

Kavango Zambezi TFCA M&E Tool

User Manual

Version Update: 30-08-2018



Background

The monitoring and evaluation (M&E) work of the Kavango Zambezi (KAZA) Transfrontier conservation area (TFCA) has evolved since from inception in 2010. Initially, it was planned to simply track progress of activity implementation. Over time, the Monitoring and Evaluation (M&E) system progressed towards a detailed monitoring matrix, which later became the KAZA Indicator framework. This framework was used to list and define all aspects of the KAZA M&E system as well as how the data was to be captured and stored. This **Help File** covers the Official KAZA M&E Tool which is a public gateway to the data collected according to the KAZA M&E Framework.

The M&E system is implemented through the KAZA Liaison Officers (KLOs) in the five Partner States (Angola, Botswana, Namibia, Zambia, and Zimbabwe – *see below*) who are guided by the M&E officer at the Secretariat in Kasane, Botswana (using the KAZA M&E Framework).



Their data collection efforts are stored in a safe and well-maintained Spatial Database Engine (SDE) at the Peace Parks Foundation Head Office in Stellenbosch, South Africa. The decision to place the database/SDE at this location was based on system maintenance and internet access (more efficient accessibility for Tool users). The data that is collected, processed, and stored in this SDE is supported by Working Group comprising of a network of partners.

The KAZA Impact Monitoring Working Group (KAZA KIM WG) comprised of the KAZA Secretariat, Peace Parks Foundation, WWF Germany, and WWF Namibia have been developing a user-friendly, spatial monitoring tool that enables multiple parties to assess the change in key biological and socio-economic indicators (spatial and non-spatial) and the achievement of the indicator targets in relation to baselines. This system supports the evaluation of the impact that projects and investments have made in achieving the KAZA targets and vision over time and enables informed adjustments of existing projects (adaptive management) as well as a responsible planning of future initiatives.

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Introduction

Welcome to the official Kavango Zambezi (KAZA) Transfrontier Conservation Area (TFCA) Monitoring and Evaluation (M&E) Tool helpfile. This document will guide you on the use of the official tool and give a break down on what it can do. If there are processes not covered in this tool, if you encounter any bugs, or require any other assistance please contact:

- KAZA M&E Technician - kazappf@gmail.com
- KAZA M&E Officer - liwena.lishoomwa@gmail.com

Getting started

Access the M&E Tool through <http://www.kavangozambezi.org/index.php/en/>, and then click on the 'M&E' Tab:



KAVANGO ZAMBEZI

PT EN

TRANSFRONTIER CONSERVATION AREA (KAZA TFCA)

Tourism Without Boundaries



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Users can then open one of the three mentioned tools/pages:

Welcome to the Monitoring and Evaluation (M&E) component of the Kavango Zambezi (KAZA) Transfrontier conservation area.

This component allows you to access data related to KAZA's development. Users can view, visually edit, and download this data. It is recommended to first use the 'Getting Started' option so as to best understand how to utilize these tools.



Getting Started

Learn how to use the KAZA M&E Tool and Low Bandwidth Library



KAZA M&E Tool

Access all data collected for KAZA M&E. This tool allows users to visually manipulate and download data using an online map interface



Low Bandwidth Library

Access to all data found in the KAZA M&E Tool, in low bandwidth friendly form. All data is listed and in XLSX format. The help file and demonstration video are also stored in this library

Summary of Tools

Getting Started

This introduces users to the KAZA M&E Tool. Once clicked on, the user will be directed to a PDF that explains how the Tool works and includes a brief tutorial on how to display and download data. Users can also watch the in-Tool video if further help is required.

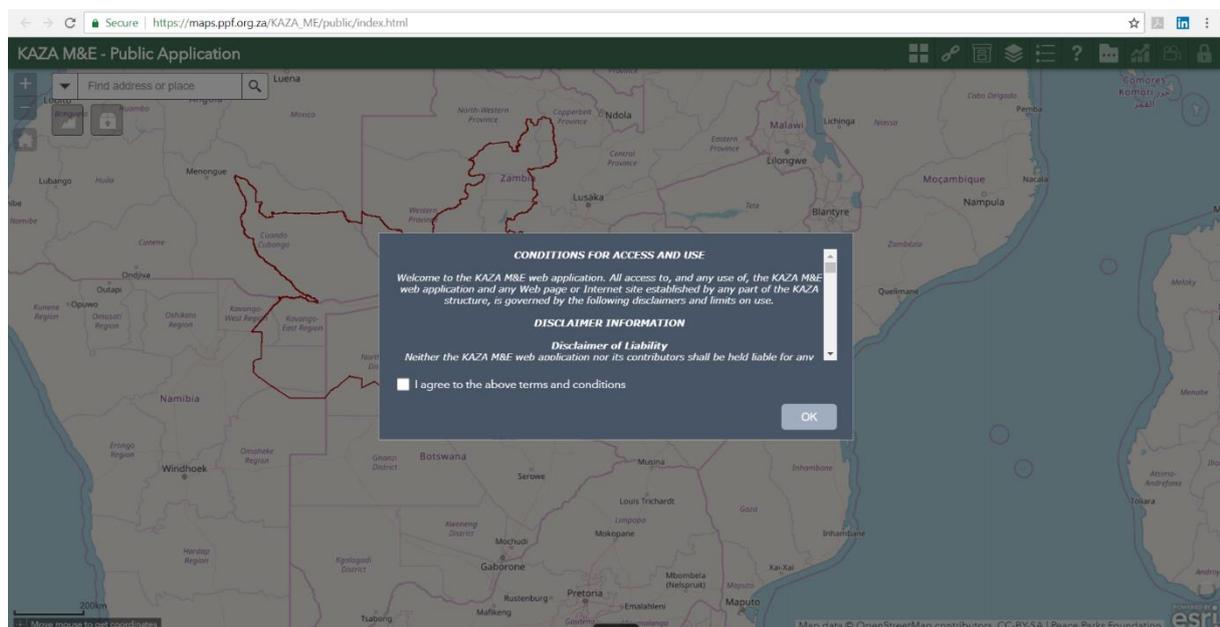
Public KAZA M&E Tool

Allows users to view and use KAZA M&E data. With this tool users can produce their own maps, graphs, and print reports. This Tool requires a stable internet connection.

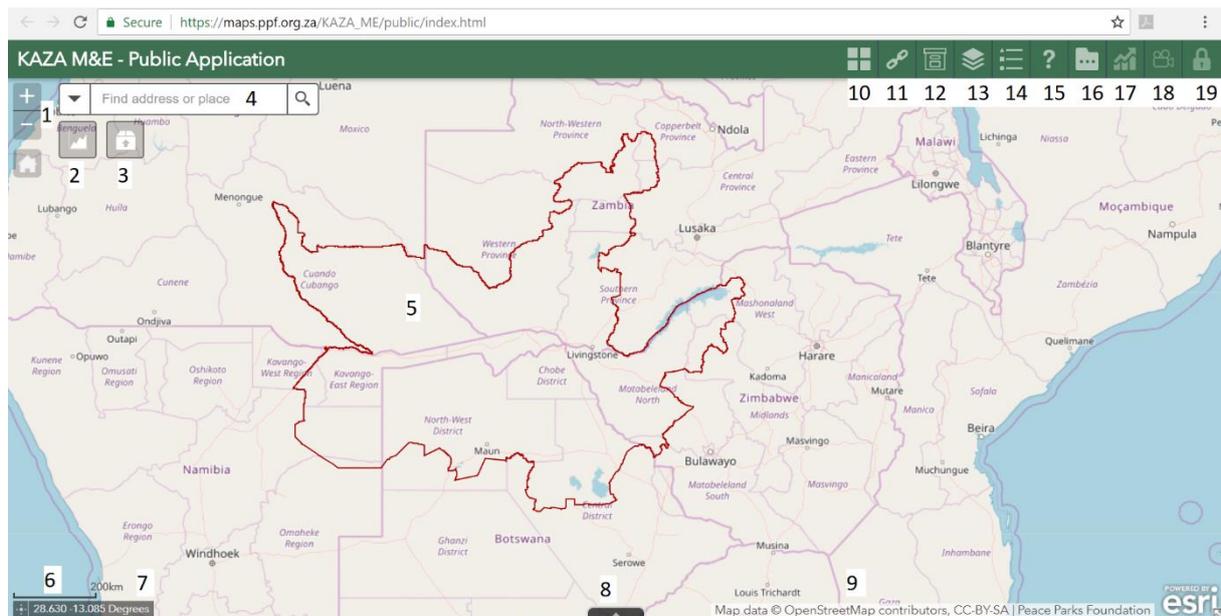
Low Bandwidth Library

The M&E Tool does require a certain standard of internet to effectively function, so if a user is unable to use either M&E Tool due to poor internet connectivity they should consider the Low Bandwidth Data Repository. The Low bandwidth Public tool gives users access to unprocessed data. The Low Bandwidth Data Repository is a database of excel files and PDFs (low in file size) where users can download the data found on the Public M&E Tool.

Once the user has clicked on one of the options, they will be taken to that respective tool. For consistency sake, this helpfile documents the Public KAZA M&E Tool (identical to the Restricted Tool except for a few indicators and user login). Before using the Tool, the user must agree to the terms and conditions by checking “OK” at the “I agree to the above terms and conditions” box. (As seen below).



After accepting the conditions for the use and access of the M&E Tool and its data, users are taken to the main view (as been below).



The landing page has the following functionality:

1. General Tools – Allows the user to Zoom in and out of the area, return to the default KAZA extent, and find your location (your location settings must be on).
2. Basic Graphing Tool – Quick Access to simple graphs
3. Download Data – Select your data and download it. This can be done as:
 - a. All Layers
 - b. Data from your current extent
 - c. Data that you have selected (user defined area)
4. Search Bar – To search for anywhere in the world (for orientation purposes).
5. Data View – Any selected data/indicators or graphs will be displayed in this area.
6. Scale Bar – Shows the scale of the map and map you are viewing.
7. Coordinates – Shows the Coordinates of where your mouse cursor is on the map (in Decimal Degrees).
8. Show Attribute Table – Brings up the attribute table of the top layer being viewed (a table is a set of data elements (values) using a model of vertical columns (identifiable by name) and horizontal rows, the cell being the unit where a row and column intersect.).
9. Map layer credits – Standard credits for the base layer of the map you are viewing.
10. Base map Gallery – Allows the user to select which base map to use.
11. Indicator Update Sheet – See the data collection progress related to Annexe A.
12. Low Bandwidth Data Repository – Takes the user to the low bandwidth data repository.
13. Layer List – Use this to view all data available on the KAZA M&E Tool (*covered in more detail in the following section*)
14. Legend – Turns the map’s legend display on and off (for the top-most current layer).
15. Help – Takes the User to this help file.
16. Chart Tool – Opens a selection of basic configured charts (*covered more in depth later- see ‘Viewing Charts’ Section*)
17. Dashboards – Dashboard view of the data
18. Demonstration Video – A video tutorial on how to use the tool
19. Restricted Data Tool – Gives access to restricted KAZA M&E Data (**Requires Login**).

Displaying Data via the Layers List (See Number 13 in above list)

To produce a map that gives users valuable insight into KAZA this mini tutorial will use one indicator, S1- Buffalo counts in each country, as an example. However, before doing this, users need to understand the File Naming Convention of the KAZA M&E Tool. The entire tools dataset is based on the KAZA M&E Framework document (available on request to the KAZA M&E Officer), which separates data into different sets/groups of indicators, namely;

1. Enabling (E)
2. Impact (I)
3. Management (M)
4. Outcome (O)
5. Socio-Economic (SE)
6. Species (S)

*The Socio-Economic indicator has a category of its own due to the nature in which the data is collected.

An example of a Tool Layer is M1 – Financial Audit. M signifies being grouped under Management, 1 represents the number of this management indicator, after which a short description of the layer is given.

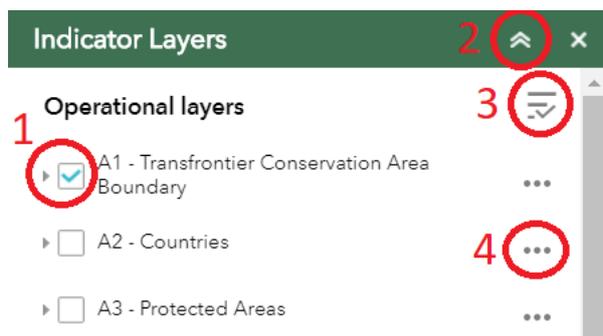
S1: Buffalo Indicator example/tutorial

Once users are familiar with the indicators in Annexe A, they can continue with making their map. As stated earlier our interest is in showing the Baseline values of Buffalo in KAZA. The first step to doing this is opening the layers view. This is done by clicking on the button shown below (Top Right).



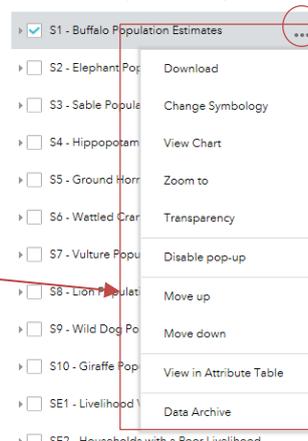
Once you have clicked on the layer list button you get to choose the indicators you wish to display, in this case it's the Buffalo indicator and you can select what to do with it (See the image below).

1. Displays the name of the indicator and controls whether the indicator layer is visible on the map by checking the box. In addition, this is an expandable icon which will display more information if expanded.
2. The double arrow shown at number two hides or shows the layer list when clicked.
3. The triple line with a tick shown at number three is a global layer control which means users can turn on or turn off all layers simultaneously.
4. The three dots at number four give the user more options associated with that layer.



Users can turn multiple layers on at once but viewing becomes more difficult as layers overlay geographically. Once a user has selected which layer(s) they want to view they can choose what they want to do with it by clicking on the option button at number 4. The drop down produced by clicking this button has the following options:

- 1) Download
- 2) Change Symbology
- 3) View Chart
- 4) Zoom to
- 5) Transparency
- 6) Disable Pop-up
- 7) Move Up/Move Down
- 8) View Attribute Table
- 9) Data Archive



Drop down list options: explained

Download	Clicking on ' Download ' will download the selected layer in the form of a zipped file geodatabase. The feature class (similar to a shapefile) for that layer is inside the file geodatabase. To use the data, the user needs to unzip the downloaded data and open the geodatabase using GIS software (preferably ArcMap).
Changing Symbology	' Changing symbology ' allows users to view the data in different ways. The options under this tab include: <ul style="list-style-type: none"> • 'A single symbol' (using one symbol for the entire file), • 'Unique Symbols' (for individual parts), and • 'Colour' which uses gradients to show certain values. For 'Colour' the user needs to specify which value within the data they wish to compare or base the colour scheme on, this is found on the 'To show' drop down menu. Additional customization options include specifying the domain (range of values to be visualised), the number of classes that the data must be divided into, and the colour.
View Chart	' View Chart ' allows the user to visualise the data in a non-spatial way. Once clicked it will display a simple chart of the data. This can be turned into an official report with a map if the user then selects 'Generate Report'. A two A4 page report will be generated with a map of the area (what is currently being viewed), the attribute table of the selected data, and the graph originally created by 'View Chart'.
Zoom to	' Zoom to ' takes the user to the full extent view of the spatial layer.
Transparency	' Transparency ' is on this drop-down menu for convenience as it is also present under the symbology option. It allows the user to make the layer more opaque or transparent to compare the layer to the area behind it (or for visualisation purposes).
Disable pop-up	' Disable pop-up ' toggles pop-up on the display. If the pop-up for a layer is enabled and you click on one of that layer's features in the map, a pop-up window with the feature's attributes will appear. The functionality on the layer list will toggle whether the pop-up for the layer is enabled or not.
Move up or Move down	' Move up ' and ' Move down ' allows the user to order the layers for map display or convenience purposes.
View in Attribute Table	' View in Attribute Table ' opens the layers attribute table. The table will appear on the bottom of the screen and can be closed again. It contains general GIS attribute data such as the objects ID, the species type, the country, the base line value, etc.

Data Archive

'Data Archive' takes the user to the low bandwidth data repository discussed in the Summary of Tools Section.

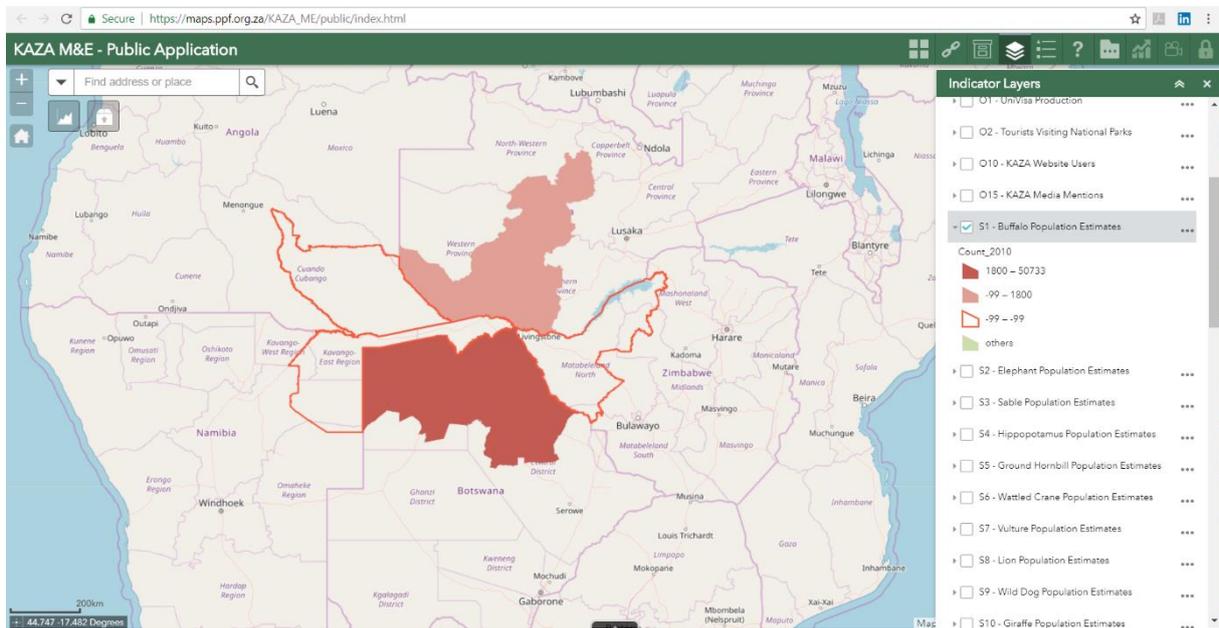


Figure 1: The S1: Buffalo Layer selected

Generating a Map/Report

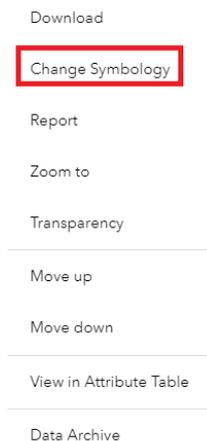
To produce a map/report, the following steps must be followed:

1. Users need to select a layer- by checking the tick box

Checked (On) A1 - Transfrontier Conservation Area Boundary

Unchecked (Off) A3 - Protected Areas

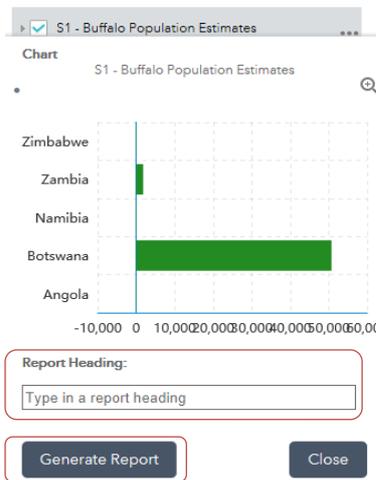
2. Change the layer appearance- second option in the drop-down list (optional)



3. Report- third option in drop down list

- Download
- Change Symbology
- Report**
- Zoom to
- Transparency
- Move up
- Move down
- View in Attribute Table
- Data Archive

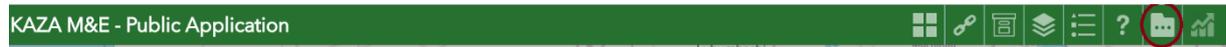
4. Enter a Report heading- available after selecting to 'Report', and then clicking on 'Generate Report'.



The output pdf document will load (give it time) and then users will be able to save or print a report (two A4 pages).

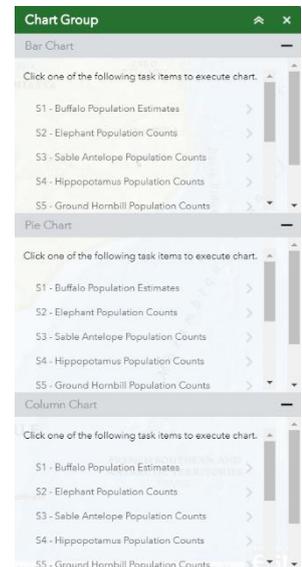
Viewing Charts

Earlier on in this help file users were shown how to open the chart view (shown again below).

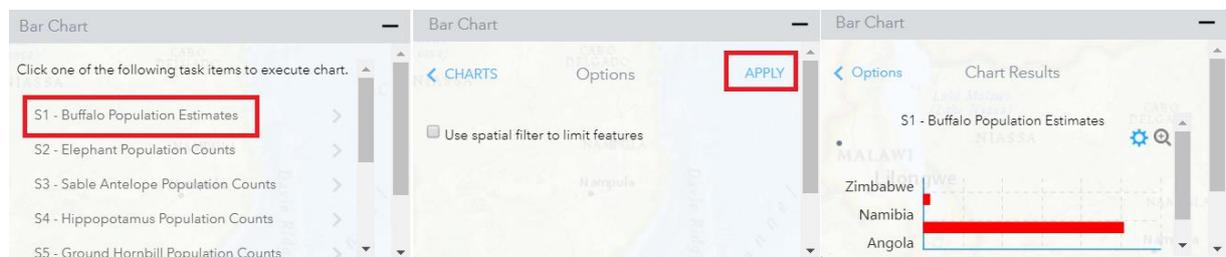


Once clicked on, the following display will be shown (see to the left). This view shows which graph types are available and the data sets within them. The available chart types include:

- **Bar Chart** - If you have comparative data that you would like to represent through a chart then a bar chart would be the best option. This type of chart is one of the more familiar options as it is easy to interpret. These charts are useful for displaying data that is classified into nominal or ordinal categories.
- **Pie Chart** - Pie charts are generally used to show percentage or proportional data and usually the percentage represented by each category is provided next to the corresponding slice of pie. Pie charts are good for displaying data for around 6 categories or fewer.
- **Column Chart** - Both the Bar and the Column charts display data using rectangular bars where the length of the bar is proportional to the data value. Both are used to compare two or more values. However, their difference lies in their orientation. A Bar chart is oriented horizontally whereas the Column chart is oriented vertically.



Users can create one chart of each type. They can hide and show the graphs using the minimize and maximize buttons on the side of the charts (the + and – buttons). This allows user to decide on which data to focus on (Note that one chart must always be maximized). To produce a chart, users need to simply select an Indicator, choose whether to use a spatial filter (viewing a chart that only shows data for the area in view), click apply and then view their chart.



Users can then also change the size of their chart (+ or -), this allows users to magnify the selected chart to make viewing easier. Users can change the colour (the blue gear icon). Once data has been viewed users can clear the chart to view another indicator using the 'clear' button.

Acknowledgements

This tool was made possible by the KAZA Secretariat, Peace Parks Foundation, WWF Germany, and WWF Namibia.

Annexe A: Indicator Matrix

Theme	Code	Name	Description	Purpose
Enabling	E1	<i>Extent of Conservation Areas & KAZA</i>	This indicator measures the total area (hectares) of conservation areas which are officially designated in KAZA. The areas are calculated as total and % of country, wildlife dispersal area, and habitat type throughout KAZA, measured annually. In addition, the entire KAZA extent is measured when it changes	To estimate extent of formal conservation areas and size of KAZA which is important for assessing % land cover, fragmentation etc.
	E2	<i>Presence of Approved Conservation Area Management Plans</i>	Number of conservation areas with management plans which have been implemented and approved.	To assess management effectiveness of conservation areas.
	E3	<i>Number of projects implemented in each WDA since inception</i>	number of projects in place in WDAs	
	E4	<i>Number of eco awarded tourism facilities (compared to number of tourism facilities)</i>	Number and types of eco- and cultural tourism facilities facilitated. Must go through accreditation. Must also investigate the term "Green".	Evaluate sustainability of tourism sector
	E5	<i>Number of countries who have ratified treaty</i>	Ratification of Treaty by all Countries. Only Angola Remaining.	
	E6	<i>Indicator Completion Scores</i>	Review of Database	
Impact	I1	<i>Land Cover</i>	Natural land cover (total hectares and % of area) available for wildlife habitat	Wall-to-wall mapping of vegetation and land cover from satellite imagery is efficient and consistent for providing information on natural habitats and human activities and threats

	12	<i>Wildlife Movement through corridors</i>	Species presence in corridor areas - wild dog, zebra, buffalo, elephant	Demonstrates movements of wildlife and natural migration
	13	<i>Fragmentation of natural habitat</i>	The total area (in hectares) of intact and potentially degraded natural habitat over time are calculated for all of KAZA using a fragmentation index. This is measured as number of hectares, and % of total habitat that is intact (core) compared to areas which have been converted to inner edge, outer edge, and small patches, which can be grouped as fragmented. Fragmentation can be derived on natural land cover data which are derived for the Habitat Cover indicator (I1). The indicator is derived consistently over KAZA. Trends in areas are shown over time, and, the loss of core habitat identified with regards to location inside or out of wildlife dispersal areas.	Fragmentation analysis identifies intact and degraded land cover types (core and edge) over time; elements of connectivity are important to wildlife movement and habitat integrity.
	14	<i>Human Wildlife Conflict Events</i>	Number of Human Wildlife Conflict events reports (HWC).	Evaluation of conflicts in land use and reduction of habitat. KAZA wants to increase wildlife migration in wildlife dispersal areas, locations of HWC indicate priorities areas for mitigation.
	15	<i>KAZA Tourism revenue by country</i>	Revenue earned by governments from tourism in KAZA	Indicates interest and potential revenue to KAZA
	16	<i>Community Revenue from Natural Resources</i>	Benefits from tourism and sustainable use of natural resources to the rural households. The amount of money that a conservancy or group receives during a specific period (annually). Natural resources are defined as materials or substances occurring naturally in the area which can be exploited for economic gain	Indicator related to poverty and livelihoods
	17	<i>Number of fences erected or opened</i>	Length of fences decommissioned, erected, or opened. This can be done using length of fences (Km) in WDAs. A secondary description would be the area of the fenced region (Ha). Categories can include: Up, Down, Decommissioned, Damaged	Fences are significant barriers to wildlife movement; opened fences may encourage movement
	18	<i>Fire Extent and Frequency</i>	The extent, frequency and timing of fires, by land cover.	Fires, in certain land cover types at certain times are an indicator of anthropogenic activity. Fires can also drive wildlife movements.

	I9	<i>Human Population Density</i>	Human population in KAZA	Indicator of human presence, and density is important for determining threat and pressures from development, HWC etc
	I10	<i>Human Settlements</i>	Urban and extent of settlements in KAZA	Indicator of human presence and expansion is important for determining threat and pressures from development, HWC etc
Outcome	O1	<i>Number of Uni-Visas Issued</i>	Number of Univisas issues to tourists for easier travel between Zambia and Zimbabwe.	To know the movement and ease of flow of tourists between KAZA countries, and the success of the UniVisa program
	O10	<i>Interest in KAZA Website</i>	Interest in KAZA website by public internet users	
	O11	<i>Number of visitors to KAZA website</i>	Interest in KAZA website by public internet users	
	O12	<i>Illegal trade & Poaching</i>	Number of poaching incidents, seizures, poaching attempts, and recorded illegal trades reported in each KAZA country	
	O13	<i>Number of Harmonized Policies & Agreements</i>	Number of enacted harmonized policies and agreements (bi-lateral agreements)	To measure inter-country participation and collaboration for KAZA goals
	O14	<i>Enabling laws and policies</i>	Number of stakeholders who consider laws, regulations, and policies to be facilitating	To determine the stakeholder perception on laws and regulation
	O15	<i>KAZA media mentions</i>	This indicator measures the number of mentions of KAZA in worldwide press articles and related publications.	To determine positive visibility and awareness of KAZA in national and international press.
	O16	<i>Effective demining of Angolan area</i>	Total area or km of roads where mines have been cleared, number of removed mines.	
	O17	<i>Number of National tour operators marketing KAZA</i>	Interest from tour operators specifically promoting tours in KAZA. Companies must be registered	To determine the visibility of KAZA in tour operator activities
	O18	<i>Number of New Collaborative Management Agreements to</i>	Number of agreements	

		<i>Secure Wildlife Corridors</i>		
	O2	<i>Tourists Visiting National Parks</i>	Number of tourists visiting National Parks. For now, data is documented only in national parks. Additional data for protected areas may be integrated as available.	To document tourism and entry in protected areas
	O3	<i>Tourism PA visit duration</i>	Day visitors and overnight visitors.	Determine use of national parks vs. transit
	O4	<i>Tourism infrastructure capacity (bed count and number of facilities)</i>	Total number of beds and facilities available to tourists or overnight guests.	To determine the total capacity and availability of overnight facilities for tourists
	O5	<i>Law Enforcement Jobs in Conservation Areas</i>	Number of people working as ranger or enforcement in protected areas.	Estimate capacity to effectively manage conservation areas against poaching
	O6	<i>Tourism Jobs</i>	The Travel and tourism industry and its' associated sectors provide various employment opportunities. Besides working in travel agencies, airlines, tour operators, theme parks, events and hotels, there are other options such as working in government tourism departments, customs services, airline catering, tourism promotions and sales, etc. For this document, this indicator will focus on the number of people employed (in the KAZA region) in the tourism industry created because of the KAZA TFCA. Listed below are examples of the jobs considered in this document.	To determine positive impacts on local livelihoods
	O7	<i>Investments into KAZA</i>	Volume of investments (private sector, government, etc.) into KAZA. Must be split into direct and indirect investments	To evaluate investments and activities in KAZA, composition of portfolio
	O8	<i>Number of Joint-venture partnerships</i>	Number (%) of joint venture partnerships benefitting. Must be an official agency.	
Species	S1	<i>Buffalo Population</i>	Buffalo Population estimates, numbers of individuals	Buffalo are an indicator of ecosystem plant health, and a source of cattle-borne diseases. Knowing where buffalo

				populations exist helps determine where ecosystems are providing grazing vegetation and their potential of diseases are present.
	S10	<i>Giraffe Population</i>	Giraffe Population estimates, numbers of individuals	Needs documentation
	S2	<i>Elephant Population</i>	Elephant population estimates.	Elephants are flagship species. Landscape engineers, indicators of healthy ecosystems. There have been barriers to their movements which has affected landscapes locally.
	S3	<i>Sable Antelope Population</i>	Population estimates of sable antelope	Species which is sensitive to ecosystem fragmentation and habitat change
	S4	<i>Hippopotamus Population</i>	Population estimates of hippos	Hippos are important to wetland ecosystems, ecosystem engineers
	S5	<i>Ground Hornbill Population</i>	Population estimates for ground hornbill	Tree nesting birds which are an indicator of ecosystem health
	S6	<i>Wattled Crane Population</i>	Population estimates of Wattled crane	Indicator of ecosystem condition
	S7	<i>Vulture Population</i>	Presence of vultures and incidence of poisoning	Play an important ecosystem role and suffer from wildlife crime (poisoning)
	S8	<i>Lion Population</i>	Population estimates of lions	Top carnivores indicate intact wildlife food chain
	S9	<i>Wild Dog Population</i>	Breeding packs present (which represents the population as a whole) which is determined by sightings of pups or presence of dens	Ecosystem engineers; affected by human activities
Socio-Economic	SE1	Livelihood Value Index	This is the aggregated indicator of 47 variables of the HH questionnaire, considering all the 5 assets. It will improve slowly. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region.

	SE2	Percentage of households classified as having a poor livelihood	75 % of households have a yearly income below 2000 USD per year, + 13 % do not have a cash income at all. This indicator monitors how many households in KAZA have what is defined as a poor livelihood. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region.
	SE3	The perceived importance of tourism for the economy at a community level.	This indicator monitors the perceived importance of tourism for the economy from the views of the communities within KAZA. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region.
	SE4	Percentage of households acknowledging to receive benefits from tourism.	This indicator shows the percentage of households that acknowledge that tourism benefits them. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region.
	SE5	Percentage of household members having increased regular monthly cash	This indicator shows the percentage of household members that have increased regular monthly cash. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region.
	SE6	Percentage of local household members receiving income from	This indicator shows the percentage of household members receiving money from their own business initiatives. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA)	Understanding Socio-Economic development in the KAZA region.

		own business	and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	
	SE7	Percentage of households acknowledging to receive cash benefits from conservation.	This indicator shows the percentage of household acknowledging that they have received cash benefits from conservation. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region
	SE8	Percentage of communities with no access to roads decreased.	This indicator shows the percentage of communities with no access to roads. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region
	SE9	Percentage of households with good access to market places increased.	This indicator shows the percentage of households with good access to a marketplace. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region
	SE17	Loss of livestock to wildlife decreased	This indicator shows the loss of livestock to wildlife in KAZA. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region
	SE18	Decrease of crop loss to wildlife (annual yield percentage)	This indicator shows the amount of crops lost to wildlife based on annual yield percentage. The area monitored is the KAZA agricultural pilot region. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a	Understanding Socio-Economic development in the KAZA region

			framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	
	SE19	Number of infrastructure constructed by KAZA-TFCA at regional and national level.	This indicator shows the Number of infrastructure constructed by KAZA-TFCA at regional and national level. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region
	SE20	Percentage of communities acknowledging to be actively involved in KAZA related activities and receiving benefits increased.	This indicator shows the Percentage of communities acknowledging to be actively involved in KAZA related activities and receiving benefits increased. This includes activities such as conservation farming, Human Wildlife conflict, and training etc. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region
	SE21	Community Revenues from concession agreements increased	This indicator shows community revenue from concession agreements in KAZA. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Trans frontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region
	SE22	Number of reported HWC incidents reduced	This indicator shows the number of reported Human Wildlife Conflict (HWC) incidents. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region.
	SE23	Number of communities where HWC mitigation	This indicator shows the number of communities where HWC mitigation measures are applied. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi	Understanding Socio-Economic development in the KAZA region

		measures are applied	Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	
	SE24	Number of community-based tourism facilities established or facilitated by KAZA	This indicator shows the number of community-based tourism facilities established or facilitated by KAZA. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region
	SE25	Percentage of households stating to use or have access to KAZA services	This indicator shows the percentage of households stating to use or have access to KAZA services. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region
	SE26	Number of households voluntarily settled outside of the corridors, compensated and resettled in the new social environment.	This indicator shows the number of households voluntarily settled outside of the corridors, compensated and resettled in the new social environment. For more information, see the Socio-Economic Baseline Survey for the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) and the development of a framework for monitoring and evaluating the impacts of the KAZA TFCA Programmes on rural livelihoods (2014).	Understanding Socio-Economic development in the KAZA region.