

Climate Resilience and AE

CSA and Sustainable Food Systems

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Food Security Assessments

FIGURE 3 IN 2022, ASIA WAS HOME TO 55 PERCENT (402 MILLION) OF THE PEOPLE IN THE WORLD AFFECTED BY HUNGER, WHILE MORE THAN 38 PERCENT (282 MILLION) LIVED IN AFRICA



NOTES: Projected values are based on the projected midranges. The full ranges of the projected 2022 values can be found in Annex 2. n.r. = not reported, as the prevalence is less than 2.5 percent. SOURCE: FAO. 2023. FAOSTAT: Suite of Food Security Indicators. In: FAO. [Cited 12 July 2023]. www.fao.org/faostat/en/#data/FS



Drivers of food insecurity – Climate Change

A. Observed temperature change relative to 1850–1900

Since the pre-industrial period (1850–1900) the observed mean land surface air temperature has risen considerably more than the global mean surface (land and ocean) temperature (GMST).

CHANGE in TEMPERATURE rel. to 1850-1900 (°C)



Climate Change effects include changes in long-term averages and extremes, resulting in challenges to production *and other FS dimensions*. Confirmed by NDC submissions!



Climate Change and Land

An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems



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NDCs in the Paris Agreement



Article 4

2. Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.

3. Each Party's successive nationally determined contribution will represent a progression beyond the Party's then current nationally determined contribution and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

9. Each Party shall communicate a nationally determined contribution every five years in accordance with decision 1/CP.21 and any relevant decisions of the Conference of the Parties serving as the meeting of the Parties to this Agreement and be informed by the outcomes of the global stocktake referred to in Article 14.

- The Paris Agreement established NDCs as a key mechanism for joint ambition setting
- The <u>Katowice "Rulebook"</u> provided guidance on NDC accounting and timeframes, with additional guidance on NDC features under way
- 168 NDCs have been submitted to represent 195 Parties,* 153 NDCs of which have been new or updated (NDC2.0) (November 2023).

*the European Union NDC represents 27 Member States.

WHICH HAZARDS ARE DRIVING ADAPTATION RESPONSES IN AFSs?

WHAT IS THE SCALE OF ADAPTATION IN AFSs?

HOW INCLUSIVE IS ADAPTATION IN AFSs?



Mitigation ambition in the agriculture & land use sectors is on the rise



- 86% of NDCs now include mitigation in the AFOLU sector (compared to 67% in first-round NDCs)
- Agrifood systems contribute to around onethird of global GHG emissions¹

Source: Forthcoming: Crumpler, K., Angioni, C., Prosperi. P., Roffredi, L., Salvatore, M., Tanganelli, E., Umulisa, V., Wolf, J. and Bernoux, M. Agrifood systems in Nationally Determined Contributions: Global Analysis. Rome, FAO.

Agroecology and CSA

Diverse cropping systems (polycultures, agroforestry) – resilience to extreme weather

Soil conservation techniques (cover crops, composting, minimal tillage) improves water retention and reduces drought impacts

Traditional and local knowledge

Organic soil management increases carbon sequestration

Agroforestry stores carbon in trees and soil

Reduced synthetic fertilizer IPM use lowers nitrous oxide emissions

Low emissions feed to livestock for low emissions methane

AWD

Biodigesters, biomass (food loss and waste; post harvest waste)



ASEAN initiatives

- ASEAN Climate Resilience Network
- www.asean-crn.org
- ASEAN Guidelines on Promotion of CSA volumes 1, 2 and 3
- ASEAN Guidelines for Sustainable
 Agriculture
- ASEAN Guidelines Agroecology
- ASEAN GAP
- TAF ASEAN Vision 2026-2036
- ASEAN RDPE Master plan 2022-2026





ANNUAL 20 MEMBERS 20 FORUM 25 MEETING 25

NDC 3.0, UNFSS + 4 and COP30





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