Alliance Bioversity & CIAT

CSAMSP
Climate Action in Agriculture Sector

ICAT Initiative for Climate Action Transparency

TRAINING GUIDE

Kenya Climate-Smart Agriculture (CSA) Monitoring and Evaluation Framework and CSA Reporting Tool

Initiative for Climate Action Transparency - ICAT Training Modules

AUTHORS

Alliance of Bioversity International and CIAT, Ministry of Agriculture and Livestock Development, Climate Smart Agriculture-Multi stakeholder Platform

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DISCLAIMER

PREPARED UNDER

The Initiative for Climate Action Transparency (ICAT), supported by Austria, Germany, Italy, the Children's Investment Fund Foundation and the ClimateWorks Foundation.

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UNOPS

The Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) delivers research-based solutions that harness agricultural biodiversity and sustainably transform food systems to improve people's lives. Alliance solutions address the global crises of malnutrition, climate change, biodiversity loss, and environmental degradation. The Alliance is part of CGIAR, a global research partnership for a food-secure future.

PREPARED UNDER

The Initiative for Climate Action Transparency (ICAT) project is an unincorporated multi-stakeholder partnership, which aims to increase the overall transparency capacity of countries. ICAT is supported by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, the Children´s Investment Fund Foundation (CIFF), the Italian Ministry of Ecological Transition (IMET) and ClimateWorks.

ICAT PARTNERS IN KENYA

In Kenya, the Alliance of Biodiversity International and CIAT are implemented the project in partnership with the Ministry of Agriculture and Livestock Development through the National Climate-Smart Agriculture (CSA) Multi-Stakeholder Platform (MSP).

Report Authors

Alliance of Bioversity International and CIAT, Ministry of Agriculture and Livestock Development and the Kenya Climate smart Multi Stakeholder Platform.

Report produced

(Synthesis, editing, design and layout)
by KANDS Collective | hello@kandscollective.com

About this training guide

The Alliance of Bioversity International and the International Centre for Tropical Agriculture (CIAT), in collaboration with the Ministry of Agriculture and Livestock Development through the National Climate-Smart Agriculture (CSA) Multi-stakeholder Platform (MSP), are Implemented the Initiative for Climate Action Transparency (ICAT) project aimed at strengthening the capacity to implement, monitor, and report climate change adaptation actions for the agricultural sector in Kenya at both national and county levels in a transparent manner.

Phase I of the project facilitated the development of the National CSA Monitoring and Evaluation (M&E) Framework, and the CSA Reporting Tool. The project also supported the startup of five of the county CSA Multi-Stakeholder Platforms (CSA-MSPs). These county CSA-MSPs consist of both government and non-government stakeholders undertaking CSA in the counties and are coordinated by the Agriculture and Livestock Departments through appointed focal point officers. To achieve the overall objective, ICAT Phase II targeted operationalising the CSA Reporting Tool for adaptation reporting for the agricultural sector, developing capacity-building methodologies and approaches, and strengthening adaptation tracking, reporting, and transparency at national and sub-national levels.

Subsequently, three training modules were developed as part of the commitment to operationalise the CSA Reporting Tool for adaptation reporting in the agricultural sector in Kenya. These modules have been designed to facilitate the piloting process of the CSA Reporting Tool and are aligned with the goals of the ICAT project. The training modules cover essential topics such as climate action reporting requirements, the Kenya CSA M&E Framework, and the CSA Reporting Tool. Through these modules, participants will gain a comprehensive understanding of the reporting requirements, tools, and frameworks necessary for successful reporting of CSA. This training guide provides an overview of the training modules, including their purposes, expected outcomes and contents.

Training guide outline

MODULE 1
Climate action reporting requirements

MODULE 2
Kenya CSA M&E Framework

MODULE

3CSA
ReportingTool

Acronyms and abbreviations

BTR	Biannual Transparency Report
CBO	Community-Based Organisation
CCD	Climate Change Directorate
CCU	Climate Change Unit
CIAT	International Center for Tropical Agriculture
CSA	Climate-Smart Agriculture
CSA-MSP	National Climate-Smart Agriculture - Multi-Stakeholder Platform
CSO	Civil Society Organisation
ETF	Enhanced Transparency Framework
GHG	Greenhouse Gas
ICAT	Initiative for Climate Action Transparency
KCSAIF	Kenya Climate-Smart Agriculture Implementation Framework
KCSAS	Kenya Climate-Smart Agriculture Strategy
M&E	Monitoring and Evaluation
MoALFC	Ministry of Agriculture, Livestock, Fisheries and Cooperatives
MRV	Measurement, Reporting and Verification
MSP	Multi-stakeholder Platform
NCCAP	National Climate Change Action Plan
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organisation
UNFCCC	United Nations Framework Convention on Climate Change

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Climate action reporting requirements

WHAT YOU WILL LEARN

Purpose

The purpose of module 1 is to equip stakeholders with the knowledge and skills necessary to effectively report their climate actions and contributions to global climate change adaptation and mitigation efforts. The training module focuses on the transparency requirements set out under the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. By the end of the module, participants will have a clear understanding of the reporting obligations, the benefits of transparent reporting, the technical guidance available to them, and the tools and resources necessary to meet their reporting requirements.

Learning outcome

Increased understanding of transparency reporting requirements in the agricultural sector.

REPORTING WITHIN THE UNFCCC

The UNFCCC provides the foundation for intergovernmental action to combat climate change and its impacts on humanity and ecosystems. To achieve the objective of the UNFCCC, Parties need reliable, transparent and comprehensive information on greenhouse gas (GHG) emissions, climate actions and support.

Kyoto Protocol

The Kyoto Protocol was adopted on 11th December 1997 and entered into force on 16th February 2005.

The Kyoto Protocol operationalises the UNFCCC by committing industrialised countries and economies in transition to limit and reduce GHG emissions in accordance with agreed individual targets.

Annex I of the Kyoto Protocol addresses the reporting and review of information by Parties.

The measurement, reporting and verification (MRV) framework, which covers the reporting requirements and the timelines for the submission of national reports, are different for Annex I Parties and (Non-Annex I Parties), based on common but differentiated responsibilities and respective capabilities.

Paris Agreement

The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at the 21st United Nations Climate Change Conference of Parties (COP21) in Paris on 12th December 2015, and entered into force on 4th November 2016. The Paris Agreement establishes a series of long-term goals on climate change mitigation, adaptation, and the provision of support.

All Parties are to act towards:

Limiting global average temperature increases to as close to 1.5˚C as possible above pre-industrial levels;

Making financial flows consistent with climate action objectives; and

Strengthening climate resilience.

Under the Paris Agreement, Parties report on five different pieces of information:

- A **national inventory of anthropogenic emissions** by sources and removals by sinks of GHGs (shall be reported by each Party).
- **Information necessary to track progress made in implementing and achieving Nationally Determined Contributions (NDCs)** under Article 4 (shall reported by each Party).
- **Information related to climate change impacts and adaptation under Article 7** (should be reported by each Party, as appropriate).
- **Information on financial, technology transfer and capacity-building support** provided and mobilised for developing country Parties (shall be reported by developed country Parties and should be reported by other Parties that provide support).
- **Information on financial, technology transfer, and capacity-building support** needed and received (should be reported by developing country Parties).

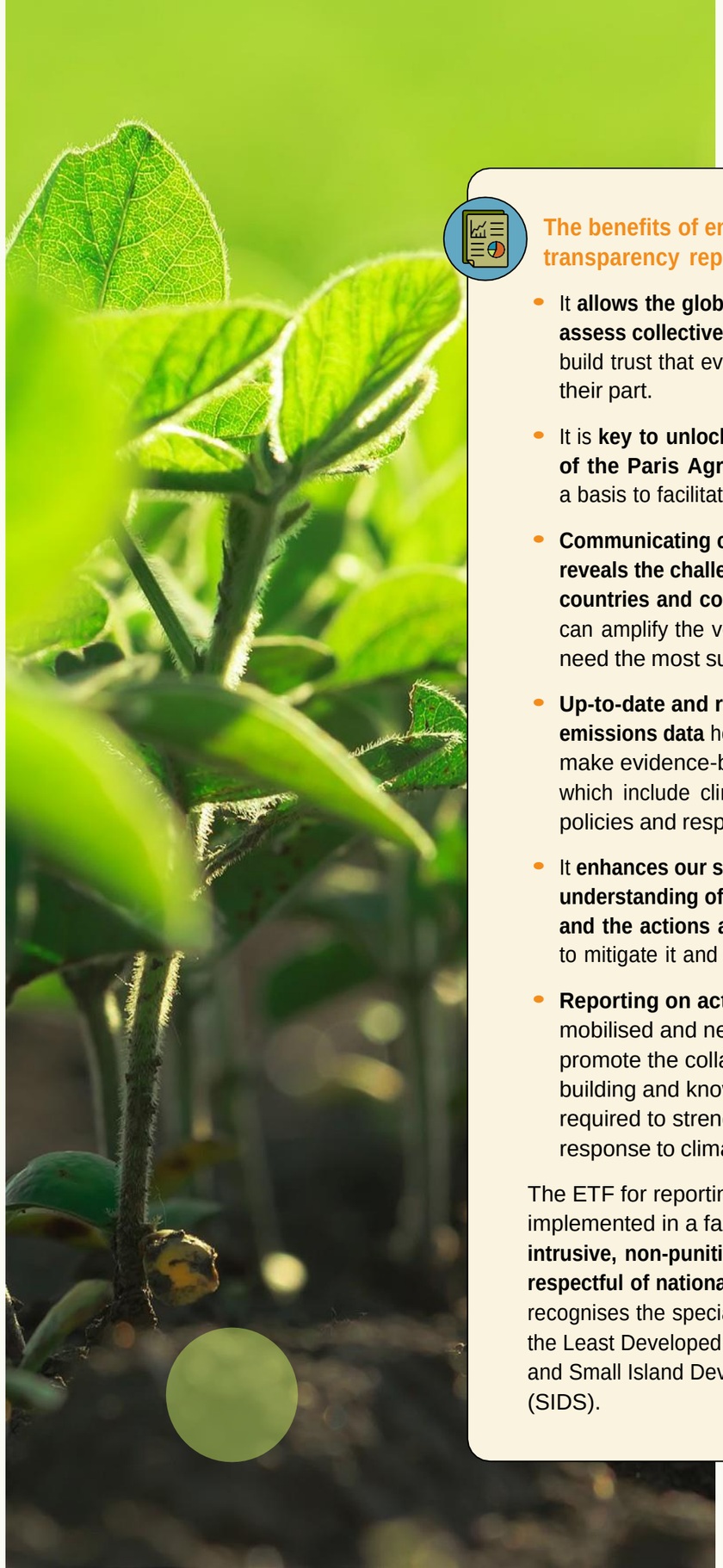
ENHANCED TRANSPARENCY FRAMEWORK

Transparency reporting refers to the regular reporting of emissions data and mitigation measures that enable countries to track their progress towards achieving their climate goals. The UNFCCC established the Enhanced Transparency Framework (ETF) for reporting under the Paris Agreement to support information on the implementation and achievement of national objectives.

The ETF provides a snapshot of global progress in relation to the objectives of the Paris Agreement. By communicating information on GHG emissions and the actions to reduce them, as well as on adaptation and means of implementation such as finance, technology transfer and capacity-building, the transparency and reporting system allows to understand ambition and progress on climate actions and support by Parties. The objective of the ETF is to build mutual trust and confidence and promote effective implementation.

Starting in 2024, all Parties to the Paris Agreement will follow the transparency process to:

- Provide a clear understanding of climate change actions and support; and
- Contribute to the global stocktake of the implementation of the Paris Agreement.



The benefits of enhanced transparency reporting include:

- It **allows the global community to assess collective progress** and helps build trust that everyone is playing their part.
- It is **key to unlocking the full potential of the Paris Agreement**, by providing a basis to facilitate further ambition.
- **Communicating climate action reveals the challenges faced by countries and communities**, which can amplify the voices of those who need the most support.
- **Up-to-date and reliable GHG emissions data** helps governments make evidence-based decisions which include climate-action related policies and responses.
- It **enhances our scientific understanding of climate change and the actions and policies** needed to mitigate it and adapt to its impacts.
- **Reporting on action**, and the support mobilised and needed, helps promote the collaboration, capacity building and knowledge transfer required to strengthen the global response to climate change.

The ETF for reporting is to be implemented in a facilitative, **non-intrusive, non-punitive manner that is respectful of national sovereignty**. It recognises the special circumstances of the Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

NATIONALLY DETERMINED CONTRIBUTIONS

Under the **ETF for reporting, Parties are expected to establish NDCs to communicate the domestic and, where applicable, international actions that they intend to take to mitigate climate change**, adapt to its effects, and support other countries in their mitigation and adaptation efforts by means of finance, technology and capacity building (FTC) initiatives. The ETF reporting under the Paris Agreement includes tracking progress of implementation and achievement of NDCs. From 2024, each country is to outline and communicate their NDC every two years through a Biannual Transparency Report (BTR).

The BTR is to provide the information necessary to track a country's progress in implementing and achieving their NDC targets and to demonstrate their efforts towards implementation of the Paris Agreement in:

- Reducing national emissions; and
- Building resilience and adapting to the impacts of climate change.

Parties are to submit new /updated NDCs every five years showing enhanced ambition in climate action. Transparency reporting is therefore an important aspect of the UNFCCC process, as it helps to ensure countries are meeting their commitments under the treaty.

REPORTING REQUIREMENTS AT THE NATIONAL LEVEL

Institutional reporting arrangements are detailed in Kenya's Climate Change Act, 2016. The 5-year National Climate Change Action Plan (NCCAP) provides for mitigation and adaption reporting by priority sectors through:

- A GHG inventory; and
- A National Adaptation Report.

Climate Change Act

The Climate Change Act, 2016 requires the Government to develop action plans to guide the mainstreaming of climate change into sector functions. It outlines the requirements for climate change reporting from the national to the grassroots level.

The Climate Change Act is anchored on the national values and principles of governance in Article 10 of Kenya's Constitution and the values and principles of public service in Article 232 of the Constitution. It also provides a legal basis for the Climate Change Directorate (CCD).

The Climate Change Act stipulates that the Cabinet Secretary is to make regulations that guide reporting and verification of climate change actions.

Some of these regulations are listed below:

- **Article 8(2)e:** The Cabinet Secretary shall submit a report bi-annually to Parliament on the status of implementation of international and national obligations to respond to climate change, and progress towards attainment of low carbon climate resilient development.
- **Article 13(7):** The Directorate shall undertake a biennial review of the implementation of the NCCAP and report to the Council.
- **Article 15(5):** Each state department and national government public entity shall -
  - Article 15(5)b: Report on sectoral GHG emissions for the national inventory.
  - Article 15(5)d: Regularly monitor and review the performance of the integrated climate change functions through sectoral mandates.
  - Article 15(5)f: Report annually to the Council on the status and progress of performance and implementation of all assigned climate change duties and functions.
- **Article 15(6):** Where an evaluation report from a statutory public body discloses unsatisfactory performance, the State Department shall undertake investigations and report the findings to the Council.
- **Article 16(2):** The Council shall make regulations governing the nature and procedure for reporting on performance by private entities, including the authority to monitor and evaluate compliance.
- **Article 16(3)a:** Notwithstanding other provisions in this Act, the Council may, by notice in the Gazette, require a private entity that is subject to climate change obligations to, at any time, prepare reports on the status of its performance of the climate change duties and prescribe the period for reporting.
- **Article 19(5):** A county government shall at the end of every financial year, through the designated County Executive Committee Member, submit a report on progress of implementation of climate change actions to the County Assembly for review and debate, and a copy of this report shall be forwarded to the Directorate for information purposes.

Image: ©Neil Palmer (CIAT)

- **Article 34(1):** The Council shall, at least three months before the end of each financial year, prepare an annual report setting out—

a. the financial statements of the Council;

b. a description of the activities of the Council;

c. the progress made towards implementation of the climate change action plans;

d. whether the objectives of the action plans for the year under review were met and the manner in which those objectives were or were not met;

e. the action taken by the national and county governments to address the impacts of climate change during that year;

f. any further efforts which may be necessary to achieve the objectives of the action plans;

g. recommendations on legal and administrative measures necessary for mitigating and adapting to the effects of climate change; and

h. any further information relating to the functions of the Council.

THE NATIONAL CLIMATE CHANGE ACTION PLAN (NCCAP), 2018-2022, IS A FIVE-YEAR PLAN THAT GUIDES KENYA ADAPT TO CLIMATE CHANGE AND REDUCE GREENHOUSE GAS EMISSIONS.

National Climate Change Action Plan

Kenya's NCCAP 2018-2022, is a five-year plan that guides the country in adapting to climate change and reducing GHG emissions. The NCCAP offers guidelines on reporting and establishing climate change structures. It is highly multi-sectoral and focuses on mainstreaming crosscutting issues and building synergies in terms of technical and financial capacity to accommodate all the stakeholders. The NCCAP creates an avenue for counties to simplify and align their Strategic Plans and County Integrated Development Plans (CIDPs) to the Vision 2030 National Development Blueprint and the Medium-Term Plan (MTP) III. It recommends building the capacity of stakeholders, the private sector, civil society and vulnerable groups, including women, youth, persons with disabilities, and marginalised and minority communities in such areas as climate change response, climate finance, and reporting and monitoring as well as the establishment of the M&E system for adaptation action.

Sector Reporting Requirements in the NCCAP

The NCCAP outlines seven strategic sectors comprising:

- Disaster Risk Management;
- Food and Nutrition Security;
- Water and the Blue Economy;
- Forestry, Wildlife, and Tourism;
- Health, Sanitation, and Human Settlements;
- Manufacturing; and
- Energy and Transport.

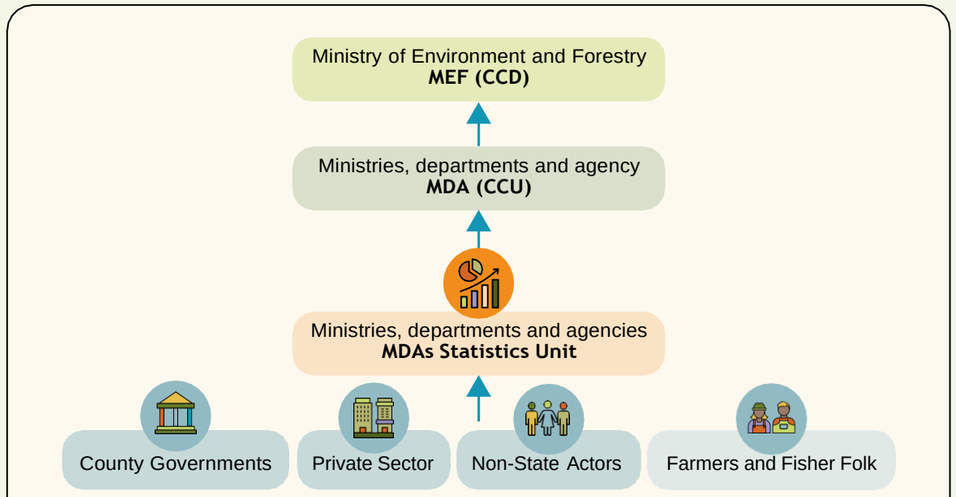
The Food and Nutrition security targets are drawn from the:

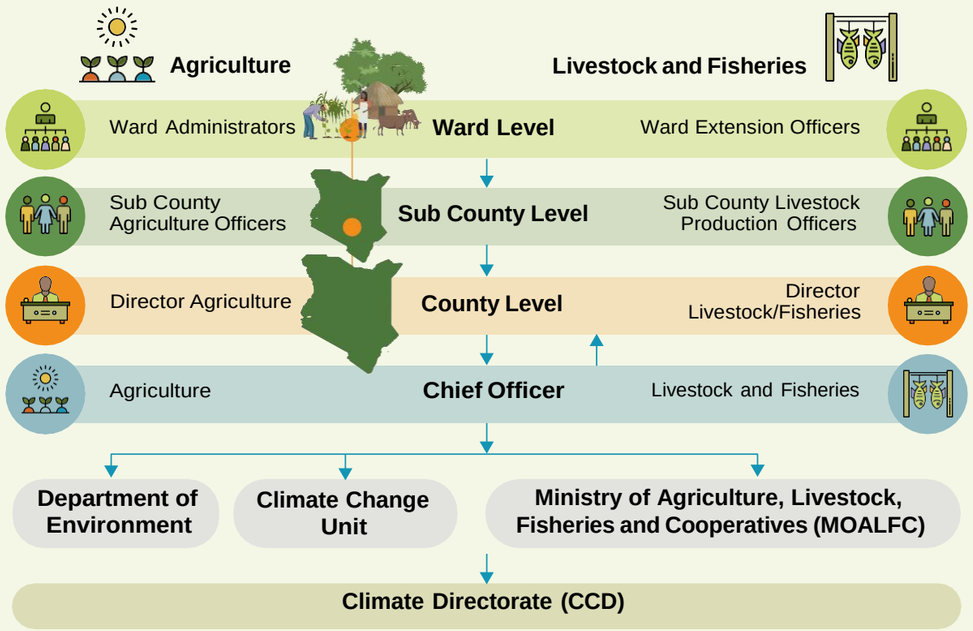
- NCCAP;
- Kenya CSA Implementation Framework (KCSAIF); and
- Kenya CSA M&E Framework.

The indicator in the CSA Reporting Tool is based on the KCSAIF and Kenya CSA M&E Framework targets.

Data information flows

Data information flow is from the bottom up. It emanates from the CSA implementers (farmers and fisher folk) on the ground, through the Ward, Sub-County and County levels up to the CCD at the national level.





CAPACITY REQUIREMENTS

In December 2020, a needs assessment was implemented by CIAT and the Ministry of Agriculture for five counties (Taita Taveta, Makueni, Nyamira, Baringo and Muranga).

It identified the following capacity requirements:

- Support in **consolidating** county based MSPs;
- **Capacity building** on data collection and reporting tools;
- Skills for **analysing and interpreting information**;
- Support to **establish and operationalise CCUs**;
- Capacity building on **identifying reporting indicators**;
- Development of simplified **reporting guidelines**; and
- Facilitation of linkages between **national climate change platforms**.

ACTIVITY: DISCUSSION QUESTIONS

Some important questions to consider:

- Does the data flow reflect the real situation?
- How do non-state actors get involved?
- What are the actual capacity gaps?

Key resources

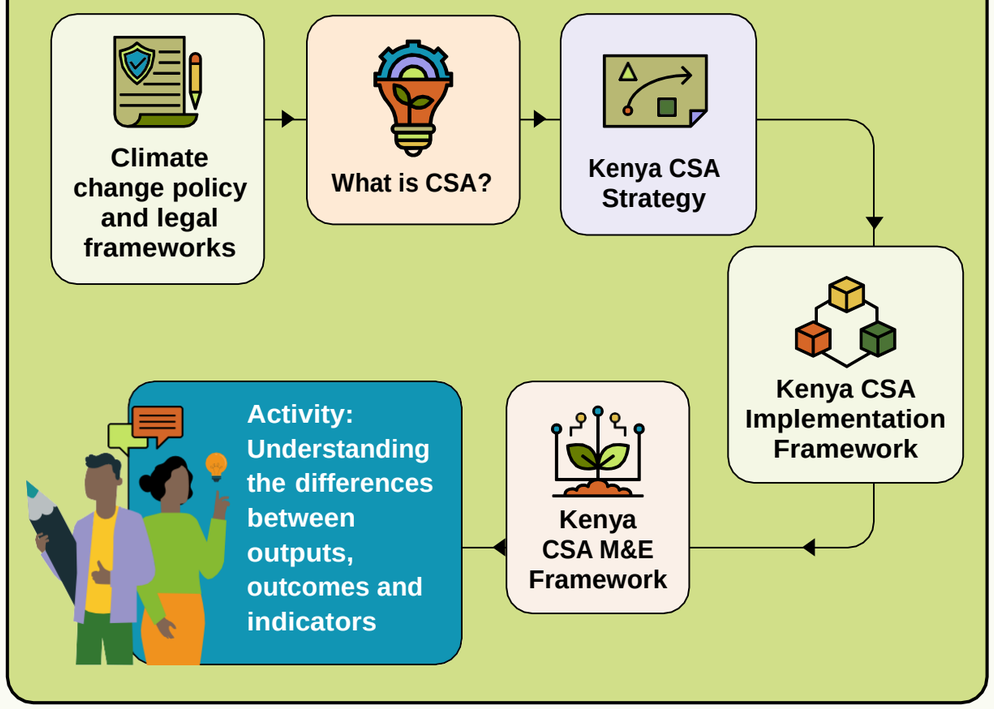
Key resources to be referred to for additional information are as follows:

- Kinyua I., Mwongera C., Osumba J., Ndetu V. 2021. Climate change adaptation reporting requirements in Kenya's agriculture sector. Kenya (Nairobi): Alliance of Bioversity International and CIAT 15 p. Climate change adaptation reporting requirements in Kenya's agriculture sector.
- Ministry of Environment and Forestry. 2020. Kenya's First NDC (updated version).
- UNFCCC. 2022. United Nations Framework Convention on Climate Change.

Image: ©P. Casier (CGIAR)

Kenya Climate-Smart Agriculture Monitoring and Evalutation Framework

WHAT YOU WILL LEARN



Purpose

This module provides a brief overview of the CSA approach and its significance in promoting sustainable agriculture. It highlights the importance of monitoring, evaluation and reporting in the implementation of CSA initiatives. Additionally, the module introduces the Kenya CSA M&E Framework, demonstrating how it can be used to effectively monitor and evaluate the impact of CSA projects.

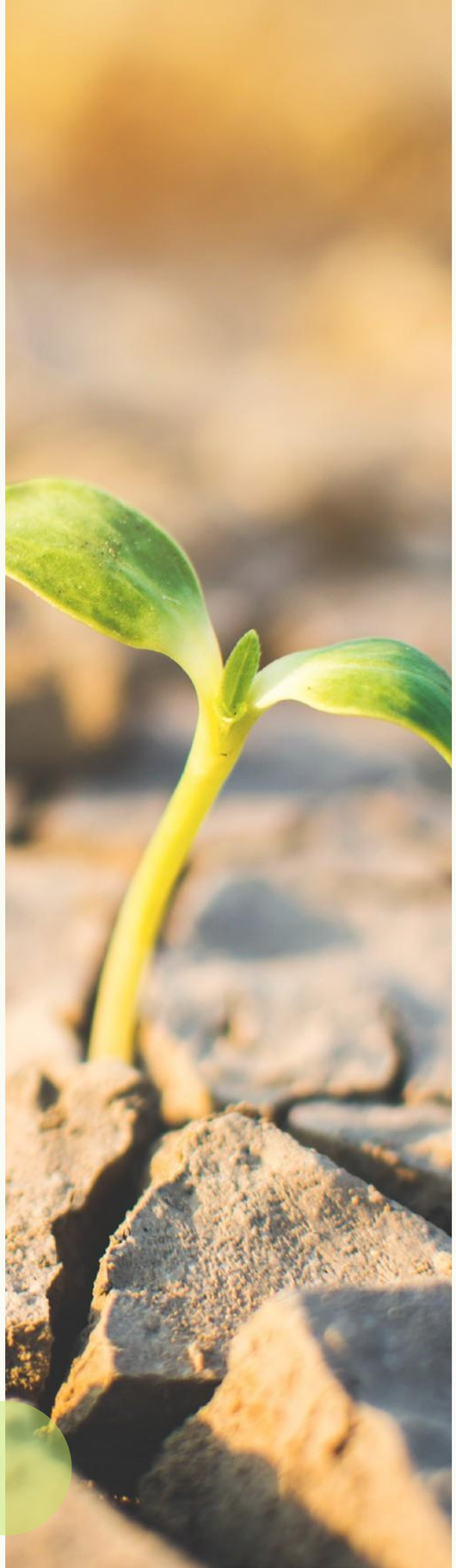
Learning outcome

- Ability to explain the concept of CSA, its principles, and its importance in promoting sustainable agriculture.
- Ability to use the Kenya CSA M&E Framework as a reference to effectively monitor and evaluate the impact of CSA projects.

CLIMATE CHANGE POLICY AND LEGAL FRAMEWORKS

Kenya's Climate Change Act 2016 obligates government at all levels to integrate and mainstream climate change actions and interventions in all sectors. Further, Kenya ratified the UNFCCC in 1994 and has been a Party to the Kyoto Protocol since 2005. Under the NDC (updated in 2020) Kenya has committed to reduce GHG emissions by 32% by 2030.

Kenya's agricultural sector has committed to contribute to the implementation of NDCs through the CSA approach. The CSA approach is based on agriculture that sustainably and reliably increases productivity and farm incomes, builds resilience of livelihoods and ecosystems, builds adaptation to the effects of climate change and reduces GHG emissions. CSA offers an excellent opportunity for agricultural growth. However, it requires collaborative action amongst various actors including national and county governments, farmers, the private sector, civil society organisations (CSOs), and other value chain actors.



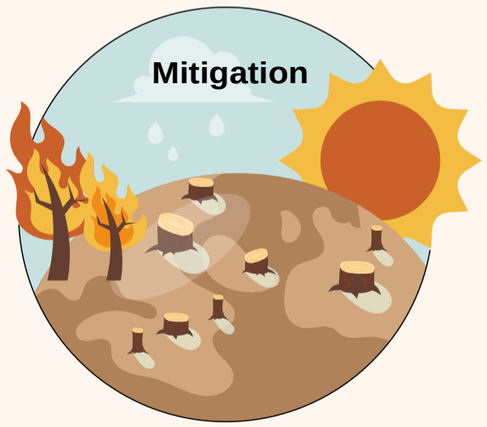
WHAT IS CSA?

CSA is an approach that:

- Transforms and reorients agricultural systems by positively addressing the relationship between agriculture and climate change.
- Builds resilience to climate change and links adaptation and mitigation opportunities.
- Maximises adaptation and mitigation benefits from farm to landscape – at different levels - from local to global - and over short and long time horizons, taking into account national and local specificities and priorities.

Enhanced productivity: increase in yields and incomes

Adaptation: the process of adjustment to actual or expected climate and its effects to moderate harm or exploit beneficial opportunities



Mitigation: the removal, reduction, or prevention of GHG emissions

There are seven types of CSA practices:

- Soil management;
- Livestock management;
- Forestry; and
- Crop management;
- Fisheries and aquaculture;
- Energy and management.
- Water management;

Technologies and practices promoted for climate change adaptation and mitigation are categorised into different 'smartness criteria':

- **Weather and knowledge-smart:** Generating and disseminating weather and meteorological information to farmers assists them in making informed decisions – use of technology and media.
- **Water-smart:** Technologies and practices which minimise yield losses due to extreme weather conditions – e.g. rainwater harvesting and storage, drip irrigation, drainage management, cover crops, flood/drought tolerant varieties.
- **Nutrient/carbon-smart:** Reduce GHG emissions – e.g. soil nutrition management using organic fertiliser, intercropping, residue retention, manure management, zero/minimum tillage.
- **Seed/breed-smart:** High quality seeds of locally adapted varieties and improved livestock breeds are key to enhanced productivity – e.g. drought/disease/flood tolerant crop varieties, heat tolerant livestock breeds, pest and disease resistant cultivars, nutrient efficient cultivars.
- **Institution/market-smart:** Institutional strengthening to assist farmers in accessing resources, information and markets as well as to address gender inequality – e.g. inter-sectoral linkages, capacity building, financial services, market information dissemination.

Why adopt CSA?

The agricultural sector in Kenya employs over 80% of the rural workforce and provides more than 18% of formal employment. The sector aims to achieve an innovative, commercially oriented, modern agricultural sector through institutional reforms, increased productivity, land use transformation, greater access to markets, and the development of arid and semi-arid lands. However, the sector is predominantly rain-fed and therefore vulnerable to climate change.
It is not only impacted by climate change but also contributes to the problem. It is the largest source of GHG emissions and was responsible for one third of Kenya's total emissions in 2010.

CSA addresses the triple challenge of:

- A need for increased quantity, quality and diversity of food, everywhere and for everyone;
- A need to adapt to climate change; and
- A need to contribute to climate change mitigation.

KENYA CSA STRATEGY

To guide the implementation and adoption of CSA, the sector developed the Kenya Climate Smart Agriculture Strategy 2017-2026 (KCSAS). The overall objective of the KCSAS is to build resilience and minimise emissions from agricultural farming systems for enhanced food and nutritional security and improved livelihoods.

Other specific objectives include:

- To enhance the adaptive capacity and resilience of farmers, pastoralists and fisher-folk to the adverse impacts of climate change.
- To develop mechanisms that minimise GHG emissions from agricultural production systems.
- To improve coordination and collaboration amongst institutions and stakeholders in CSA.
- To address crosscutting issues that adversely affect or enhance CSA.

KENYA CSA IMPLEMENTATION FRAMEWORK

The Kenya Climate Smart Agriculture Implementation Framework 2018-2027 (KCSAIF) was developed to implement the KCSAS. It was created to address the impacts of climate change challenges on agricultural growth and development. The framework is aligned with the Government's commitments and obligations to guide the country's transition towards a low-carbon, climate-resilient development pathway.

Efficient tracking of the climate change response in the agricultural sector is a prerequisite to demonstrate progress in the implementation of the KCSAS. Consequently, the M&E Framework was developed as an integral component of the KCSAIF to ensure that strategic objectives are achieved in a cost-effective, coordinated, and harmonised way at both the national and county levels.

Essentially, the M&E Framework aims to guide coordinated, effective, efficient and transparent data collection, analysis, and use, and the provision of information that includes indications of impact, outcomes, and outputs. These are well articulated in the CSA M&E Tool.

KENYA CSA M&E FRAMEWORK

The Kenya CSA M&E Framework was developed through several consultative stakeholder meetings under the leadership of the Ministry of Agriculture's CCU. The stakeholders included technical experts from the CSA-MSP, drawn from ministries, state departments and non-state agencies.

The document underwent various stages of development including:

- Analysing the KSCAS and KCSAIF to establish the expected goals, outcomes, impacts and indicators. The team also developed metadata to be used together with the Kenya CSA M&E Framework.
- Document design and the development of a draft document with technical assistance from experts.
- Review of the document by the CSA-MSP with technical assistance.
- Finalisation and adoption of the document in 2021.

The document is facilitated (technical and financial support) by various organisations and agencies including the Food and Agriculture Organization of the United Nations (FAO), CIAT, and the United Nations Development Programme (UNDP).

Purpose of the CSA M&E Framework

Under the UNFCCC, the Paris Agreement sets out the ETF for climate change action and support. Kenya is expected to provide information on mitigation, adaptation, and the support received. Kenya's transparency framework is based on the MRV+ system defined in the NCCAP 2013-2017 as **"an integrated framework for measuring, monitoring, evaluating, verifying, and reporting results of mitigation actions, adaptation actions and the synergies between them."** The MRV+ system generates information for national and international reporting requirements. The purpose of this CSA M&E Framework is to track whether the scheduled KCSAIF goals, objectives, outcomes, outputs, and other factors are proceeding as planned.

An effective CSA M&E Framework will help guide the implementation of the KCSAIF and by extension the KCSAS. The purpose of the CSA M&E Framework, therefore, is to ensure that the implementation of the KCSAIF is efficient and that stakeholders can measure the progress of initiatives arising from the KCSAS and the KCSAIF.

The objectives of the CSA M&E Framework are:

- To guide the monitoring and evaluation of progress toward the KCSAIF goals, outcomes, and indicators, to ensure efficiency, effectiveness, and accountability during implementation.
- To enforce a culture of results-based M&E and provide a foundation for an evidence-based decision-making process.

Key terms in monitoring and evaluation

There are several terms used in M&E which are important for facilitating common understanding.

Some of the key words include:

Indicator: A quantitative or qualitative factor or variable that provides a simple and reliable basis for assessing achievement, change, or performance. It is a unit of information measured over time that can help show changes in a specific condition. A given goal or development objective can have multiple indicators.

Result: The measurable output, outcome, or impact—intended or unintended, positive or negative—of a development intervention.

Outcomes-outputs (M&E) matrix: A table presenting information on performance questions; information gathering requirements, including indicators; reflection and review events with stakeholders; and resources and activities required to implement a functional M&E system. This matrix lists how data will be collected, when, by whom, and where. Outcomes and outputs are all results in a result chain framework or matrix.

- **Outcome:** The result achieved at the level of 'purpose' in the objective hierarchy. It is part of the impact, a result at purpose and goal level.
- **Output:** The immediate, intended, and tangible—that is, easily measurable and practical—results to be produced through sound management of agreed-upon inputs. Outputs may also include changes resulting from interventions that are necessary to achieve outcomes at the purpose level.

Metadata means 'data about data'. Metadata is defined as data that furnishes information about one or more aspects of other data; it is used to summarise basic information about data which can make tracking and working with that data easier.

ACTIVITY: UNDERSTANDING THE DIFFERENCES BETWEEN OUTPUTS, OUTCOMES AND INDICATORS

A non-profit organisation is Implementing a project to improve agricultural productivity in a rural area. Can you identify one outcome, one output and one indicator for the project?

Reminder: The outcome is the long-term impact that the projects aim to achieve. The output is the immediate result of the project. The indicator is the specific measurable characteristic that demonstrates progress towards the outcome.

For example:

- **Outcome:** Access to and use of adaptive technologies are enhanced in the rural area.
- **Output:** Improved access to training; increased access to market for rural farmers; expansion of area under climate-smart cultivation; adoption of climate-smart crops and livestock breeds; and the adoption of improved adaptive technologies for the capture and culture of fish.
- **Indicator:** Number and type of CSA adaptive technologies in use for crops, livestock and fisheries; number of Public Private Partnerships involved in the promotion of improved CSA technologies; the acreage under CSA technologies; the quantity and value of climate-smart products marketed; and the number of farms using CSA technologies such as conservation agriculture.

(Refer to the Kenya CSA Framework for further examples.)

Key resources

Key resources to be referred to for additional information are as follows:

- Ministry of Agriculture, Livestock, Fisheries and Irrigation. 2017. Kenya Climate Smart Agriculture Strategy 2017-2026. Government of the Republic of Kenya.
- Ministry of Agriculture, Livestock, Fisheries and Irrigation. 2018. Kenya Climate Smart Agriculture Implementation Framework 2018-2027. Government of the Republic of Kenya.
- MoALFC. 2021. Kenya CSA M&E Framework. Ministry of Agriculture, Livestock, Fisheries and Co-operatives. Government of the Republic of Kenya.

Climate-Smart Agriculture Reporting Tool

WHAT YOU WILL LEARN

- Introduction to the CSA Reporting Tool
- Getting started
- Creating and activating an account
- Types of users and their roles
- Data form responses
- Structure and elements of the data form
- Standard Operating Procedure
- Scalability and sustainability of the tool

Purpose

This module presents the CSA Reporting Tool which provides a means for effective, efficient and transparent reporting of climate change responses in the agricultural sector. The module seeks to equip sub-national stakeholders with the knowledge and skills required to use the CSA Reporting Tool.

Learning outcome

- Ability to describe the components and structure of the CSA Reporting Tool.
- Ability to demonstrate understanding of the Standard Operating Procedure of the CSA Reporting Tool.
- Ability to use the CSA Reporting Tool to submit a report on climate change responses undertaken at the sub-national (ward, sub-county, county) and national levels.

INTRODUCTION TO THE CSA REPORTING TOOL

The CSA Reporting Tool is an innovative platform that is based on the KCSAIF guidelines. It was developed by partners from government, the private sector, research organisations, non-governmental organisations (NGOs), CSOs and community-based organisations (CBOs). The CSA Reporting Tool was developed in response to the felt need for a digital CSA tool for effective, efficient and transparent reporting of climate action in the agricultural sector. The tool is configured to accept data input from various sources and to store it in a centralised database for analysis and further action. To facilitate understanding and adoption of the tool by CSA-MSP stakeholders at national, county, sub-county and ward levels, this module provides background knowledge on the tool and a detailed step-by-step guide on how to use it.

Tool usability context

The online web application is designed for use by CSA-MSP stakeholders at the county and national level who are to serve as reporters, reviewers and administrators in climate action related projects.

The tool can be accessed using a variety of devices such as tablets, laptops, desktops, and mobile phones. However, it cannot be used offline, connection to the internet is required to access the tool and to submit data.

The main aim of the tool is to support data reporting on CSA projects at national, county, sub-county, and ward levels. The data is then used to track the progress of climate action. The KCSAIF sets the scope of the tool with requisite indicators to measure advancement towards the goals, impacts, outputs, and outcomes.

The indicators are organised in four main outcomes:

- **Outcome 1:** Institutional coordination of CSA policy and implementation;
- **Outcome 2:** Agricultural productivity and integration of the value chain approach;
- **Outcome 3:** Building resilience and appropriate mitigation actions; and
- **Outcome 4:** Communication systems on CSA extensions and agro-weather issues.

Why use the CSA Reporting Tool?

There are several benefits to using the CSA Reporting Tool, including:

- **Accuracy** – The tool ensures that the data collected is accurate and of high quality. It provides relevant and meaningful information that is aligned with the reporting objectives from the framework.
- **Ease of use** - The tool is user-friendly, accessible, and intuitive, making it easy for users to collect and enter data.
- **Scalability** - The tool can handle large amounts of data and support growing data reporting needs.
- **Flexibility** - The tool is customisable and flexible, allowing for changes to be made as needs evolve over time. Additionally, the tool allows for the creation of custom reports, enabling users to tailor reports to their specific needs and requirements.
- **Security** - The data collection tool ensures that data is protected from unauthorised access and breaches. Therefore, the tool ensures the security of data, protecting sensitive information and data privacy.
- **Collaboration** - The tool allows for collaboration and sharing of data amongst multiple users, if necessary. This promotes transparency, accountability and trust.
- **Integration** - The tool can integrate with other systems such as databases and data visualisation tools, thereby facilitating more comprehensive data analyses, and through its visualisation options, allows for easy interpretation.

GETTING STARTED

Accessing the tool

The CSA Reporting Tool is an online website data collection tool. The tool is designed to accept data input from various sources and to store it in a centralised database for analysis and further action. This requires an internet connection.

Keywords relating to internet access are defined below:

Browser - Is an application that can be used to access websites either using a computer or a mobile phone.

Different internet browsers

URL (Uniform Resource Locator) - Incorporates the domain name along with other detailed information to create a complete web address. The URL directs the browser to a specific page online called a web page. In essence, it is a set of directions, and every web page has a unique one.

Constitution of URL

Domain name - Is a unique, easy-to-remember address used to access websites, such as 'alliancebioversityciat.org', 'google.com', and 'facebook.com'.

DOMAIN NAME

https://**alliancebioversityciat.org**/stories/launch-kenya-climate-smart-agriculture-multi-stakeholder-platform-strategic-plan-kenya-csa

URL

Access the CSA Reporting Tool by opening a browser application and loading the following URL: http://170.187.184.207:4200/#/home. Once you are logged in, you will see a webpage with several navigation tabs (Home, About, Overview, Resources, Partnerships and Contacts) located at the top right of the screen.

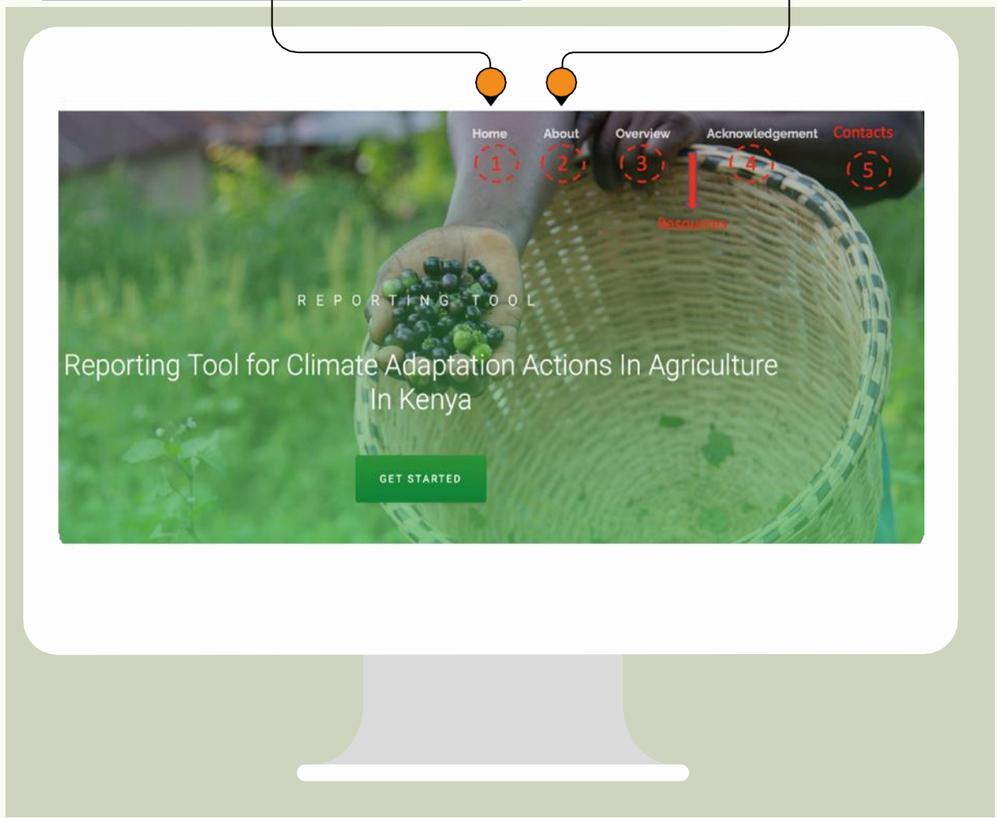
Homepage window

Description of the navigation tabs

This section of the module gives information on each of the navigation tabs that are visible on the homepage.

HOME TAB - The Home tab is the main landing page that you will be directed to upon visiting the site. It provides an overview of the site's purpose and content and includes links to other sections or pages within the site such as About, Overview, Resources, Partnerships, Contacts, and a button to log in and access the data collection form. It provides summary information about the tool and project.

ABOUT TAB - The About tab gives information on the website and the details of key persons such as creators, owners, or administrators. This tab also provides the background and history of the website and information on the partners behind its development.



OVERVIEW TAB

The Overview tab gives a summary of the main goals, objectives, and the scope of the tool as follows:

Framework: Kenya CSA M&E Framework 2018-2027.

Goal: To advance towards a sustainable, long-term, low carbon, and climate-resilient national development plan that meets the aspirations of Vision 2023.

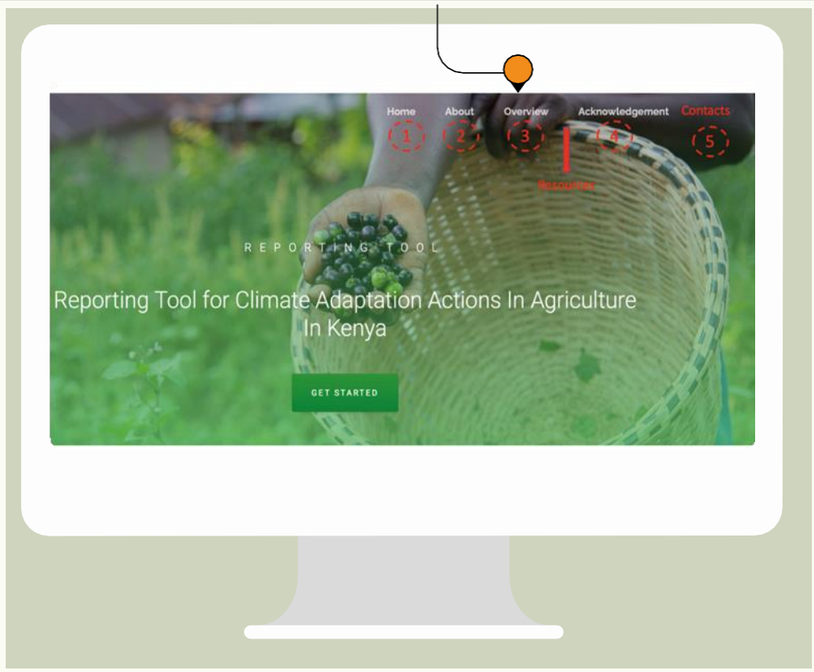
Scope: The creation of a tool that facilitates the development of a sustainable system for efficient and effective governance of climate resilience and low carbon growth in the agricultural sector.

Timeline: The KCSAIF will be implemented from 2018 to 2027.

Key deliverables: A website that is designed with improved user experience, increased website traffic, and higher customer engagement to enable effective, efficient and transparent reporting of indicators at county and national levels.

Responsibility: The tool will be managed by the CCU within the Ministry of Agriculture, Livestock Development on behalf of the CSA-MSP project partners at national and county levels. The partners consist of national and county governments, the private sector, NGOs, CSOs, and CBOs, amongst others.

Beneficiaries: The main beneficiaries of the tool are decision makers in the agricultural sector, donors, county and national governments, and the UNFCCC national focal point.



RESOURCE TAB

The Resource tab provides additional information and materials related to the main content or purpose of the website. This tab contains a variety of resources, including:

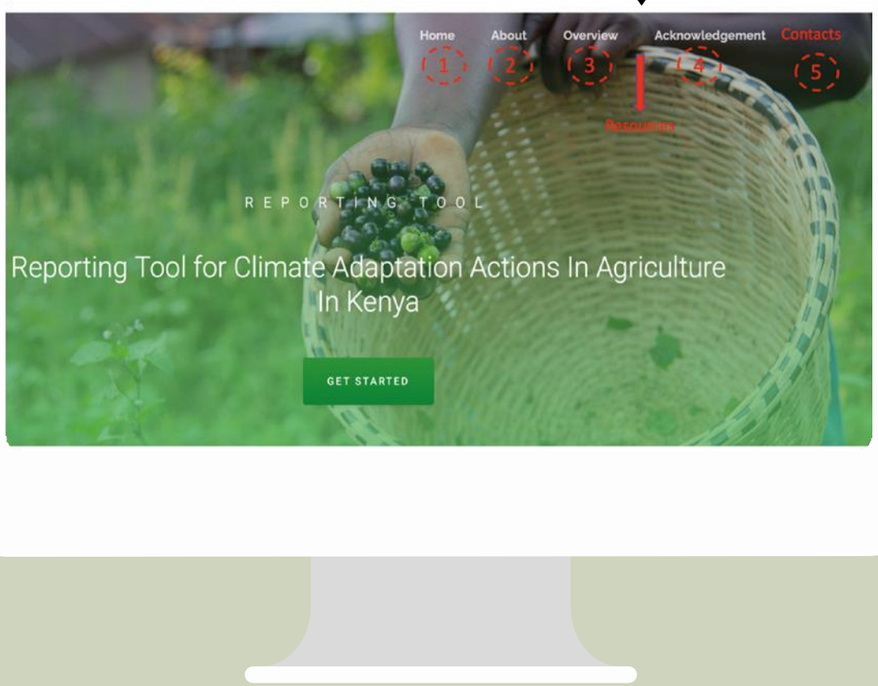
Downloadable files: Such as PDFs, case studies, or other documents providing in-depth information on the tool and framework.

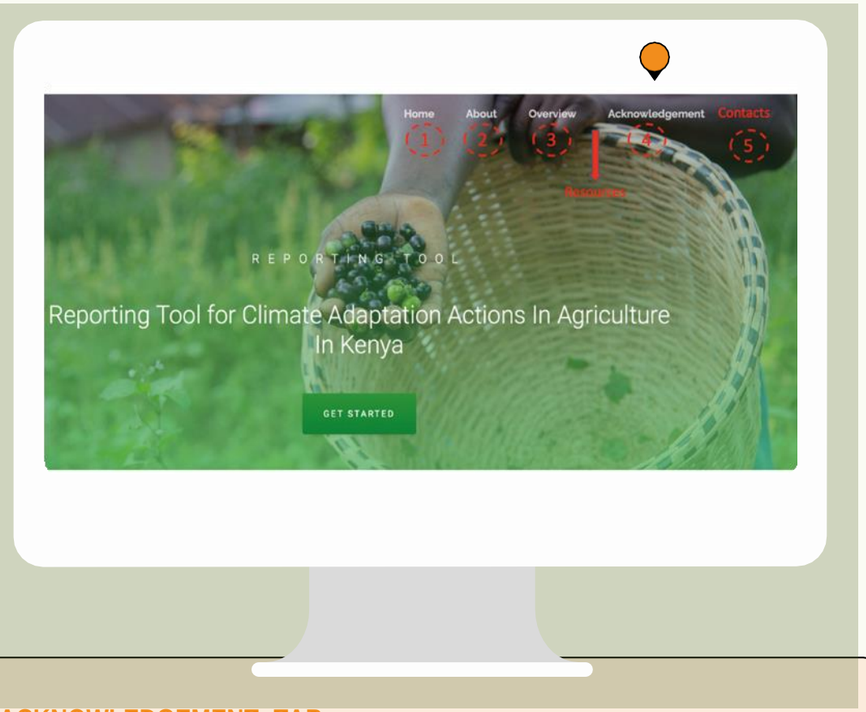
Links to external resources: This includes links to articles, blogs, or other websites that provide further information on the framework and the tool.

Videos: This includes tutorial videos and demonstrations that provide information to enhance the user's website experience.

Images: This includes galleries, infographics, or other visual resources that provide additional information to support the main content.

Glossary: This includes a list of terms and definitions related to the subject matter of the website.





ACKNOWLEDGEMENT TAB

The Acknowledgement tab gives credit to individuals, organisations, or entities that contributed to the content or development of the tool, and/or supported the development of the website, as follows:

Contributors: This includes a list of individuals who have written articles, created videos, provided images or other content that is used on the website. They include climate action experts from government, research organisations, the private sector, CSOs, CBOs and NGOs.

Partners: This includes a list of organisations, companies, or other entities that have partnered with the developers of the website to provide additional resources, information, or other forms of support. The partners include government, research organisations, the private sector, CSOs, CBOs and NGOs.

Sponsor: The United Nations Environment Programme Copenhagen Climate Centre (formerly the UNEP DTU Partnership).

Credits: This is a list of individuals or organisations that have provided technical support, design services, or other forms of assistance in the development and maintenance of the website. They include the Alliance of Bioversity International and CIAT in collaboration with the MoALFC, and the CSA-MSP.

CONTACT TAB

The Contact tab provides users with information on how to get in touch with the website owner, operator, or support team. The tab contains a variety of information and resources, including:

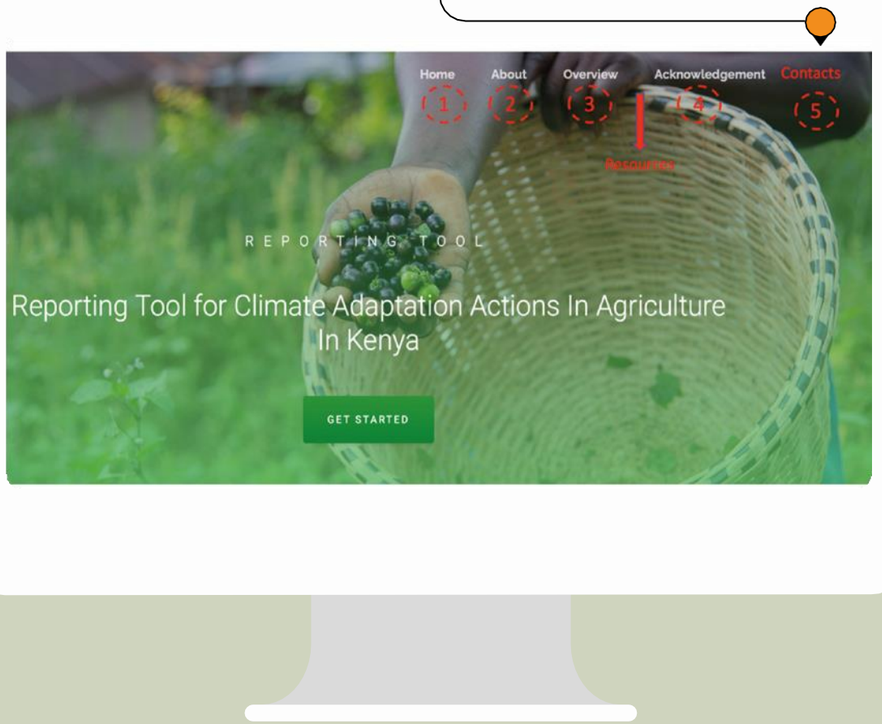
Contact form: This is a web form that users can fill out to send a message directly to the website owner or support team.

Email address: This is an email address that users can use to send a message directly to the website owner or support team.

Phone number: This is a phone number that users can call to get in touch with the website owner or support team.

Mailing address: This is a physical address that users can use to send mail to the website owner or support team.

Social media: This includes links to the website owner or support team's social media profiles, such as Facebook, Twitter, or LinkedIn.

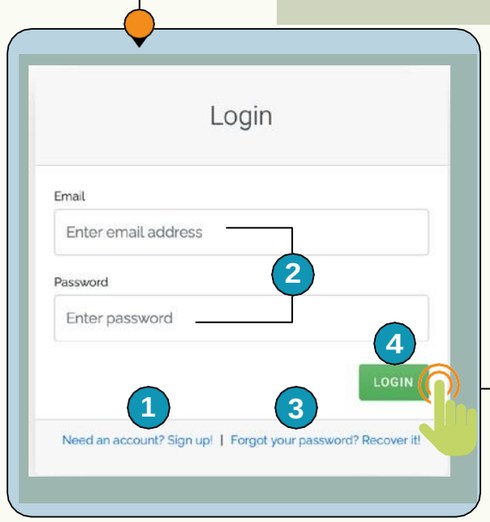


CREATING AND ACTIVATING AN ACCOUNT

On the website home page, click the button **'GET STARTED'**.

Website home page

After clicking **'GET STARTED'**, a pop-up login window will appear.



Setup and login window

Setting up an account window

Click the button labelled **'NEED AN ACCOUNT? SIGN UP!'** to set up an access account. This is only done once. A new pop-up window **'CREATE ACCOUNT'** will appear.

Setting up an account window

Enter your details into the window as follows:

1. Enter your full name e.g. Jane Doe.
2. Enter your valid email address.
3. Enter a strong password. A strong password is typically a combination of the following elements:
   - **Length:** It should be at least 12 characters long. The longer, the better.
   - **Complexity:** Use a mixture of upper- and lower-case letters, numbers, and symbols. Avoid using easily guessable information such as birthdays or names.
   - **Unpredictability:** Avoid using easily guessable patterns, such as '123456789' or 'qwerty'.
   - **Uniqueness:** Do not use the same password for multiple accounts.

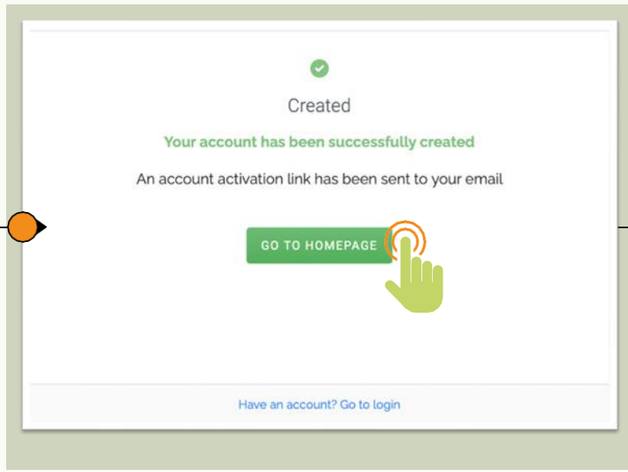
Some examples of strong passwords include:

- C0mpl3xP@ssw0rd!
- 1m@g1n@t!v3P@ssw0rd
- P@ssw0rdW1thSymb0ls#23

4. Lastly, click **'CREATE ACCOUNT'**.

Activating your account

When the account setup is complete, a new pop-up window will appear, it indicates that your account creation is successful. Next, go to your email account and click the activation link sent to you.

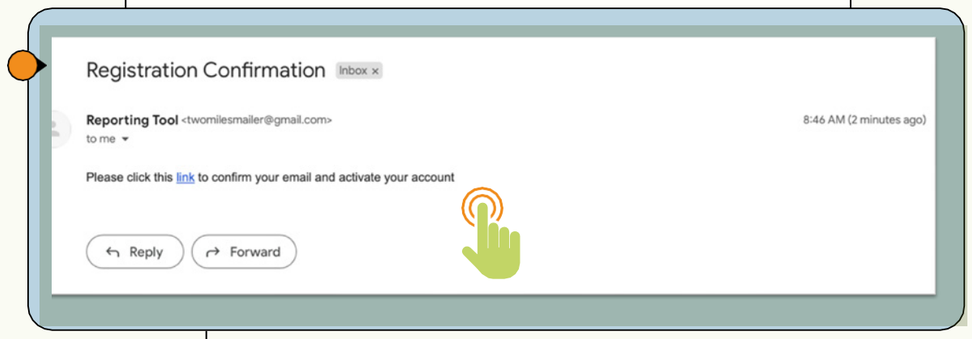


MODULE 03

CSA Reporting Tool

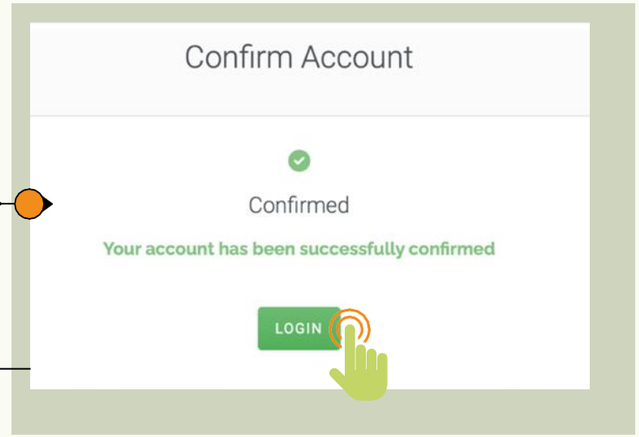
Successful account creation window

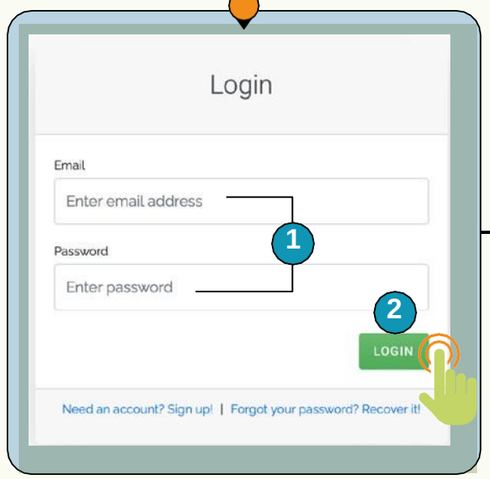
In the inbox of your email account, the email message will appear as follows, with the subject headed 'Registration Confirmation'. Click on the blue link to confirm your account.



Confirmation email window

A successful activation window will appear, click **'LOGIN'**.





Successful account confirmation window

A new pop-up window will appear, enter the following details:

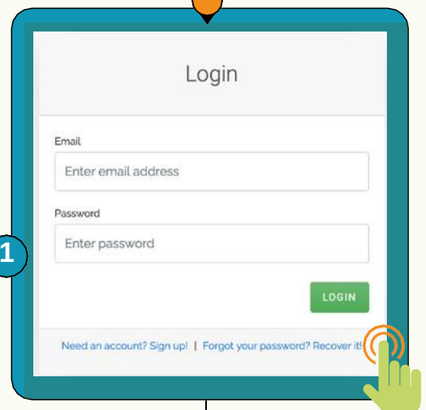
1. The email address you used during the account setup; and
2. The password you entered during the setup.

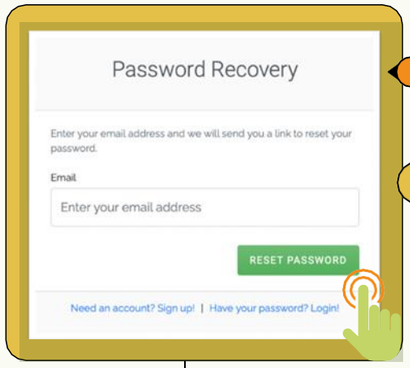
Login window

If you forget your password, you can recover your account by resetting your password as illustrated below:

How to reset your password

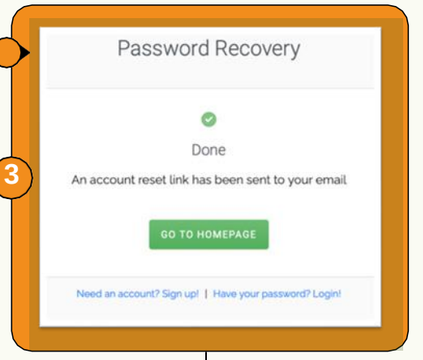
From the login window, click on **'FORGOT YOUR PASSWORD? RECOVER IT'** (option 3 below).

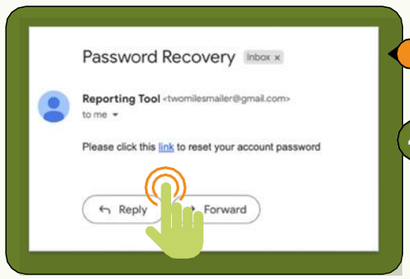




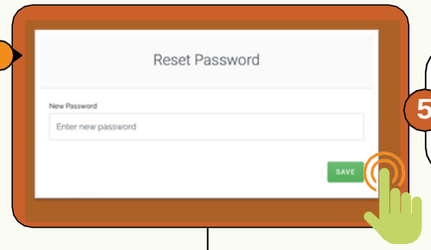
2 On the next pop-up window, enter the email address used during the setup of your account.

A successful password recovery pop-up window will appear. 3

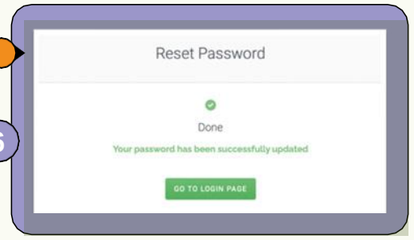




4 On the next pop-up window, enter the email address used during the setup of your account.



5 On the next pop-up window, enter your new strong password and click **'SAVE'**.



6 A new pop-up window will appear showing your password has been successfully updated.

Click on **'GO TO LOGIN PAGE'** and enter your email address and your new password and log in to the system.

After you have successfully logged in, proceed to set up your data collection form on the landing page.

TYPES OF USERS AND THEIR ROLES

The CSA Reporting Tool is managed by a team of three user categories namely, reporters, reviewers and administrators. The roles of the users are described as follows:

Reporters

The repaorters play a key role in the CSA reporting process. Their task is to gather the documented CSA actions from their organisations'/ institutions' projects within a specified reporting period and submit them through the CSA Reporting Tool. The information must be accurate and representative of the organisation's CSA related efforts in the designated location.

Reviewers

The CSA reviewers, serve as the CSA desk officers at the county level, they oversee the reporting process for county level stakeholders and also ensure the quality of all the reports submitted by reporters/ organisations. Working with the administrators and the county's CSA-MSP steering committee, the reviewers will ensure that all stakeholders are properly profiled and given access to the reporting tool for their respective organisations/ institutions to report.

Administrators

Administrators play a crucial role in the reporting of CSA actions across the country, operating primarily from the Head Office of the Ministry CCU headquarters. Their responsibilities include assigning roles to the reporters and reviewers and ensuring that the reporting tool functions properly. The administrators also profile organisations/institutions with the necessary credentials to access the tool for reporting their CSA activities.

The administrators are responsible for verifying the quality of submitted data, conducting statistical analyses, consolidating the data, and developing the final report for submission to the CCD. They work closely with the reviewers to ensure that all data are complete and corrected.

DATA FORM RESPONSES

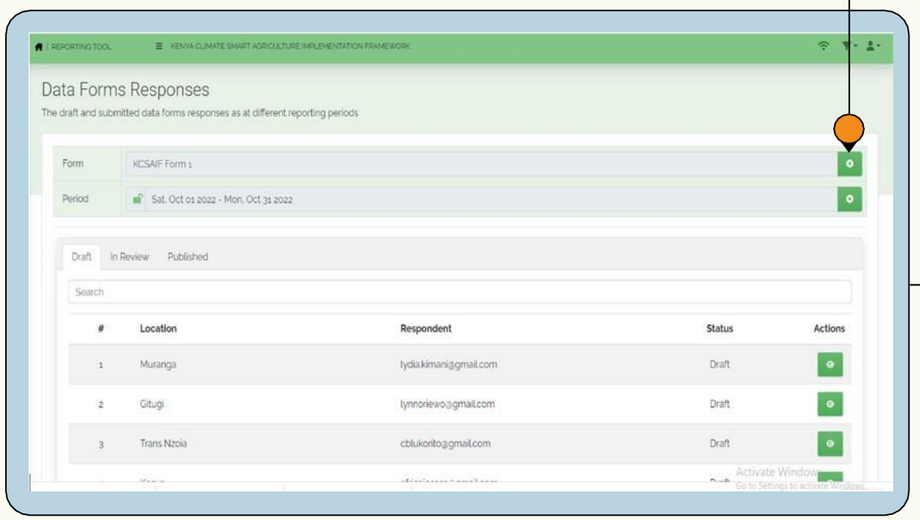
This section outlines how to access data forms after approval by an administrator:

Website home page

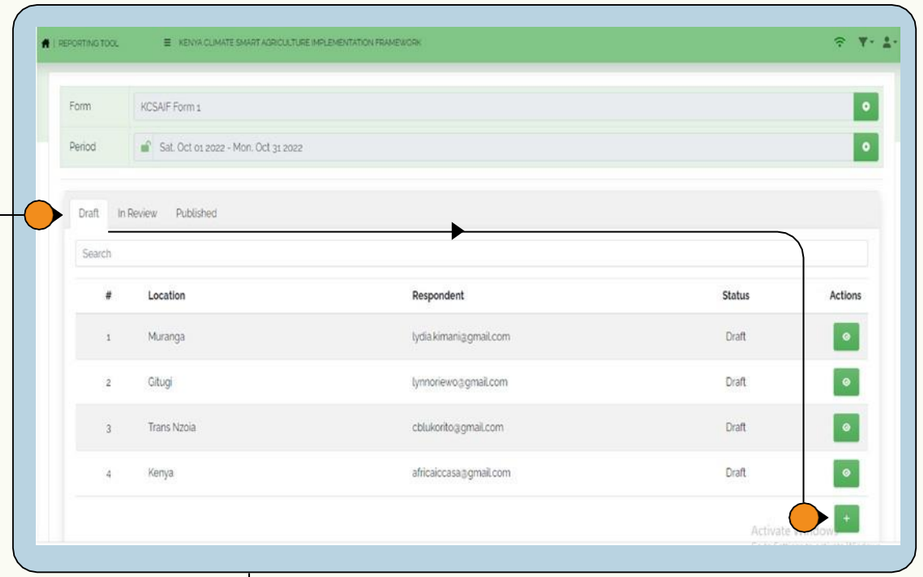
Click the **'GET STARTED'** button.

A data response form window will open showing the type of form and the reporting period.

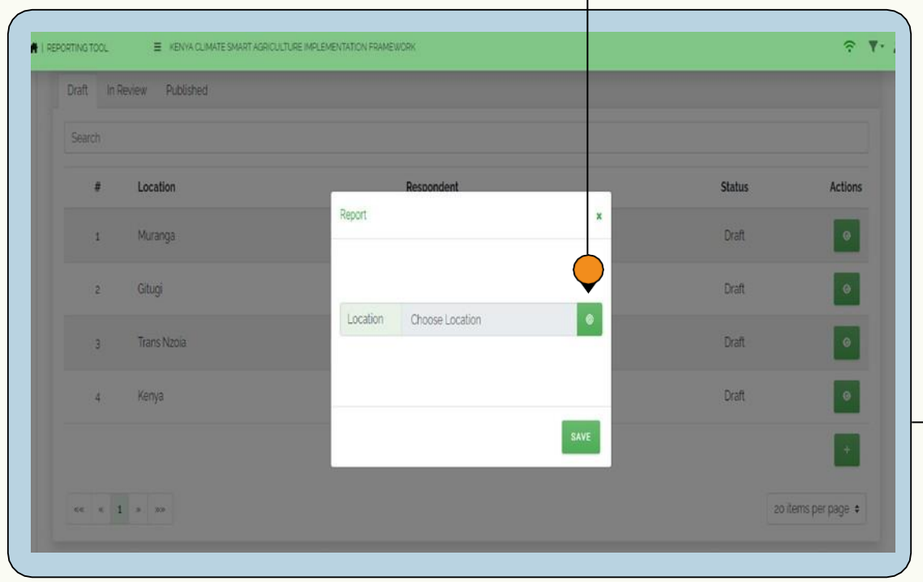
- Ensure the form is a **'KCSAIF1'**.
- Click the button on the right of the form to select the reporting period.



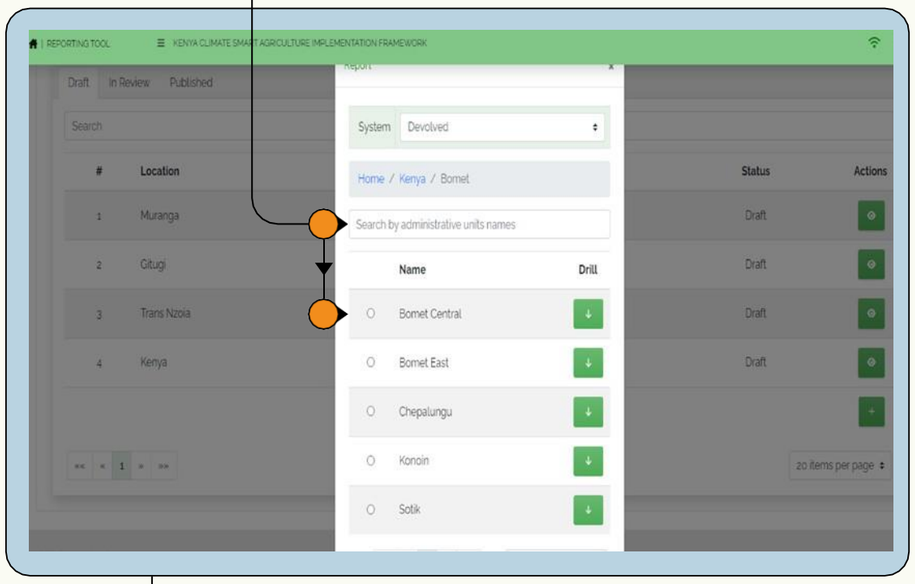
Next, click on the **DRAFT TAB**, then click the **'+'** sign on the bottom right of the window to select the location.



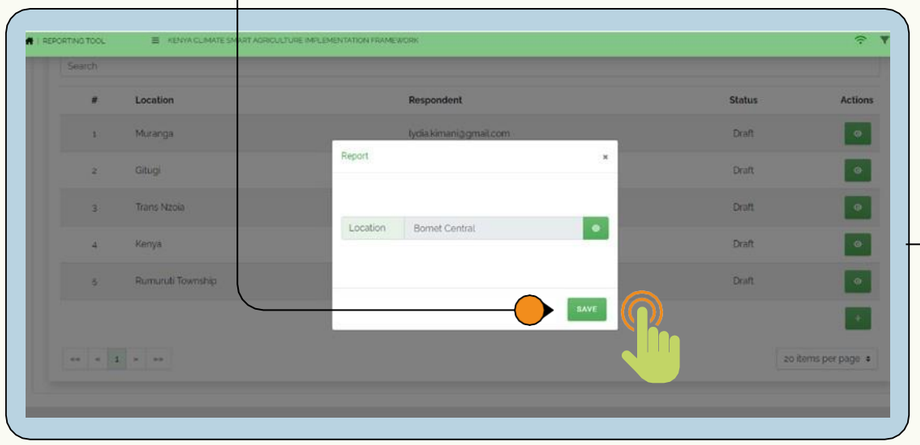
A small pop-up window will appear. Click the button to select the appropriate location.



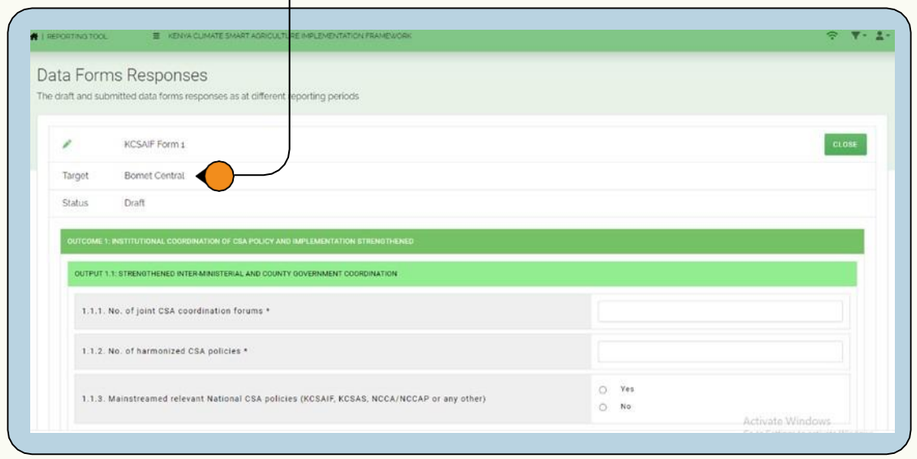
After clicking the button, another small window will open with a list of administrative units. Search and select the name of the administrative unit you require.



Upon selection of the name of the administrative unit, click the **'SAVE'** button.

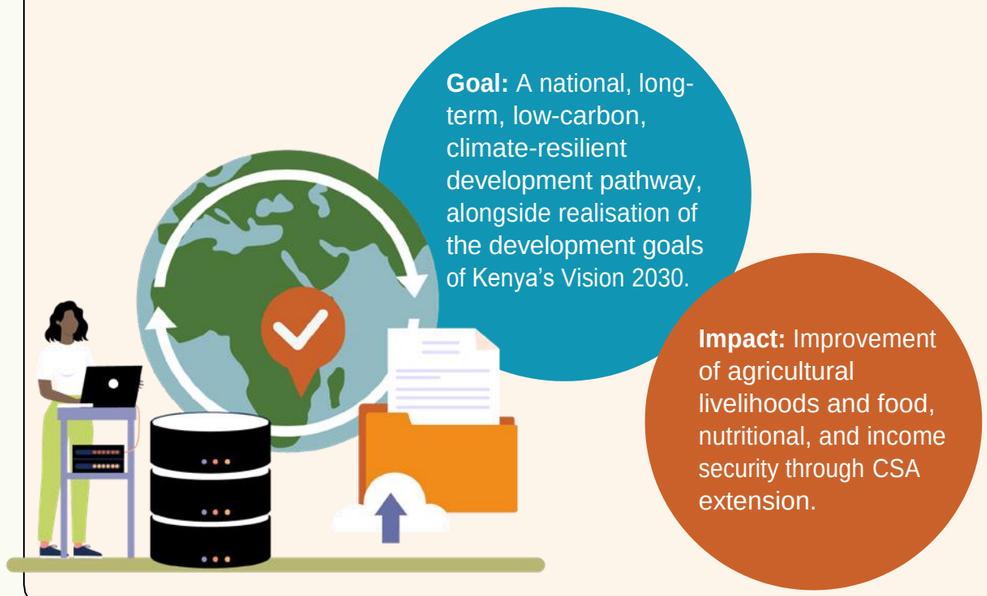


After saving, the Data Form Response window will open based on the target location for data entry.



STRUCTURE AND ELEMENTS OF THE DATA FORM

The form includes a set of indicators that can effectively track the progress of climate actions in the agricultural sector. It provides all stakeholders undertaking agricultural-sector climate actions with the requisite indicators to measure advancements towards the goal, impact, outcomes, and outputs outlined in the KCSAIF, thus enabling effective M&E reporting.



Units of measure

Indicators	Unit of measure
Climate change adaptation investments in the agricultural sector	Ksh.
GHG emissions per unit of agricultural produce per commodity	Kg CO2eq/unit
Renewable energy investments in the agricultural sector	Ksh.
Proportion of climate-resilient households	%
Total agricultural-sector GHG emissions	Metric Tons CO2eq
Prevalence of severe food insecurity in target areas	%
National average intake of calories per capita	Kcal per capita
Prevalence of stunted children under five years old	%
Household dietary diversity score, which is an index of household food availability, access, utilization, and stability of supply	Index

Outcome 1: Strengthened institutional coordination of CSA policy and implementation

The aim of Outcome 1 is to demonstrate a sustainable system for achieving coordinated, coherent, and cooperative governance of climate-resilient, low-carbon growth in the agricultural sector through improved inter-ministerial and county government coordination. This is to be achieved through:

- Deepening partnerships between state and non-state actors; and
- Improving linkages between actors in the agricultural research system, advisory services, and producers.

Indicators and units of measure

Indicators	Unit of measure
Indicator 1.1: Total amount of finances invested in CSA	Ksh.
Indicator 1.2: Existence of functional CSA coordination mechanism at the national and county levels	Descriptive
Indicator 1.3: Presence of up-to-date CSA policies and strategies in place at both national and county levels of governance	Descriptive
Indicator 1.4: Existence of functional research-extension-farmer linkages mechanisms	Descriptive

The expected outputs include:

- Output 1.1: Strengthened inter-ministerial and county government coordination;
- Output 1.2: Strengthened partnerships amongst state and non-state actors;
- Output 1.3: Strengthened research-extension-farmer linkages;
- Output 1.4: Enhanced enabling environment for CSA; and
- Output 1.5: Enhanced capacities of organisations to address issues relevant to CSA.

Outcome 2: Agricultural productivity and integration of the value chain approach

The aim of Outcome 2 is to mainstream CSA to support the transformation of Kenya's agricultural sector into an innovative, commercially oriented, competitive, and modern industry that contributes to poverty reduction and improved food security in Kenya.

Indicators and units of measure

Indicators	Unit of measure
Indicator 2.1: Changes in productivity of various value chains	Descriptive
Indicator 2.2: Changes in the quantity of marketed produce or products derived from value-added commodities	Tonnes
Indicator 2.3: Change in number of value chain actors in the agricultural sector adhering to market standards	No.
Indicator 2.4: Volumes of strategic reserves of foods or feeds stored	Tonnes
Indicator 2.5: Percentage change in area of land under efficient irrigation systems	%
Indicator 2.6: Proportion of small and medium-sized enterprises (SMEs) using green technologies for value addition	%
Indicator 2.7: Number of green jobs created	No.
Indicator 2.8: Change in percentage of post-harvest losses by value chain	%

The expected outputs include:

- Output 2.1: Improved access to, and use of, adaptive technologies (TIMPS);
- Output 2.2: Enhanced efficiency of irrigation;
- Output 2.3: New products developed, and value addition of commodities enhanced;
- Output 2.4: Enhanced competitiveness and markets access for climate smart products; and
- Output 2.5: Improved food and feed storage and distribution.

OUTCOME 2: AGRICULTURAL PRODUCTIVITY AND INTEGRATION OF VALUE CHAIN APPROACH	
OUTPUT 2.1: IMPROVED ACCESS TO AND USE OF ADAPTIVE TECHNOLOGIES (TIMPS)	
2.1.1. Types of Adaptive technologies (TIMPs) in use along value chains (crops, livestock, fisheries)	
2.1.2. Types of CSA products certification (e.g., organic or Global G.A.P)	

Outcome 3: Building resilience and appropriate mitigation actions

The aim of Outcome 3 is to reduce the vulnerability of agricultural systems by cushioning them against the impacts of climate change and to reduce GHG emissions where possible.

Indicators and units of measure

Indicators	Unit of measure
Indicator 3.1: Percentage change in GHG emission intensity	%
Indicator 3.2: Total land under integrated soil fertility and water management practices	Ha
Indicator 3.3: Total area under Ecosystem management and degraded land rehabilitation	No.
Indicator 3.4: Volume of water harvested and stored for agricultural use	M3
Indicator 3.5: Existence of Monitoring Reporting and Verification (MRV+) systems	Descriptive

The expected outputs include:

- Output 3.1: Soil health improved, and degraded lands rehabilitated;
- Output 3.2: Enhanced conservation of water and other natural resources;
- Output 3.3: Enhanced access to climate risk related agricultural insurance and other safety nets; and
- Output 3.4: Synergies between adaptation and mitigation promoted.

OUTCOME 3: BUILDING RESILIENCE AND APPROPRIATE MITIGATION ACTIONS	
OUTPUT 3.1: SOIL HEALTH IMPROVED, AND DEGRADED LANDS REHABILITATED	
3.1.1. No. of farmers adopting climate smart soil fertility management practices	

Outcome 4: Communication systems on CSA extension and agro-weather issues actions

The aim of Outcome 4 is to strengthen communication systems related to CSA extension and agro-weather issues by:

- Generating, communicating, and disseminating CSA knowledge;
- Enhancing access to climate information and agro-weather advisory services and early warning systems; and
- Developing capacity in climate risk contingency planning.

Indicators and units of measure

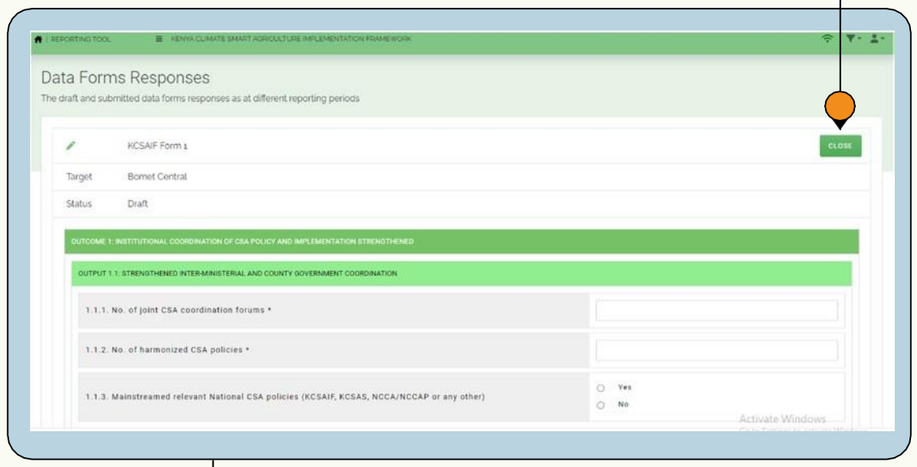
Indicators	Unit of measure
Indicator 4.1: Change in total number of actors with access to CSA information	No.
Indicator 4.2: Existence of functional CSA information management systems	Descriptive
Indicator 4.3: Existence of functional contingency plans for climate risks response	Descriptive
Indicator 4.4: Presence of functional CSA communication strategies.	Descriptive

The expected outputs include:

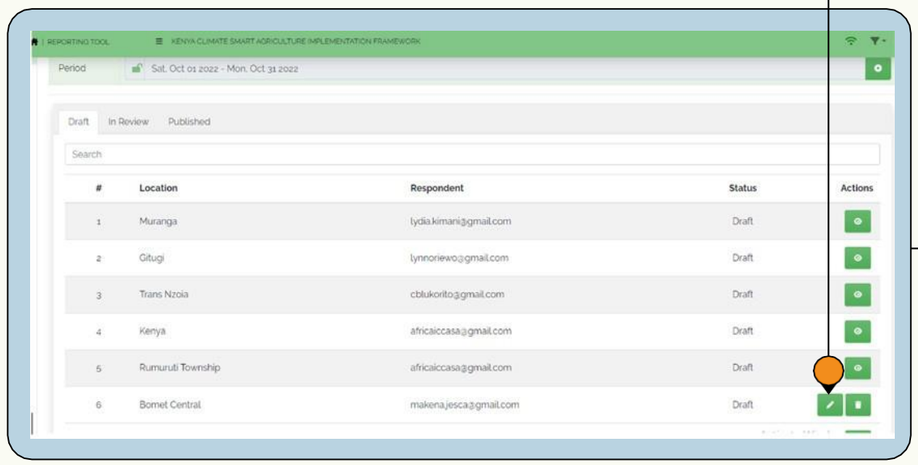
- Output 4.1: Enhanced CSA knowledge generation;
- Output 4.2: Enhanced CSA knowledge communication and dissemination;
- Output 4.3: Enhanced access to climate information and agro-weather advisory services; and
- Output 4.4: Strengthened early warning systems and contingency plans for climate change response.

STANDARD OPERATING PROCEDURE
Form content editing and submission

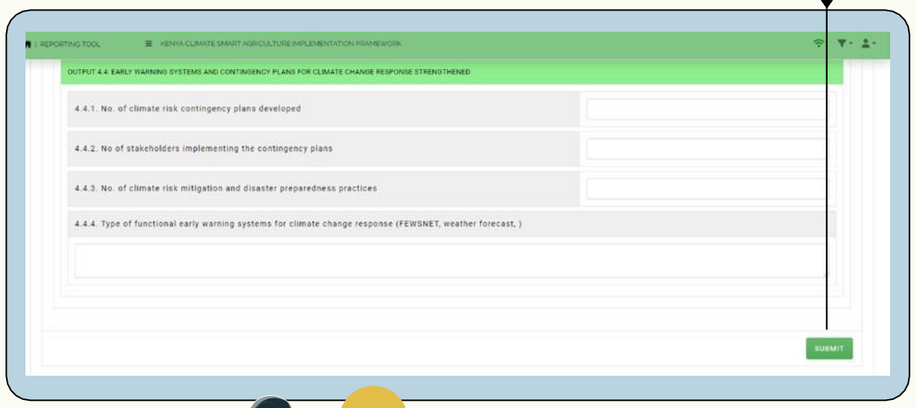
Prior to submission of the completed reporting form, you can edit and close it by clicking '**CLOSE**' at the top right corner of the data form response window.



The filled data form can be accessed for editing by clicking on the pencil icon.



Submit the duly filled reporting form by clicking **'SUBMIT'** at the bottom right of the window.



PLEASE NOTE

- **During data entry, the tool AutoSaves the form; and**
- **The form cannot be edited after submission.**

MODULE 03
CSA Reporting Tool

SCALABILITY AND SUSTAINABILITY OF THE TOOL

Scalability

The CSA Reporting Tool has the potential to be extended to other locations outside the project areas and allows for the attribution and recognition of actors in climate action. Regarding attribution, the tool gives organisations reporting on climate action the chance to be recognised for improving transparency of reporting at the county level. This is crucial for non-state actors who use this information to secure funding from financial institutions, or donors for their respective organisations. Improved recognition allows organisations participating in the reporting process the opportunity to receive priority consideration for future climate change projects at the county level. This incentivises actors in the county to participate in the county CSA-MSP projects and activities, thus contributing further to enhanced climate action in agriculture.

Sustainability

The CSA Reporting Tool enables a continued flow of information that can inform decision-making and resource allocation aimed at enhancing resilience, improving productivity, and reducing emissions. Furthermore, the information availed by the tool can improve cross-sectoral planning and increase access to climate finance. The tool is accessible online and provides the flexibility needed to upload content on climate action. The tool is designed for ease-of-use and quick uploading of content based on a password policy that is set by the relevant partner institutions.

Key resources

Key resources to be referred to for additional information are as follows:

- Ministry of Agriculture, Livestock, Fisheries and Irrigation. 2018. Kenya Climate Smart Agriculture Implementation Framework 2018-2027. Government of the Republic of Kenya.
- MoALFC. 2021. Kenya CSA M&E Framework. Ministry of Agriculture, Livestock, Fisheries and Co-operatives. Government of the Republic of Kenya.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