Climate smart agriculture kenya pdf

The general objective of kenya's Intelligent Agriculture Strategy 2017-2026 (KCSAS) is to adapt to climate change, build the resilience of agricultural systems and minimise emissions for increased food and nutritional security and better livelihoods. The specific objectives of the CCSAS are (i) to increase the adaptation capacity and resilience of farmers, herders and fishermen to the adverse effects of climate change; (ii) establish mechanisms that minimise greenhouse gas emissions from agricultural production systems; (iii) establish a supportive regulatory and institutional framework; and (iv) address cross-cutting issues that adversely affect smart agriculture in the climate field. Four broad strategic areas have been identified for KCSAS: (i) adapting and building resilience by addressing vulnerability to precipitation and temperature changes, extreme weather events and unsustainable land/water management and use; (ii) mitigating greenhouse gas emissions from key and smaller sources in the agricultural sector; (iii) establishing a supportive political, legal and institutional framework for the effective implementation of smart climate farming; and (iv) Minimising the effects of fundamental cross-cutting issues such as human resources capacity and finance, potentially limiting the implementation of smart agriculture's climate objectives. Smart climate farming provides an excellent opportunity to transform the unification of agriculture, development and climate change within the framework of a joint programme through the integration of three dimensions of sustainable development (economic, social and environmental) by jointly addressing food security and climate challenges. CsA therefore sustainably increases agricultural production and incomes, builds the resilience of agricultural systems to climate change and minimises greenhouse gas emissions. However, existing national strategies and interventions, such as the National Action Plan on Climate Change (2013-2017) and the Agricultural Development Strategy (2010-2020), do not sufficiently integrate adaptation, resilience building and mitigation of greenhouse gas emissions into the agricultural sector. As a result, the sector needs a healthy and enabling CSA strategy that will also guarantee productivity and food security while addressing adaptation to and mitigation of climate change.more Who are we leading, Organisation and History What we do projects, products and services where we work on understanding poverty Global data and statistics, research and publications and topics in the field of poverty and development Working with us Work, procurement, training and events The concept of climate-intelligent agriculture (CSA) reflects the ambition to further integrate agricultural development and climate responsiveness. CsA aims to achieve food security and broader development goals within the framework of a changing climate and increasing demand for food. CSA initiatives in a sustainable way increase resilience and minimise greenhouse gas emissions. Gases. planning is essential to address the trade-offs and synergies between the three pillars: productivity, adaptation and mitigation [1]. Addressing challenges in the environmental, social and economic dimensions in a productive environment, CSA's practices coordinate the priorities of several countries and stakeholders in order to achieve more efficient, efficient and fairer food systems. Although this concept is new and still evolving, many of the processes that make up CSA already exist worldwide and are currently used by farmers to manage various production risks [2]. The inclusion of ĆSA requires critical mapping of successfully completed, continuous procedures and future institutional and financial assumptions. This country profile provides an overview of the development of the baseline established to launch the discussion at both national and global level on entry points for investment in CSA on a scale. Climate change is real and has become an obstacle to sustainable development worldwide. Climate change will have a number of positive and negative impacts in agriculture, depending on the regions of the world. Negative impacts are expected to be more negative in developing countries, especially sub-Saharan Africa, such as Kenya, which has experienced rising temperatures since the 1960s, along with increased frequency and intensity of extreme weather events such as El Niño and La Niña. The effects of the negative effects will include declining agricultural productivity and loss of crops, livestock, fish and agricultural investments due to changing temperatures and precipitation regimes and increased frequency and intensity of extreme weather events. In addition, fisheries and aquaculture are affected by acidification of bodies of water, changes in water temperatures and circulatory patterns that change the physico-chemical properties of fish habitats and ultimately productivity. Agriculture is not only affected by climate change, but also contributes to this problem. The country's agriculture is predominantly fed by rain and is therefore vulnerable to climate change, in particular changes in temperature regimes and rainfall patterns and extreme weather events. This leads, among other things, to unsustainable land and agricultural water management. Kenya's greenhouse gas emissions are estimated to be 73 million tonnes of carbon dioxide equivalent (MtCO2e) in 2010 and are expected to rise to 143 MtCO2e in 2030 unless appropriate mitigation measures are taken. Agriculture is the largest source of greenhouse gas emissions; responsible for one third of Kenya's total emissions in 2010. Agricultural emissions are likely to increase from 20 MtCO2e in 2010 to 27 MtCO2e by 2030, largely due to livestock methane emissions and land use change, which account for 90% of agricultural emissions and 30% of total national emissions. Weak policies, legislation, enforcement and overlapping of mandates between the institutions involved in regulation, together with weak and cooperation between institutions and stakeholders in the field of smart climate farming have contributed to the country's inability to effectively address vulnerability and greenhouse gas emissions. In addition, cross-cutting issues such as the underfunding of ČSA's activities; the limited capacity of women, youth and vulnerable groups (WY&VG) to participate in the activities of the CSA; unsustainable management of natural resources (NRMs) and exploitation; limited human resources capacity for the implementation of ČSA; limited development and innovation of CSA research technologies; and insufficient data and information on CSAs also led to a lack of implementation of csa activities. A country requires the transformation of its agricultural systems to make them more productive and resilient, while minimising greenhouse gas emissions in a changing climate. CsA provides an excellent opportunity to transform the unification of agriculture, development and climate change within the framework of a joint programme through the integration of three dimensions of sustainable development (economic, social and environmental) by jointly addressing the challenges of food security and climate. CsA therefore sustainably increases agricultural production and incomes, builds the resilience of agricultural systems to climate change and minimises greenhouse gas emissions. However, existing national strategies and interventions, such as the National Action Plan on Climate Change (2013-2017) and the Agricultural Development Strategy (2010-2020), do not sufficiently integrate adaptation, resilience building and mitigation of greenhouse gas emissions into the agricultural sector. As a result, the sector needs a healthy and supportive CSA strategy, which will also guarantee productivity and food security, while at the same time addressing adaptation to and mitigation of climate change. The general objective of the CsA Kenyan Strategy (KCSAS) is to adapt to climate change, to build the resilience of agricultural systems while minimising emissions for increased food and nutritional security and better livelihoods. The specific objectives of the KCSAS are (i) to increase the adaptation capacity and resilience of farmers, herders and fishermen to the adverse effects of climate change; (ii) establish mechanisms that minimise greenhouse gas emissions from agricultural production systems; (iii) establish a supportive regulatory and institutional framework; and (iv) address cross-cutting issues that have an adverse impact on CSA. Four broad strategic areas have been identified for KCSAS: (i) adapting and building resilience by addressing vulnerability due to changes in precipitation and temperature, extreme weather events and unsustainable land/water management and use; (ii) mitigating greenhouse gas emissions from key and smaller sources in the agricultural sector; (iii) establishing a supportive political, legal and institutional framework for the effective implementation of the CSA; and (iv) Minimising the effects of fundamental cross-cutting issues such as human resources capacity and finance, limited the implementation of ČSA ČSA The coordination framework and implementation mechanism for the KCSAS will be aligned with the intergovernmental coordination structure under development and near completion. This will ensure clarity in the flow of information, policy direction and funding. In particular, regional governments will have the implementation of this strategy. KCSAS is a tool for implementing kenya's NDC contribution to the agricultural sector and will require domestic and international support. The implementation of the KCSA strategy will require a total of KSh 500 billion (USD 5.0 billion) for adaptation and mitigation measures for the agricultural sector by 2026. This will contribute to building resilience and adaptive capacity in the sector, as well as to reducing sectoral emissions to 30 MtCO2e compared to the normal trajectory of 37 MtCO2e in 2026. The investment resources for the implementation of the KCSAS will be mobilised from a variety of sources and appropriate mechanisms established for access, disbursement and use. The strategy provides a detailed implementation framework with clear roles and responsibilities for stakeholders. The implemented framework also forms the basis for the establishment of a monitoring and evaluation framework (M&E). Framework.