Ethiopia

Climate Commitment Status 0.4% of global emissions¹ Agriculture = 67.2 MtCO2eq in 2013² or 71% of total emissions excluding LULUCF ↑ +90% since 1990 At 2020 update submitted⁴ ✓ LTS not yet submitted ★ CAT rating⁵ ALMOST SUFFICIENT Net zero commitment: No official commitment Net source of emissions

How action-oriented are the NDCs in the food and land sector?

Criteria	NDC Assessment
Specific policy priorities or actions for agriculture and food:	AAA
 The NDC covers the agricultural sector in detail, with a dedicated mitigation section; the agricultural sector, particularly the livestock sector, is the biggest source of emissions and will continue to be under any mitigation scenario 	Very high: NDC provides specific orientations pursued by the Party in different agricultural
 The livestock sector represents the second most important sector for emissions abatement after the LUCF sector; emissions from the sector will be reduced by 0,92% unconditionally, and up to 7,6% under the conditional scenario, but they will keep growing overall 	and food sub-sectors, including specific targets and means of implementation (such as policie
Planned actions in the livestock sector under existing policies include:	or funding associated to them)
• Dairy, red meat and poultry intervention packages (enhancing efficiency and productivity in livestock subsector)	
Agricultural mechanisation (replacing cattle/oxen with tractors for farmers and smallholders)	
 Increase in the share of poultry (replacing non-dairy cattle stock with chickens (supply side) and inducing a demand shift from beef to chicken) 	
Oilseed feeding (improved feeding to reduce emissions from enteric fermentation)	
 Sustainable agriculture (increasing the share of agricultural land under sustainable management practices, reducing pre-harvest losses and land converted for agricultural infrastructure) 	
 The NDC states that GHG emissions from crop production and managed soils contribute only 3%, therefore all relevant policy action is taken in the livestock subsector 	
Ethiopia's major climate change adaptation commitments are in the AFOLU sector; this includes measures such as climate-smart agriculture: livestock diversification; drought-resistant animal breeding; rangeland management:	

Specific policy priorities or actions for LULUCF:

available in Annex 2 of the NDC).

 The NDC covers the land-use change and forestry (LUCF) sector in detail, with a dedicated mitigation section; it states that the LUCF sector is the second biggest source of emissions and offers the biggest mitigation potential, with planned policies potentially leading to a reduction of 34,6% compared to BAU under the unconditional scenario and 171% under the conditional scenario; the conditional scenario would shift the LUCF sector from the second biggest source of emissions to a net sink in 2030

improved drought-resistant crop varieties; crop and livestock insurance (detailed actions, indicators and targets are

- The NDC outlines that the potential for net emission removals in LUCF can be realised through massive
 reforestation and restoration of a total of up to 15 million hectares (ha) as a long-term forestry sector goal,
 based on Ethiopia s Forest Sector Development Plan, the Green Legacy Initiative and Reducing Emissions from
 Deforestation and Forest Degradation (REDD+) strategic actions. This will increase forest cover to 30% of the
 national territory by 2030
- $\bullet\,$ The NDC details planned actions in the LUCF sector under existing policies on:
 - Grassland improvement: Carbon sequestration through grassland improvement and Lowlands Livelihoods Resilience Project
 - 2. Reducing residential biomass use: Fuel switch, with a shift from unsustainable biomass energy demand to electric stoves, renewable biofuels (e.g. residues), and biomass efficiency, through improved cookstoves
 - 3. Reforestation of 3 million ha of land by 2030 (conditional pathway), 20% moist Afromontane, 60% dry Afromontane, 10% Acacia-Commiphora, 10% Combretum-Terminalia)
 - 4. Restoration of 5 million ha of land by 2030 and 9 million Ha by 2050 (conditional pathway), 10% moist Afromontane, 60% dry Afromontane, 10% Acacia-Commiphora, 20% Combretum-Terminalia)
- Ethiopia's major climate change adaptation commitments are in the AFOLU sector; this includes measures such as ecosystem-based adaptation; sustainable forest management; community-based forest management and conservation, afforestation and reforestation programmes.

Very high: NDC provides specific orientations pursued by the Party in different LULUCF sub-sectors, including specific targets and means of implementation (such as policies or funding associated to them)

Criteria		NDC Assessment
 Agriculture Growth Progr Livestock Master Plan (LN Livestock and Fisheries S Climate Resilience Strate 10-year development pro National Adaptation Plar LULUCF: Climate Resilient Green E Sustainable Land Manag Ethiopia's Forest Sector D 	Economy (CRGE) – This is a strategy for agriculture and forestry amme (AGP) MP) ector Plan (LFSP) gy for Agriculture and Forestry (2015) gramme (10YDP) in (2017) Economy (CRGE) – This is a strategy for agriculture and forestry ement Programme (SLMP) Development Plan, the Green Legacy Initiative and Reducing Emissions from Degradation (REDD+) strategic actions	Very high: NDC lists policies related to both agriculture and food and LULUCF which are directly linked to actions/ orientations
 Ethiopia is committed to agriculture and LUCF me total) The conditional targets (8 international climate final 	invest USD 63.2 billion by 2030 on mitigation and adaptation measures (mostly on asures). This is the amount necessary to reach the unconditional targets (20% of the 80% of the total) will require USD 252.8 billion by 2030 which should be received from the sources and on which share of the funding will be dedicated to action in the AFOLU sector	Medium: NDC provides a general indication on existing or planned public funding to finance mitigation policies and actions in either agriculture and food or LULUCF
Spatial information for I N/A	mitigation provided in the NDC:	Low: NDC does not provide any information on spatial planning to support adaptation or mitigation actions in the food and land sectors in the form of maps or indications of spatial data
	chnology transfer is key to reaching the conditional targets of the NDC ultural mitigation include agricultural mechanisation (replacing cattle/oxen with tractors	Medium: NDC provides a general indication of technological development needs or plans related to agriculture, food or LULUCF
What specific polic	y measures are included in the NDCs regarding critical food an	d land transitions?
Critical transition	Details	NDC Assessment
Healthy diets	• N/A	NDC does not mention any detail on the critical transition
Productive and regenerative agriculture	Enhance food security by improving agricultural productivity in a climate-smart manner Integrating climate change adaptation and expansion of agroforestry, expand the use of improved crop varieties with climate resilient characteristics through improved seed coverage Ethiopia will further expand and prioritise measures such as climate-smart agriculture, livestock diversification, drought resistance animal breeding, rangeland management, improved drought resistant crop varieties, and more. Agricultural Growth Programme (AGP), Livestock Master Plan (LMP), Livestock and Fisheries Sector Plan (LFSP)	NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition

Critical transition	Details	NDC Assessment
Protecting and restoring nature	Rehabilitation of degraded lands and restoration of degraded forestland through natural regeneration to enhance landscape-based climate resilience; the governments potential for net emission removals in LUCF can be realised through massive reforestation and restoration of a total of up to 15 million hectares as a long-term forestry sector goal, based on Ethiopia's REDD+ strategic actions. Ethiopia has a Climate Resilience Strategy for Agriculture and Forestry (2015) Reforestation of 3 mill ha of land by 2030	NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition
A healthy and productive ocean	Livestock and Fisheries Sector Plan (LFSP)	NDC provides inexplicit or unclear information on the critica transition (topic is mentioned, but not as a policy action)
Diversifying protein supply	Commitment to diversify livestock and animal mix, including the promotion of poultry and small ruminants	NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition
Reducing food loss and waste	Waste generation policy interventions: reducing emissions from reduced waste generation rate per capita, reducing emissions by aggressively diverting organic materials from landfills, i.e., waste separation and composting; lead institution: Ministry of Urban Development and Construction, and Ministry of Water Irrigation and Electricity The waste sector accounts for relevant emission sources from municipal solid waste generation, decomposition of organic components of waste on landfills, wastewater, and solid waste incineration	NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition
Local loops and linkages	• N/A	NDC does not mention any detail on the critical transition
Digital revolution	Section on Mitigation Measuring, Reporting and Verification (MRV) and Adaptation Monitoring and Evaluation (M&E) Enhance accessibility and availability of data through state-of-the-art technology Integration of MRV/M&E with general national statistical data management system Catalyse technology transfer including for land use management Strengthen crop disease and pest monitoring framework in vulnerable areas. Enhance water quality monitoring coverage Adaptation actions undertaken: adding actions or measures to strengthen implementation (policy, institutional arrangements, resource mobilisation, training, and capacity building and technology)	NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition
Stronger rural livelihoods	Nearly 80% of the population lives in rural areas where most are smallholders who practice low input and low output farming in very fragmented land; mitigation and adaptation activities have been included in the sectoral plans and various initiatives including Agricultural Growth Programme (AGP), Livestock Master Plan (LMP), Livestock and Fisheries Sector Plan (LFSP), Sustainable Land Management Programme (SLMP) are critical programmes in the agriculture sector and the national adaptation plan The SLMP mainstreams the green economy needs into sectoral programmes and has been configured to the safety net programmes. Policy intervention for livestock sector: replace cattle/oxen with tractors for farmers and smallholders Strengthen drought and crop insurance mechanisms for climate risk management	NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition
Gender and demography	Detailed gender and institutional capacity gap analyses were conducted to inform NDC updating process Across all sectors, a gender-responsive approach will be adopted and vulnerable groups and communities will be considered to ensure equity in sharing benefits that arise Policy interventions to assess the proportion of women shared development and management role in irrigation systems	NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition

What specific institutional arrangements for climate have countries put in place?

Dedicated body in place:

• The Environment, Forest and Climate Change Commission (EFCCC) is the lead agency for the coordination of Ethiopia's response to climate change and is the national focal point to the UNFCCC; it formulates environmental laws and standards; and develops, coordinates and guarantees the implementation of sectoral programmes and plans. "The institutional arrangements reflect a cross-sectoral, multi-disciplinary approach organised through bodies like the inter-ministerial and management committee and allows for regional engagement" (these bodies are not further described)

Consultation processes:

Public participation was integral to the preparation of the NDC and the 10-Year Development Plan upon which it is based. Consultations with line
ministries and workshops with a wide range of sector representatives were held to agree on actions, indicators and targets. Consultation with non-state
actors and donors were also held as part of finalising the NDC document

SUMMARY

Summary of the NDC analysis:

- The NDC provides extensive detail on orientations in the food and land sector, with agriculture and LUCF being the two biggest sources of emissions and expected to provide the biggest mitigation benefits. Actions are described in detail, with clear targets under different mitigation scenarios.
- · Several national policies supporting these actions are mentioned and explicitly linked to them.
- The document provides details on funding for the NDC, including on which part will come from national budgets and which is conditional on external support. However, there is no clear indication on which percentage will be dedicated to actions in the AFOLU sector.
- · No information is provided on the need for and use of spatial information and only generic information is available on the use of technology in agriculture.
- The NDC covers many of the critical transitions analysed and includes a combination of relevant policies, targets and interventions to support the implementation of these transitions. Under the transition on "food loss and waste", the NDC takes it a step further including policy interventions as well as the lead institutions involved (Ministry of Urban Development and Construction, and Ministry of Water Irrigation and Electricity).
- Under the critical transition on "stronger rural livelihoods", the NDC addresses smallholder farmers in rural areas and associated mitigation and adaptation activities that have been included in sectoral plans to support the agricultural sector, for instance the Agricultural Growth Programme.

REFERENCES

- 1. Source: ClimateWatch, accessed 30 August 2021. https://www.climatewatchdata.org/compare-all-targets?
- 2. Source: UNFCCC, Greenhouse Gas Inventory Data, accessed 30 August 2021. https://di.unfccc.int/detailed_data_by_party
- 3. Source: UNFCCC, Greenhouse Gas Inventory Data, accessed 30 August 2021. https://di.unfccc.int/detailed_data_by_party
- 4. Submitted 23 July 2021. Source: UNFCCC. https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Ethiopia%20First/Ethiopia%27s%20updated%20NDC%20JULY%202021%20Submission_.pdf
- 5. Source Climate Action Tracker, accessed 15 September 2021. https://climateactiontracker.org/climate-target-update-tracker/ethiopia/