, play and interact with one another on a day-to-day basis.
- » Their culture – that is, their shared beliefs, customs, values and language or dialect.
- » Their community – its cohesion, stability, character, services and facilities.
- » Their political systems – the extent to which people are able to participate in decisions that affect their lives, the level of democratisation that is taking place, and the resources provided for this purpose.
- » Their environment – the quality of the air and water people use, the availability and quality of the food they eat, the level of hazard or risk, dust and noise they are exposed to, the adequacy of sanitation, their physical safety, and their access to and control over resources.
- » Their health and wellbeing – health is a state of complete physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity.
- » Their personal and property rights – particularly whether people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties.
- » Their fears and aspirations – their perceptions about their safety, their fears about the future of their community, and their aspirations for their future and the future of their children.

The purpose of this SIA Report is therefore to:

- » Provide baseline information describing the social environment within which the project is proposed, and which may be impacted (both positively and negatively) as a result of the proposed development.
- » Identify, describe and assess possible social risks / fatal flaws and social impacts that may arise as a result of the proposed development (in terms of the detailed design and construction, operation, and decommissioning phases of the project).
- » Recommend ways in which negative impacts can be avoided, minimised, or their significance reduced, and positive impacts maximised or enhanced.

2.2 Approach to the Study

This SIA Report provides a snapshot of the current social setting within which the Xhariep Export Programme - Agricultural Development and associated infrastructure is proposed. It provides an overview of the manner and degree to which the current status quo is likely to change or be impacted by the construction, operation and decommissioning of the project, as well as the manner in which the social environment is likely to impact on the development itself.

The SIA process comprised the following:

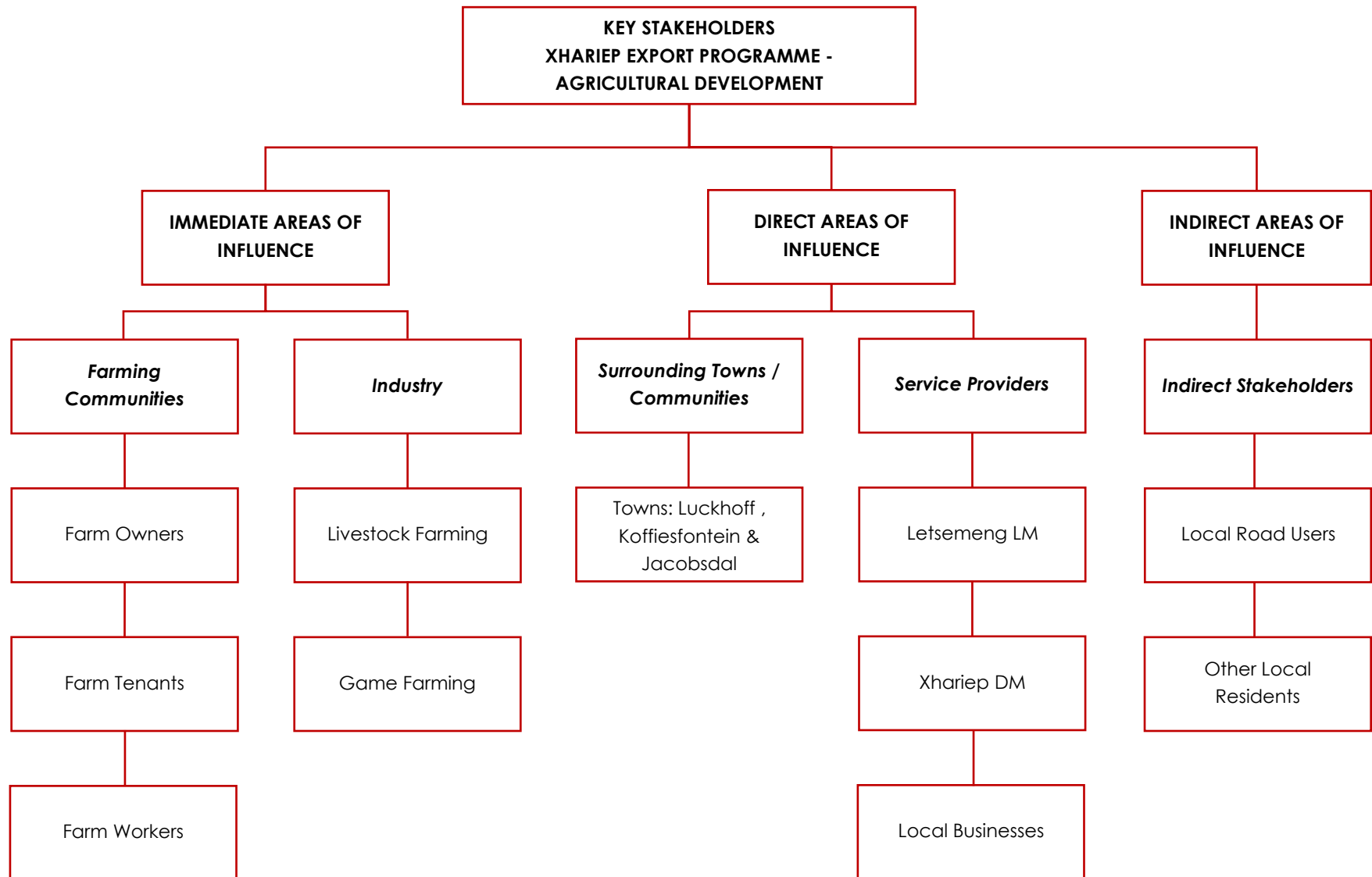
- » Collection and review of existing information, including national, provincial, district, and local plans, policies, programmes, census data, and available literature from previous studies conducted within the area. Project specific information was obtained from the project proponent.
- » As part of the public participation process for placement of site notices, a social investigation was undertaken as part of the site visit on 26 May 2022.
- » Collection of primary data during telephonic interviews. Attempts were made to undertake telephonic interviews with affected landowners to gain inputs on the project, including the perceived social impacts and benefits. The questionnaire for the telephonic interviews were distributed to all affected landowners and key stakeholders via email on 05 August 2022 for completion. Following the email correspondence the landowners were contacted telephonically 10 August 2022 to either provide feedback on the submission of the completed questionnaire or to provide verbal feedback as part of the telephonic discussions on the questionnaire. To date, only a few landowners have submitted the completed questionnaire and the majority of the landowners have been available to participate in telephonic interviews. During the interviews it also became clear that the site visit for the undertaking of face-to-face interviews was not required due to the information provided during the telephonic interviews. In cases where landowners were not available or not willing to participate in interviews this has been recorded. It must be noted that all social issues raised during the public participation process undertaken for the proposed agricultural development and associated infrastructure will be included, have been considered and addressed as part of this report for the project to be submitted to the Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA).
- » Identification of potential direct, indirect and cumulative impacts likely to be associated with the construction, operation, and decommissioning of the proposed project. Impacts associated with construction can also be expected to be associated with the decommissioning phase (however, to a lesser extent as the project site would have previously undergone transformation and disturbance during construction)
- » Assessment of identified impacts in terms of their nature, extent, duration, consequence / magnitude, probability, significance, and status.
- » Where applicable, mitigation measures with which to minimise impacts and enhance benefits associated with the project were identified.

2.2.1 Stakeholder Identification and Analysis

Stakeholders are defined as: "*Any group or organisation which may affect or be affected by the issue under consideration*" (UN, 2001: 26).

These may be directly or indirectly impacted and may include organisations, institutions, groups of people or individuals, and can be at any level or position in society, from the international to regional, national, or household level (Franke & Guidero, 2012).

Stakeholder analysis involves the identification of affected or impacted people and their key grouping and sub-groupings (IFC, 2007). Identifying stakeholders that are directly and indirectly affected by the project is important to determine who might be impacted by the development and in what way. The key stakeholders in the area proposed for development have been identified, grouped / sub-grouped and described (as per Ilse Aucamp SIA methodology and Aucamp et al, 2011). There are immediate, direct and indirect areas of influence to the proposed development. Affected stakeholders comprise sensitive social receptors that may potentially be affected by the proposed development based on their location.



A description of each of the stakeholders' groups in relation to the proposed Xhariiep Export Programme and associated infrastructure is discussed in detail below:

- » **Farming community:** The farming community can be grouped into three categories, namely farm owners, farm tenants, and farm workers. Farm owners comprise individuals who own and make a living off of their properties. Farm tenants are people who rent land and work on the land to earn an income. Farm workers are people who work, and also often reside on the farm with their families and are seen as a vulnerable community.
- » **Farming industry:** There are potentially vulnerable farming activities in the broader study area of the project. Agriculture is one of the main economic activities within the area, and the primary agricultural activities comprise mainly livestock farming.
- » **Surrounding towns / affected communities:** One town is in proximity to proposed development which is Luckhoff. The town of Luckhoff is a small merino sheep farming town, with bulk of sheep found in this district.
- » **Service providers:** The major service providers which will be affected by the project include the DM, LM, and local businesses in the area. The Letsemeng LM and to a lesser degree the Xhariiep DM are likely to be impacted by the proposed development. The Letsemeng LM will absorb a number of positive and negative social impacts. In addition, there are a number of local businesses in the surrounding area that could be impacted negatively or benefit from the opportunities of the proposed project.
- » **Stakeholders outside the direct area of influence:** There are a number of stakeholders that reside outside the direct area of influence but who may be affected by the project. These include road users, including those that use the local gravel roads on a frequent basis as part of their daily or weekly movement patterns.

2.2.2 Collection and Review of Existing Information

Existing desktop information that has relevance to the proposed project, project area and / or surrounds was collected and reviewed. The following information was examined as part of this process:

- » Project maps and layouts.
- » Google Earth imagery.
- » A description of the project (as provided by the project proponent).
- » Responses to questions posed to the project proponent regarding employment and social upliftment and local economic development opportunities (as provided by the project proponent).
- » Census Data (2011), and the Local Government Handbook (2019).
- » Planning documentation such as Provincial Growth and Development Strategies (PGDSs), Local and District Municipality Integrated Development Plans (IDPs), Spatial Development Frameworks (SDFs), and development goals and objectives.
- » Relevant legislation, guidelines, policies, plans, and frameworks.
- » Available literature pertaining to social issues associated with the development and operation of agricultural development and associated infrastructure.

2.2.3 Limitations and Assumptions

- » Data derived from the 2011 Census, documents from Free State Province, Xhariiep District Municipality and Letsemeng Local Municipality was used to generate the majority of information provided in the

baseline profile of the study area. The possibility therefore exists that the data utilized may be out of date and may not provide an accurate reflection of the current status quo.

- » This SIA Report is intended to provide an overview of the current social environmental and assist in the identification of potential social impacts.
- » This SIA Report was prepared based on information which was available to the specialist at the time of preparing the report. The sources consulted are not exhaustive, and the possibility exists that additional information which might strengthen arguments, contradict information in this report, and / or identify additional information might exist.
- » Some of the project projections reflected in this SIA Report (i.e. with regards to job creation and local content) may be subject to change, and therefore may be higher or lower than those estimated by the project proponent.
- » It is assumed that the motivation for and planning and feasibility study of the project were undertaken with integrity; and that information provided by the project proponent was accurate and true at the time of preparing this SIA Report.

2.2.4 Collection of Primary Data

Primary data was collected in the form of meeting notes from Focus Group Meetings (FGMs) conducted with key stakeholders as part of the Public Participation process being conducted for the Scoping process and from interviews conducted with identified stakeholders and affected landowners (refer to **Table 2-2**).

The purpose of the consultation was:

- » to generate a good understanding of the project by all stakeholders.
- » to understand and characterise potential environmental, social and economic impacts of the project
- » to enhance local benefits that may accrue from the project
- » to provide stakeholders a chance to voice their opinions, hence participating in the proposed project.

In addition, the views and comments of the public have been incorporated, to the extent possible and are likely to influence the development of the proposed project and its associated infrastructure.

Table 2-1 Overview of FGMs conducted as part of the Public Participation process being conducted for the Scoping process.

FGM Date & Time	Stakeholder Group	Summary of Matters Raised
Monday, 20 June 2022 at 10h00	Local and District Officials	Concerns around how the project would benefit the people in the area especially youth and women and also how the project aligns with the district municipalities Local Economic Development (LED) framework. The issue around the information pertaining to the LED not being included or considered as part of this assessment.
Monday, 04 July 2022 at 10h00	Key Stakeholders	No matters pertaining to social issues were raised.

Table 2-2: Overview of Telephonic Interviews with landowners and stakeholders as well as attempts made to contact the relevant parties.

Representative	Representative details	Date of contact / attempted contact	Notes and feedback (not verbatim, only summarised)
Siphiwe Phithi	Letsemeng Local Economic Development Manager	11 August 2022	A new Integrated Development Plan has been drafted and this should be included in this SIA report. As the local municipality we do not have any objections on this project but it is important that it we are clear on how the communities will benefit from such a project.
Elizabeth Maria Joeste	Neldam 469 Portion 0	26 October 2022 10:00am	She did not want a conversion in English then I have requested my colleague Bregardia Rabie to contact her. She has sent her relevant documents to notify her about the project, so that she can comment on the project.
Jan Han Van der Walt	Tshepiso Farms Trust	26 October 2022 10:03	He was not aware of the proposed project and requested us to provide him with relevant documents regarding the project so that he can comment.
Christian Gouws	Natural Eco Investment 56	26 October 2022 10:10	He also wanted someone who could speak Afrikaans and requested my colleague Bregardia Rabie to call him and provide him with relevant documents related to the project so that he can provide us with comments.
Edward John Dalton		26 October 2022 10:30	He indicated that he provided his comments 6 months ago. His issue is that the development is on an area that is not good for irrigation. He further stated that the developer is taking chances No comments pertaining Social were raised
Jan Van Aswegen Steyler		26 October 2022 10:30	He indicated that he does not have a property near the proposed project area, and he cannot comment.
Petrus Inker Hoogenhout		26 October 2022 10:3010:55	No answer

2.3 Methodology for Assessing Impact

SignificanceThe impact assessment was undertaken using a matrix selection process, the most commonly used methodology, for determining the significance of potential environmental impacts/risks. This methodology takes into account two aspects for assessing the potential significance of impacts, namely occurrence and severity, which are further sub-divided into the following categories in (Table 2.3)

Table 2.3: Impact assessment factors

Occurrence		Severity	
Probability of occurrence	Duration of occurrence	Scale/extent of impact	Magnitude of impact

Table 2.4: Impact assessment scoring methodology

Value	Description
Magnitude	
10	Very high/ unknown
8	High
6	Moderate
4	Low
2	Minor
Duration	
5	Permanent (impact continues post closure)
4	Long Term (>15 years) (Impact ceases after decommissioning and closure)
3	Medium-term(5-15 years) (Impact ceases after the operational phase)
2	Short -term (2-5 years) (impact ceases after the construction phases)
1	Immediate (0-1 year)
Scale/ Geographic Extent	
5	International
4	National
3	Regional
2	Local
1	Site Only
0	None
Probability	
5	Definite/ Unknown (impact will definitely occur)
4	Highly Probable (most likely, 60% - 90% chance)
3	Medium Probability (40% - 60% chance)
2	Low Probability (5% - 40% chance)
1	Improbable (less than 5% chance)
0	None

Significance Points = (Magnitude + Duration + Scale) x Probability.

Table 2.5: Significance of impacts based on point allocation

Points	Significance	Description
SP>60	High environmental significance	An impact which could influence the decision about whether or not to proceed with the project regardless of any possible mitigation.
SP 30-60	Moderate environmental significance	An impact or benefit which is sufficiently important to require management, and which could have an influence on the decision unless it is mitigated.
SP<30	Low environmental significance	Impacts with little real effect and which will not have an influence on or require modification of the project design.
+	Positive impact	An impact that is likely to result in positive consequences/ effects

For the methodology outlined above, the following definitions were used:

- » Magnitude is a measure of the degree of change in a measurement of analysis and is classified as none/negligible, low, moderate or high.
- » Scale/ Geographic extent refers to the area that could be affected by the impact and is classified as site, local, regional, national, or international;
- » Duration refers to the length of the time over which an environmental impact may occur: i.e. immediate/ transient, short-term, medium-term, long-term or permanent; and
- » Probability of occurrence is a description of the probability of the impact actually occurring as improbable (< 5% chance) low probability (5% - 40% chance), medium probability (40% - 60% chance), high probable (most likely, 60% - (0% chance) or definite (Impact will definitely occurs)

3. LEGISLATION AND POLICY REVIEW

The legislative and policy context applicable to a project plays an important role in identifying and assessing the potential social impacts associated with the development. In this regard a key component of the SIA process is to assess a proposed development in terms of its suitability with regards to key planning and policy documents.

The following key pieces of documentation were reviewed as part of this legislation and policy review process:

3.1 National Policy and Planning Context:

- » Constitution of the Republic of South Africa, 1996
- » National Environmental Management Act (No. 107 of 1998) (NEMA)
- » White Paper on the Energy Policy of the Republic of South Africa (1998)
- » National Energy Act (No. 34 of 2008)

- » Integrated Energy Plan (IEP) (2015)
- » National Development Plan (NDP) 2030 (2012)
- » Strategic Infrastructures (SIPs)

3.2 Provincial Policy and Planning Context:

- » Free State Provincial Growth and Development Strategy (FSGDS) (2005 – 2014)
- » Free State Provincial Growth and Development Strategy (FSGDS), Revised October 2007
- » Free State Provincial Spatial Development Framework (PSDF) - Executive Summary (Inception Report)
- » Free State Green Economy Strategy (2014)
- » Free State Investment Prospectus (2019)

3.3 Local Policy and Planning Context:

- » Integrated Development Plan (IDP) of the Xhariep District Municipality 2016-2017
- » Integrated Development Plan (IDP) of the Letsemeng Local Municipality 2021/2022

3.4 National Policy and Planning Context

Any project which contributes positively towards the objectives mentioned within national policies could be considered strategically important for the country. A review of the national policy environment suggests that the agricultural development is considered integral to contributing towards social upliftment and economic development, even if only limited in extent.

A brief review of the most relevant national legislation and policies is provided in table format (**Table 3.1**) below.

Table 3.1: Relevant national legislation and policies for the Xhariep Export Programme - Agricultural Development and associated infrastructure

Relevant legislation or policy	Relevance to the proposed project
Constitution of the Republic of South Africa, 1996	<p>Section 24 of the Constitution pertains specifically to the environment. It states that Everyone has the right to an environment that is not harmful to their health or well-being, and to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation, promote conservation and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.</p> <p>The Constitution outlines the need to promote social and economic development. Section 24 of the Constitution therefore requires that development be conducted in such a manner that it does not infringe on an individual's environmental rights, health, or well-being. This is especially significant for previously disadvantaged individuals who are most at risk to environmental impacts.</p>
National Environmental Management Act (No. 107 of 1998) (NEMA)	<p>This piece of legislation is South Africa's key piece of environmental legislation, and sets the framework for environmental management in South Africa. NEMA is founded on the principle that everyone has the right to an environment that is not harmful to their health or well-being as contained within the Bill of Rights.</p> <p>The national environmental management principles state that the social, economic and environmental impacts of activities, including disadvantages and benefits, must be</p>

Relevant legislation or policy	Relevance to the proposed project
	<p>considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment.</p> <p>The need for responsible and informed decision-making by government on the acceptability of environmental impacts is therefore enshrined within NEMA.</p>
<p>National Development Plan 2030 (2012)</p>	<p>The National Development Plan (NDP) 2030 is a plan prepared by the National Planning Commission in consultation with the South African public which is aimed at eliminating poverty and reducing inequality by 2030.</p> <p>In terms of the Energy Sector's role in empowering South Africa, the NDP envisages that, by 2030, South Africa will have an energy sector that promotes:</p> <ul style="list-style-type: none"> » Economic growth and development through adequate investment in energy infrastructure. The sector should provide reliable and efficient energy service at competitive rates, while supporting economic growth through job creation. » Social equity through expanded access to energy at affordable tariffs and through targeted, sustainable subsidies for needy households. » Environmental sustainability through efforts to reduce pollution and mitigate the effects of climate change. <p>The NDP aims to provide a supportive environment for growth and development, while promoting a more labour-absorbing economy.</p>
<p>White Paper on the Energy Policy of the Republic of South Africa (1998)</p>	<p>The White Paper on Energy Policy places emphasis on the expansion of energy supply options to enhance South Africa's energy security. This can be achieved through increased use of RE and encouraging new entries into the generation market. South Africa has an attractive range of cost-effective renewable resources, taking into consideration social and environmental costs. Government policy RE is thus concerned with meeting the following challenges:</p> <ul style="list-style-type: none"> » Ensuring that economically feasible technologies and applications are implemented. » Ensuring that an equitable level of national resources is invested in renewable technologies, given their potential and compared to investments in other energy supply options. » Addressing constraints on the development of the renewable industry. <p>The policy states that the advantages of renewable energy include; minimal environmental impacts during operation in comparison with traditional supply technologies, generally lower running costs, and high labour intensities. Disadvantages include; higher capital costs in some cases; lower energy densities; and lower levels of availability, depending on specific conditions, especially with sun and wind based systems. Nonetheless, renewable resources generally operate from an unlimited resource base and, as such, can increasingly contribute towards a long-term sustainable energy future. The White Paper on Energy Policy therefore supports the advancement of RE sources and ensuring energy security through the diversification of supply.</p>
<p>National Energy Act (No.34 of 2008)</p>	<p>The purpose of the National Energy Act (No. 34 of 2008) is to ensure that diverse energy resources are available, in sustainable quantities and at affordable prices, to the South African economy in support of economic growth and poverty alleviation; while taking environmental management requirements into account. In addition, the Act also provides for energy planning, and increased generation and consumption of Renewable Energies (REs). The objectives of the Act, are to amongst other things, to:</p>

Relevant legislation or policy	Relevance to the proposed project
	<ul style="list-style-type: none"> » Ensure uninterrupted supply of energy to the Republic. » Promote diversity of supply of energy and its sources. » Facilitate energy access for improvement of the quality of life of the people of the Republic. » Contribute to the sustainable development of South Africa's economy. <p>The National Energy Act therefore recognises the significant role which electricity plays growing the economy while improving citizens' quality of life. The Act provides the legal framework which supports the development of RE facilities for the greater environmental and social good, and provides the backdrop against which South Africa's strategic planning regarding future electricity provision and supply takes place. It also provides the legal framework which supports the development of RE facilities for the greater environmental and social good.</p>
<p>Integrated Energy Plan (IEP) (2016)</p>	<p>The Integrated Energy Plan (IEP) (which was developed under the National Energy Act (No. 34 of 2008)), recognises that energy is essential to many human activities, and is critical to the social and economic development of a country. The purpose of the IEP is essentially to ensure the availability of energy resources, and access to energy services in an affordable and sustainable manner, while minimising associated adverse environmental impacts. Energy planning therefore needs to balance the need for continued economic growth with social needs, and the need to protect the natural environment.</p> <p>The IEP is a multi-faceted, long-term energy framework which has multiple aims, some of which include:</p> <ul style="list-style-type: none"> » To guide the development of energy policies and, where relevant, set the framework for regulations in the energy sector. » To guide the selection of appropriate technologies to meet energy demand (i.e. the types and sizes of new power plants and refineries to be built and the prices that should be charged for fuels). » To guide investment in and the development of energy infrastructure in South Africa. <p>To propose alternative energy strategies which are informed by testing the potential impacts of various factors such as proposed policies, introduction of new technologies, and effects of exogenous macro- economic factors.</p>
<p>Strategic Infrastructure Projects (SIPs)</p>	<p>The Presidential Infrastructure Coordinating Committee (PICC) are integrating and phasing investment plans across 18 Strategic Infrastructure Projects (SIPs) which have the following 5 core functions:</p> <ul style="list-style-type: none"> » To unlock opportunity. » Transform the economic landscape. » Create new jobs. » Strengthen the delivery of basic services. » Support the integration of African economies. <p>A balanced approach is being fostered through greening of the economy, boosting energy security, promoting integrated municipal infrastructure investment, facilitating integrated urban development, accelerating skills development, investing in rural development and enabling regional integration.</p>

Relevant legislation or policy	Relevance to the proposed project
	<p>SIP 8 of the energy SIPs supports the development of RE projects as follow:</p> <ul style="list-style-type: none">» SIP 8: Green energy in support of the South African economy: <p>Support sustainable green energy initiatives on a national scale through a diverse range of clean energy options as envisaged in the Integrated Resource Plan (IRP 2010) and supports bio-fuel production facilities.</p> <p>The development of the proposed project is therefore also aligned with SIP 8 as it constitutes a green energy initiative which would contribute clean energy in accordance with the IRP 2010 – 2030.</p>

3.5 Provincial Policies

This section provides a brief review of the most relevant provincial policies. The proposed Xhariep Export Programme - Agricultural Development and associated infrastructure is considered to align with the aims of these policies, even if contributions to achieving the goals therein are only minor.

A brief review of the most relevant provincial policies is provided in table format (**Table 3.2**) below.

Table 3.2: Relevant provincial policies for the Xhariep Export Programme - Agricultural Development and associated infrastructure

Relevant policy	Relevance to the proposed project
<p>Free State Provincial Growth and Development Strategy (FSGDS) (2005 – 2014)</p>	<p>The overarching goal of the Free State Growth and Development Strategy (FSGDS) is to align the provincial and national policies and programmes and to guide development in terms of effective and efficient management and governance to achieve growth and development. The strategy is a living document that uses the latest business planning and evaluation tools in order to maximise the effect of all spending.</p> <p>Based on the social and economic development challenges of the province, the Strategy identifies a few primary objectives, including stimulating economic development and developing and enhancing the infrastructure for economic growth and social development, poverty alleviation through human and social development, ensuring a safe and secure environment for all and the promotion of effective and efficient governance and administration.</p> <p>The development of the agricultural and infrastructure development supports the overall objective of stimulating economic development and infrastructure investment towards growth and social development, by contributing to the energy mix, supply and infrastructure of the province. The development of the facility will also contribute (albeit limited) to the alleviation of poverty through the creation of direct and indirect employment opportunities and well as skills development</p>
<p>Free State Provincial Growth and Development Strategy (FSGDS), Revised October 2007</p>	<p>The revised FSGDS refers to specific imperatives which sets the tone and pace for shared growth and development in the Province. These include:</p> <ul style="list-style-type: none"> » The need to effectively use scarce resources within the Province, whilst addressing the real causes of development challenges. » The need to accelerate service delivery based on a common provincial development agenda as the basis for provincial strategic direction. » The need to identify investment opportunities and provide an environment of certainty critical for private-sector investment. » The need to promote intergovernmental coordination between the three spheres of government. » The need to facilitate the implementation of the People's Contract within the Province. » The need to provide a common vision as the basis for common action amongst all stakeholders, both inside and outside government. » The need to provide a framework for budgets, implementation, performance management and spatial development. <p>The development of the agricultural and infrastructure development will assist with the need to effectively use scarce resources and the need to identify investment opportunities, including private sector-investment. The development of a solar facility reduces the need to make use of non-renewable resources for the generation of electricity and opens up the Province to further future solar energy development.</p>
<p>Free State Provincial Spatial Development Framework (PSDF) - Executive Summary (Inception Report)</p>	<p>The Free State PSDF is a provincial spatial and strategic planning policy that responds to and complies with, in particular, the National Development Plan Vision 2030 and the National Spatial Development Perspective (NSDP). The latter encourages all spheres of government to prepare spatial development plans and frameworks (such as the PSDF) that promote a developmental state in accordance with the principles of global sustainability as is advocated by, among others, the South African Constitution and the enabling legislation.</p>

Relevant policy	Relevance to the proposed project
	<p>The Free State Provincial Growth and Development Strategy states that sustainable economic development is the only effective means by which the most significant challenge of the Free State, namely poverty, can be addressed. The PSDF gives practical effect to sustainable development, which is defined as development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.</p> <p>The PSDF is prepared in accordance with bioregional planning principles that were adapted to suit the site-specific requirements of the Free State. It incorporates and complies with the relevant protocols, conventions, agreements, legislation and policy at all applicable levels of planning, ranging from the international to the local.</p> <p>The agricultural and infrastructure development will contribute to sustainable and economic development goals of the Free State PSDF, once completed and formally adopted.</p>
<p>Free State Green Economy Strategy (2014)</p>	<p>This green economy strategy for Free State Province (FSGES) was developed in alignment with the national green economy strategy elaborated in the National Green Economy Framework and Green Economy Accord, as well the Free State Provincial Growth and Development Strategy. The development process was spearheaded by the Department of Economic Development, Tourism and Environmental Affairs (DETEA).</p> <p>The objective was to develop a green economy strategy to assist the province to, amongst others, improve environmental quality and economic growth, and to develop green industries and energy efficiency within the province.</p> <p>The agricultural and infrastructure development will contribute to the aim of energy efficiency and green industry whilst promoting economic growth, and is therefore consistent with this strategy.</p>
<p>Free State Investment Prospectus (2019)</p>	<p>The Premier of the Free State considers providing access to individual investors' to accurate and pertinent information makes it easier for investors to glean investor ready opportunities that are currently available in the Free State.</p> <p>Opportunity of the development of renewable energy is considered in the key sectors overview. The prospectus states that opportunities are opening up in the Province for the energy sector, including renewable energy. Rezoning for the development of multiple solar energy facilities has already been undertaken in the province. The development of a Solar Park in the Xhariep region is seen as a driver of growth along the banks of the Orange River.</p> <p>Considering the future opportunities available for the development of renewable energy facilities (including solar PV facilities) the development of the agricultural and infrastructure development is considered to be in-line with the Investment Prospectus of the Province.</p>

3.6 District and Local Municipalities Policies

The strategic policies at a district and local level have similar objectives for the respective areas, namely, to accelerate economic growth, create jobs, and uplift communities proposed Xhariep Export Programme - Agricultural Development and associated infrastructure is considered to align with the aims of these policies, even if contributions to achieving the goals therein are only minor.

A brief review of the most relevant district and local municipal policies is provided in table format (**Table 3.3**) below.

Table 3.3: Relevant district and local municipal policies for the Xhariep Export Programme - Agricultural Development and associated infrastructure

Relevant policy	Relevance to the proposed project				
Integrated Development Plan (IDP) of the Xhariep District Municipality 2016-2017	<p>The Vision of the Municipality is for a community-orientated municipality characterized by a sound political and administrative capacity with sustainable and enabling business environment. The key development challenges experienced by the municipality is high poverty and unemployment – 46.03% (STATSSA 2011); Inadequate access to basic services (water, sanitation, refuse collection, electricity, housing and primary health care); infrastructure, maintenance and service backlogs; HIV and AIDS – 30.8% prevalence rate (Antenatal Care Statistics) and TB; Substance abuse; Illegal dumping; Lack of integrated planning between the three spheres of government; Unfunded mandates; Housing shortage and rectification of incomplete houses; and lack of integrated and sustainable human settlements.</p> <p>Opportunities provided by the municipality are:</p> <ul style="list-style-type: none"> » Gariep Dam (Biggest dam in Southern Africa) » Popular tourism destination with rich biodiversity » Friendly and vibrant people, with a rich diversity of culture and languages » National routes linking the district to other provinces » Fish hatchery » Solar hub project partnering with Free State Development Corporation <p>Key Spatial Issue within the municipality is:</p>				
	<table border="1"> <thead> <tr> <th data-bbox="373 987 740 1014">Key Spatial Issue</th> <th data-bbox="745 987 1468 1014">Brief Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="373 1021 740 1256">Access to Land</td> <td data-bbox="745 1021 1468 1256">The issue of access to land relates the local authorities as well as individuals and groups. As far as individuals and groups are concerned, the burning issues are access to residential land in urban areas and to agricultural land for emerging farmers. Various local authorities experience a shortage of land for residential expansion and other social functions.</td> </tr> </tbody> </table>	Key Spatial Issue	Brief Description	Access to Land	The issue of access to land relates the local authorities as well as individuals and groups. As far as individuals and groups are concerned, the burning issues are access to residential land in urban areas and to agricultural land for emerging farmers. Various local authorities experience a shortage of land for residential expansion and other social functions.
	Key Spatial Issue	Brief Description			
	Access to Land	The issue of access to land relates the local authorities as well as individuals and groups. As far as individuals and groups are concerned, the burning issues are access to residential land in urban areas and to agricultural land for emerging farmers. Various local authorities experience a shortage of land for residential expansion and other social functions.			
	Land Development	Land Development relates to the availability, preparation and funding of certain key land uses such as sites for housing developments, land for needed social amenities and economic activities. The key issues requiring attention in this regard include: the generation of proper information of projected land development needs, funding, co-operation and local capacity to evaluate development applications.			
Spatial Integration	Spatial integration has to focus on both a macro and a micro level. On a macro level there is a need for a more focused development at key nodal points to develop the region strategically within current resource constraints. On a micro level, most town areas are still geographically segregated and direct intervention within former buffer strip areas will be required to integrate communities.				
Sustainable land management	The long-term sustainability of all land development practices will be the key factor in the environmental and economic future of this predominantly agricultural region. Specific attention will have to be				

Relevant policy	Relevance to the proposed project	
		given to the building of capacity amongst especially emerging land users and the provision of a management framework to all land users within the district.
	Proper distribution network	The vast distances between the various towns in the district make all communities dependent on the regional distribution roads for social as well as economic functioning. Most of these roads are however in a state of disrepair and especially the routes falling within the corridor areas will have to be upgraded and maintained as a matter of urgency.
	Land reform and restitution	The two land restitution cases within the municipality (namely Bethany and Oppermans) still need to be finalised and will require infrastructural intervention to provide proper infrastructure not presently available due to past neglect. The further land redistribution effort within the region will also have to be co-ordinated proactively in order to ensure legal and systematic address of the land shortage within the area
	Land Conservation	Various areas along the southern border of the district, adjacent to the Orange river as well as surrounding regional dams are well suited for tourism and agricultural development alike. These areas are however sensitive to over utilization and pollution and will have to be protected and conserved to ensure long-term benefits thereof.
<p>Integrated Development Plan (IDP) of the Letsemeng Local Municipality 2021/2022</p>	<p>The municipality aligns their priorities with the key government priorities which are:</p> <ul style="list-style-type: none"> » Education » Health » Rural development » Fight against crime » Decent employment and inclusive economy to promote sustainable livelihoods & growth » Infrastructure development <p>Issues that require special attention:</p> <ul style="list-style-type: none"> » Waste collection & illegal dumping sites » Sewer spillages and maintenance » Unemployment » SMME development » Roads and infrastructure <p>Spatial proposals for the local municipality include:</p> <ul style="list-style-type: none"> » The whole of Xhariep district as a 'solar corridor' » Vanderkloof dam and the Rolfontein nature reserve as a tourism node » The potential of the N8 as development corridor » Agricultural beneficiation potential of the VanderKloof dam and Riet river irrigation networks, serving Oppermansgronde and Jacobsdal, respectively. 	

3.7 Conclusion

The review of relevant legislation, policies and documentation pertaining to the proposed development indicates that the establishment of the agricultural development and associated infrastructure is supported

at a national, provincial, and local level, and that the proposed project will contribute positively towards a number of targets and policy aims.

4. OVERVIEW OF THE STUDY AREA

4.1 Introduction to overview of study area

This section provides an overview of the relevant administrative context along with the province socio economic and municipal contexts. It closes with a description of the local context of the immediately surrounding of the proposed development of the Xhariep Export Programme Agriculture Development and associated infrastructure.

4.2 Spatial context of study area

The Xhariep Export Programme - Agricultural Development and associated infrastructure will be located Southwest of Luckhoff and Koffiesfontein in the Free State Province. The development will take place on a site of ~4690ha in extent across in 10 interlinked properties within the Letsemeng Local municipality of the Xhariep District Municipality.

Table 4.1: Spatial Context of the study area for the development of the Xhariep Export Programme - Agricultural Development and associated infrastructure

Province	Free State Province
District Municipality	Xhariep District Municipality
Local Municipality	Letsemeng Local Municipality
Ward number(s)	1
Nearest town(s)	Luckhoff (~9km north- east) and Petrus Ville (~15km south- west)

The sections below provide an overview of the socio-economic environment of the province, DM, and LM within which the Xhariep Export Programme - Agricultural Development and associated infrastructure is proposed and provides the socio-economic basis against which potential issues can be identified.

4.2.1 Free State Province

The Free State Province lies in the centre of South Africa, located between the Vaal River in the north and the Orange River in the south. The province comprises four District Municipalities which includes Xhariep, Thabo Mofutsanyana, Fezile Dabi and Lejweleputswa District Municipality, (refer to Figure 4.1). The region is one of flat, rolling grassland and fields of crops, rising to mountains in the north-east.

Economic towns include Welkom, Kroonstad, Parys, QwaQwa, and Bethlehem. The Free State is the third-largest Province in South Africa, but it has the second-smallest population and the second-lowest population density. The culture is centred on traditional cultures but built on the influences of the early European settlers.

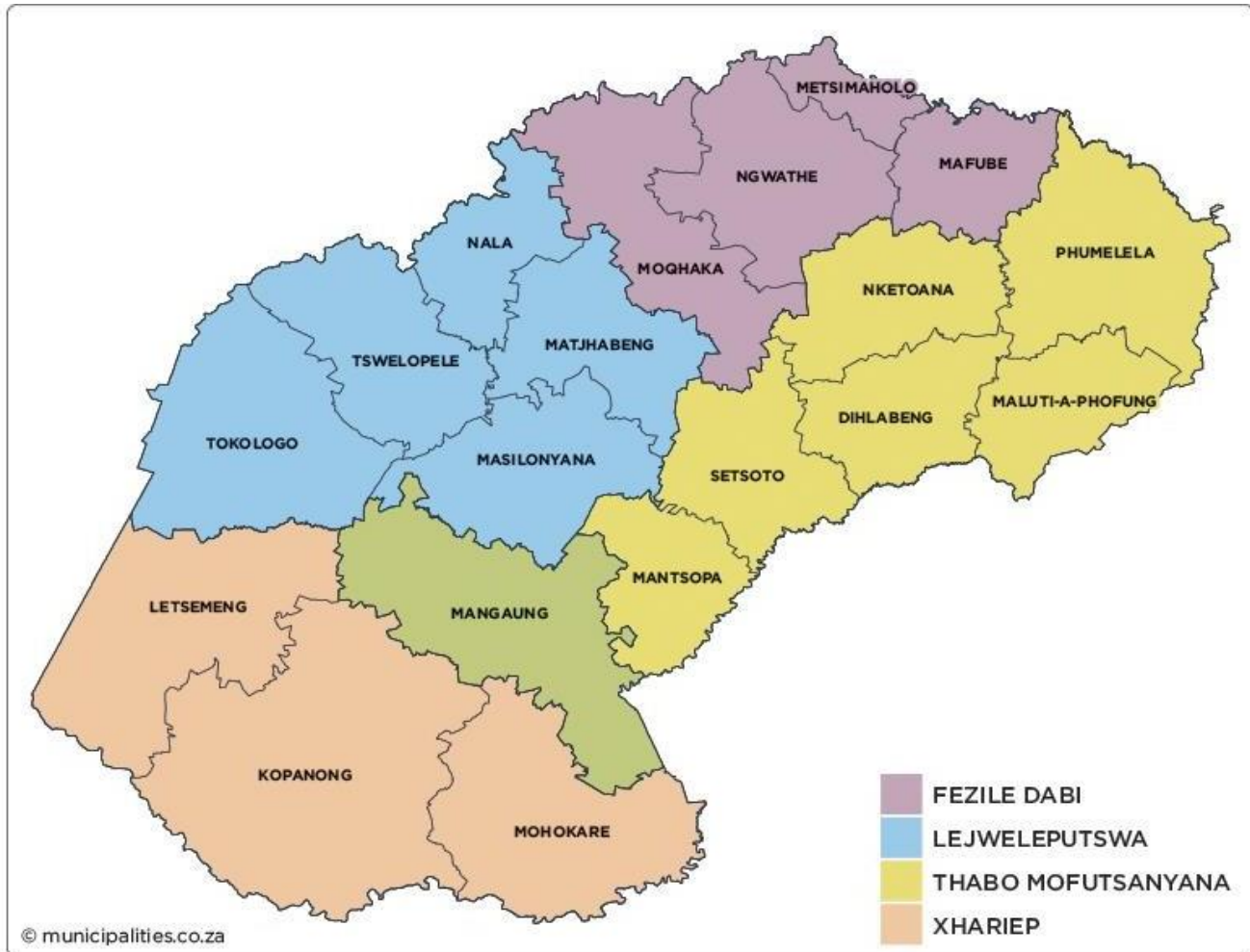
Close to 2.8-million people live in the Free State, with two-thirds speaking Sesotho, followed by Afrikaans, Zulu, Tswana, Xhosa and English.

The province is the granary of South Africa, with agriculture central to its economy, while mining in the goldfield reefs is its largest employer. According to the Provincial Spatial development Framework, the province's high poverty levels are major concerns. In 2018 44% % of the Free state people were considered to be below the poverty line. "Many people find it difficult to have access to basic services due to high level

of poverty, low income and an increase in economic inequality. According to 2022 Quarter 1 Labour Force Survey the province's unemployment rate is at 31.1%

The Free State is strategically placed to take advantage of the national transport infrastructure. Two corridors are of particular importance: the Harrismith node on the N3 corridor between Gauteng and KwaZulu-Natal, and the N8. The N1 connects Gauteng to the Western Cape. Bram Fischer International Airport in Bloemfontein handles about 250 000 passengers and 221 000 tons of cargo a year. Manufacturing also features in the provincial economic profile. This sector makes up 14% of the provincial output, with petrochemicals (via Sasol) accounting for more than 85% of the output.

Figure 4.1: Map showing the districts of the Free State Province (Source: www.municipalities.co.za).



4.2.2 Xhariep DM

The Xhariep District Municipality is a Category C municipality situated in the southern part of the Free State. It is bordered by the Mangaung Metro to the north, Eastern Cape to the south, Lesotho to the east, and Northern Cape to the west.

It is the largest district in the province, making up just more than a third of its geographical area. It is comprised of three local municipalities: Letsemeng, Kopanong and Mohokare, which include 21 towns. Its administrative headquarters are in Trompsburg, which lies 125km south of Bloemfontein.

The towns in this district boast abundant natural resources such as water and agricultural land. The largest dam in South Africa is situated at the southern tip of the district. Three national roads (N1 – Gauteng to Cape Town, N6 – Eastern Cape to Bloemfontein and N8 – Bloemfontein to Kimberley) pass through this area (refer to **Figure 4.2**).

According to census 2016, an estimated number of 125 884 reside in the Xhariep municipality area. The number is slowly growing at a rate of 0.72%. 66.7% of the population within the district municipality is between the age of 15 and 64. The IDP consultation process identified a number of key issues affecting the young population in Xhariep District municipality which include high school drop outs, youth unemployment rate, teenage pregnancies and HIV infections, alcohol and substance abuse.

Due to the district municipality's sparse population, it is difficult to provide an equivalent level of service across such a broad area. Most services are provided to the metropolitan nodes than to the rural parts of the district. Xhariep have identified important economic sectors for future development which include agriculture and farming, winery, mining and tourism. According to the integrated Development plan, the emerging farmers within the district municipality shall be supported, access to finance improved, the coordination of local economic development must be enhanced,

4.2.3 Letsemeng LM

The Letsemeng Local Municipality is a Category B municipality situated on the central part of the Xhariep District and covering an area of 9 828km². The municipality includes the towns of Jacobsdal, Koffiefontein and Luckhof. Koffiefontein is the municipal head office and its economic hub. It is bordered in the north by the Lejweleputswa District, in the south by Kopanong, in the east by the Mangaung Metro, and in the west by the Northern Cape Province (refer to **Figure 4.2**). It is one of three local municipalities in the district, making up almost a third of its geographical area.

According to the Integrated Development Plan (IDP), the "Letsemeng Municipality economy is characterised by the following:

- » Mining and agricultural sector are the largest contributors to the local economy.
- » The decline in the agricultural sector over the recent years has had an adverse effect on the employment potential of the rural areas.
- » De Beers Mines contributed major part of the local before it was closed



Figure 4.2: Map showing the Xhariep District Free State Province (Source: www.municipalities.co.za).

4.3 Baseline Description of the Social Environment

Table 4.2 provides a baseline summary of the socio-economic profile of the Letsemeng LM within which the Xhariep Export Programme - Agricultural Development and associated infrastructure is located. In order to provide context against which the LM's socio-economic profile can be compared, the socio-economic profiles of the Xhariep DM, Free State Province, and South Africa as a whole have also been considered. The data presented in this section have been derived from the 2011 Census, the Local Government Handbook South Africa 2019, and the Xhariep DM and Letsemeng LM IDPs.

Table 4.2: Baseline description of the socio-economic characteristics of the area within which the Xhariep Export Programme - Agricultural Development and associated infrastructure

Location characteristics
» The project is proposed within the Free State Province, which is the third-largest province in South Africa and has the second-smallest population and the second lowest population density.
» The project is proposed within the Letsemeng LM of the Xhariep DM.
» The Letsemeng LM is approximately 9 826km ² in extent, whilst Xhariep is 34 250km ² in extent.
Population characteristics
» According to the Statistics SA Letsemeng had a population growth per annum of 0.82%. the total population is 40 444 which is about one-third of the figure in Xhariep (125,884).
» From the StatsSA in 2016 it shows that males were more than females in age group 15-34, 35-64 and females were more than males in age groups 1-14,65+ (adults)
» Males have the highest portion, particularly the highest portion are the males in the youth between 15-34.

- » For every 100 (ages 15-64) the dependency ratio in 2016 was 111.8 whilst in 2011 it was 105.7.
- » The growth rate according to 2011 census data is -1.04% (between 2001-2011)

Economic, education and household characteristics

- » In terms of houses/brick structures on a separate stand dominate by far in all urban areas (83%)
- » Second largest number of households type is shacks (14%)
- » The vast majority live in dwellings that are fully paid off (66%); 12% occupy their dwellings rent free and 11% rent through a private individual.
- » There is 36.6% rate on employment which is about the same as the rate in Xhariep 36.47%.
- » Discouraged work-seeker is about 7% (1,745), other not economically active is 46% (11,518), unemployed 10.5% (2,624).
- » The annual income average is R15 000 which is about the same as the amount in Xhariep (R15 000)
- » Those that earn between R10k – R20K is about 31% (the highest).
- » 57.6% have completed Grade 9 or higher which is about the same as rate in Xhariep (56.38%)
- » 31.9% completed matric or higher which is about the same rate in Xhariep 31.7%.
- » Employment for those between 15-17 years is about R7 500 an average annual income of employed about the same as the amount in Xhariep R1 500.
- » 14% of children between 15 and 17 are in the labour force which is a little higher than the rate in Xhariep (13.28%).

Services

- » 78.3% are getting water from a regional or local service provider which is about 90 percent of the rate in Xhariep (85.7%).
- » Those with piped water inside the house is 47.1% (18,875); piped water inside yard is 46.1% (18,455); borehole in yard 2.2% (869; borehole outside yard is 1.8% (710) and other is 2.8% (1,136).
- » 2.4% have no access to electricity which is about three quarters of rate in Xhariep (3.23%)
- » Those with in-house prepaid meter is 79.2% (31,728); in-house conventional meter is 13.3% (5,324); other source (no paying for) is 3.1% (1,234); no access to electricity is about 2.4% (942) whilst on other is 2% (816)
- » 87.2% have access to flush or chemical toilets a little less than rate in Xhariep (90.4%).
- » 1.4% have no access to any toilets which is about half the rate in Xhariep 2.73%.
- » 61.1% are getting refuse disposal from a local authority, private company or community members about 80 percent of the rate in Xhariep (75.22%).

5. SOCIO-ECONOMIC & LOCAL ECONOMIC DEVELOPMENT

This section presents a summary of the existing socio-economic impacts facing the community living within the regional study area (Luckhoff community), which will be supported by understanding and outlining the local municipalities' Local Economic Development (LED). In Xhariep District Municipality, Letsemeng Local municipality is the second largest contributing municipality (29.8%) to the total GGP. For the district agricultural is the largest contributing sector to the GGP, followed by general government (16.2%) and the finance sector (15.6%). Very little diversification takes place, and this places the area at economic risk in light of the decline in the agricultural sector during recent years. Assuming the GGP has not increased drastically over the period 1996 to 2001, the GGP per capita is calculated at R4 858, which is the second lowest amongst all the district municipalities in the Free State.

As part of the spatial development plans for Koffiefontein it has been earmarked for expansion towards the northeast, The future development framework of Koffiefontein also includes the implementation of small-scale farming for emerging farmers. According to the spatial development for Luckhoff it is believed there are still areas that can be (re) developed and densified. Small scale farming would be implemented for emerging farmers. After mining and tourism, agriculture is the biggest contributor to the economy in Free State. Initiatives and programmes are directed to further unlock the agricultural potential in Free State.

In the study area, it is important to note that although the rural areas seemingly have the lowest unemployment rate, the decline in the agricultural sector over recent years has had adverse effect on the employment potential of the rural area and today it is expected that high levels of poverty occur (Letsemeng LM, IDP). In an attempt to develop rural communities and ensure their economically independence, various economic empowerment projects are executed or planned,.

	Municipality/Town	Project description	Economical Impact	Status
Farming	Jacobsdal & Koffiefontein	Xharies Ostrich project	Promotion of Ostrich industry by establishing farmers Expansion and creation of secondary uses: <ul style="list-style-type: none"> • Tannery • Abattoir (meat) • Job creation • Tourism • Practical use of natural resources • Diamond and wine route promotion 	Funding Business plan Feasibility study
	Koffiefontein	Crop (maize) farming		Operational
	Luckhoff	Diary at Luckhoff amongst emerging farmers	Secondary uses e.g. cheese fabric, butter	No irrigation in Luckhoff Funding Business plan
	Jacobsdal, Koffiefontein, Luckhoff and Petrusburg	Establishment of emerging farmers on 116 000ha	Settlement of farmers Skills development Job creation Produce	Funding Business plan in process
	Koffiefontein	57ha irrigation rights to be developed in Koffiefontein	Empowerment of people Economic sustainability	Finalisation of funding

For small emerging farmers the loss of land could have a significant negative impact. Vanclay (2004) states that "From a sustainable agriculture point of view, we should be concerned about protecting (zoning) our productive farmlands, to protect them from conversion to non-farm use."

This is closely linked to the social issue of the level of poverty evident in the Free State communities. Poverty is experienced especially by those living in peri-urban and rural areas. The Xhariep IDP states that "It is therefore crucial if not pivotal that the Department of Agriculture address and stimulates job creation and poverty alleviation through rendering of efficient services in the agro-processing and production fields. Agriculture is often the dominant and sometimes-exclusive economic sector, and opportunities for resource mobilization are limited. The characteristics mean that people living in rural areas face a set of factors that pose major challenges to development." According to the Strategic Plan (2003/2006) of the Free State Province Department of Agriculture, the following strategic goals and objectives are identified.

- 1) Agro-processing and production, job creation and poverty alleviation;
- 2) Agricultural economic and market development;
- 3) Optimisation of plant and livestock health, production and product safety;
- 4) Service delivery innovations;
- 5) Natural resource and infrastructure utilization and management;
- 6) Research and experimental facilities;
- 7) Information management, including IT and related technology
- 8) Formal and non-formal training programs.

6. SOCIAL IMPACT ASSESSMENT

This section provides a detailed description and assessment of the potential social impacts that were identified for the detailed design and construction, operation, and decommissioning phases, of the proposed Xhariep Export Programme - Agricultural Development and associated infrastructure.

A facility layout has been provided by the applicant for consideration as part of the EIA process and is considered within the SIA. The layout provides an indication of the facility infrastructure proposed within the development footprint (refer to **Figure 6.1.**)

Social impacts are expected to occur during both the construction and operation phase of Xhariep Export Programme - Agricultural Development and associated infrastructure. The status of the impacts will be either positive or negative and either mitigation or enhancement measures are recommended for the management of the impacts depending on the status of the impacts.

6.1 Social Impacts during the Construction Phase

The majority of social impacts associated with the project are anticipated to occur during the construction phase of the development and are typical of the type of social impacts generally associated with construction activities. These impacts will be temporary and short-term (~12 months) but could have long-term effects on the surrounding social environment if not planned or managed appropriately. It is therefore necessary that the detailed design phase be conducted in such a manner so as not to result in permanent social impacts associated with the ill-placement of project components or associated infrastructure or result in the mismanagement of the construction phase activities.

The positive and negative social impacts identified and assessed for the **construction phase** includes:

- » Direct and indirect employment opportunities
- » Economic multiplier effects
- » Safety and security impacts
- » Impacts on daily living and movement patterns
- » Nuisance impacts, including noise and dust
- » Visual impacts and sense of place impacts

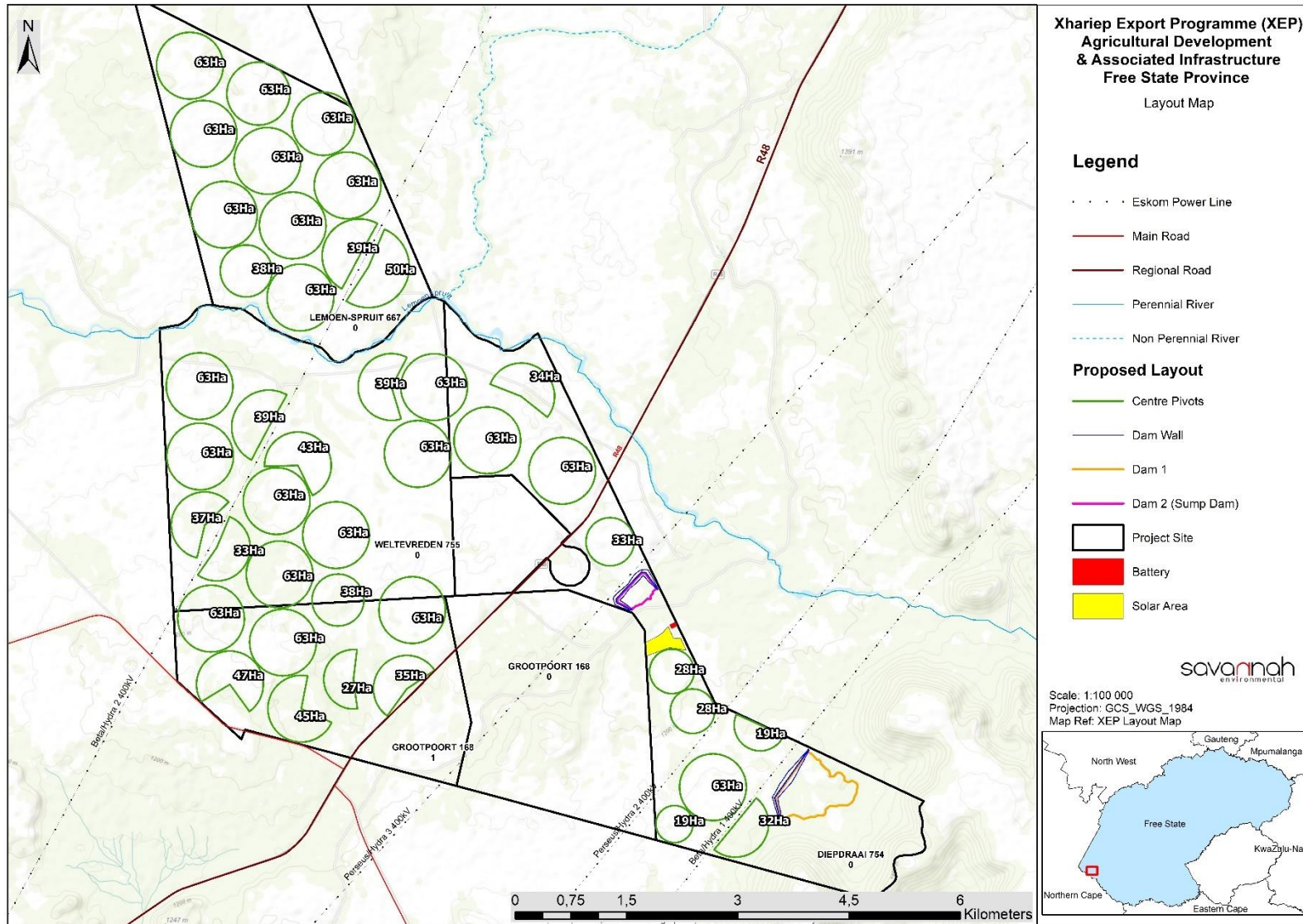


Figure 6.1: Layout for the proposed agricultural development and associated infrastructure.

Table 5.1: Impact assessment on direct and indirect employment opportunities

Nature:			
Employment opportunities and skills development			
Impact description: The creation of employment opportunities and skills development opportunities during the construction phase for the country and local economy			
	Rating	Motivation	Significance
Prior to Enhancement			
Duration	Short-term (2)	The construction period will last for less than one year	Low Positive (30)
Extent	Local – Regional (3)	The impact will occur at a local, regional and national level	
Magnitude	Low (4)	It is not confirmed yet on how many job opportunities will be created The creation of employment opportunities will assist to an extent in alleviating unemployment levels within the area.	
Probability	Medium Probability (3)	Construction of the project will result in the creation of a number of direct and indirect employment opportunities, which will assist in addressing unemployment levels within the area and aid in skills development of communities in the area	
Enhancement measures:			
To enhance the local employment, skills development and business opportunities associated with the construction phase, the following measures should be implemented:			
<ul style="list-style-type: none"> » It is recommended that a local employment policy be adopted to maximise the opportunities made available to the local labour force. JN Venter Beleggings Trust should make it a requirement for contractors to implement a 'locals first' policy, especially for semi and low skilled job categories. » Enhance employment opportunities for the immediate local area, i.e., Letsemeng Local Municipality. If this is not possible, then the broader focus areas should be considered for sourcing workers. » Consideration must be given to women during the recruitment process. » It is recommended that realistic local recruitment targets be set for the construction phase. » Training and skills development programmes should be initiated prior to the commencement of the construction phase. 			
Post Enhancement			
Duration	Short-term (1)	The construction period will last for less than one year	Medium Positive (55)
Extent	Regional (3)	The impact will occur at a local, regional and national level	
Magnitude	Moderate(6)	The creation of employment opportunities will assist to an extent in alleviating unemployment levels within the area	
Probability	Definite (5)	Construction of the project will result in the creation of a number of direct and indirect employment opportunities, which will assist in addressing unemployment levels within the area and aid in the skills development of communities in the area	
Residual Risks:			
Improved pool of skills and experience in the local area			

Table 5.2: Economic multiplier effects

Nature:			
Multiplier effects on the local economy			
Impact description: Significance of the impact from the economic multiplier effects from the use of local goods and services			
	Rating	Motivation	Significance
Prior to Enhancement			
Duration	Long-term (4)	Will continue for the duration of the project due to legal obligation to pay taxes.	Medium Positive (36)
Extent	Local – Regional (3)	Will include mostly local and some regional impacts	
Magnitude	Low (4)	Will derive from increased cash flow from wages, local procurement, economic growth, taxes and LED and HRD initiatives.	
Probability	Medium Probability (3)	Will depend on; proportion of local spending by employees, capacity of local enterprises to supply; effectiveness of LED and HRD initiatives, contributions to local government.	
Enhancement measures:			
<ul style="list-style-type: none"> » It is recommended that a local procurement policy be adopted by the developer to maximise the benefit to the local economy, where feasible (Letsemeng Local Municipality). » JN Venter Beleggings Trust should develop a database of local companies, specifically Historically Disadvantaged (HD) companies, which qualify as potential service providers (e.g., construction companies, catering companies, waste collection companies, security companies etc.) prior to the commencement of the tender process for construction contractors. These companies should be notified of the tender process and invited to bid for project-related work where applicable. » It is a requirement to source as much good and services as possible from the local area. » Engage with local authorities and business organisations to investigate the possibility of procurement of construction materials, goods and products from local suppliers, where feasible. 			
Post Enhancement			
Duration	Long-term (4)	As for pre-enhancement	Medium Positive (60)
Extent	Local – Regional (3)	SMME capacity building will limit procurement from outside the local municipality	
Magnitude	Low (4)	Mitigation will likely increase intensity of multiplier effects as it will concentrate impact to local area, sustainability of initiatives will also be increased if aligned with other those of other institutions	
Probability	Definite (5)	Increased local employment and procurement as well as skilled SMME's skill enhance likelihood of benefits to local economy	
Residual Risks:			
Improved local service sector, growth in local business.			

Table 5.3: Assessment of safety and security impacts

Nature:

Safety and security			
Impact description: Temporary increase in safety and security concerns associated with the influx of people during the construction phase			
	Rating	Motivation	Significance
Prior to Mitigation			
Duration	Short-term (2)	Will be limited to the construction phase which is less than one year.	Low Negative (27)
Extent	Local – Regional (3)	Safety concerns will affect nearby communities.	
Magnitude	Low (4)	Could place the lives of neighboring community members at risk.	
Probability	Medium Probability (3)	Traffic would need to be considered in the area	
Mitigation:			
<ul style="list-style-type: none"> » Access in and out of the construction area should be strictly controlled by a security company. » The appointed EPC contractor must appoint a security company and appropriate security procedures are to be implemented to limit access to the site and surrounding areas. » The contractor must ensure that open fires on the site for heating, smoking or cooking are not allowed except in designated areas. » The contractor must provide adequate firefighting equipment on site and provide firefighting training to selected construction staff. » Have clear rules and regulations for access to the proposed site to control loitering. » A comprehensive employee induction programme would cover land access protocols, fire management and road safety must be prepared. A Community Liaison Officer should be appointed. A method of communication should be implemented whereby procedures to lodge complaints are set out in order for the local community to express any complaints or grievances with the construction process 			
Post Mitigation			
Duration	Short-term (2)	As for pre-mitigation	Low Negative (16)
Extent	Local (2)	Safety measures will likely restrict impacts on nearby communities	
Magnitude	Low (4)	Appropriate mitigation will reduce the risk of this project	
Probability	Improbable (2)	As for pre-mitigation	
Residual Risks: None anticipated.			

Table 5.4: Assessment of impacts on daily living and movement patterns.

Nature: Disruption of daily living and movement patterns			
Impact description: Temporary increase in traffic disruptions and movement patterns during the construction phase			
	Rating	Motivation	Significance
Prior to Mitigation			
Duration	Short-term (2)	Will be limited to the construction phase which is 12 months	Medium Negative (40)
Extent	Local (2)	Will affect road users from nearby communities	
Magnitude	Moderate (6)	Will affect the quality of life of neighboring communities	

Probability	Highly probable (4)	Traffic would need to be considered in the area	
Mitigation:			
<ul style="list-style-type: none"> » All vehicles must be road worthy, and drivers must be qualified, obey traffic rules, follow speed limits and be made aware of the potential road safety issues. » Heavy vehicles should be inspected regularly to ensure their road safety worthiness. » Implement penalties for reckless driving for the drivers of heavy vehicles as a way to enforce compliance to traffic rules. » Avoid heavy vehicle activity during 'peak' hours (when people are driving to and from work). » The developer and engineering, procurement and construction (EPC) contractors must ensure that any damage / wear and tear caused by construction related traffic to the roads is repaired. » A comprehensive employee induction programme which covers land access protocols and road safety must be prepared. » A Community Liaison Officer should be appointed. A method of communication should be implemented whereby procedures to lodge complaints are set out in order for the local community to express any complaints or grievances with the construction process. 			
Post Mitigation			
Duration	Short-term (2)	As for pre-mitigation	Low Negative (16)
Extent	Local (2)	Safety measures will likely restrict impacts on road users	
Magnitude	Low (4)	Appropriate mitigation will reduce the risk of this project	
Probability	Improbable (1)	As for pre-mitigation	
Residual Risks:			
None anticipated.			

Table 5.5: Assessment of nuisance impacts (noise and dust)

Nature:			
Nuisance impacts (noise& dust)			
Impact description: Nuisance impacts in terms of temporary increase in noise and dust, and the wear and tear on private farm roads for access to the site			
	Rating	Motivation	Significance
Prior to Mitigation			
Duration	Short-term (2)	Nuisance impacts will only be limited to the construction phase.	Medium Negative (44)
Extent	Local (1)	This will remain within the project extent from construction activities.	
Magnitude	High (8)	Dust impacts and noise nuisance from construction activities.	
Probability	Highly Probable (4)	Movement of heavy construction vehicles during the construction phase has a potential to create noise, damage to roads and dust.	
Mitigation:			
<ul style="list-style-type: none"> » The movement of construction vehicles on the site should be confined to agreed access road/s. » The movement of heavy vehicles associated with the construction phase should be timed (where possible) to avoid times days of the week, such as weekends, when the volume of traffic travelling along the access roads may be higher. 			

<ul style="list-style-type: none"> » Dust suppression measures should be implemented, such as wetting on a regular basis and ensuring that vehicles used to transport sand and building materials are fitted with tarpaulins or covers. » All vehicles must be roadworthy, and drivers must be qualified and made aware of the potential road safety issues and need for strict speed limits. » A Community Liaison Officer should be appointed. A method of communication should be implemented whereby procedures to lodge complaints are set out in order for the local community to express any complaints or grievances with the construction process 			
Post Mitigation			
Duration	Short-term (2)	As for pre-mitigation	Low Negative (18)
Extent	Local (1)	Mitigation measures will assist with increasing the impact.	
Magnitude	Moderate (6)	Appropriate mitigation will reduce the risk of this project	
Probability	Improbable (1)	As for pre-mitigation	
Residual Risks: None anticipated			

6.2 Potential Social impacts during the Operation Phase

It is anticipated that the Xhariep Export Programme - Agricultural Development and associated infrastructure will operate for approximately 10 – 20 years, or as long as required by the development.

The potential positive and negative social impacts that could arise because of the operation of the proposed project include the following:

- » Direct and indirect employment opportunities
- » Development of clean, renewable energy infrastructure
- » Visual impact and sense of place impacts
- » Improve Food security and Nutritional status of the region and of the country
- » Minimized food imports, increased food exports and savings of the foreign exchange

Table 5.6: Employment opportunities and skills development

Nature: Job creation during operation			
Impact description: The creation of employment opportunities and skills development opportunities during the operation phase for the country and local economy			
	Rating	Motivation	Significance
Prior to Enhancement			
Duration	Long term (4)	Project will be operational up to 20 years	Medium Positive (33)
Extent	Regional (3)	Any new positions are likely to be filled by persons living in the local municipal area	
Magnitude	Low (4)	It is confirmed yet on how many jobs will be generated during the operation phase. A number of highly skilled personnel may need to be recruited from outside the local municipal area	
Probability	Probable (3)	Employment opportunities will be created during the operation phase	

Enhancement measures:			
<ul style="list-style-type: none"> » It is recommended that a local employment policy is adopted by the developer to maximise the project opportunities being made available to the local community. Enhance employment opportunities for the immediate local area, Letsemeng Local Municipality, if this is not possible, then the broader focus areas should be considered for sourcing employees. » The recruitment selection process should seek to promote gender equality and the employment of women wherever possible » The developer should establish vocational training programs for the local employees to promote the development of skills 			
Post Enhancement			
Duration	Long-term (4)	As for pre-enhancement	Medium Positive (44)
Extent	Local - regional (3)	As for pre-enhancement	
Magnitude	Low (4)	Mitigation will maximise local job creation	
Probability	Highly Probable (4)	Mitigation will maximise probability that any local recruitment targets are achieved and local benefits optimised	
Residual Risks:			
Improved pool of skills and experience in the local area			

Table 5.7: Development of clean, renewable energy infrastructure

Nature:			
Development of clean, renewable energy infrastructure			
Impact description: Development of clean, renewable energy infrastructure			
	Rating	Motivation	Significance
Prior to Enhancement			
Duration	Long term (4)	Adding a renewable energy sector to the Letsemeng Local Municipality economy may contribute to the diversification of the local economy and provide greater economic stability and reduce carbon footprint.	Medium Positive (48)
Extent	Local – Regional - National (4)	The proposed development will indirectly reduce the strain on the national grid, as the power generated by the facility will supply directly to the proposed project	
Magnitude	Low (4)	The proposed facility will only generate up to 10MW _{ac}	
Probability	Highly Probable (4)	Facility will help contribute to the total carbon emissions associated with non-renewable energy generation	
Enhancement measures:			
None anticipated			
Post Enhancement			
Duration	Long term (4)	As for pre-enhancement	Medium Positive (48)
Extent	National (4)	As for pre-enhancement	
Magnitude	Low (4)	As for pre-enhancement	
Probability	Highly Probable (4)	As for pre-enhancement	
Residual Risks:			
Reduce carbon emissions through the use of renewable energy and contribute to reducing global warming			

Table 5.8: Visual impacts and impacts on sense of place

Nature: Visual impacts and impacts on sense of place			
Impact description: Visual impacts and sense of place impacts associated with the operation phase of the project			
	Rating	Motivation	Significance
Prior to Mitigation			
Duration	Long term (4)	Impact on sense of place relates to the change in the landscape character and visual impact of the proposed solar energy facility	Low Negative (18)
Extent	Local (1)	Dependent on the demographics of the population that resides in the area and their perceptions	
Magnitude	Low (4)	There are no industrial/mining operations and formal residential areas located in proximity to the site	
Probability	Improbable (1)	There are no tourist attractions located adjacent to the property and therefore the anticipated impact on the areas visual quality and sense of place is low.	
Mitigation: None anticipated			
Post Mitigation			
Duration	N.A. – Mitigation not possible.		N.A. – Mitigation not possible.
Extent	N.A. – Mitigation not possible.		
Magnitude	N.A. – Mitigation not possible.		
Probability	N.A. – Mitigation not possible.		
Residual Risks: None anticipated if the visual impact will be removed after decommissioning, provided the solar energy facility infrastructure is removed and the site is rehabilitated to its original (current) status			

Table 5.9: Improved Food Security

Nature: Improved Food security and nutritional status during operation phase			
Impact description: Improved food security of the local region and of the country as a result of the increase in the quantity of food produced once the project becomes operational			
	Rating	Motivation	Significance
Prior to Enhancement			
Duration	Long term (4)	Increased food security for the duration of the proposed project	Medium Positive
Extent	Local-National (4)	It will increase the current regional and national food security	
Magnitude	Low (4)	The proposed project will increase agricultural activities and, as a result, improve agricultural production because it is located in an agricultural center area.	
Probability	Highly Probable (4)	Local food produced is likely to increase reduce malnutrition and hunger as a result of food insecurity	

Enhancement measures: None anticipated			
Post Enhancement			
Duration	Long-term (4)	As for pre-enhancement	Medium Positive
Extent	Local - regional (3)	As for pre-enhancement	
Magnitude	Low (4)	As for pre-enhancement	
Probability	Highly Probable (4)	As for pre-enhancement	
Residual Risks: None anticipated			

Table 5.10: Minimized food imports, increased food exports and savings of the foreign exchange

Nature: Minimize food imports, increase food exports and savings of the foreign exchange			
Minimized food imports, increase food exports and currency savings as a result of increased local production and export revenue			
	Rating	Motivation	Significance
Prior to Enhancement			
Duration	Long term (4)	The proposed project will increase revenue via for the duration of its life cycle	Medium Positive (33)
Extent	Local – International (5)	Local produce will reduce the regional and national food insecurity and increase revenue during exports	
Magnitude	Low (4)	Local production will offset the cost of higher prices for local consumers	
Probability	Highly Probable (4)	The proposed project will save money on foreign exchange due to increase in local production of staple food and increase revenue when exporting.	
Enhancement measures: None anticipated			
Post Enhancement			
Duration	Long-term (4)	As for pre-enhancement	Medium Positive (44)
Extent	Local - international (5)	As for pre-enhancement	
Magnitude	Low (4)	As for pre-enhancement	
Probability	Highly Probable (4)	As for pre-enhancement	
Residual Risks: None anticipated			

6.3 Assessment of Cumulative Impacts

Cumulative impacts are described as impacts arising from the combined effects of two or more projects of action. They typically refer to large scale rather than site specific impacts and they frequently intensify the effects already anticipated for the proposed project. The aim of this section is to highlight the nature of the cumulative socio-economic impact that are expected to occur as a result of the combined effect of the proposed project has the potential to result in significant positive cumulative impacts and relatively low cumulative impact. The proposed development will create a number of socio-economic opportunities for the area, which in turn, will result in a positive social benefit. The positive cumulative impacts include creation of employment and Multiplier effects on the local economy, skills development and training opportunities,

and downstream business opportunities, enhance food security, minimize imports of and savings on foreign exchanges. Benefits to the local, regional and national economy through employment and procurement of services could be substantial should many agricultural developments with Solar facilities proceed. This benefit will increase significantly should critical mass be reached that allows local companies to develop the necessary skills to support construction and maintenance activities and that allows for components of the renewable energy facilities to be manufactured in South Africa. Furthermore, at municipal level, the cumulative impact could be positive and could incentivize operation and maintenance companies to centralize and expand their activities towards education and training.

Nature: An increase in employment opportunities, skills development and business opportunities with the establishment of more than one solar energy facility		
	Overall impact of the proposed project considered in isolation	Cumulative impact of the project and other projects in the area
Extent	Local -regional (3)	Local-regional (3)
Duration	Long-term (4)	Long-term (4)
Magnitude	Low (4)	Moderate (6)
Probability	Medium Probability (3)	Medium Probability (3)
Significance	Medium (33)	Medium (52)
Status (positive or negative)	Positive	Positive
Reversibility	N/A	N/A
Irreplaceable loss of resources?	N/A	N/A
Can impacts be mitigated?	Yes	Yes
Confidence in findings: High.		
Mitigation: The establishment of agricultural development with solar energy facilities in the area does have the potential to have a positive cumulative impact on the area in the form of employment opportunities, skills development and business opportunities. The positive benefits will be enhanced if local employment policies are adopted and local services providers are utilised by the developers to maximise the project opportunities available to the local community.		

Nature: Negative impacts and change to the local economy with an in-migration of labourers, businesses and jobseekers to the area		
	Overall impact of the proposed project considered in isolation	Cumulative impact of the project and other projects in the area
Extent	Local (1)	Local-regional (3)
Duration	Long-term (4)	Long-term (4)
Magnitude	Minor (2)	Low (4)
Probability	Improbable (1)	Improbable (2)
Significance	Low (7)	Low (22)
Status (positive or negative)	Negative	Negative
Reversibility	Yes	
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	Yes	
Confidence in findings: High.		
Mitigation: <ul style="list-style-type: none"> » Develop a recruitment policy / process (to be implemented by contractors), which will ensure the sourcing of labour locally, where available. » Work together with government agencies to ensure that service provision is in line with the development needs of the local area. 		

- » Form joint ventures with community organisations, through Trusts, which can provide local communities with benefits, such as employment opportunities and services.
- » Develop and implement a recruitment protocol in consultation with the municipality and local community leaders. Ensure that the procedures for applications for employment are clearly communicated.

6.4 The No-development alternative

The “no-development” alternative implies that the project does not proceed thereby maintaining the status quo. Environmental resources’ current state is unaltered, therefore, their condition neither improves nor deteriorates. However, the implementation of this project has many benefits as indicated in Section 6 of this report. The “no development” alternative has various negative and possible long-term impacts to the region which includes the local populations continue to suffer from food scarcity and consequently food insecurity due to lack of agricultural produce and a projected reduction in poverty levels. The no-development alternative would not comprise the development of the Xhariep Export Programme and associated infrastructure across the Free State province and South Africa, but the socio-economic benefits to the Letsemeng Local Municipality and the communities will be lost. The establishment of the proposed project should be developed. However, the enhancement and mitigation measures proposed in Section 6 of this SIA as well as in other specialist studies for this proposed development should be implemented.

7. CONCLUSION AND RECOMMENDATIONS

This SIA has focused on the collection of data to provide an understanding of the current social environment associated with the Xhariep Export Programme - Agricultural Development and associated infrastructure that is proposed and identifying and assessing social issues and potential social impacts associated with the development of such a nature. The environmental assessment framework for evaluation of impacts at the EIA phase and the relevant criteria was applied to evaluate the significance of the potential impacts and to recommend appropriate mitigation and enhancement measures for the identified impacts.

A summary of the potential positive and negative impacts identified for the construction and operation phases of the project are presented in Error! Reference source not found. and Error! Reference source not found.. A summary of the potential positive and negative cumulative social impacts identified for the project is provided in Error! Reference source not found..

Table 7.1: Summary of potential social impacts identified for the construction phase of the Xhariep Export Programme - Agricultural Development and associated infrastructure

Impact	Status	Significance
Positive Impacts		
Creation of direct and indirect employment and skills development opportunities.	Positive	Medium
Economic multiplier effects	Positive	Medium
Improve Food Security,	Positive	Medium
Minimized food imports, increased food exports and savings of the foreign exchange	Positive	Medium
Negative Impacts		
Safety and security impacts	Negative	Medium
Impacts on daily living and movement patterns	Negative	Low

Impact	Status	Significance
Nuisance impact (noise and dust)	Negative	Low
Visual and sense of place impacts	Negative	Low

Table 7.2: Summary of potential social impacts identified for the operation phase of the Xhariep Export Programme - Agricultural Development and associated infrastructure

Impact	Status	Significance
Positive Impacts		
Direct and indirect employment and skills development opportunities	Positive	Medium
Development of clean renewable energy	Medium	Medium
Negative Impacts		
Visual and sense of place impacts	Negative	Low

Table 7.3: Summary of potential cumulative impacts identified for the construction phase of the Xhariep Export Programme - Agricultural Development and associated infrastructure

Impact	Overall impact of the proposed project considered in isolation	Cumulative impact of the project and other projects in the area
Positive Cumulative Impacts		
Direct and indirect employment and skills development opportunities	Medium	Medium
Development of clean renewable energy	Medium	Medium
Negative Cumulative Impacts		
Visual and sense of place impacts	Low	Low

7.1 Key findings and Recommendations

7.1.1 Key Findings

From a social perspective, it is concluded that the project is supported, but that mitigation measures should be implemented and adhered to. Positive and negative social impacts have been identified. The assessment of the key issues indicated that there are no negative impacts that can be classified as fatal flaws, and which are of such significance that they cannot be successfully mitigated. Positive impacts could be enhanced by implementing appropriate enhancement measures and through careful planning. Based on the social assessment, the following general conclusions and findings can be made:

- » The potential negative social impacts associated with the construction phase are typical of construction related projects and not just focused on the construction of PV facilities and pivot infrastructure (these relate to intrusion and disturbance impacts, safety and security) and could be reduced with the implementation of the mitigation measures proposed.
- » Employment opportunities will be created in the construction and operation phases and the impact is rated as positive even if only a small number of individuals will benefit in this regard.
- » The proposed project could assist the local economy in creating entrepreneurial development, especially if local businesses could be involved in the provision of general material and services during the construction and operational phases.
- » Capacity building and skills training amongst employees are critical and would be highly beneficial to those involved, especially if they receive portable skills to enable them to also find work elsewhere and in other sectors.

- » The proposed development also represents an investment in infrastructure for the generation of clean, renewable energy, which, given the challenges created by climate change, represents a positive social benefit for society.

7.1.2 Recommendations

The following recommendations are made based on the Social Impact Assessment during the stakeholder engagement process. The proposed mitigation measures should be implemented to limit the negative impacts and enhance the positive impacts. Based on the social assessment, the following recommendations are made:

- » In terms of employment related impacts, it is important to consider that job opportunities for the unskilled and semi-skilled are scarce commodities in the study area and could create competition among the local unemployed. Introducing an outside workforce will therefore most likely worsen local endeavors to obtain jobs and provoke discontent as well as put pressure on the local services available. Local labour should be utilised to enhance the positive impact of employment creation in the area. Local businesses should be involved with the construction activities where possible. It is imperative that local labour be sourced to ensure that benefits accrue to the local communities. Preference should thus be given to the use of local labour during the construction and operational phases of the project as far as possible.
- » Locals should also be allowed an opportunity to be included in a list of possible local suppliers and service providers, enhancing the multiplier effect. This aspect would serve to mitigate other subsequent negative impacts such as those associated with the inflow of outsiders to the area, the increased pressure on the infrastructure and services in the area, as well as the safety and security concerns.
- » Impacts associated with the construction period should be carefully mitigated to minimise any dust and noise pollution.
- » Safety and security concerns should be considered during the planning and construction phases of the proposed project.

7.2 Conclusion

The proposed Xhariep Export Programme - Agricultural Development and associated infrastructure is unlikely to result in permanent damaging social impacts. From a social perspective, it is concluded that the project could be developed subject to the implementation of the recommended mitigation measures, enhancement measures and management actions contained in the specialist reports.

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