POWER FOR ALL FACT SHEET

Global Food System and Climate Change: A Vicious Cycle

POWER FOR ALL

64 %

AFRICAN COUNTRIES' GDP GROWTH RATE REDUCTION BY THE END OF THE CENTURY BECAUSE OF THE CLIMATE CRISIS

3.2°C

EXPECTED INCREASE IN GLOBAL TEMPERATURE BY 2050 FOLLOWING BUSINESS AS USUAL

1/3

SHARE OF THE GLOBAL GHG EMISSIONS GENERATED BY THE GLOBAL FOOD SYSTEM

Climate change and the global food system are intertwined. Agri-food production struggles to meet rising demands, while contributing to a third of GHG emissions. This fossil-fuel dependency is unsustainable, exacerbating vulnerabilities for those with limited adaptive resources.

The food system causes environmental damage, producing one-third of global greenhouse gas emissions. Deforestation and current food practices drive climate change.»

» The food system relies on fossil fuels for 80% of its energy and causes one-third of global GHG emissions.[1]

» Emissions sources include land use (32%), production (40%), and other stages, with food waste contributing to half[2] Food loss and waste account for about half of these emissions across all stages.[3]

» A third of global forests are cleared for farming (2 billion hectares). For zero deforestation, technology-driven agricultural efficiency is vital.[4]

» Africa's food system alone contributes 59% of its total emissions.[5]

Africa, expected to have the highest population growth, has the least energy access and food security. Meeting its 2050 food demand could push global warming beyond 1.5C.:

» Sub-Saharan Africa's (SSA) population is projected to double by 2050, reaching over 2 billion people.[6]

» In Africa, smallholder farmers contribute up to 90% of food in some nations, yet 70-85% lack energy access.[7]

» 9.2% of the global population is hungry. Between 2021-2022, hunger decreased in Asia and Latin America but rose in Western Asia, the Caribbean, and Africa.[8]

» Nearly 20% of Africans are hungry, a rate higher than other regions. Global food demand is expected to increase 60% by 2050, with Africa seeing the highest increase.[10]

» Despite possessing 60% of the world's unused arable land and abundant sun and water, Africa's low mechanization and energy access result in net food imports costing $50B annually.[11]

» Using a business-as-usual strategy for global food, energy, and water demands could result in a 3.2°C temperature increase by 2050.[12]

Climate change threatens the food system, particularly in Africa, which contributes least to the issue:

» The Global North is the main source of agrifood GHG, but the Global South, especially 18 out of 20 top affected countries in SSA, bears the impact.[13]

» Since 1961, climate change has decreased global agricultural output by 21%.[14]

» The Global South's food system, especially Africa's, faces droughts, floods, and pests due to climate change.[15]

» African nations risk a GDP growth drop of up to 64% by century's end from climate effects, despite contributing minimally to the crisis.[16]

» SSA's agriculture, more climate-dependent than other developing areas, is highly sensitive to rainfall and temperature shifts.[17]

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Share the Message

» 🌍 Climate change and our food system are closely connected with dire consequences for all. We must break the cycle!

» 🔥 Did you know? A whopping 1/3 of global emissions come from our food system! It's time to demand sustainable, fair food production! 🍽

» 🥖 Millions go hungry globally and Africa feels it the most. But with such rich resources, let's supercharge smallholder farmers and crush food insecurity!

Sources:

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