

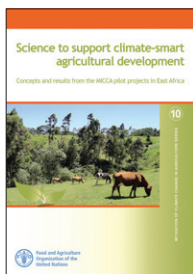


Food and Agriculture Organization
of the United Nations



**MITIGATION OF CLIMATE
CHANGE IN AGRICULTURE
MICCA PROGRAMME**

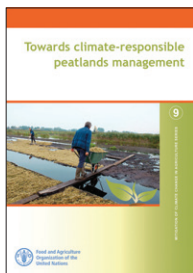
Publications 2010–2014



Science to support climate-smart agricultural development – Concepts and results from the MICCA pilot projects in East Africa (2014)

The report provides results from scientific research and discusses the analytical approaches used in field studies. It concludes with key messages on climate-smart agriculture.

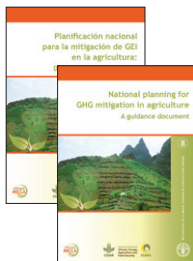
Key words: Climate-smart agriculture; farm management; productivity; dairy; conservation agriculture; smallholder farmers; GHG estimates; carbon stock



Towards climate-responsible peatlands management (2014)

This guide on responsible peatland management practices gives an overview of current knowledge on peatlands, their locations, characteristics as well as socio-economic importance. It documents case studies from all climatic regions.

Key words: Peatlands; livelihoods; restoration; rewetting; adaptation; greenhouse gas emission reductions; agriculture; forestry; fisheries and aquaculture

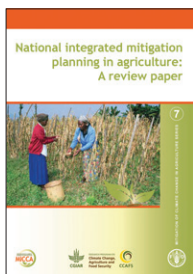


National planning for GHG mitigation in agriculture – A guidance document (2013)

Planificación nacional para la mitigación de GEI en la agricultura – Documento de orientación (2014)

The guide introduces the main mitigation planning approaches and key elements to sustainable agricultural systems. Two main approaches are described: Low-Emission Development Strategies and Nationally Appropriate Mitigation Actions.

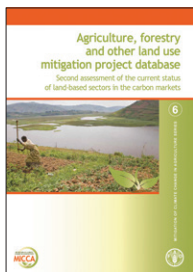
Key words: NAMA; LEDS; policies; institutions; technical dimensions; climate change mitigation



National integrated mitigation planning in agriculture – A review paper (2013)

This review gives an overview of climate change mitigation planning in the agriculture sector and highlights the relevance of agriculture in national plans and actions to reduce greenhouse gas emissions.

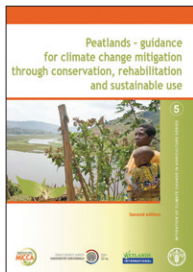
Key words: Development; planning; policies; costs; barriers; emission reductions



Agriculture, forestry and other land use mitigation project database – Second assessment of the current status of land-based sectors in the carbon markets (2013)

The publication summarizes 575 projects from 12 different registries contributing to GHG emission reductions. The paper comments on emerging gaps in the climate change agenda regarding agriculture, forestry and other land use in developing countries.

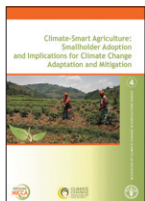
Key words: Greenhouse gas emissions, forestry, land use; carbon markets



Peatlands – guidance for climate change mitigation through conservation, rehabilitation and sustainable use (2012)

This handbook on management and finance options to reduce emissions from peatlands and enhance peatland ecosystem services summarizes the methodologies for quantifying GHG emissions.

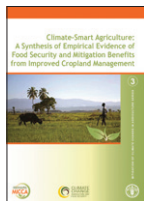
Key words: Organic soils; climate change; ecosystem services; biodiversity; rehabilitation; sustainability



Climate-Smart Agriculture – Smallholder adoption and implications for climate change adaptation and mitigation (2011)

A review of the adaptation and mitigation benefits of various practices and technologies and evidence on the costs and barriers in the adoption of climate-smart practices.

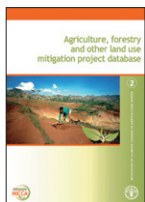
Key words: Climate-smart agriculture; households; projects; investments; productivity; adaptation; emission reductions



Climate-Smart Agriculture – A synthesis of empirical evidence of food security and mitigation benefits from improved cropland management (2011)

A literary review of evidence of different sustainable land management practices aimed at increasing and stabilizing crop productivity in developing countries.

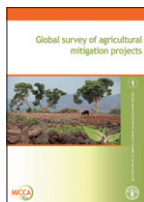
Key words: Land management; productivity; cropland; sustainability; food security; carbon sequestration



Agriculture, forestry and other land use mitigation project database – An assessment of the current status of land-based sectors in the carbon markets (2010)

This publication is a compilation of data on mitigation projects in agriculture, forestry and other land use sectors and provides an analysis the AFOLU mitigation project database.

Key words: Land use; forestry; adaptation



Global survey of agricultural mitigation projects (2010)

This report presents data on 50 projects focusing on climate-smart agriculture. It showcases projects that have introduced smallholder farmers to activities to reduce GHG emissions in agriculture.

Key words: Greenhouse gas; agriculture; climate-smart agriculture, smallholders; adaptation

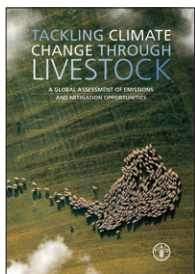


Training guide – Gender and climate change research in agriculture and food security for rural development (2013)

Guía de capacitación – Investigación del género y cambio climático en la agricultura y la seguridad alimentaria para el desarrollo rural

Guide de formation – Recherche sur le genre et les changements climatiques dans l'agriculture et la sécurité alimentaire pour le développement rural

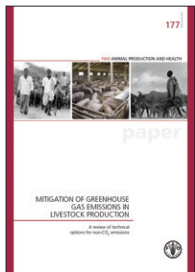
Key words: Gender; climate change; food security; research



Tackling climate change through livestock – A global assessment of emissions and mitigation opportunities (2013)

A comprehensive global assessment of the livestock sector's greenhouse gas emissions and its mitigation potential.

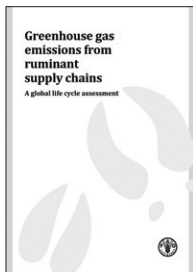
Key words: Sustainability; efficiency; livestock; land use; feed; beef; dairy; manure; climate change mitigation options



Mitigation of greenhouse gas emissions in livestock production – A review of technical options for non-CO₂ emissions (2013)

A review of current knowledge on mitigation practices for greenhouse gas emissions in the livestock sector. It focuses specifically on non-CO₂ emissions from enteric fermentation and manure management.

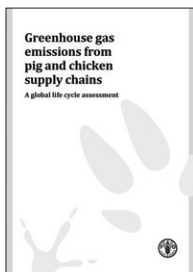
Key words: Greenhouse gas; livestock; manure; methane; nitrous oxide; animal husbandry



Greenhouse gas emissions from ruminant supply chains – A global life cycle assessment (2013)

Results from an assessment carried out to improve the understanding of GHG emissions along livestock supply chains. The analysis was conducted by FAO's Animal Production and Health Division, co-financed by the MICCA Programme.

Key words: Sustainability; efficiency; livestock; life cycle assessment; land use change; climate change mitigation potential; emission reduction options



Greenhouse gas emissions from pig and chicken supply chains – A global life cycle assessment (2013)

This report provides a detailed analysis of emissions and presents information on the options to reduce greenhouse gas emissions arising from pig and chicken supply chains.

Key words: Sustainability; meat; greenhouse gas; chicken; pig; life cycle assessment; climate change mitigation potential; emission reduction options



Greenhouse gas emissions from the dairy sector – A life cycle assessment (2010)

The overall goal of this report is to provide estimates of GHG emissions associated with milk production and processing for the world's main regions and farming systems.

Key words: Sustainability; greenhouse gas; dairy; land use; efficiency; climate change mitigation potential; emission reduction options; feed



Transitioning towards climate-smart agriculture in Kenya (2014)

This information brief discusses the integration of CSA practices at farm and landscape level. It is the result of a consultation in Kenya that brought together researchers, development workers, producers and policy makers.

Key words: Development; climate-smart agriculture; policy; research; integrated farming systems; landscape approach; greenhouse gas emissions; knowledge-management; gender; youth



Equal access to resources and power for food security in the face of climate change (2013)

The infographic describes the links between food security, gender and climate change giving the analytical framework of the training guide 'Gender and climate change research in agriculture and food security for rural development'.

Key words: Gender; climate-smart agriculture; climate impact; markets; resources; climate information services



New research and training materials – Gender and climate change research in agriculture and food security for rural development (2011)

This policy brief outlines the different responses of men and women to climate change especially when safeguarding their food security and livelihoods. It gives details on the importance of gendered, participatory approaches to climate-smart agriculture.

Key words: Gender; climate-smart agriculture; food security; resources; knowledge; technology; services

About the MICCA Programme

Since 2010 the Mitigation of Climate Change in Agriculture (MICCA) Programme has contributed to making agriculture more climate-smart.

The programme complements other FAO and United Nations efforts to address climate change and collaborates with the UN-REDD Programme in the reduction of deforestation.

The technical information presented in these publications and briefs reflects several years of research and practical field work carried out by the MICCA team in collaboration with partners. The technical information supports negotiation processes undertaken through the United Nations Framework Convention on Climate Change.

MICCA's activities have been made possible thanks to the generous support from the governments of Finland, Germany and Norway.



Federal Ministry
of Food, Agriculture and
Consumer Protection



www.fao.org/climatechange/micca/publications/

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