

# Inception report

---



INTERGRATED LAND USE  
MANAGEMENT PLAN FOR GHANZI  
AND KGALAGADI DISTRICTS

---

March 2021



## Acronyms and abbreviations

BTO	Botswana Tourism Organisation
CBD	Convention on Biological Diversity
CBO	Community-based organisation
CBNRM	Community-based Natural Resources Management
CITES	Convention on the International Trade in Endangered Species
CKGR	Central Kalahari Game Reserve
CTA	Chief Technical Advisor
DDC	District Development Committee
DDP	District Development Plan
DEA	Department of Environmental Affairs
DFRR	Department of Forestry and Range Resources
DLUPU	District Land Use Planning Unit
DTCP	Department of Town and Country Planning
DWNP	Department of Wildlife and National Parks
GDP	Gross domestic product
GIS	Geographic information system
ICT	Information and communications technology
ILUMP	Integrated Land Use Management Plan
IPCC	Intergovernmental Panel on Climate Change
IWRM	Integrated water resources management
KGDEP	Kgalagadi and Ghanzi Dryland Ecosystem Project
KTP	Kgalagadi Transfrontier Park
LED	Local Economic Development
MEA	Multilateral Environmental Agreement
NDP	National Development Plan
NGO	Non-governmental organisation
NSP	National Spatial Plan
PMU	Project Management Unit
PPP	Public-private partnership
PSC	Project Steering Committee
SDG	Sustainable Development Goal
TRG	Technical Reference Group
TWG	Technical Working Group
UNCCD	United Nations Convention on Combatting Desertification
UNDP	United Nations Development Programme
UNFCCC	United Nation Framework Convention on Climate Change
WMA	Wildlife management area

## **INTRODUCTION**

The Government of Botswana, with the support of the United Nations Development Programme (UNDP), is developing an Integrated Land Use Management Plan (ILUMP) for the Kgalagadi and Ghanzi districts. This is undertaken through the GEF-financed project entitled “Managing the human-wildlife interface to sustain the flow of agro-ecosystem services and prevent illegal wildlife trafficking in the Kgalagadi and Ghanzi Drylands”.

This inception report provides processes, steps, methodologies and workplans to be undertaken towards the development of the ILUMP. It also provides information on stakeholders to be consulted as well as the timelines to be considered in the development of the plan.

The development of the plan will be undertaken through a project working group led by the Department of Town and Country Planning (DTCP) and assisted by the Department of Environmental Affairs (DEA), who will work closely with KGDEP’s Chief Technical Advisor (CTA), who will be playing a technical coordination role. Selected experts from government departments will form part of the project working group. Where necessary, experts will be brought in to assist with studies and analysis that require specific expertise that is not available within the core team.

## **OBJECTIVES**

The main objective of the assignment is to develop an ILUMP for the Kgalagadi and Ghanzi Districts to address the intense competition and conflict between the numerous land uses within the landscape and their associated stakeholders. The ILUMP will importantly provide a framework for maintaining wildlife migratory corridors between the Kgalagadi Transfrontier Park (KTP) and the Central Kalahari Game Reserve (CKGR). This requires that the entire wilderness zone is taken into account during the planning process. Additionally, the ILUMP is intended to increase the land area under community management, subsequently increasing the participation of local communities in natural resource management (NRM) and direct benefits received by these communities. This will include assisting communities: i) in developing/revising and implementing WMA management plans to ensure that use of their land is in line with conservation requirements; ii) to obtain formal gazettelement of WMAs to link up the Kgalagadi Transfrontier Park and the Central Kalahari Game Reserve, with a goal of securing habitat for wildlife populations that migrate between the two protected areas and which use the Schwelle as a wet season calving area — contributing to the maintenance of wildlife migratory corridors. Of fundamental importance is that relevant stakeholders are provided with a forum to have a dialogue on land use, to negotiate trade-offs, and to ultimately agree on the overarching principles for how the entire wilderness landscape should be managed. Sub-objectives of the plan include *inter alia*:

- Integrated natural resources management;
- Domestication of sustainable development goals;
- Localisation of Vision 2036;

- Sustainable natural resource-based livelihoods that contribute to biodiversity conservation; and
- Local economic development focusing on the promotion of a wildlife-based economy.

**Study area**

The project focusses on Kgalagadi and Ghanzi Districts (Figure 1).

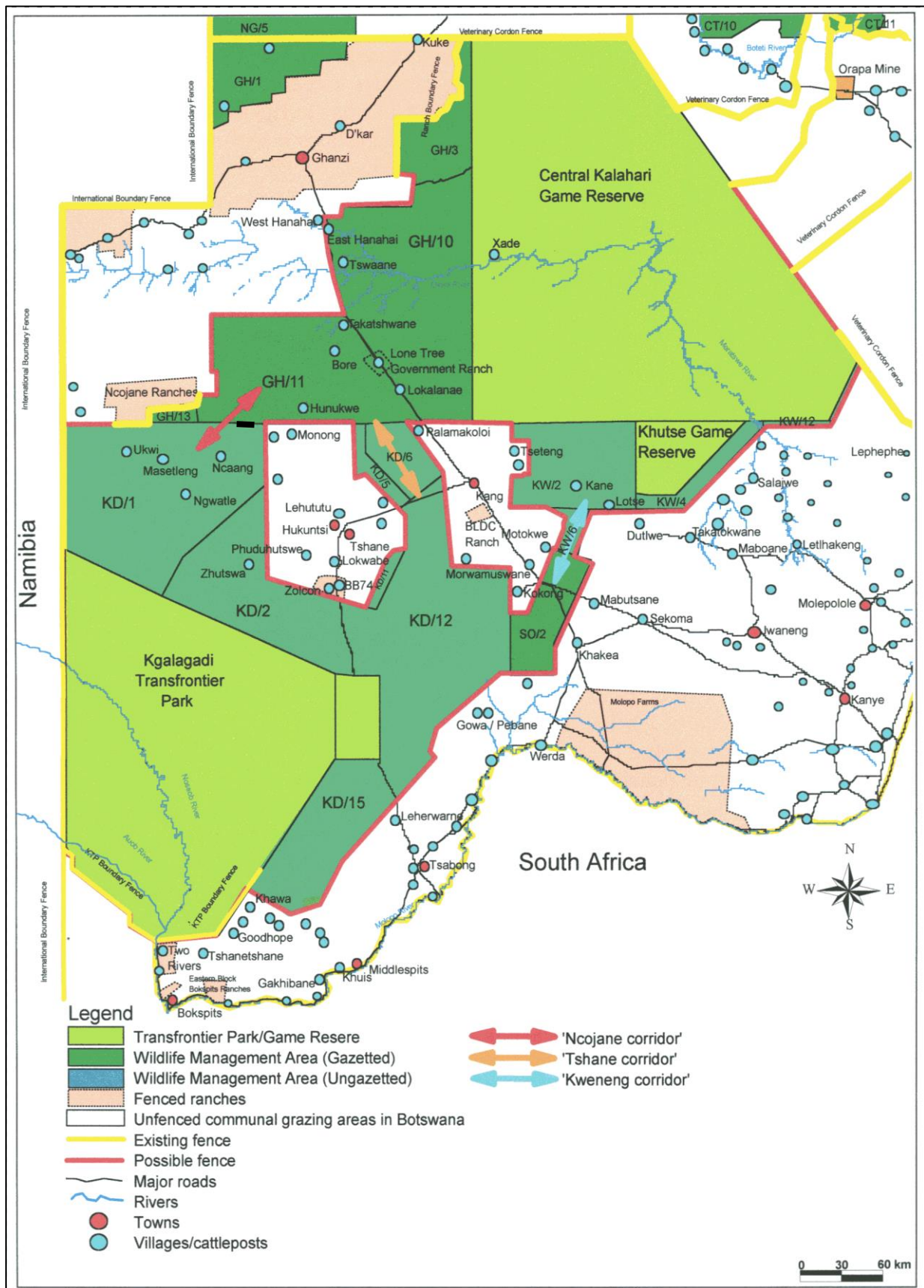


Figure 1: Map of the landscape to be covered by the ILUMP.

## **Approach**

*Process:*

### 1. Inception

- Inception meeting
- Consultations with district leadership and structures
- Consultation and approval of draft inception by Steering committee and Technical Reference Group (TRG)
- Final Inception report

### 2. Desktop reviews of essential components

### 3. Stakeholder consultations

Qualitative data collection (interviews, presentations, questionnaires etc.)

### 4. Site Visits (continuous process)

Quantitative data collection

### 5. Situational Analysis Report

### 6. Landscape analysis report

### 7. Further Stakeholder consultation (DLUPU, DDC, kgotla meetings etc.)

### 8. Further data collection and analysis

### 9. DRAFT plan

### 10. FINAL plan

### 11. Approval and gazettelement

## **Methodology**

**Overview:** This section presents the systematic and theoretical analysis of methods that will be applied during the development of the KGDEP ILUMP. It presents methods to be utilised in each component of the ILUMP.

### **Landscape connectivity analysis**

A landscape connectivity analysis will be undertaken to inform the development of the ILUMP by providing an accurate understanding of the present state of the Kgalagadi ecosystem in terms of functional landscape connectivity for multiple wildlife species, and the spatial factors which influence such connectivity, in order to inform land use planning. Through state-of-the-art quantitative spatial modelling, the analysis will provide science-based descriptions and predictions that will guide land use planning to achieve the conservation goal of securing wildlife habitat connectivity

between KTP and CKGR for long-term population persistence of Kgalagadi wildlife.

The analysis will encompass the free-ranging (unfenced) Kalahari ecosystem including Protected Areas (KTP, CKGR), Wildlife Management Areas (KD1, KD2, KD5, KD6, KD11, KD12, KD15, GH10, GH11, GH13, KW2, KW6, SO2), and Communal Grazing Areas (KD3, KD7, KD13, KD20, KD27, GH6, GH9, KW1, KW5, KW7, SO1).

Although being conducted in parallel, the landscape connectivity analysis, will inform the situational analysis. As relevant information is generated through the landscape connectivity analysis, it will be integrated into the relevant component chapters of the situational analysis (see below).

### *Methodology*

#### **Data collection**

Environmental layers: Spatially accurate environmental geographic layers for will be developed for the target area, including vegetation, soils, roads, settlements, fences, and borehole-cattlepost (livestock waterpoint) locations. In particular, existing spatial datasets for borehole-cattlepost locations are incomplete, inaccurate and outdated. Consequently, an accurate layer will be developed using resources such as high-resolution satellite imagery.

Wildlife data: Existing comprehensive Kalahari wildlife species occurrence and abundance field data relevant to the areas listed above will be utilised. Comprehensive implies all mammalian wildlife species with 0.2 kg body mass and larger, including all large and small herbivores, carnivores, and insectivores. These data will span a 10-year period (2008 – 2018) and will be representative of adequate temporal (wet/dry seasons) and spatial replication of disturbance gradients in the Schwelle, with sample coverage that includes all potential corridor areas between KTP and CKGR.

#### **Spatial analysis:**

The above data will be analysed within the UNICOR species connectivity and corridor network simulator to quantitatively assess landscape connectivity for Kgalagadi wildlife species. UNICOR “provides invaluable ability to quantitatively compare spatially explicit conservation and restoration scenarios and prioritize actions to have the largest cumulative effects on population connectivity.” It is computationally intensive and requires high-performance computing.

#### **Deliverables**

Deliverables of the landscape connectivity analysis are listed below.

Initial (Phase 1) Landscape Connectivity Analysis Report, including:

1. Assessment of the current state of the comprehensive multi-species free-ranging Kalahari wildlife landscape (from data-based multi-scale modelling of distribution and abundance), including the identification of core areas and existing connectivity between KTP and CKGR.
2. Identification of the key environmental driver(s) of wildlife species spatial use in the Kalahari landscape, including quantification of spatially explicit response gradients of wildlife species occurrence and abundance in relation to those key environmental driver(s)
3. Identification of the subset of most disturbance-sensitive species for further analysis.

Final (Phase 2) Landscape Connectivity Analysis Report, including:

1. Predictions in high resolution spatial detail (mapping) of the existing species-specific wildlife connectivity landscape including the remaining core areas and functional corridors linking KTP and CKGR.
2. Spatial prioritization and assessment of value of each management unit and ranking of core areas and corridors for importance for key individual species and all species jointly.
3. Evaluation of the impact of a limited set of future scenarios (e.g., expansion of boreholes-cattleposts within 20 km WMA village development radii) on core area and corridor integrity.
4. Application of the UNICOR modelling and scenario planning to provide guidance on:
  - a. the spatial limits of tolerable encroachment beyond which each corridor likely ceases to function;
  - b. prioritized restoration actions (e.g. particular borehole deactivation/repurposing) that will maximize wildlife corridor and core area integrity;
  - c. potential areas where industrial/agricultural development might occur without negatively impacting wildlife corridor and core area integrity; and
  - d. potential areas where industrial/agricultural development expansion might occur without negatively impacting wildlife corridor and core area integrity.



## Situational analysis

This section provides a description of the approach to the development each component chapter of the situational analysis which will be used to inform the development of the ILUMP. Data collection methodologies and stakeholders relevant to each component chapter are also presented. As mentioned above, the situational analysis will be conducted in parallel with and be informed by the landscape connectivity analysis.

The overall objective is to collect data and organise it into a geodatabase for analysis in order to understand the existing situation and the land use trends in the target landscape.

Teams consisting of government officers will be tasked with preparing each component chapter under the guidance of the ILUMP technical and national coordinators. More details on roles and responsibilities are

**COMPONENT 1: Kalahari ecosystem and its People** (*Stakeholders*; Kgalagadi and Ghanzi District (Population officers, Lands officers, physical planners, Social and community development, District officer development, economic planners), Gender Affairs Department, Tribal Administration, Statistics Botswana, Department of Wildlife and National Parks, Department of Forestry and Range Resources, Department of Environmental Affairs)

Activities	Responsibility
1. Discuss the region's boundaries and its size, and settlement distribution, including the development of maps	
2. Elaborate on the biophysical aspects of the area	
3. Desktop review of existing infrastructural footprint including road networks, ICT, powerlines etc.	
4. Discuss the status and dynamics of population; history of the people and their way of life, cultural norms, household patterns, population structure	
5. Discuss the socio economic issues; GDP, schools, health facilities; administration authorities, infrastructure developments, livelihoods, unemployment levels, literacy levels, poverty levels and eradication etc, keeping in mind the 3 regional areas as per National Spatial Plan (NSP) recommendations, super impose the proposed development initiatives and population dynamics (including the proposed Trans Kalahari railway, desalination plants, Ncojane wellfield – water-reticulation for Ghanzi and Kgalagadi, the Hukuntsi-Tsabong road via Mabuasehube)	
6. Discuss the socio economic and environmental issues and challenges	
7. Identification of gaps for further data gathering	
8. Carry out stakeholder validation	

**COMPONENT 2: Policy and related legislative frameworks** (*Stakeholders*; Kgalagadi and Ghanzi council (Population officers, Lands officers, physical planners, Social and community development, District officer development, economic planners), Botswana Police, Department of Wildlife and National Parks, Department of Forestry and Range Resources, Department of Environmental Affairs)

<b>Activities</b>	<b>Responsibility</b>
1. Discuss the governance and institutions relevant to the targeted landscape	
2. Outline and discuss the existing legislative frameworks relevant to the target landscape	
3. Identify relevant policy gaps, issues and challenges	
4. Identify gaps for further data gathering	
5. Undertake stakeholder validation	

**COMPONENT 3: Water Resources Management** (Stakeholders; Department of Water and Sanitation, Water Utilities, Botswana Geological Institute, Department of Meteorological services)

<b>Activities</b>	<b>Responsibility</b>
1. Desktop analysis water situation in the targeted landscape	
2. Compile geological and hydro (geo-) logical information to define drylands characteristics	
3. Assess all hydro geological data/ information - determine different water balance components and - develop hydrological distribution models	
4. Study and document water resources (based on available information and data) - up-date of water point surveys - groundwater potential - wastewater (consider the opportunities provided for food security and job creation)	
5. Identify threats to available water resources taking into consideration the scenario for planned developments	
6. Undertake a comparative study on sectoral water efficiencies for agriculture, tourism, mining, wildlife, livelihoods	
7. Following the recommendations of the IPCC on climate model for Botswana as well as other recent studies, integrate how it will influence the hydrological model	
8. Determine the different water uses and options and develop alternative water resource strategies (using IWRM approach)	
9. Identify gaps for further data gathering and how this will be done	
10. Undertake stakeholder validation	

**COMPONENT 4: Flora and Fauna** (Stakeholders; Dept. of Wildlife and National Parks, Dept. of Environmental Affairs, Department of Forestry and Range Resources, relevant NGOs, Department of Lands, Independent researchers, academia, Community Based Organisations)

<b>Activities</b>	<b>Responsibility</b>
1. Desktop review of the existing literature (maps, borehole distribution, management plans for protected area, WMAs, other areas of biodiversity significance, emerging issues, value chain business plan developed under the	

Access and Benefit Sharing Project) relevant management plans and legislations)	
2. Review and update inventories - Fauna and Flora inventories - Forest inventories - Invasive species - Wildfires - Degradation	
3. Review and align inventory of different land use maps (especially National Spatial Plan) - Protected areas maps (KTP, CKGR) and WMA`s - Agricultural land use maps - Settlement maps etc.	
4. Review the status and trends of human wildlife conflict	
5. Review existing conflict mitigation measures and design additional ones to preserve essential wildlife corridors	
6. Integration of national strategy on endangered and/or valuable species into the ILUMP	
7. Identify existing projects for CBNRM	
8. Discuss and identify gaps in the implementation of WMA management plans in the targeted landscape	
9. Develop Park and People Strategy for the KTP and CKGR in line with Park Management Plans	
10. Study methods of increasing economic and development benefits from the drylands ecosystem, especially the local benefits	
11. Study impact of ranches on wildlife and livelihoods	
12. Assess how the International Panel on Climate Change model (IPCC) will influence the proposed green belt (recommended in the National Spatial Plan), the distribution of species, and the pattern of wildfires	
13. Based on the findings of the protected area fee review exercise under the Financing Biodiversity Project, review feasibility of different Park management models for the KTP and CKGR (e.g. private sector, PPP)	
14. Identify gaps for further data gathering	
15. Review transboundary legislation and management plans	

**COMPONENT 5: Tourism and heritage development** (Stakeholders; Department of Tourism, Department of National Museum and Monuments, Botswana Tourism Organisation and relevant NGOs)

<b>Activities</b>	<b>Responsibility</b>
1. Carry out a desktop review of existing and potential tourism ventures (including heritage sites) in the targeted landscape and verification (LED Strategy, NSP, Tourism development Plan, Ecotourism strategy, tourism masterplan, Kalahari tourism heritage trail map, value chain analysis and economic feasibility study with its associated business plans and existing DDP`s and relevant policies and legislations)	
2. Explore feasibility of public-private sector partnerships for Park management for KTP and CKGR	

3. Assess feasibility and viability of community-private sector partnerships in business development (SWOT Analysis)	
4. Assess constraints and opportunities to enhance local participation and benefits of tourism including the CBNRM model	
5. Confirm and identify tourism nodal points in the Kalahari ecosystem, and the tourism trail identified in the NSP and incorporate the sites identified under the 100 monuments development plan	
6. Identify gaps for further data gathering	
7. Undertake stakeholder validation	
8. Review transboundary legislation and management plans	

**COMPONENT 6: Land management** (Stakeholders; Department of Town and Country Planning, Land boards, Department of Lands)

<b>Activities</b>	<b>Responsibility</b>
1. Conduct a desktop review of existing land use plans (National Spatial Plan, regional plans, structural, layouts, development plans, relevant policies and legislations for the targeted landscape)	
2. Undertake a survey of critical areas (ground truthing)	
3. Produce a report for the survey of land uses (includes region wide consultation).	
4. Overlay the proposed activities from all the sectors	
5. Identify conflicts, hotspots, opportunities for synergies using LUCIS	
6. Scenario development for different options, taking into consideration the IPCC model.	
7. Review of current land use plans to identify opportunities for integrated planning	
8. Establish a system to track land use changes use of remote sensing techniques including GIS	
9. Consolidate district settlement plans	
10. Identify gaps for further data gathering	
11. Undertake stakeholder validation	

**COMPONENT 7: Agriculture Development** (Stakeholders; Ministry of Agriculture and Food Security, Department of crop production, Department of Animal Production, Department of Veterinary Services, Agribusiness promotion, Department of Agricultural Research, Natural Agricultural Research and Development, Land Boards, Department of Wildlife and National Parks, Department of Forestry and Range Resources)

<b>Activities</b>	<b>Responsibility</b>
1. Desktop review of the baseline existing agricultural land (geo-specific review)	

including but not limited to game and livestock farms, communal grazing land, arable, veldt products in the food value chain and pastoral land, map of planned expansion of the same)	
2. Discuss the population status and trends for domestic animals and privately owned wildlife in the targeted landscape (disaggregated into gender, youth, marginalized groups, ownership)	
3. Assess the current status of arable farming in the targeted landscape and discuss opportunities for diversification taking into account the peculiarities of the dryland system	
4. Assess the interface between the current stocking rate and carrying capacity stipulated for the grazing areas	
5. Assessment of the veldt products stocks that goes into value chain for food and medicine	
6. Outline and discuss issues and challenges of agricultural land use (market access, human wildlife conflict, degraded land, carrying capacity, arable and pastoral farming)	
7. Assess how the IPCC Model will influence the agricultural aspect of the landscape	
8. Identify gaps for further data gathering and undertake stakeholder validation	

**COMPONENT 8: Mining** (Stakeholders; Department of Mines and Botswana Geological Institute)

<b>Activities</b>	<b>Responsibility</b>
1. Desktop review of existing mining policies and management plans in the targeted landscape	
2. Map existing mining activities (ongoing, prospecting and those issued with prospecting licenses) in the targeted landscape	
3. Identify and discuss upstream and downstream activities associated with mining concessions in the targeted landscape	
4. Discuss the issues and challenges with regards to mining in the targeted landscape	
5. Overlay the prospects with other prevailing and proposed land uses	
6. Assess potential cumulative impacts and opportunities for synergies	
7. Asses how they relate with other cross cutting issues such as climate change, gender, health etc.	
8. Identify gaps for further data gathering and undertake stakeholder validation	

**COMPONENT 9: Waste management** (Stakeholders; Department of Waste Management and Pollution Control, Department of Environmental Health)

<b>Activities</b>	<b>Responsibility</b>
1. Desktop review of existing waste management policies and management plans in the targeted landscape	
2. Discuss the proportion and distribution of population with access proper toilets and waste collection	
3. Map the waste collection infrastructure available in the targeted landscape	
4. Assess and discuss the implementation of the Reduce, Reuse and Recycle principle in the targeted landscape (Identify the waste streams and disaggregate into recyclables and how much is going into value chain)	
5. Discuss the issues and challenges in relation to waste management in the targeted landscape	
6. Identify gaps for further data gathering and undertake stakeholder validation	

## **ILUMP development structure**

The details on the roles and responsibilities, as well as the expected time commitment, of relevant members of the ILUMP development team are provided below.

### *1. KGDEP Project Management Unit*

The Kgalagadi and Ghanzi Dryland Ecosystems (KGDEP) Project Management Unit (PMU) will provide secretarial services to the development of the ILUMP and play an administration role to ensure an efficient development process.

### *2. ILUMP Coordinator*

Tlameo Tshamekang, Ministry of Land Management, Water and Sanitation Services-Department of Town and Country Planning.

#### Duties and responsibilities

In collaboration with the CTA, Assistant Coordinator and PMU, the Coordinator will manage and oversee the development processes of the ILUMP through performance of the following:

- Supervise and coordinate the production of ILUMP outputs, as per the ILUMP workplan.
- Mobilize all processes of the ILUMP in accordance with set procedures for the plan development.
- Liaise with stakeholders and partners in the performance of all work related to the ILUMP and supervise ILUMP attaches, consultants and sub-contractors.
- In collaboration with relevant ILUMP structures and partners/implementing partners, oversee the recruitment and selection of experts/consultants and other personnel as might be required/necessary.
- Work closely with different ILUMP Teams in preparation and delivery of ILUMP outputs and revise ILUMP related, as required by MLWS, MENT, UNDP and ILUMP oversight structures.
- Ensure that all crosscutting issues including gender are mainstreamed accordingly into ILUMP processes and plans, as maybe necessary.
- Liaise relevant donor organizations, NGOs and other Agencies for support in the delivery of the ILUMP.
- Provide administrative support to experts and activities under the ILUMP.
- Oversee and ensure timely submission of ILUMP Reports, and updates to relevant structures are maybe required.
- With relevant partners and structures, review technical and other reports, as may be required for the ILUMP delivery.
- Disseminate ILUMP reports and respond to queries from concerned stakeholders.
- Report progress of ILUMP development to the ILUMP oversight structures and ensure the fulfilment of their directives.
- Ensure timely communication of key outputs, recommendations and deliverables etc at all stages of the plan development to relevant structures for decision making and guidance.
- Ensure the timely and effective implementation of all components of the ILUMP.
- Expected time commitment: 30-40 hours per week during plan development (this will vary depending on the stage of plan development).

### 3. Assistant Coordinator

Mosimanegape Nthaka, Ministry of Environment, Natural Resources Conservation and Tourism-Department of Environmental Affairs.

The Assistant Coordinator will work under the supervision of, and assist the Coordinator with, the implementation of the duties and responsibilities described above. Expected time commitment: 30-40 hours per week during plan development (this will vary depending on the stage of plan development).

### 4. ILUMP Teams

The team below is responsible for contributing to the overall objectives of the ILUMP with the team leaders coordinating the undertaking of the tasks. Their role is to successfully perform the tasks and activities stipulated in the scope of work. They will also report progress and collaborate with other team members. The team members will work directly under and report to the ILUMP Coordinator and Assistant Coordinator. Proposed team leaders and members are presented in Annex 4.

#### Team leader roles and responsibilities:

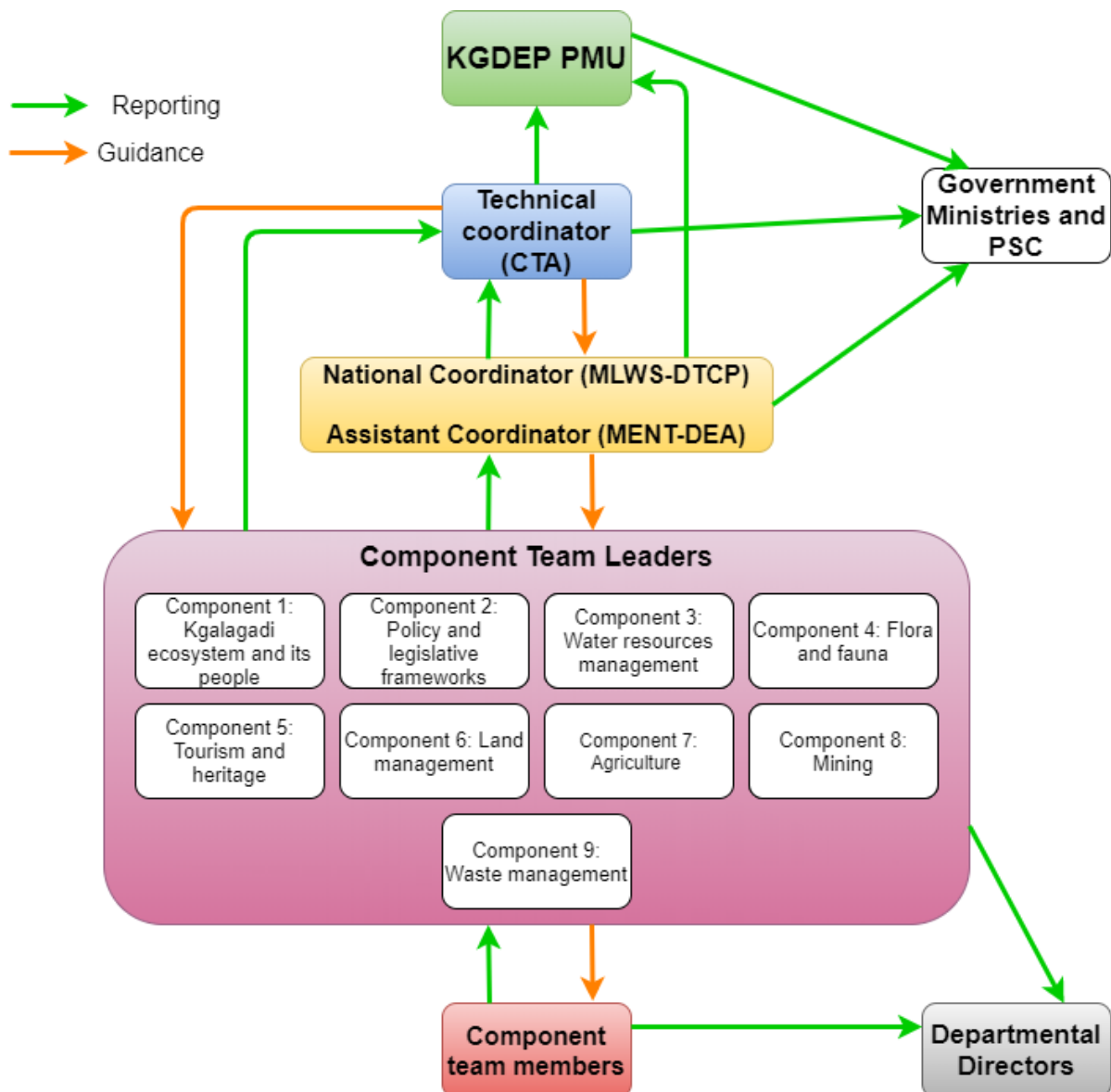
- Oversee the development of the respective component chapter.
- Coordinate the work of their respective team members, ensuring that the activities required to develop the relevant component chapters are implemented.
- Develop monthly progress reports on component chapter development.
- Conduct site visits and consultations with relevant team members as required.
- Work directly under and report to ILUMP Coordinator and Assistant Coordinator.
- Expected time commitment: 10-20 hours per week during plan development (this will vary depending on the stage of plan development; some weeks may be more intensive than others).

#### Team member roles and responsibilities:

- Work directly under the guidance of and report to the component chapter team leader on relevant tasks.
- Work with other team members to ensure timely delivery of relevant tasks.
- Prepare outputs related to his/her tasks.
- Conduct site visits and consultations with relevant team leaders and members as required.
- Expected time commitment: 5–10 hours per week during plan development (this will vary depending on the stage of plan development and relevant activities; some weeks may be more intensive than others).
- A list of proposed Team Members per component is presented in Annex XX

#### ILUMP development reporting structure





### *Reporting frequency*

- **Team members** report on progress to **team leaders** every two weeks.
- A simple report structure report structure will be used for ease of reporting (see example below).
- A monthly meeting (online) will be arranged (by the team leader) for each component team to ensure coordination.

**Component: Agriculture**

**Date: 2 March 2021**

**Name and position:** Tumisang Mongae, Officer – Department of Animal Production

**Task/s and deadlines:** Review of population status and trends of domestic animals, 20 February 2021

**Progress (work done):** Desktop research complete

**Challenges encountered:** Limited information available online

**Next steps:** Meet with local stakeholders in February to gather livestock population information and write up review

**Figure 2.** Reporting template example.

- **Team leaders** will report on progress to the **coordinator, assistant coordinator and technical coordinator** every two weeks.
- The report will be an overview of progress under the entire component, based on the reports received from the team members.
- Areas where technical guidance and troubleshooting are needed will also be presented.
- The workplan for the relevant component will also be presented in the progress report to indicate progress towards deliverables.
- A monthly meeting (in person or online) will be arranged for with coordinators and team leaders to discuss overall progress and issues.
- **Coordinators** will report on progress to **PMU/UNDP/GoB** every two weeks.
- This will include the consolidation of feedback received from team leaders.
- Coordinators, CTA and PMU will have biweekly planning and progress meetings.
- Feedback will then be provided to the team leaders after their biweekly meetings.

### *Key considerations when developing the ILUMP:*

The ILUMP development team will take into account several considerations that must inform the development of an effective management plan for the Kgalagadi and Gantsi dryland ecosystem, such as:

Ensuring consistency with the National Spatial Plan: Botswana developed a twenty-year National Spatial Plan (2016–2036, NSP), which was approved by Cabinet for implementation. The NSP provides a long-term strategy for the spatial development of Botswana that will promote a better quality of life, sustainable economic growth and a high-quality environment for all. The intention of the NSP, *inter alia*, is to serve as an overarching framework to guide policies, programmes and investment. Resultantly, it is of necessity that the ILUMP aligns with and builds from the NSP.

Aligning with Vision 2036, national and district development plans: The alignment of the ILUMP with existing development plans that guide development at both national and district levels will be ensured during the ILUMP development process. For the ILUMP to be adopted and implemented by districts authorities, or to be accepted by local communities with development hopes, or to be financed, it must be aligned with existing development plans and national priorities. Therefore, the ILUMP should be anchored on the already existing development frameworks and national priority documents.

Integrating linkages with National Framework Strategy for sustainable development: the ILUMP will support and respond to Botswana's sustainable development objectives. It will be an instrument through which Sustainable Development Goals (SDGs) will be localised for the Ghanzi and Kgalagadi districts. The ILUMP will discuss and demonstrate ways in which the districts will contribute to the realisation of the sustainable development goals.

Aligning with national legislative and policy instruments: Botswana has a number of legislative and policy instruments that are relevant to the ILUMP and will be considered in the development of the ILUMP. This includes legislative and policy framework from sectors of agriculture, water, land, wildlife, forestry, mining, finance, trade, and national governance. This will form a key part of the ILUMP.

Supporting Botswana's compliance with its international commitments: Botswana is signatory to a number of multi-lateral environmental agreements (MEAs), including: i) United Nations Convention on Combating Desertification (UNCCD); ii) United Nations Convention on Biological Diversity (CBD); iii) United Nations Convention on Persistent Organic Pollutants; iv) United Nations Framework Convention on Climate Change (UNFCCC); v) Basel Convention on the Transboundary Movement of Hazardous Wastes and other Wastes; and vi) Convention on the International Trade in Endangered Species (CITES). The ILUMP will be developed with due consideration to Botswana's obligations to multi-lateral environmental agreements.

Engagement with a broad spectrum of stakeholders: A plan of this nature must integrate the views, knowledge, advices, and recommendations from relevant

stakeholders. By identifying and engaging extensively with the relevant stakeholder groups and appropriate institutions during the development process, buy-in and ownership of the ILUMP will be facilitated. Therefore, the project will have a strong stakeholder consultations aspect in order to ensure that its objectives are fully realised.

Capturing the link between management plan development and socio-economic development: Central to the development process of the ILUMP is the socio-economic development of communities that reside in the targeted landscape. The ILUMP will be developed in a way that will not disadvantage the developmental needs of communities. It will be developed with a deliberate approach to improve livelihoods. The natural resources/wildlife management objectives of the ILUMP will not be placed higher than those of community livelihoods. This is mainly because the challenging socio-economic status of communities in the target landscape require targeted strategies and interventions. Therefore, the ILUMP will include recommendations on how communities can be developed, from a socio-economic perspective.

## **LEGISLATIVE AND POLICY INSTRUMENTS RELEVANT TO THE DEVELOPMENT OF THE ILUMP**

**Overview:** There is no comprehensive management plan for the Kgalagadi landscape, hence the ILUMP. A major issue here is the diverse and multiple number of policies, programmes and legislation/regulations that guide the use of land, economic development and natural resource systems. Despite this diversity and multiplicity, there is some degree of coordination that takes place through the national and district development planning processes implemented in the targeted landscape by the District Development Committees for Ghanzi and Kgalagadi.

The actual responsibility for these policies, regulations and programmes is spread across a number of institutions. The ILUMP will, somehow, be affected by these policies, regulations and programmes. This will be during the development of the ILUMP, and at its implementation. The following, therefore, is a brief of policies, regulations and programmes that are relevant to the ILUMP. They will be utilised to inform components of the ILUMP, this is mainly because there is a need to align ILUMP to other key national plans, policies and programmes. Relevant legislative and policy instruments are presented in Annex 2.

## **STAKEHOLDER CONSULTATIONS**

**Overview:** The ILUMP will be developed through a participatory approach in which all relevant stakeholders will be engaged. This is in line with Botswana's principles of ensuring that all developmental projects and programmes are undertaken with the input/views of stakeholders. It must be noted that, consultation is not a once-off activity rather, it will be a continuous process throughout the development of the ILUMP.

This section presents the list of stakeholders to be consulted and the methodology which was applied to inform the selection process. Appropriate consultation tools and platforms are also discussed.

The objectives of the stakeholder consultation process are to:

- To inform stakeholders for purposes of obtaining buy-in and ownership
- To solicit stakeholder views and inputs
- To acquire data and information for the ILUMP development process
- To enhance the scope of the ILUMP

### **STAKEHOLDER SELECTION CRITERIA**

In the selection of stakeholders to be consulted, a purposive sampling method was applied. The technical task team adopted a participatory approach to avoid bias. The approach was based on selecting stakeholders in terms of their level of importance and their expected influence on the development of the ILUMP at national, regional and local levels.

The methods that will be used consult and solicit stakeholder inputs are as follows:

- Structured interviews
- Virtual and physical meetings (in the form of kgotla meetings; workshops; focussed group discussions)
- Questionnaires

Botswana has been affected by the outbreak of the COVID-19 pandemic and continues to register new cases. As such, the country has put in place restrictions to curb the spread of the disease. It is anticipated that these restrictions will affect the development process of the ILUMP, especially the stakeholder consultation aspect. For instance, travelling across zones for meetings is restricted. This may delay progress as ILUMP teams may not meet regularly. In addition, the consultation process may not reach out to the desired target number of community members due to COVID 19 protocols (e.g. gatherings of <50 and adhering to two-hour duration for meetings).

To address the above, methods which require less physical meetings will be applied for example, visual platforms such as zoom meetings, and online administration of questionnaires will be utilised. Similar lesser physical interactive platforms will be utilised in facilitating the drafting process by the technical task team. For community meetings, consultations will be not longer than 2 hours with 30-minute breaks.

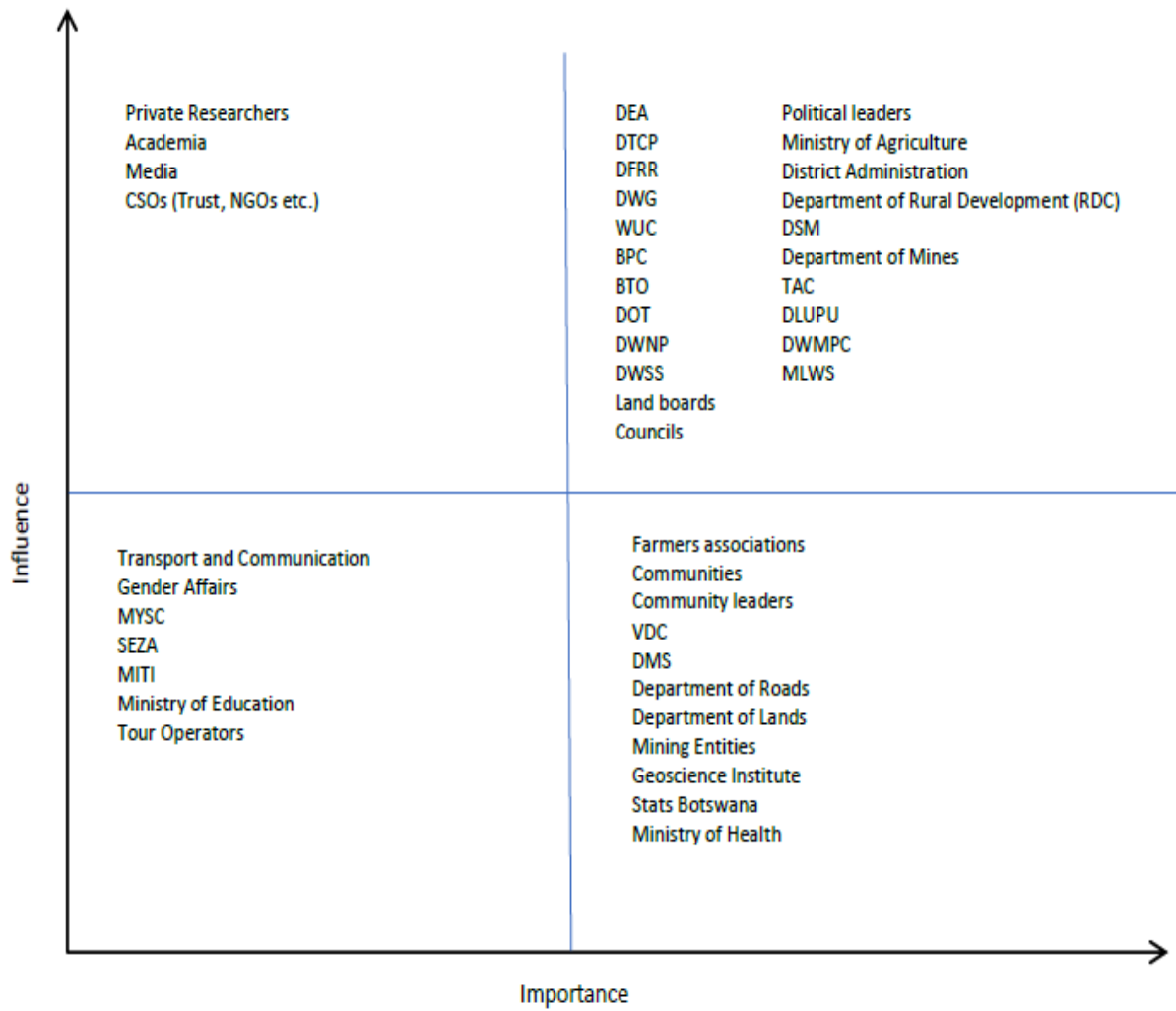
### **STAKEHOLDER CONSULTATIONS MATRIX**

In the process of developing a stakeholder consultation matrix, the following 4 quadrants were adopted to evaluate the level of influence and importance of each stakeholder:

<b>No.</b>	<b>Level</b>	<b>Relevance (i.e. are they linked to a site or activity/why do they need to be consulted/what aspects do they need to be engaged on etc.)</b>
1.	High Influence / Very Important	<ol style="list-style-type: none"> <li>1. Involved in the Plan development</li> <li>2. Provide Critical Information</li> <li>3. Approval of Plan</li> </ol>
2.	Low Influence / Low Importance	<ol style="list-style-type: none"> <li>1. Considered but not involved in the plan development.</li> </ol>
3.	High Influence / Low Importance	<ol style="list-style-type: none"> <li>1. Involved in the data collection Process.</li> <li>2. Not involved in the plan development.</li> </ol>
4.	Low Influence / Very Important	<ol style="list-style-type: none"> <li>1. Directly affected by the project and must be consulted.</li> <li>2. Important in providing information and for buy-in purposes.</li> </ol>

Below is the stakeholder consultation matrix, developed through a participatory process during the inception period.

### Stakeholder Consultation Matrix



## **Expected outputs and deliverables**

The ILUMP development process, which will include a participatory approach, is expected to deliver the following outputs:

1. Inception Report
2. Situational Analysis report
3. Landscape Connectivity Analysis Report
4. First Draft Integrated Land Use Management Plan
5. Final Draft Integrated Land Use Management Plan, including (among others):
  - Communication plan;
  - Capacity development plan;
  - Resource mobilisation plan;
  - Biodiversity/wildlife economy and livelihoods development plan; and
  - Costed implementation plan.

The above listed outputs will be submitted to the KGDEP governance structures (TRG and PSC) for approval and decision making. TRG and PSC meetings will be convened in line with the workplan for the same.



## WORKPLAN

Year	2020	2021												2022				
Tasks	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
Project initiation meeting																		
Inception Report Development																		
Inception Report presentation to TRG																		
Incorporation of comments (CTA reviews, revises and validates the inception report)																		
Literature review for the situational analysis (collection of data from literature in line with activities per component/chapter)																		
Collection of primary data (consultative platforms, questionnaires, surveys, mapping) in line with activities per component chapter of the situational analysis. Focus group discussions, stakeholder consultative workshops, field visits etc.																		
Landscape Connectivity Analysis																		
Data transcribing and drafting of the situational analysis report																		
Presentation of the Situational Analysis report to TRG																		



## **ANNEXURE 1: Proposed Structure of the Integrated Landscape Management Plan**

### **1. Executive Summary**

### **2. Synthesis Report**

### **3. Introduction**

### **4. Situational Analysis**

4.1 People and Socio-economic

4.2 Policy and Related Legislative instruments

4.3 Land Management

4.4 Tourism Development

4.5 Agricultural Development

4.6 Flora and Fauna Management

4.7 Waste Management

4.8 Water Resources Management

### **5. Landscape Connectivity Analysis**

### **6. Costed ILUMP Implementation Plan**

### **7. Annexes**

## Annexure 2: Policy Instruments Relevant to the ILUMP

POLICIES/PLANS/LAWS	DESCRIPTION OF THE LEGAL FRAMEWORK
<b>POLICIES</b>	
Community-Based National Resource Management Policy, 2008	Aims to contribute to poverty reduction through employment creation, income generation and the provision of social services, while promoting biodiversity conservation and sustainable resource use.
Game Ranching Policy, 2002	Supports economic diversification in rural areas and increases economic returns from wildlife resources outside protected areas.
National Policy on Agricultural Development, 1991	The objective of the policy is to support sustainable agricultural development
National Policy on Forestry, 2011	The policy is focussed on sustainable forest management.
National Policy on Natural Resources Conservation and Development (1990)	Calls for sustainable utilisation of natural resources, strengthening of governance systems and for mainstreaming of environment into development, to foster sustainable development.
National Policy on Resource Conservation and Development, 1990	Ensures effectiveness in the use and management of natural resources.
Revised National Policy for Rural Development, 2002	The aim of the policy is to reduce poverty by providing opportunities for income generation and increasing involvement in economic activities.
Tourism Policy, 2009	Promotes low-volume, high value tourism that benefits the country.
Wastewater and Sanitation Management Policy, 2003	Assess the status of sanitation and waste water in Botswana and propose improved management.
Wildlife Policy, 2013	Provides a framework for the conservation and sustainable utilisation of wildlife.
<b>PLANS</b>	
National Development Plan 11	NDP 11 implements six national priorities, including developing diversified sources of economic growth and the sustainable use of national resources.
Integrated Water Resources Management (IWRM) Plan of 2012	Coordinates the development and management of water, land and related resources to maximise economic and social welfare without compromising the sustainability of ecosystems and the environment.

National Master Plan for Arable Agriculture and Dairy Development, 2002	Improve and ensure the sustainable performance of the agriculture sector.
National Water Master Plan for Wastewater and Sanitation	Demonstrates the necessary planning and direction for the country's water supply.
National Water Master Plan, 2006	Determines the optimum water resources development programmes and policies, and identifies the associated financial, institutional and legal requirements, as well as the likely social and environmental impacts.
Water Efficiency Plan	Discusses appropriate and efficient water resources management, their development and utilisation to elevate agricultural production and food security as well as the expansion of access to potable water and proper sanitation and improvement of water delivery services.
National Spatial Plan, 2017	Botswana's National Spatial Plan provides a holistic guidance for the country in terms of the best spatial development options. It was developed based on the principles of sustainable development, and through a participatory approach.
<b>PROGRAMMES</b>	
Integrated Support Programme for Arable Agriculture Development, 2008	Addresses the challenges faced by farmers on arable land. It includes provision of draught power, potable water, seeds, fertilizers and herbicides, facilitation of access to credit and fencing and the establishment of agricultural service centres.
Livestock Management and Infrastructure Development Programme, 2010	The objective of the programme is to promote food security through improved productivity of cattle and small stock, to improve livestock management, to improve range resource utilization and conservation, to eliminate destitution by providing resources to the poor and to provide infrastructure for safe and hygienic processing of farm produce.
National Monuments Development programme	The programme focusses on identifying and developing national monuments and heritage sites. This are important for supporting tourism and economic development.
<b>LAW / STRATEGIES / GUIDELINES</b>	
Eco-tourism Guidelines, 2013	Used under the Botswana Tourism Organisation (BTO) to provide ecotourism guidelines /criteria that contribute to environmentally responsible tourism operations.
Environmental Assessment Act, 2011	An Act to provide for the strategic environmental assessment to be used to assess the potential effects of planned developmental activities. The Act aims to determine and to provide mitigation measures for effects of such activities as well as to put in place a monitoring process and evaluation of the environmental impacts of implemented activities.

National Biodiversity Strategy and Action Plan	The vision of the plan is “by 2025, ecosystem, species and genetic diversity is valued, protected, and used sustainably and equitably, through the involvement of all sectors of society and the provision of sufficient resources for its sound management.”
National Ecotourism Strategy 2002	The goal of the National Ecotourism Strategy is to create an environment in which all elements of tourism development, planning and management, promote and reward adherence to the key ‘principles’ of ecotourism by all of those involved in the tourism industry.
National Action Plan for the United Nations Convention on Combating Desertification	The plan calls for sustainable and inclusive measures to combat desertification, management of forest resources and realise land degradation neutrality.
National Strategy for Sustainable Development	Seeks to integrate the short and long term economic, social and environmental objectives of Batswana.
National Vision 2036	Vision 2036 aims to transform Botswana from an upper middle-income country to a high-income country by 2036 and sets out four pillars to guide in the realisation of this vision.
Strategy for Economic Diversification and Sustainable Growth (2008)	Sets out the strategy to diversify the economy.
Waste Management Act 1998	It makes provision for the planning, facilitation and implementation of systems for regulating the management of waste in order to prevent harm to human, animal and plant life

The above policy instruments are aligned with the overall ILUMP objective of realising sustainable livelihoods and natural resource management, while conserving functional wildlife corridors. It should also be noted that ILUMP is a development instrument that is primarily guided and informed by the National Spatial Plan 2036, amongst others.

## **Annexure 3: Detailed workplans for the development of the situational and landscape connectivity analyses**

### Situational Analysis Workplans

#### Landscape Connectivity Analysis Workplan

1. Month 0
  - Environmental GIS layers finalization, data preparation
2. Months 1-5
  - Phase 1 Analysis
  - Multiscale statistical predictive modelling of comprehensive wildlife occurrence and abundance in relation to environmental layers
  - Phase 1 reporting (*preliminary multi-species landscape connectivity report*)
3. Months 6-10:
  - Phase 2 Analysis
  - UNICOR analysis of core areas and connectivity corridors for subset of species most sensitive to land use
4. Months 11-12:
  - Final stage discussions and adjustments regarding scenario planning as may be needed, presentations/knowledge transfer workshops
5. Phase 2 reporting (*final synthesized landscape connectivity report*)

#### Annex 4: List of proposed team members

Position	Name	Affiliation
<b>Group 1 – Kgalagadi and its People</b>		
<b>Team Leader</b>	Oritjua Setekia	DOD - GH
<b>Assistant Team Leader</b>	Masego Pitso	DOD - KG
<b>Team member</b>	Thatayaone Maithamako	District POP Officer - GH
	Gaopotlake Masuntlha	M&E officer - KG
	Gaseediwe Marakalala	M&E officer - GH
	Bonang Timile	Environmental Coordinator - KG
	Mogametsi Kootshwaetse	Economic Planner - GH
	Tumelo Setshogo	Economic Planner – KG (N)
	Chedza Aobakwe Ngwigwa	Poverty Eradication Coordinator (assistant) - KG
	Dominic Botshelo (currently not in office)	Poverty Era. Coordinator - GH
	Joyce Bosele	Community Development Officer - GH
	David K. Tsietso	Community Development Officer – KG (S)
	Tsholofetso Kombani	Gender Affairs - KG
Tony Ramaretlwa	Gender Affairs - KG	
<b>Group 2 - Flora and fauna</b>		
<b>Team Leader</b>	Banele Jongi`Lizwe	DWNP - KG
<b>Assistant Team Leader</b>	Keletso Seabo	DFFR - GH
<b>Team Member</b>	Modiegi Bakane	DWNP - GH
	Motshidisi Moshoeshe	DFFR - KG
	Keneilwe Mathaba	CCB
	Gaolaolwe Mapeu	DEA - GH
	Phindi Rampete	Dept of Lands - National
	Julius Rakose	DWNP - GH



	Nsununguli. Maja	DWNP - KG
	UB (Gab)/BUIST(Palapye)/BUAN (Gab)	Academia - Gab
	Researchers	Kgalagadi Research and conservation, BirdLife, Raptors Botswana
	Tshepo White	DWNP-HQ CITES
<b>Group 3 – Land management</b>		
<b>Team Leader</b>	Masego Thebe	Physical Planning - KG
<b>Assistant Team Leader</b>	Karabo Masita	Land Officer - KG
<b>Team Member</b>	Tshegofatso Tebogo	Land Officer - KG
	Mandy Ntereke	Physical Planning - KG
	Pindi Rampete	DOL - HQ
	Ikageng Seoleseng	Lands Officer - GH
	Taboka Mabayani	DTCP - HQ
	Kutlwano Motlotlegi (HO)	Physical Planning - GH
	Thebeethata Serame	Land Surveyors - KG
	Ookeditse Ramasokola	Land Surveyors - KG
	Thebeethata Serame	Land Surveyors - KG
	Ernest Orapeleng	Land Surveyors - GH
	Kenneth Selape	Beef and Range Officer - GH
	Oemeleng Mochanang	Beef and Range Officer - KG
	Bokani Moloi	Physical Planning - KG
<b>Group 4 - Water management</b>		
<b>Team Leader</b>	Golekanye Ranthoyakgale	DWS - KG
<b>Assistant Team Leader</b>	Seitsang Sabone	DWS - GH
<b>Team Member</b>	Elija Makwana	DWS - KG
	Keabetswe Kebabonye	DWS - GH
	Mr Machete	WUC - KG
	Gosalamang Ramabe	WUC - GH

	TBD	DMS - KG
	O.Monyatsi	DMS - GH
	Galetogelwe Kegomoditswe	Irrigation officer - GH/KG
	TBD	BGI - Lobatse
<b>Group 5 - Tourism and Heritage Development</b>		
<b>Team Leader</b>	Maureen Tshebo	DOT - GH
<b>Assistant Team Leader</b>	Annah Masetla	DOT - KG
<b>Team Member</b>	Tlhokomelo Phuthego	BTO - GH
	Claudia Zuze	BTO - KG
	TBD	DNMM - HQ
	HATAB, Business Botswana, BOGA	NGO
	Omphile Tawanda Malefho	DWNP - HQ Estate
	Researchers	UB and ORI
<b>Group 6 - Agricultural Development</b>		
<b>Team Leader</b>	<b>Kenneth Selape</b>	<b>DAP-GH</b>
<b>Assistant Team Leader</b>	<b>Motsumi Mafokate</b>	<b>DCP-KG</b>
Team Member	Mittah Beason	DAP-KG
	Kerekileng Kelebileng	DCP-GH
	TBD	Agric Reseach - GH
	Oitse Monei	Agric Reseach - KG
	Dr Olefile Phalaagae	DVS KG
	Theresa Camm	DVS GH
	Tlotlego Tlotlego	Lands Officer-AGRIC GH
	Oemeleng Mochanang	Lands Officer-AGRIC KG
	Kesegotse Monyame	Agri business -GH
	Lebang Nkele	Agri business -KG
<b>Group 7 - Waste management</b>		
<b>Team Leader</b>	Mpho Tebele	DWMPC - HQ
	Kalani	DEH - GH

<b>Assistant Team Leader</b>	Golekanye Ranthoyakgale	DWS - KG
<b>Team Member</b>	Kebabonye	DWS - GH
	David Ntshole	DEH - KG
	Mr Letsotle	DWMPC - Maun
<b>Group 7 - Mining</b>		
<b>Team Leader</b>	Kebannetse Keatlhotswe	DM - HQ
<b>Assistant Team Leader</b>	TBD	BGI
<b>Team Member</b>	Researchers	UB