

Data Management Policy

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Version	01
Principal Responsibility	MMCO Steering Committee - Chairman
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Policy Approval

This policy shall be known as the MMCO data management policy of the Maasai Mara Citizen Observatory (herein referred to as “the Policy”) and is aligned to National and International policies on data management.

Dated the 18 day of November 2019
Chairman – MMCO Steering Committee

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Foreword

Maasai Mara Citizen Observatory is a multi-stakeholder forum which brings together government and non-governmental agencies involved in the conservation and management of the Mara ecosystem and local communities who are affected by the decisions made with respect to the management of the ecosystem. There are emerging challenges in the Mara ecosystem which are related to utilisation and management of land and natural resources. Specifically, balancing biodiversity conservation and community livelihoods is a major challenge for sustainable management of the social-ecological system. Reliable biodiversity data as well as data on local livelihoods issues are necessary to reconcile conservation and livelihoods and to create sustainable opportunities for local communities. Citizen Science is the involvement of citizen volunteers in scientific research processes. Citizen Observatories are community-based environmental monitoring and information systems which build on innovative and novel earth observation applications embedded in portable or mobile personal devices. Through Citizen Observatories, citizens can help and be engaged in observing and monitoring the environment.

This data management and sharing policy aims at managing the collection, storage, sharing and usage of data and information by individuals and institutions for purposes of the MMCO in a secure manner.

Chairman – MMCO Steering Committee

Definition of Terms used in MMCO Data Policy

Sensitive data - is any data or information which requires some control of access to it since knowledge of it by third parties may result in loss of an advantage or create insecurity.

Data protection - is the process of ensuring that sensitive data is not breached nor disclosed to unauthorised third parties.

Data access - is the ability to retrieve data stored on the MMCO database.

Third Party - a person, company or institution that is not one of the main people involved in the MMCO but has a minor role or interest in the MMCO's activities.

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Acronyms and Abbreviations

MMCO - Maasai Mara Citizen Observatory

KMD - Kenya Meteorological Department

KWS - Kenya Wildlife Services

KFS - Kenya Forestry Services

WRA - Water Resources Authority

MAMASE - Mau Mara Serengeti Sustainable Water Initiative

Introduction

The Maasai Mara Citizen Observatory (MMCO) is multi-stakeholder platform for generating and sharing of data, information and knowledge to improve policy making and implementation for sustainable livelihoods and biodiversity management in the Mara ecosystem.

The Kenya case is one of six (6) case studies being developed through the Ground Truth 2.0 project, led by IHE- Delft, Institute for Water Education in the Netherlands. The Ground Truth 2.0 aims to demonstrate the technological feasibility, the sustained use and the societal and economic benefits of such citizen observatories. This is done using an innovative approach of combining the social dimensions of citizen observatories with enabling technologies, so that the implementation of a particular citizen observatory is tailored to its envisaged societal and economic benefits. Citizens can play a key role in helping fill data gaps in the management of natural resources for sustainable development by using their own observations and simple technological tools. This provides a new data stream of local information about their environment, complementing existing systems and data sources. Via citizen observatories, citizens and not just scientists and professionals can be enabled to share data about their environment and to take on a new role in decision making and cooperative planning.

The MMCO platform was developed with the support of Upande, IHE, TAHMO and Gavagai. Co-design sessions involved key stakeholders including MMWCA, conservancies, Friends of the Mara, KMD, KWS, KFS, WRA, Narok County, African Conservation Centre, and National Museums of Kenya, MAMASE, Maasai Mara University, the Kenya Ministry of Defence and others. During the co-design sessions, different activities were carried out to identify the challenge of the Kenya Demo Case Citizen Observatory and to define the Mission, Vision and Objectives. Then, the functional design for accomplishing these premises was developed.

The MMCO focuses on balancing biodiversity, natural resources and livelihoods (on flora and fauna, water availability and water quality, for land and natural resources management). The project uses mobile apps and social media analytics to collect explicitly and implicitly-sensed citizen data. As such, citizens are enabled to collect and share data with implementing agencies about the environment and to take on a new crucial role in environmental monitoring, decision making, cooperative planning and environmental stewardship. Data is collected using direct observation and sensors. The data from direct observation is recorded using Online/Mobile ODK forms, while those from sensors are sent directly to a database.

Vision, Mission and Core Values of MMCO

Mission

The mission of the MMCO is to constitute a multi-stakeholder platform for generating and sharing of data, information and knowledge to improve policy making and implementation for sustainable livelihoods and biodiversity management in the Mara ecosystem.

Vision

The vision of the MMCO is to have a society in which all stakeholders are working together to ensure the balance between sustainable livelihoods and biodiversity management in the Mara ecosystem.

Core Values

The core values of the MMCO include active collaboration, integrity of institutions and people and accessibility of data and information.

Reference Documents for developing this Data Policy

- i. Data Protection Bill 2012;
- ii. Data Protection Bill 2018;
- iii. Water Act 2016;
- iv. National Information & Communications Technology (ICT) Policy 2016;
- v. Wildlife (Conservation And Management) Act 2013;
- vi. The EU General Data Protection Regulation (GDPR).

Purpose of this Data Policy

The main purpose of the data policy is to manage the collection, storage, sharing and usage of data and information by individuals and institutions for purposes of the MMCO in a secure manner.

Scope of the Data Policy

This policy shall apply to data on natural resources, wildlife, livelihoods and personal information of those involved in the data collection.

Policy Objectives

- i. To ensure data collection is done in accordance to agreed regulations;
- ii. To ensure that data is stored in a secure MMCO Data Management System;
- iii. To ensure that specific data is shared and accessible to relevant stakeholders only;
- iv. To ensure that data is used in appropriate manner or as stipulated in this policy;
- v. To ensure that data quality is maintained and improved continuously;
- vi. To improve data, information and knowledge generation and sharing on biodiversity and livelihoods between citizens, practitioners, researchers and policy makers for informed policies and policy implementation.

Policy statement

MMCO is fully committed to secure and protect sensitive data pertaining to natural resources, wildlife, livelihoods and personal information of those involved in the data collection. Sensitive data will be collected, recorded and used fairly, stored safely and securely and not disclosed to any third party unlawfully. The lawful and correct treatment of personal, wildlife and community information is critical to our successful operations and to maintaining confidence.

When personal information is collected, MMCO is committed to:

- i. Protecting sensitive personal details;
- ii. Keeping stakeholders' and other individuals' personal data up to date and confidential;
- iii. Use personal data only for the purpose originally stated and not transfer it to any third party;
- iv. Allow for the removal of personal information under request;
- v. Maintaining personal data collected only for the time period required;
- vi. Adhering to regulations and related procedures to ensure that all members who have access to any personal data held by or on behalf of MMCO are fully aware of and abide by their duties under the national and international data management regulations.

When sensitive information is collected MMCO is committed to:

- i. Separating sensitive information from non-sensitive information;
- ii. Protecting sensitive records;
- iii. Releasing sensitive records only to authorized individuals/parties and no one else unless permission is given to do so and for the specific purpose specified in the permission;
- iv. Collecting accurate and relevant sensitive data only for specified lawful purposes;
- v. Adhering to regulations and related procedures to ensure that all members who have access to any sensitive data held by or on behalf of MMCO are fully aware of and abide by their duties under the national and international data management regulations;

Any person is allowed to report any allegation in relation to the unlawful treatment of personal, wildlife or community data via the complaints procedure described herein. A complaint should be made in the event that any person feels that records of personal, wildlife and community data have been:

- i. Lost;
- ii. Obtained through unlawful disclosure or unauthorized access;
- iii. Recorded inaccurately and/or in a misleading manner;
- iv. Provided to a third party without permission.

Where requested, the MMCO will take appropriate action/corrective measures against unauthorized/unlawful processing, loss, destruction or damage to personal or sensitive data.

There shall be a steering committee that shall ensure that this policy is published, accessible to all stakeholders, the public and any relevant third parties.

Identification of personal and sensitive data

When data is collected it will be fragmented in atomic pieces that can be mapped to a predefined data model. In the elaboration of the data model, personal and sensitive information will be identified.

Personal and sensitive information will be stored in separate tables that will be subjected to a common set of security measures. Data will be encrypted while stored and its access will be restricted to a minimum set of people and software. Examples of sensitive data fields are the exact position of an individual or an endangered species, variety of agrarian crop, etc.

Personal Information

We may collect personal data such as name, physical address, email address and telephone number when it is provided voluntarily. Any information by which one can be identified will only be used in accordance with this privacy policy and with the sole purpose stated.

The information collected from those interactions may also include, but is not limited to any of the following:

- i. Preferences as to how one should be contacted in the future;
- ii. Data entered on the MMCO website or app, including information to take part in challenges/Mapathon events (such as contact information). When one enters a challenge event he/she will be asked by the organizers to complete the official form which may require providing information, Images, photographs or videos;
- iii. Data about positions or roles;
- iv. Details of the visit to the MMCO website or apps, including technical information such as the IP address used to access the website, the device used, browser type and version that might constitute one's internet footprint;
- v. Any other details which may include reasons for supporting the MMCO.

Keeping your information up to date

Accuracy

Measures shall be taken by the data controller to ensure that personal data is correct, complete, and kept up to date. Users will be provided with mechanisms to allow them to update their personal information as and when required.

Confidentiality and Integrity

Personal data shall be processed securely to retain confidentiality and integrity in consistency, accuracy, and trustworthiness over its entire life cycle. Steps shall be taken to ensure that data cannot be accessed or altered by unauthorized entities or people. The security of personal data shall be preserved by establishing suitable organizational and technical measures to prevent unauthorized access, illegal processing or distribution, as well as accidental loss, modification or destruction.

Rights of data subjects

A data subject (an individual to whom personal data relates) has the following rights:

- i. The right to access to personal information;
- ii. The right to information as to whether personal data is being processed;
- iii. The right to rectification if the information held is inaccurate or incomplete or requires to be updated;
- iv. The right to restrict processing of personal data;
- v. The right to object decisions solely based on automated processing circumstances such as automated processing, publication/ processing of sensitive personal data profiling which produces legal effects or significantly affects data subjects;
- vi. The right to complain (as would be appropriate to the controller, processor or regulator);
- vii. The right to object the processing of data for direct-marketing purposes;
- viii. The right to data portability;
- ix. The right to be forgotten/ the right to erasure - mechanisms shall be put in place to ensure this right;
- x. Right to appropriate security safeguards where personal data is being archived for various purposes;
- xi. The right to appropriate security safeguards in cross border transfer of personal data;
- xii. The right to withdraw consent at any time without any detriment to interests.

Big Data and Analytics

The use of big data and analytics is permitted subject to the processes involved in complying with the requirements of the Data Protection Laws. The big data analytics may result in aggregated information where information of individuals cannot be extracted and sensitive information is masked. In this case, the resulting information is excluded from this data policy and can be freely distributed.

Policy implementation

The steering committee shall regularly communicate the policy to MMCO members and other stakeholders through circulars, meetings, seminars, posters and other means to sensitize them, create awareness and promote acceptance and ownership. The steering committee shall assign responsibilities to MMCO members to implement the policy.

Policy Review

This policy shall be reviewed by MMCO in consultation with other stakeholders from time to time as may be necessary to reflect emerging issues and to ensure relevance to the needs of all stakeholders and continued suitability.