



Food and Agriculture
Organization of the
United Nations

ENVIRONMENT
AND NATURAL
RESOURCES
MANAGEMENT

EXECUTIVE
SUMMARY

REGIONAL ANALYSIS OF THE NATIONALLY DETERMINED CONTRIBUTIONS OF EASTERN AFRICA

Gaps and opportunities in the agriculture sectors

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The management of the NDC database, analysis and writing relative to the mitigation component was led by Krystal Crumpler (CBC), Elizabeth Laval (CBC), Sandro Federici (CBC), Florent Eveille (CBC) and Mirella Salvatore (CBC), while the adaptation component was led by Elisa Di Stefano (CBC), Maryline Darmaun (CBC), Ana Heureux (CBC) and Selvaraju Ramasamy (CBC).

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BACKGROUND

The Paris Agreement constitutes a landmark achievement in the international response to climate change, as developed and developing countries alike have committed to do their part in the transition to a low-emissions and climate-resilient future. (Intended) Nationally Determined Contributions (NDCs) represent the main national policy frameworks, under the United Nations Framework Convention on Climate Change (UNFCCC), by which Parties communicate their climate commitments to the international community and report on the progress made, and support needed, toward achieving them.

FAO is proposing a series of regional-level analyses of the NDCs to identify the current commitments, gaps and opportunities in the agriculture sectors for enhancing mitigation and adaptation ambitions in the next round of NDCs. In the analysis, the agricultural sectors refer to crops, livestock, forestry, and fisheries and aquaculture as defined by FAO. This report aims to guide FAO – and other international actors – committed to providing developing countries with the support required for implementing their NDCs and ensuring future commitments are transparent, quantifiable, comparable, verifiable and ambitious.

The results of the analysis will inform the facilitative dialogue and global stocktaking process – an integrated periodic review of collective progress in achieving the long-term climate goals of the Paris Agreement.

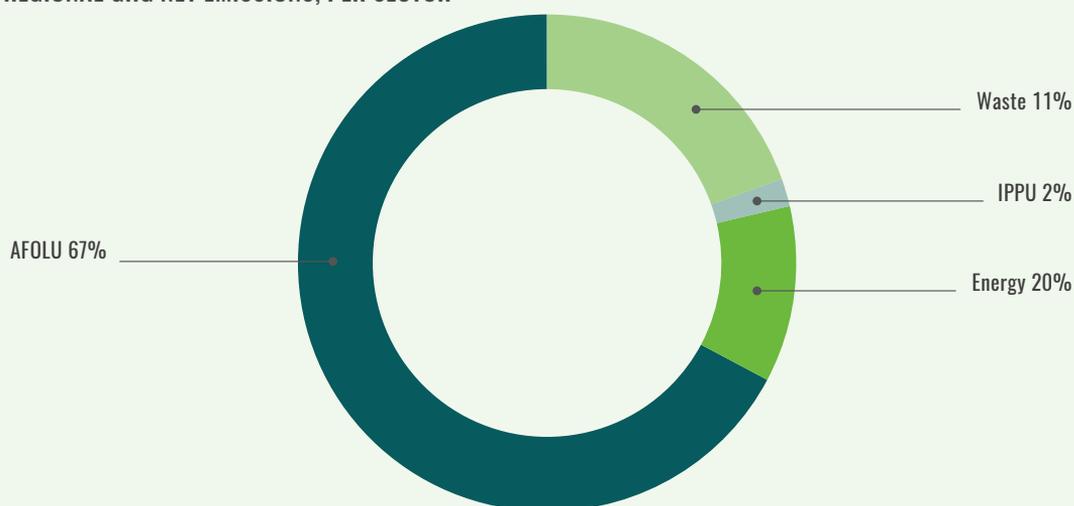
The first of the regional series covers Eastern Africa, as defined by the FAO regional grouping, including eighteen countries: Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Seychelles, Somalia, South Sudan, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

1.1 Regional circumstances

Reducing greenhouse gas (GHG) emissions while ensuring food security will be a challenge in Eastern Africa, as agriculture drives the rural economy, accounting for approximately 25 percent of gross domestic product (GDP) (WB, 2017), 70 percent of employment (ILO, 2017), and five billion USD in food export revenues every year (FAO, 2017b). Currently, around one-third of the population is undernourished, with high prevalence of food inadequacy, stunting and wasting at 41, 44, and 8 percent, respectively. Overall, poverty is widespread across the region, with more than 40 percent of the population living in households with consumption or income per person below 1.90 USD per day (WB, 2017).

FIGURE 1.

REGIONAL GHG NET EMISSIONS, PER SECTOR



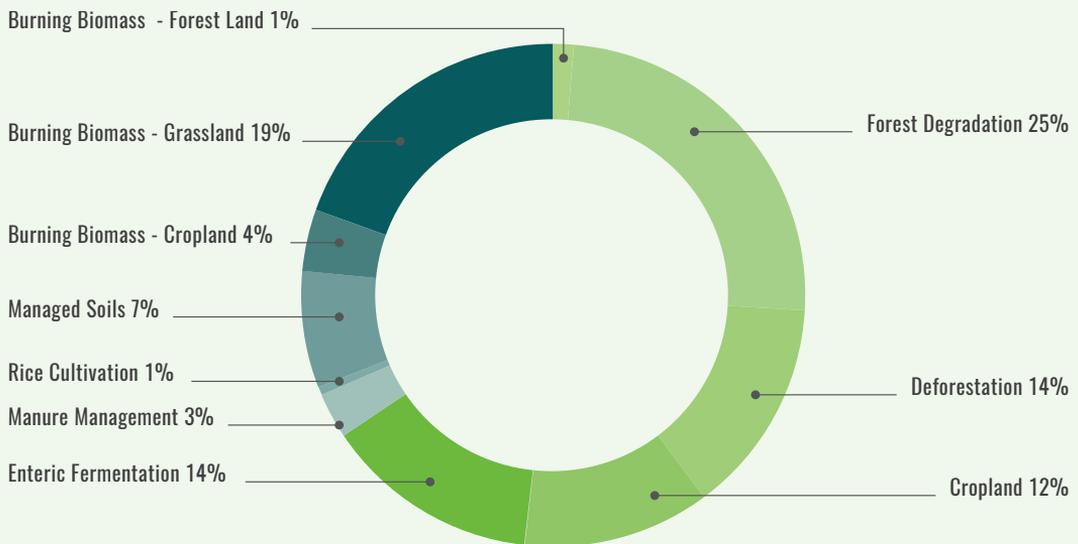
Source: Countries' National Communication (NC), excluding Somalia and South Sudan whom did not submit a NC

According to the national GHG inventories reported in latest National Communications (NC) (**Figure 1**), the Agriculture, Forestry and Other Land Use (AFOLU) sector represents the most significant share of net emissions¹ in the region (67 percent), followed by the Energy (20 percent), Waste (11 percent) and the Industrial Processes and Product Use (IPPU) sectors (2 percent). While the agriculture sector constitutes a source of annual net emissions (0.36 Gt CO₂ eq), the LULUCF sector represents a net sink (-0.11 Gt CO₂ eq), for a combined total of 0.25 Gt CO₂ eq net emissions per year in the AFOLU sector.

¹ The result of summing all anthropogenic emissions and removals.

FIGURE 2.

SHARE OF REGIONAL GHG EMISSIONS AMONGST SOURCES IN THE AFOLU SECTOR



Source: NC

Within the AFOLU sector (**Figure 2**),² the GHG sources from agriculture and Land Use, Land Use Change and Forestry (LULUCF) are almost equally distributed, with 49 and 51 percent shares each. Overall, the most significant GHG sources are forest degradation³ (25 percent) and grassland biomass burning (19 percent),⁴ with deforestation⁵ and enteric fermentation holding equal shares (14 percent).

Within the agriculture sector, the largest sources of emissions are grassland biomass burning (40 percent), enteric fermentation (29 percent) and non-CO₂ emissions from managed soils (16 percent), followed by cropland biomass burning (8 percent),⁶ manure management (6 percent) and rice cultivation (1 percent).

² AFOLU-related GHG categories are aggregated in this analysis to accommodate for both the 1996 and 2006 *IPCC Guidelines* for reporting adopted by countries in their respective NCs. Annex 1 illustrates the methodology for capturing national data in common GHG categories and sub-categories that link the 1996 IPCC source/sink categories to the 2006 land use categories, carbon pools and non-CO₂ gases.

³ Forest degradation refers to total GHG net emission from 2006 IPCC land use category "Forest land remaining forest land" and 1996 GHGI category "Changes in forest and other woody biomass" when those categories are a net source at the national level.

⁴ Burning biomass on grassland refers to total GHG net emissions from 2006 IPCC land use sub-category "Biomass burning" and to 1996 NGHGI category "Prescribed burning of savannahs".

⁵ Deforestation refers to total GHG net emissions from 2006 IPCC land use category "Forest land converted to other use" and 1996 IPCC GHGI category "Forest and grassland conversion."

⁶ Burning biomass on cropland refers to total GHG net emissions from 2006 IPCC land use sub-category "Biomass burning" under land use category "Cropland," and to 1996 NGHGI category "Burning of agricultural residues".

Overall, the LULUCF sector constitutes a net sink at the regional level, constituted mainly by forest management⁷ (65 percent) and afforestation⁸ (31 percent). However, aggregated country data suggests that forest degradation⁹ is the highest source of LULUCF emissions (48 percent), while deforestation¹⁰ and cropland account for around one-third of the total (27 and 23 percent, respectively).

1.2 Overall coverage of mitigation and adaptation in the NDCs

In Eastern Africa, all 18 countries communicated their ambitions towards reducing GHG net emissions and increasing resilience under climate change in their respective mitigation and adaptation contributions. Representing the most significant source of net emissions, as well as the priority sector for adaptation, the agriculture sectors figure prominently in the region's commitments to a low-emissions and sustainable development pathway. Overall, 16 out of 18 countries include the agriculture and/or Land Use, Land Use Change and Forestry (LULUCF) sector in overall mitigation contributions, whereas all 18 countries include the agriculture and LULUCF sectors in the adaptation component of their NDCs (**Figure 3**).

⁷ Forest management accounts for total net emissions related to 2006 IPCC land use category "Forest land remaining forest land" and 1996 GHGI category "Changes in forest and other woody biomass," when those categories are a net sink at national level.

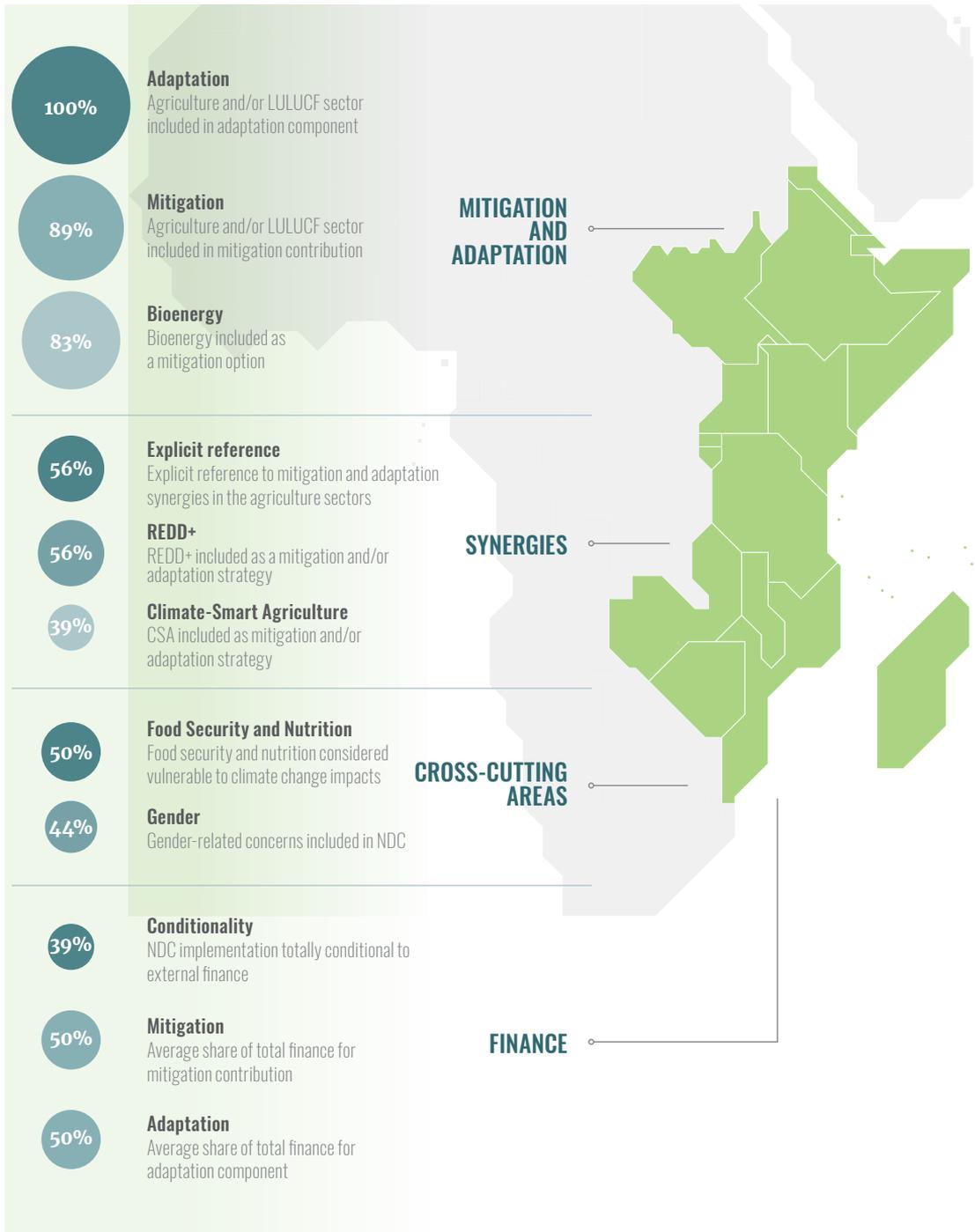
⁸ Afforestation accounts for total net emissions related to 2006 IPCC land use category "Land converted to forest land" and 1996 GHGI category "Abandonment of managed lands".

⁹ Forest degradation refers to total GHG emissions from 2006 IPCC land use category "Forest land remaining forest land" and 1996 GHGI category "Changes in forest and other woody biomass" when a net source at the national level.

¹⁰ Deforestation refers to total GHG net emissions from 1996 IPCC GHGI category "Forest and grassland conversion" and 2006 land use category "Forest land converted to other use".

FIGURE 3.

OVERVIEW OF THE NDCs IN THE AGRICULTURE SECTORS OF EASTERN AFRICA



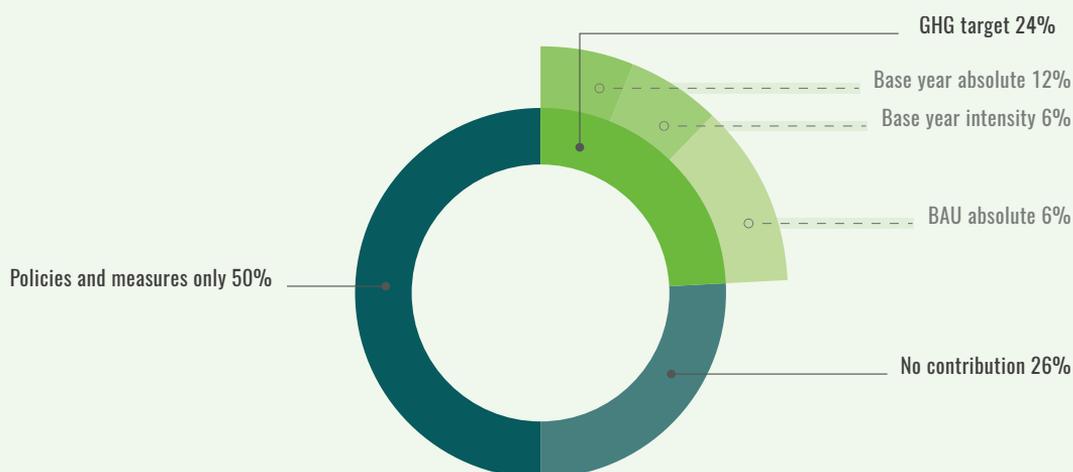
1.3 Mitigation in the agriculture sectors

1.3.1 Targets, policies and measures

Fifteen out of 18 (83 percent) East African countries set a national economy-wide GHG mitigation target for 2030, while the three remaining countries¹¹ base their mitigation contribution on “actions only,” with an implementation period varying from 10 to 15 years. All 15 countries that set an economy-wide GHG target project a baseline of future net emissions under a business as usual (BAU) scenario. Thirteen of those 15 countries express their target (i.e. the mitigation contribution) as an absolute net reduction compared with the baseline, while the other two express their target as a reduction in the intensity of per capita net emissions.

FIGURE 4.

COVERAGE OF MITIGATION CONTRIBUTION IN THE AGRICULTURE SECTOR



Source: NDC

Out of the 13 countries (Figure 4)¹² that include agriculture in their overall mitigation contribution, four (24 percent)¹³ set a sectorial GHG target – expressed as either an absolute net emission reduction compared with a base year or BAU, or as a reduction in the intensity of net emissions per capita compared with a base year. The remaining nine countries include policies and measures (P&Ms) for mitigation in the agriculture sector.

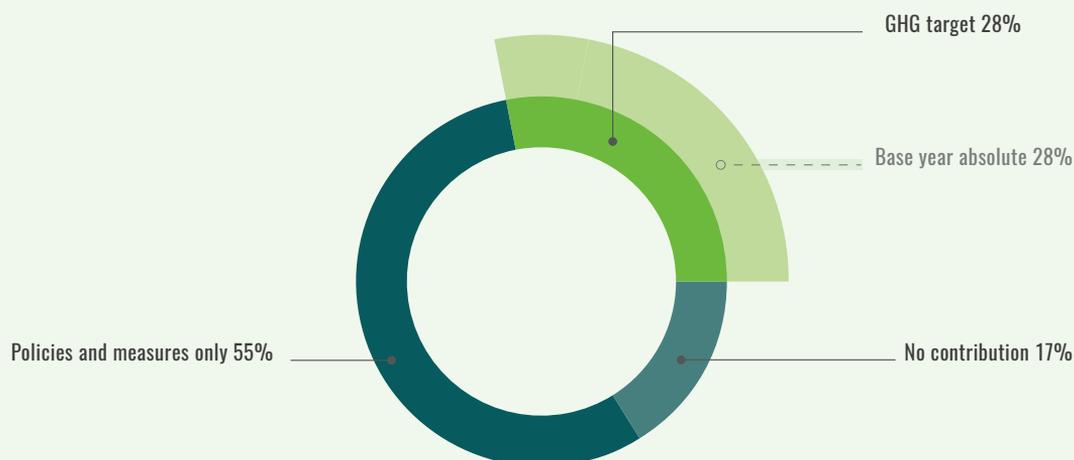
¹¹ Rwanda, Somalia and South Sudan.

¹² Mozambique, Seychelles, South Sudan, United Republic of Tanzania and Zimbabwe do not include the agriculture sector in overall mitigation contribution.

¹³ Comoros, Madagascar, Ethiopia, and Malawi.

FIGURE 5.

COVERAGE OF MITIGATION CONTRIBUTION IN THE LULUCF SECTOR



Source: NDC

Out of the 15 countries (**Figure 5**)¹⁴ including the LULUCF sector in their overall contribution, five (28 percent)¹⁵ set sectorial GHG targets – expressed as an absolute net emission reduction compared with a BAU. The remaining ten countries include P&Ms for mitigation in the LULUCF sector.

In addition to the economy-wide and sectorial targets set by countries in their NDCs, the P&Ms identified range by activity and land use management, and are often cross-sectoral. In the AFOLU sector (**Figure 6**), the majority of countries aim to avoid emissions and/or enhance removals by promoting sustainable forest management, afforestation/reforestation, and improved management of crop and livestock systems. Other P&Ms, such as reducing deforestation, integrated system management and wetlands management, are also included as mitigation options. Most countries aim to reduce emissions from forest degradation through more sustainable energy production from forest biomass, while others target agricultural emissions related to enteric fermentation and manure management through biogas production. Overall, 15 East African countries (83 percent) report either one or multiple P&Ms aiming to increase – or render more efficient – energy production from agriculture and/or forest biomass, with potential¹⁶ mitigation co-benefits in both the Energy and AFOLU sectors (**Figure 7**).

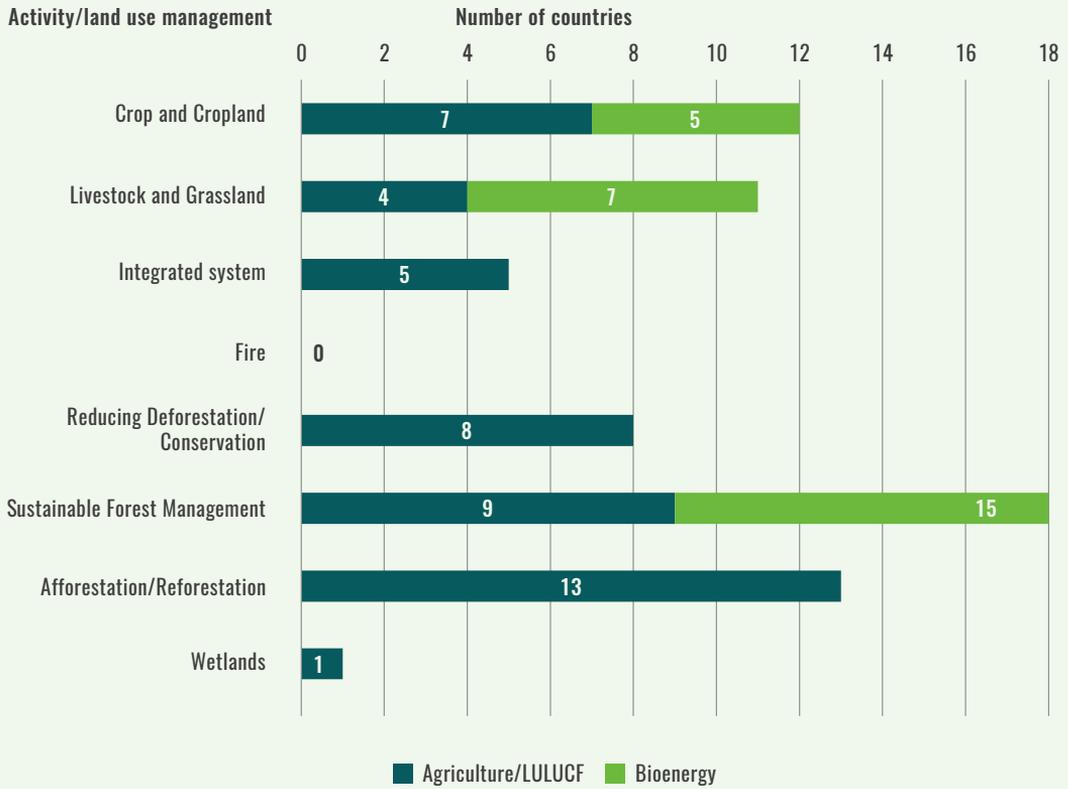
¹⁴ Djibouti, Seychelles and Zimbabwe do not include the LULUCF sector in overall mitigation contribution.

¹⁵ Comoros, Madagascar, Ethiopia, Malawi, and Uganda.

¹⁶ While the substitution of fossil fuel for biofuel from the agriculture sectors may reduce emissions in the Energy sector, the mitigation impact of biofuel production on the AFOLU sector depends on the sustainability of biofuel production, which is measured as a positive or neutral impact on the long-term average carbon stock of the land on which it is produced, and/or on the associated non-CO₂ budget.

FIGURE 6.

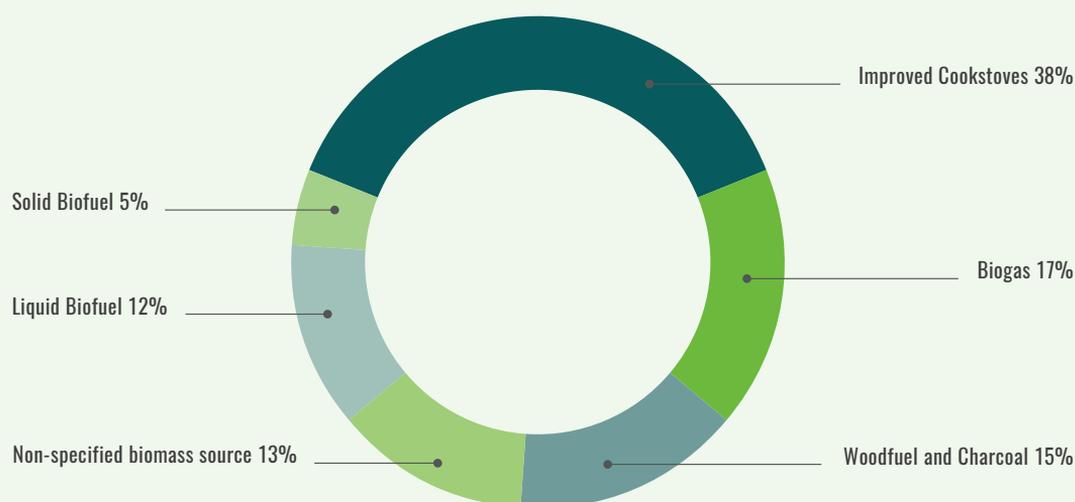
COUNTRIES WITH POLICIES AND MEASURES IN THE AFOLU SECTOR, PER ACTIVITY/LAND USE MANAGEMENT



Source: NDC

FIGURE 7.

SHARE OF COUNTRIES WITH POLICIES AND MEASURES ON ENERGY PRODUCTION AND USE FROM AGRICULTURAL/FOREST BIOMASS



Source: NDC

Lastly, cross-cutting measures, such as Climate Smart Agriculture (CSA) and Reducing Emissions from Deforestation and Forest Degradation and Conservation of Forest (REDD+), represent common strategies for enhancing agricultural productivity and improving the sustainability of forestry practices, while avoiding emissions and/or enhancing removals. Around one-third of countries include CSA as a mitigation strategy, while over half promote REDD+ as a national mitigation framework.

1.3.2 Regional baseline net emission and mitigation target analysis

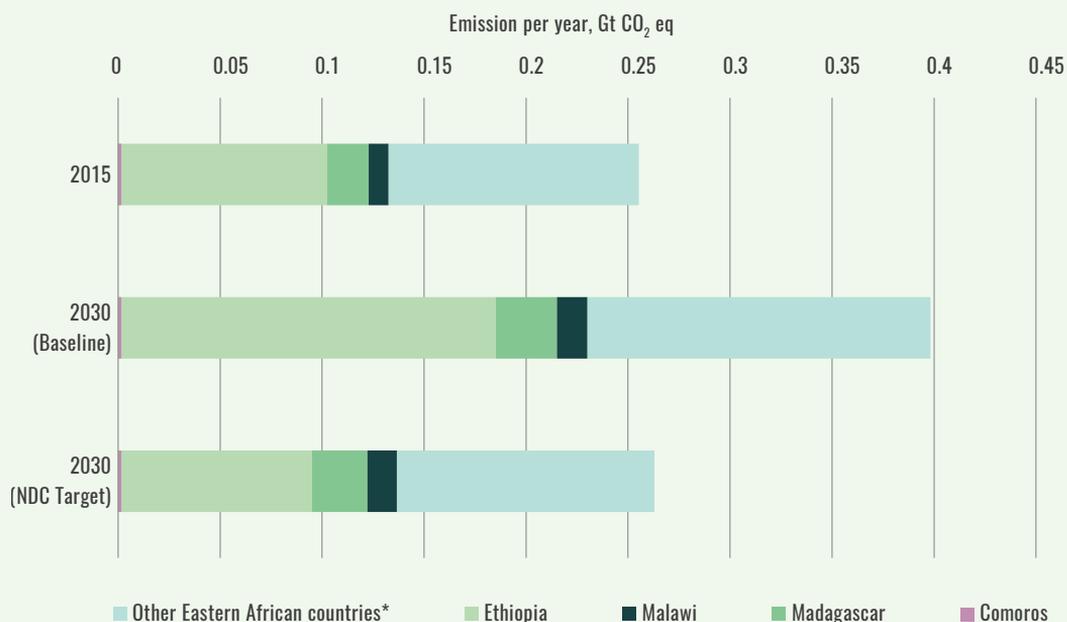
On the aggregate level,¹⁷ economy-wide net emissions in Eastern Africa reported in the NDCs are expected to increase by 80 percent¹⁸ between 2015¹⁹ and 2030. On the other hand, full implementation of both conditional and unconditional mitigation targets set forth in the NDCs would limit regional net emissions to roughly 40 percent below the baseline²⁰ – equivalent to a cumulated net emission reduction of 3 Gt CO₂ eq in 2030. However, despite implementation of the NDCs, regional net emissions would nevertheless increase by 6 percent in 2030 compared with the 2015 level.

¹⁷ Aggregated net emission reductions include only those countries (15) that estimated both an economy-wide GHG baseline and mitigation target (Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Seychelles, Uganda, United Republic of Tanzania, Zambia, and Zimbabwe) or only a GHG mitigation target (Mozambique). Rwanda, Somalia and South Sudan did not submit an economy-wide GHG targets nor 2030 baselines in respective NDC.

¹⁸ From 0.62 Gt CO₂ eq per year in 2015 to 1.12 Gt CO₂ eq per year in 2030.

¹⁹ Historical values range from 1994 to 2013, and are adjusted to respective 2015 value based on national or regional trends.

²⁰ To 0.66 Gt CO₂ eq per year in 2030.

FIGURE 8.
BASELINE VALUE (2030) AND NDC MITIGATION TARGET (2030), COMPARED WITH HISTORICAL EMISSIONS (2015), IN THE AGRICULTURE SECTOR FOR EASTERN AFRICA


Source: NDC, NC and author's calculation²¹

In the agriculture sector (**Figure 8**), regional emissions are projected to increase by roughly 55 percent²² between 2015²³ and 2030. However, full implementation of sectorial mitigation targets scaled to the regional level²⁴ would limit net emissions to approximately one-third below²⁵ the projected baseline – equivalent to a cumulated net reduction of 0.94 Gt CO₂ eq by 2030.

²¹ When the historical net emission value for the agriculture sector is not reported in the NDC, the value from respective NC is applied. If the latest reported value is prior to 2015, the value is projected to 2015 based on national or regional trends. The aggregated 2030 NDC target level includes values reported in the NDCs by (4) countries and extrapolated for those (7) countries pledging mitigation in the agriculture sector whom did not include quantified GHG targets. The methodology is described in Footnote 24.

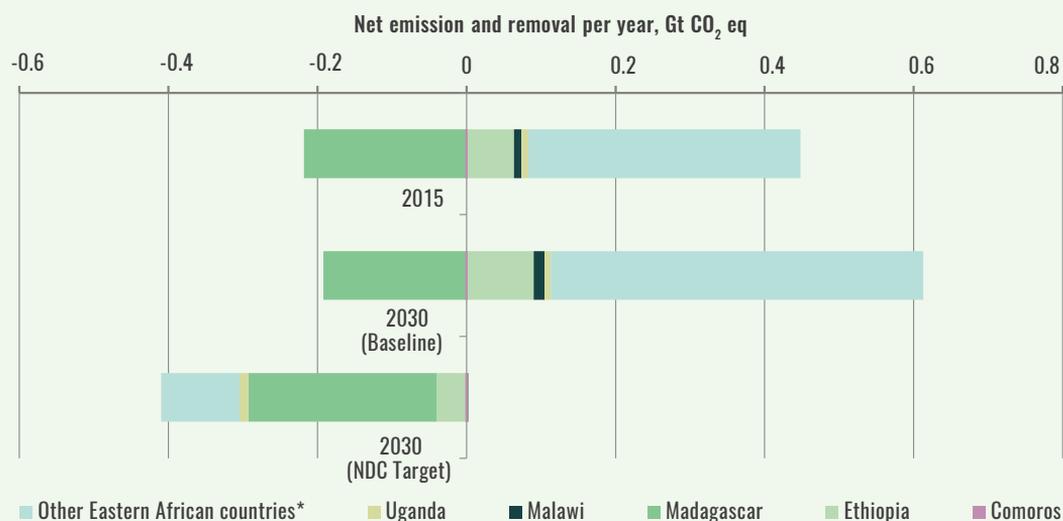
²² From 0.25 Gt CO₂ eq per year in 2015 to 0.40 Gt CO₂ eq per year in 2030.

²³ Historical values range from 1994 to 2013, and are adjusted to 2015 value based on regional trend.

²⁴ Aggregated net emissions reductions include only those countries (4) that estimated both a GHG baseline and mitigation target in the agriculture sector (Comoros, Ethiopia, Madagascar and Malawi) as well as those countries (7) pledging mitigation contributions in the agriculture sector (Burundi, Djibouti, Eritrea, Kenya, Mauritius, Uganda, and Zambia) without estimating a sectorial GHG target. For the seven countries, the baseline and mitigation target, respectively, are calculated based on: a) the average change of emissions (56 percent) from the 2015 historical value and 2030 baseline value observed in the four countries; and b) the average expected change of emissions (3 percent) from the historical 2015 value to the target 2030 value observed in the four countries.

²⁵ To 0.26 Gt CO₂ eq per year in 2030.

FIGURE 9.

BASELINE VALUE (2030) AND NDC MITIGATION TARGET (2030), COMPARED WITH HISTORICAL NET EMISSIONS (2015), IN THE LULUCF SECTOR FOR EASTERN AFRICA


Source: NDC, NC and author's calculation²⁶

In the LULUCF sector (**Figure 9**), regional net emissions are projected to increase by roughly 85 percent²⁷ between 2015²⁸ and 2030. On the other hand, full implementation of the mitigation targets scaled to the regional level²⁹ would enhance removals by roughly 275 percent³⁰ compared with the baseline – equivalent to a cumulated net reduction of 5.6 Gt CO₂ eq by 2030.

²⁶ When the historical net emission value for the LULUCF sector is not reported in the NDC, the value from respective NC is applied. If the latest reported value is prior to 2015, the value is projected to 2015 based on national or regional trends. The aggregated 2030 NDC target level includes values reported in the NDCs by (5) countries and extrapolated for those (7) countries pledging mitigation in the LULUCF sector but did not estimate a GHG target. The methodology is described in footnote 29.

²⁷ From 0.23 Gt CO₂ eq per year in 2015 to 0.42 Gt CO₂ eq per year in 2030.

²⁸ Historical values range from 1994 to 2013, and are adjusted to 2015 value based on national or regional trends.

²⁹ Aggregated net emissions reductions include only those countries (5) that estimated both a baseline and mitigation target in the LULUCF sector (Comoros, Ethiopia, Madagascar, Malawi and Uganda) as well as those countries (7) pledging mitigation contributions in the LULUCF sector (Burundi, Eritrea, Kenya, Mauritius, Mozambique, United Republic of Tanzania, and Zambia) without estimating a sectorial GHG targets. For the seven countries, the baseline and mitigation target, respectively, are calculated based on: a) the average change of net emissions (83 percent) from the historical 2015 value to the 2030 baseline value observed in the five countries; and b) the average expected change of net emissions (-277 percent) from the historical 2015 value to the 2030 target value observed in the five countries.

³⁰ To -0.41 Gt CO₂ eq per year in 2030.

1.3.3 Identifying gaps and opportunities to enhance mitigation ambitions

FIGURE 10.

GAPS IN THE OVERALL COVERAGE OF POLICIES AND MEASURES ADDRESSING REGIONAL GHG HOTSPOTS AND OPPORTUNITIES FOR ENHANCING AMBITIONS



Note: Size of blue bubble relates to relative size of gap (when policies and measures do not address GHG hotspot, the bubble relates to share of sectoral GHG emissions). Size of green bubble relates to estimated regional mitigation potential of management practice. It should be noted that gaps are opportunities.

Comparing the relative coverage of mitigation policies and measures presented in the NDCs against the GHG hotspots identified in the agriculture and LULUCF sectors, a few gaps emerge, pointing to areas for potential improvement in the next revision of the NDCs (**Figure 10**). Results from the gap analysis evidence insufficient coverage of policies and measures aiming to reduce biomass burning on grassland (i.e. savannah burning); improve soil management; and improve livestock feeding and breeding practices in the agriculture sector. In the LULUCF sector, the coverage of mitigation policies and measures targeting emissions from deforestation and cropland was also insufficient with respect to the high share of respective emissions per land use category. However, significant coverage of mitigation actions aiming to enhance forest sinks through sustainable forest management and afforestation/reforestation illustrate an opportunity, amongst others, for additional countries to achieve net reductions in the LULUCF sector. However, gaps may be closed and opportunities seized only if appropriate incentives are established and trade-offs are reconciled.

Filling in the regional and national gaps found in the overall coverage of mitigation actions targeting AFOLU-emission sources presents a critical opportunity for enhancing climate ambitions where mitigation potential is greatest. Consequently, the mitigation potential of a set of policies and measures reported by individual countries in their NDCs and NCs in the agriculture sectors were scaled to the regional level, with an estimated cumulated net emissions reduction of 4.6 Gt CO₂ eq in 2030, representing approximately 140 percent of the current economy-wide mitigation target set forth in the NDCs. If the selected mitigation actions were to be implemented in full across the region, the agriculture sectors alone could

reduce economy-wide net emissions to below historical³¹ levels by 2030. In other words, by enhancing mitigation contributions in the agriculture sectors alone – provided that timely climate finance is received at the necessary scale – Eastern Africa could not only reach its climate objectives by 2030 but enhance its climate ambitions even more.

1.4 Adaptation in the agriculture sectors

1.4.1 Priority actions and cross-sectoral measures

All 18 countries in Eastern Africa highlight the key climate related hazards, impacts, vulnerabilities and the adaptation measures and actions relevant to the agriculture and LULUCF sector.

Most countries report on observed and projected changes in meteorological variables, namely fluctuations in mean annual and seasonal land surface air temperature, changes in precipitation intensity and variability of rainfall regimes. Droughts and floods are referred to as major observed and projected climate related hazards. Countries further report on how climate change exacerbates already existing vulnerabilities, such as economic dependence on agriculture sectors, poverty and low human development. Countries report on observed effects of past and recent climate trends, as well as projected impacts mainly on human health and life incidence, agriculture productive assets and livelihoods and human settlements and infrastructure.

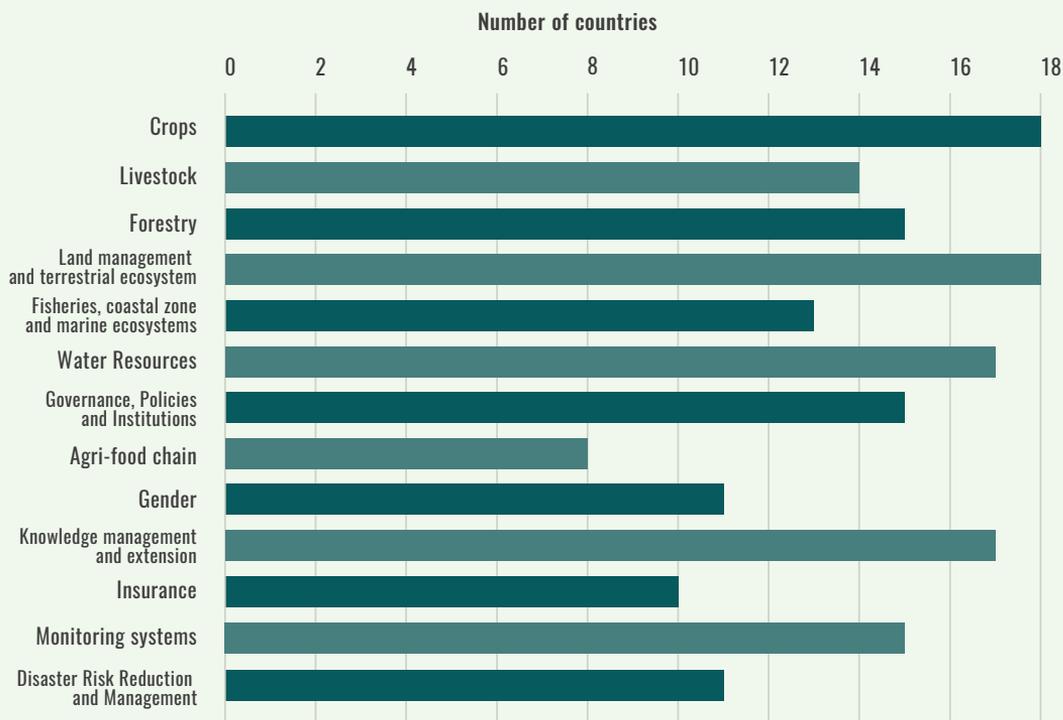
Countries stress that adaptation in the agricultural sector is a national priority, and put forward their strong commitment towards mainstreaming adaptation into sectorial, national and regional development planning processes. **Figure 11** illustrates the overall coverage of ongoing and planned adaptation measures in the agriculture sectors. Countries aim to increase agricultural production and productivity, as well as create sustainable production systems than can re-establish food self-sufficiency in the short and medium-term. Priority adaptation measures for the crop, livestock and water resource management sectors include breeding and promotion of stress tolerant crop varieties; conservation and use of germplasm of crop land species and their wild relatives; animal breeding; pasture and range management; irrigation and water storage and harvesting. All countries refer to cross-cutting crop management practices that range from CSA, conservation agriculture (CA) and agroforestry. A strategic focus is given to food production supply and agriculture value chains, not only to reduce post-harvest losses, store food and feed in productive years and secure food supply in case of extreme weather events, but also to add value to agricultural products and transform subsistence farming into profitable market agriculture while meeting the national market demand for food.

Investments for land management and protection, land rehabilitation and restoration are strongly linked to the goal of maintaining the natural resource base and ecosystem services to increase the resilience of the agriculturally productive areas. Forest-based adaptation is also a priority given the reliance of the rural population in the region on forest resources. Several countries stress the importance of protecting, conserving and restoring terrestrial and freshwater ecosystems and their biodiversity, such as wetlands and mangroves. Coastal countries express the need to foster adaptation actions for the protection and sustainable exploitation of the region's fisheries, coastal zones and marine ecosystems.

³¹ 2015.

FIGURE 11.

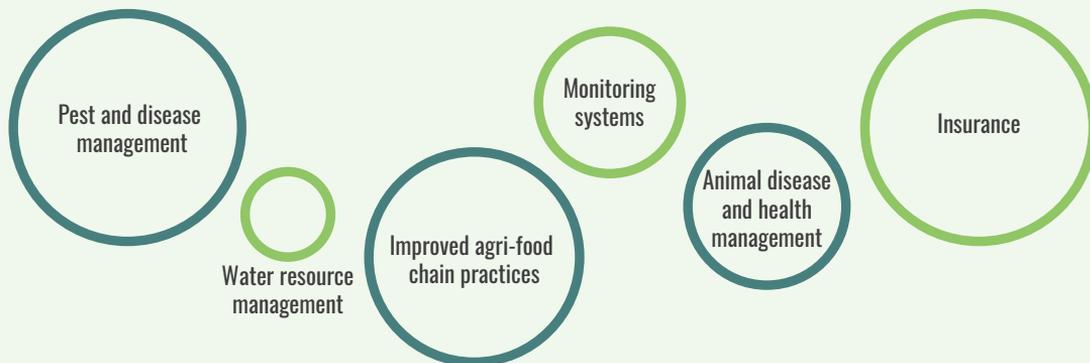
COVERAGE OF THE ONGOING AND PLANNED ADAPTATION MEASURES IN THE AGRICULTURE SECTORS



Source: NDC

FIGURE 12.

GAPS IN THE OVERALL COVERAGE OF ADAPTATION ACTIONS ADDRESSING REGIONAL HAZARDS AND VULNERABILITIES, AND OPPORTUNITIES FOR ENHANCING AMBITIONS



Note: Size of blue bubble relates to relative size of gap (number of countries not including policy and measure addressing regional hazard and vulnerability). Size of green bubble relates to relative size of opportunity (number of countries with potential to include additional good practices). It should be noted that gaps are opportunities.

Lastly, cross-sectoral adaptation measures relevant to the agriculture sectors, such as disaster risk reduction and management (DRR/M), establishment of monitoring systems, gender sensitive adaptation responses and investment in research are referred to in the region's NDCs.

1.4.2 Identifying gaps and opportunities to enhance adaptation ambitions

Assessing proposed and ongoing adaptation actions in the NDCs against projected hazards and vulnerabilities is essential for understanding gaps and opportunities in the coverage of adaptation in the agricultural sectors (**Figure 12**). Adaptation actions that have been identified by the countries as priorities in line with evidence-based research present opportunities for agricultural adaptation to climate change. Such opportunities in Eastern Africa include crop and cropland management proposed by all 18 countries (including climate smart agriculture and adapted crop varieties); water resource management (including irrigation and water storage/harvesting); land management and protection; and monitoring systems to assess the results of adaptation policies and actions in the agricultural sectors, as well as assess the impact of climate change. These key adaptation measures present opportunities for additional countries to address the literature-supported projections of climate-related hazards with appropriate adaptation measures.

There are areas of adaptation that are not broadly developed in the NDCs but are associated with hazards projected to greatly impact the region, presenting gaps in the proposed adaptation measures. Gaps highlighted by the analysis include pest and disease management mentioned by less than one-third of the countries. This is considered a gap in adaptation potential due to the expected increase in crop pests as a result of regional warming. Secondly, animal disease and health management were mentioned by few countries. Finally, the importance of food post-harvest handling and processing is expected to increase with a changing climate due to increased temperature and the potential for increased flooding. Improvements in food transport and storage need to be considered in further adaptation planning and activities.

1.5 Synergies

It is widely recognized that adaptation and mitigation in the agriculture sectors go hand and hand (FAO, 2016b), as optimizing the use of natural resources and regulating carbon and nitrogen cycles through sustainable agricultural production can enhance the long-term stability and resilience of farming systems under climate variability (FAO, 2011; 2013).

However, only a few countries explicitly identified synergies between mitigation and adaptation in their NDCs (56 percent). On the other hand, many potentially synergistic actions were promoted separately in the respective mitigation and adaptation components, such as CSA and REDD+ being mentioned as either a mitigation and/or adaptation strategy by seven and ten countries (39 and 56 percent, respectively) in the region, reinforcing the need to scale up selected actions across the region to leverage their synergistic potential.

In addition, many countries recognize the environmental, economic and socio-economic co-benefits generated by more sustainable and resilient agricultural production systems. For instance, Zambia associates sustainable forest management with increased rural household income, biodiversity conservation and rural poverty reduction, particularly amongst women and youth groups.

1.6 Priority areas for scaling up international support

Transformation to more sustainable and resilient agricultural production systems in Eastern Africa is clearly dependent on international support, as all countries in the region express support needs in the form of either technology transfer (18 countries); technical and/or institutional capacity development (17 and 18, respectively); and finance (18) for implementation of their respective NDCs.

The cumulated costs for implementation of economy-wide mitigation and adaptation priority actions set forth in the NDCs correspond to a reported 515.7 billion USD, or 35.2 billion USD per year. While seven countries set their contributions as contingent upon international support, the other 11 plan to allocate domestic resources as well. Amongst those countries that reported costs disaggregated by mitigation and adaptation actions,³² the average share of mitigation and adaptation costs is estimated to be approximately 50 percent each.

The capacity gaps and needs identified by the East African countries for achieving their respective NDC point to a set of five intervention areas that should be prioritized for international support, including institutional and technical capacity building for tracking and reporting mitigation and adaptation priority actions in the agriculture sectors in line with the Enhanced Transparency Framework (ETF), as well as national planning (Figure 13) and leveraging climate finance for NDC implementation.

FIGURE 13.

NATIONAL PLANNING FOR NDC IMPLEMENTATION



Source: NDC, UNFCCC, NAMA and NAP/NAPA Registry

³² 11 out of 18 countries.

1.7 Conclusion

The agriculture sectors in Eastern Africa represent a pivotal opportunity for simultaneously leveraging the mitigation potential of the region, while enhancing adaptive capacity and food security outcomes through a transition to more sustainable agriculture and land use. However, change will only come about if supported by appropriate policies, institutional arrangements, capacity development and finance mechanisms. By highlighting the gaps in the coverage of mitigation and adaptation actions in the agriculture sector, as well as illustrating opportunities for enhancing climate ambitions in the next round of NDCs, this analysis can serve as an important roadmap for directing future investment and international support toward low-emission, climate-resilient and inclusive agriculture systems in the region.



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