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CLIMATE INSIGHTS

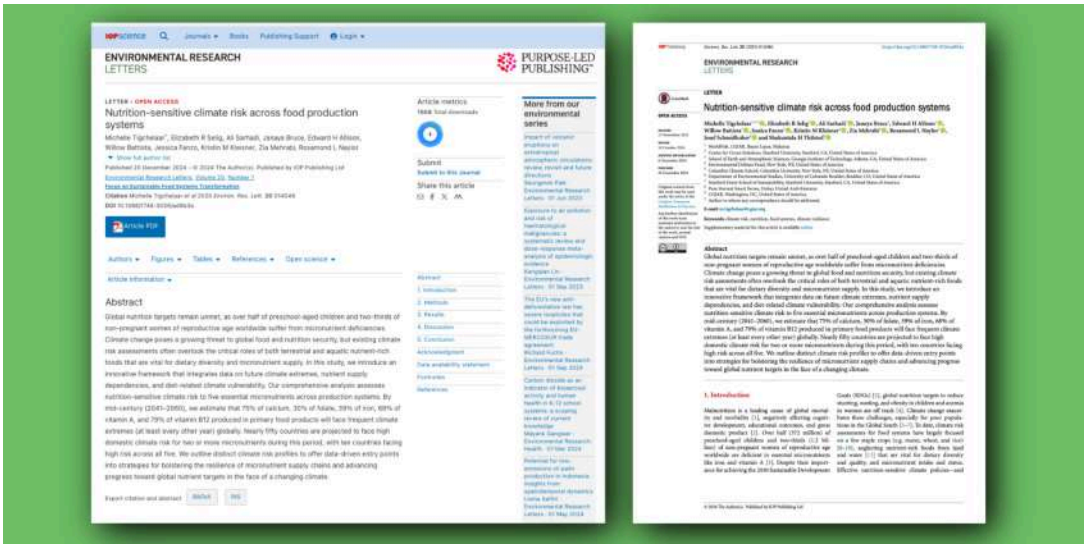
Your fortnightly update on the latest publications

CGIAR

Hello! Welcome to Issue #1 of Climate Insights 2025, the Climate Impact Platform's fortnightly roundup of the latest publications on climate change impacts and adaptation, mitigation measures, and the physical science from the literature. We're tracking trending topics in the climate space and linking them to our work for a food secure future with a brief comment on the implications of this new research on our own portfolio of climate research for development.

Here's your roundup from the last week:

CLIMATE CHANGE IMPACTS AND ADAPTATION



Nutrition-sensitive climate risk across food production systems

Tigchelaar, Michelle, et al. (2024) Nutrition-sensitive climate risk across food production systems, *Environmental Research Letters.*

Global nutrition targets remain unmet, as over half of preschool-aged children and two-thirds of non-pregnant women of reproductive age worldwide suffer from micronutrient deficiencies.

Climate change poses a growing threat to global food and nutrition security, but existing climate risk assessments often overlook the critical roles of both terrestrial and aquatic nutrient-rich foods that are vital for dietary diversity and micronutrient supply. In this study, the authors introduce an innovative framework that integrates data on future climate extremes, nutrient supply dependencies, and diet-related climate vulnerability. The comprehensive analysis assesses nutrition-sensitive climate risk to five essential micronutrients across production systems. By mid-century (2041–2060), the authors estimate that 75% of calcium, 30% of folate, 39% of iron, 68% of vitamin A, and 79% of vitamin B12 produced in primary food products will face frequent climate extremes (at least every other year) globally. Nearly fifty countries are projected to face high domestic climate risk for two or more micronutrients during this period, with ten countries facing high risk across all five. The authors outline distinct climate risk profiles to offer data-driven entry points into strategies for bolstering the resilience of micronutrient supply chains and advancing progress toward global nutrient targets in the face of a changing climate.

Learn more

This article is co-authored by three CGIAR scientists including Michelle Tigchelaar and Edward H. Allison at WorldFish as well as Shakuntala H. Thilsted.

Climate-smart agriculture reduces capital-based livelihoods vulnerability: Evidence from Latin America

Martinez-Baron, Deissy, et al. (2024), Climate-smart agriculture reduces capital-based livelihoods vulnerability: evidence from Latin America, *Frontiers.*

This study investigates the role of Climate Smart Agriculture (CSA) practices in improving rural livelihoods in Latin America, specifically through the Climate Smart Village (CSV) approach. The analysis involved a dataset of 267 households, comprising both adopters and non-adopters of CSA practices in CSVs across Guatemala, Honduras, and Colombia. The authors employed multiple correspondence analysis (MCA), Gower's metric, agglomerative clustering, partitioning around medoids (PAM), and cluster validation. The aim was to understand how CSA practices, which include the use of agroclimatic information, soil and water management practices, and risk diversification strategies, contribute to enhancing livelihoods. The authors examined this in

the context of the five capitals (social, natural, physical, financial, and human) of the Sustainable Livelihoods Framework (SLF). The findings indicate that CSA farmers exhibit lower capital-based vulnerability compared to non-CSA farmers. However, the similar performance in financial and physical capital between CSA and non-CSA farmers suggests the need for additional strategies to reduce vulnerability in these areas. The authors examined this through the Sustainable Livelihoods Framework (SLF), which includes five capitals: social, natural, physical, financial and human. These findings offer a valuable framework for policy and decision-making processes, helping to identify which capitals and dimensions of livelihood vulnerability should be prioritized in different contexts to achieve climate resilience and sustainable development. The study advocates for continued research efforts, incorporating expanded indicators, such as gender indicators within social and human capital definitions, for a more comprehensive assessment of CSA's impact. The application of SLF for analyzing CSA's contribution to rural livelihoods represents a novel approach in Latin American studies.

Learn more

This publication is co-authored by three CGIAR scientists at the International Center for Tropical Agriculture (CIAT) including Deissy Martinez-Baron, Jesus David Martinez Salgado, and Andrea Estefania Castellanos.

How can regional policy help address climate impacts in agriculture? Evaluating the climate-smart agriculture strategy for Central America (EASAC)

Howland, Fanny, et al. (2024), How can regional policy help address climate impacts in agriculture? evaluating the climate-smart agriculture strategy for Central America (EASAC), *Climate Policy.*

The design and implementation of targeted policies and programmes are crucial to addressing climate challenges. In this study, the authors sought to understand the means by and extent to which the Central American Climate-Smart Agriculture Strategy (EASAC) has contributed to addressing the specific climate challenges facing the regional agricultural sector. The authors applied a theory-based evaluation and contribution analysis to examine this policy and identified 252 changes at the national and regional levels that align with the EASAC theory of

change (ToC). Contribution analysis revealed that none of the 23 changes the authors assessed could be attributed solely to the EASAC; however, it contributed directly, in combination with other actors and institutions, to 10 such changes. The results question the efficacy of non-binding regional policies, such as the EASAC, in influencing national policy changes and highlight the dependency of climate policy implementation on international cooperation in the Central American Integration System region. Intersectoral and actor coordination, the availability of technical and research expertise, and research input appear critical to the successful implementation of regional climate policy.

Learn more

This publication is co-authored by six CGIAR scientists at CIAT including Fanny Howland, Jean Francois Le Coq, Sara Collazos, Jose Arana, Andrea Castellanos, Deissy Martinez Baron.

People in a changing climate: From vulnerability to action - Insights from World Bank Group Country Climate and Development Reports covering 72 economies

World Bank, (2024), People in a Changing Climate: From Vulnerability to Action - Insights from World Bank Group Country Climate and Development Reports covering 72 economies, *World Bank.*

This report is structured into three main parts, covering both new content and confirming key conclusions of the first two summary reports. First, it summarizes CCDR findings on the impacts of climate change on people and explores how putting people at the core of climate-development policies enhances their effectiveness and generates larger benefits. Next, it explores how people's vulnerability and ability to transition toward resilient, low-emission development depend on key infrastructure systems, the energy, water, transport, and digital sectors, and highlights the potential benefits of green value chains and green minerals. Finally, it summarizes key conclusions on macroeconomic impacts, with a focus on the diversity of impacts across countries and the large investment needs, especially in lower-income countries. These findings confirm that, even with optimistic adaptation outcomes, large residual risks make GHG emission reductions urgent. The CCDRs illustrate how low- and middle-income

countries (LICs and MICs) can contribute to this global objective without compromising on development progress and poverty reduction, with well-designed policies and enhanced support from higher-income countries.

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The CGIAR Initiative on National Policies and Strategies co-creates demand-driven policy solutions with national institutions, supporting countries to transform food, land and water systems for development and sustainable futures.

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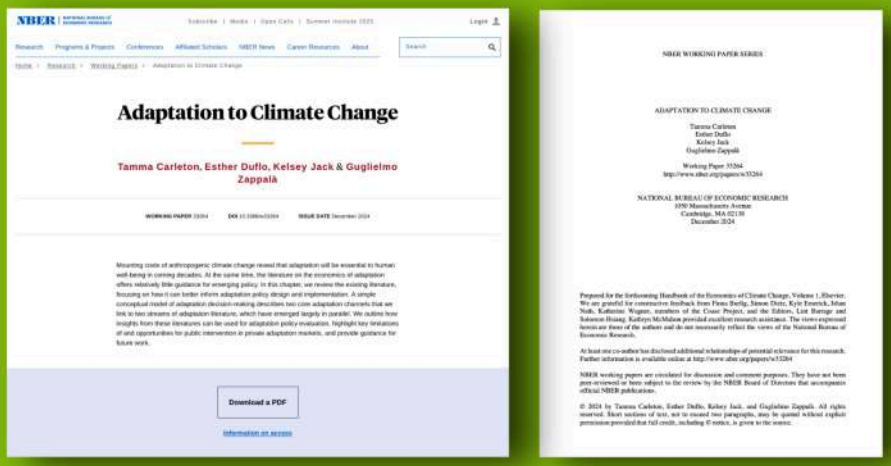

Adaptation to climate change

[Working paper] Carleton, Tamma, et al. (2024), Adaptation to Climate Change, *National Bureau of Economic Research.*

Mounting costs of anthropogenic climate change reveal that adaptation will be essential to human well-being in coming decades. At the same time, the literature on the economics of adaptation offers relatively little guidance for emerging policy. In this chapter, the authors review the existing literature, focusing on how it can better inform adaptation policy design and implementation. A simple conceptual model of adaptation decision-making describes two core adaptation channels that the authors link to two streams of adaptation literature, which have emerged largely in parallel. The authors outline how insights from these literatures can be used for adaptation policy evaluation, highlight key limitations of and opportunities for public intervention in private adaptation markets, and provide guidance for future work.

Learn more

The CGIAR Initiative on Climate Resilience, also known as ClimBeR, aims to transform the climate adaptation capacity of food and agricultural systems in low- and middle-income countries. Its goal is to

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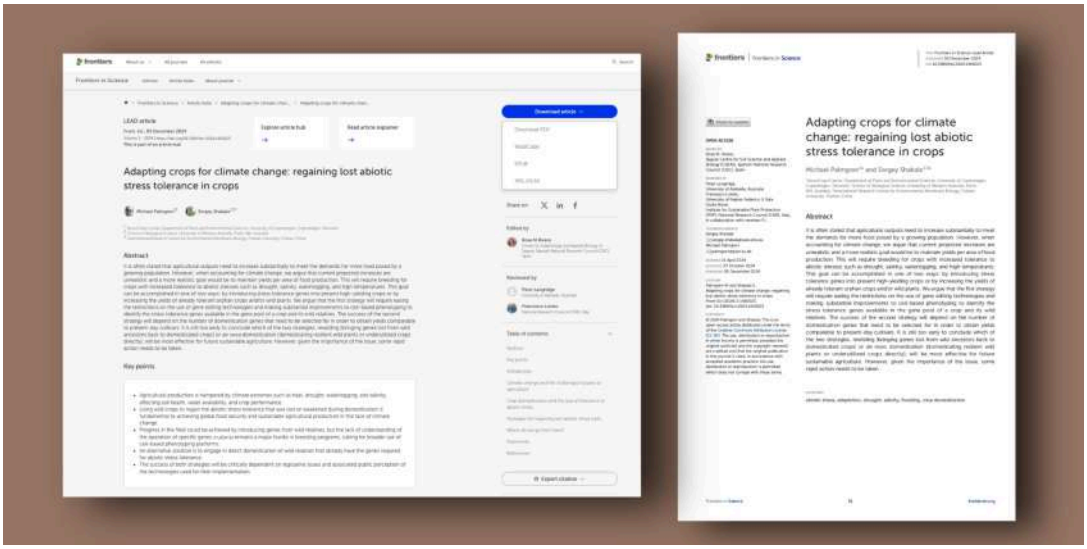
tackle vulnerability to climate change at its roots and support countries as they adapt and build equitable and sustainable futures.



Adapting crops for climate change: Regaining lost abiotic stress tolerance in crops

Palmgren, Michael, et al. (2024), Adapting crops for climate change: regaining lost abiotic stress tolerance in crops, *Frontiers.*

It is often stated that agricultural outputs need to increase substantially to meet the demands for more food posed by a growing population. However, when accounting for climate change, the authors argue that current projected increases are unrealistic and a more realistic goal would be to maintain yields per area of food production. This will require breeding for crops with increased tolerance to abiotic stresses such as drought, salinity, waterlogging, and high temperatures. This goal can be accomplished in one of two ways: by introducing stress tolerance genes into present high-yielding crops or by increasing the yields of already tolerant orphan crops and/or wild plants. The authors argue that the first strategy will require easing the restrictions on the use of gene editing technologies and making substantial improvements to cell-based phenotyping to identify the stress tolerance genes available in the gene pool of a crop and its wild relatives. The success of the second strategy will depend on the number of domestication genes that need to be selected for in order to obtain yields comparable to present-day cultivars. It is still too early to conclude which of the two strategies, rewilding (bringing genes lost from wild ancestors back to domesticated crops) or de novo domestication (domesticating resilient wild plants or underutilized crops directly), will be most effective for future sustainable agriculture. However, given the importance of the issue, some rapid action needs to be taken.

Learn more

CGIAR scientists at CIMMYT co-authored a special issue to advance the understanding of abiotic stress tolerance and development of improved cultivars for sustainable and environment-friendly crop production.

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CLIMATE CHANGE MITIGATION

Energy and socioeconomic system transformation through a decade of IPCC-assessed scenarios

van de Ven, D.J., et al. (2024), Energy and socioeconomic system transformation through a decade of IPCC-assessed scenarios, *Nature Climate Change.*

Charting future emissions pathways is a central tenet of IPCC assessment reports (AR), yet it is unclear how underlying drivers (including around policy and technology) have influenced the evolution of emissions pathways. Here the authors compare scenarios in AR5 and AR6 and find that scenarios without specific climate policies enforced have shifted lower in each scenario generation, owing to falling low-carbon technology costs and reduced expectations for economic growth, reducing fossil-fuel shares in energy and industry. Mitigation pathways consistent with 1.5–2 °C have seen increasing electrification rates and higher shares of variable renewables in electricity in more recent scenario generations, implying reduced reliance on coal, nuclear, bioenergy and carbon capture and storage, reflecting changing costs. Despite the shrinking carbon budget due to insufficient recent climate action, mitigation costs have not increased given more optimistic low-carbon technology cost projections. Moving forward, scenario producers must continually recalibrate to keep abreast of technology, policy and societal developments to remain policy relevant.

Learn more

This CGIAR Low-Emission Food Systems Initiative supports countries in meeting their emissions reductions objectives (NDCs) through transformative food system change, without compromising food security and while delivering environmental, social, and economic co-benefits.

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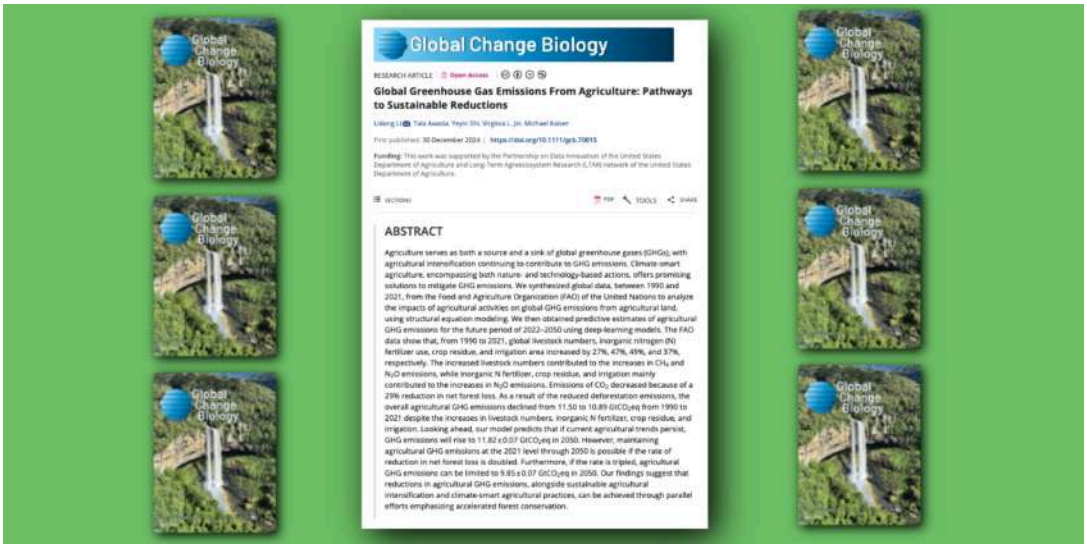


Global Greenhouse Gas Emissions From Agriculture: Pathways to Sustainable Reductions

Li, Lidong, et al. (2024), Global Greenhouse Gas Emissions From Agriculture: Pathways to Sustainable Reductions, *Global Change Biology.*

Agriculture serves as both a source and a sink of global greenhouse gases (GHGs), with agricultural intensification continuing to contribute to GHG emissions. Climate-smart agriculture, encompassing both nature- and technology-based actions, offers promising solutions to mitigate GHG emissions. The authors synthesized global data, between 1990 and 2021, from the Food and Agriculture Organization (FAO) of the United Nations to analyze the impacts of agricultural activities on global GHG emissions from agricultural land, using structural equation modeling. The authors then obtained predictive estimates of agricultural GHG emissions for the future period of 2022–2050 using deep-learning models. The FAO data show that, from 1990 to 2021, global livestock numbers, inorganic nitrogen (N) fertilizer use, crop residue, and irrigation area increased by 27%, 47%, 49%, and 37%, respectively. The increased livestock numbers contributed to the increases in CH4 and N2O emissions, while inorganic N fertilizer, crop residue, and irrigation mainly contributed to the increases in N2O emissions. Emissions of CO2 decreased because of a 29% reduction in net forest loss. As a result of the reduced deforestation emissions, the overall agricultural GHG emissions declined from 11.50 to 10.89 GtCO2eq from 1990 to 2021 despite the increases in livestock numbers, inorganic N fertilizer, crop residue, and irrigation. Looking ahead, the model predicts that if current agricultural trends persist, GHG emissions will rise to 11.82 ± 0.07 GtCO2eq in 2050. However, maintaining agricultural GHG emissions at the 2021 level through 2050 is possible if the rate of reduction in net forest loss is doubled. Furthermore, if the rate is tripled, agricultural GHG emissions can be limited to 9.85 ± 0.07 GtCO2eq in 2050. The findings suggest that reductions in agricultural GHG emissions, alongside sustainable agricultural intensification and climate-smart agricultural

practices, can be achieved through parallel efforts emphasizing accelerated forest conservation.

Learn more

The 2024 Breakthrough Agenda Report – Agriculture finds that countries must scale up the use of clean technologies to transform the global agricultural sector into a more climate-resilient, low-emissions system.

Read more

Advancing enhanced weathering modeling in soils: Critical comparison with experimental data

Bertagni, Matteo B., et al. (2024), Advancing Enhanced Weathering Modeling in Soils: Critical Comparison With Experimental Data, *Journal of Advances in Modeling Earth Systems.*

Enhanced weathering (EW) is a promising strategy to remove atmospheric CO2 by amending agricultural and forestry soils with ground silicate rocks. However, current model-based EW assessments face large uncertainties stemming from the intricate interplay among soil processes, compounded by the absence of a detailed comparison with available observational data. Here, the authors address this critical gap by first advancing a dynamic, ecohydrological, and biogeochemical Soil Model for Enhanced Weathering (SMEW). The authors then conduct a hierarchical model-experiment comparison with four experimental data sets of increasing complexity, from simple closed incubation systems to open mesocosm experiments. The comparison demonstrates SMEW's ability to capture the dynamics of primary variables, including soil moisture, alkalinity, and inorganic carbon. The comparison also reveals that weathering rates are consistently lower than traditionally assumed by up to two orders of magnitude. The authors finally discuss the implications for carbon removal scenarios and avenues for further theoretical and experimental explorations.

Learn more

By reviewing existing Soil Carbon Sequestration (SOC) measurement, reporting, and verification protocols and lessons learned from carbon projects that view SOC as a climate benefit and testing them against other projects, this CGIAR co-authored report provides strategic recommendations to the World Bank Group's Carbon Markets and Innovation team (CMI) and Agriculture and Food Global Practice division.

Read more

Effect of long-term maize and cassava cropping management on soil organic carbon sequestration in different soil aggregate fractions

Tantarawongsa, Phongsakon, et al. (2024), Effect of long-term maize and cassava cropping management on soil organic carbon sequestration in different soil aggregate fractions, *Soil Science and Plant Nutrition.*

This study aimed to investigate the effects of cultivation practices on soil organic carbon sequestration associated with the distribution and stability of soil aggregates in tropical crop fields. The study analyzed soils collected from two long-term experimental sites with different fertilizer applications during the past 46 years. For cassava cultivation, six treatments were included: Control, N fertilizer (N), NPK fertilizer (NPK), NPK incorporated with compost (NPK+CP), NPK with crop residue (NPK+CR), and crop residue (CR). For maize rotated with mung bean cultivation, six treatments were included: Control, NPK chemical fertilizer (NPK), Cow dung (CD), NPK chemical fertilizer with cow dung (NPK+CD), Rice straw (R), and NPK with rice straw (NPK+R). Soil organic carbon stock increased with the application of organic fertilizer or crop residues. Under cassava cultivation, during this 46-year span the highest carbon stock (47.0 t C ha−1) was found in the NPK+CP, compared to 26.4 t C ha−1 in the control. Under maize-mung bean cultivation, the highest soil carbon stock (46.9 t C ha−1) was found in the R treatment, compared to 39.4 t C ha−1 in the control. In each treatment, the majority of soil carbon was found in the small macroaggregate (SM). This study concluded that

combining chemical fertilizers with organic matter or applying organic matter alone enhances soil WSA stability and soil carbon sequestration potential by enhancing the proportion of small macroaggregates.

Learn more

A study was conducted by the Alliance of Bioversity International and CIAT in western Kenya to assess the effects of tillage, cropping systems and residue management on soil aggregate stability, microbial biomass carbon and soil organic carbon in 2017 and 2020.

Read more

Short-term warming supports mineral-associated carbon accrual in abandoned croplands

Zhang, Zhenrui, et al. (2024), Short-term warming supports mineral-associated carbon accrual in abandoned croplands, *Nature Communications.*

Effective soil organic carbon (SOC) management can mitigate the impact of climate warming. However, the response of different SOC fractions to warming in abandoned croplands remains unclear. Here, categorizing SOC into particulate and mineral-associated organic carbon (POC and MAOC) with physical fractionation, the authors investigate the responses of POC and MAOC content and temperature sensitivity (Q10) to warming through a 3-year in situ warming experiment (+1.6 °C) in abandoned croplands across 12 sites in China (latitude: 22.33–46.58°N). The results indicate that POC content remains unchanged while MAOC content significantly increases under warming. POC and MAOC content changes are mainly influenced by root biomass and microbial necromass carbon changes, respectively. The Q10 of MAOC is significantly lower than that of POC regardless of the warming or control treatment, suggesting that MAOC represents the most persistent and least vulnerable carbon fraction within SOC. Collectively, the sequestration of stable soil carbon can be enhanced in abandoned croplands under short-term warming.

Learn more

CGIAR scientists at the Alliance of Bioversity International and CIAT investigated three abandoned croplands with different recovery times (5, 15 and 20 years) and one natural grassland in each of two different types of steppe (desert steppe and typical steppe) in the agro-pastoral ecotone of northern China to assess the restoration potential of grassland on abandoned croplands.

Read more

PHYSICAL BASIS OF CLIMATE CHANGE

Soil moisture–atmosphere coupling amplifies the change in extreme heat in inner East Asia under rapid summer warming

Yin, Zejiang, et al. (2024), Soil moisture–atmosphere coupling amplifies the change in extreme heat in inner East Asia under rapid summer warming, *Environmental Research Letters.*

Inner East Asia (IEA) is an important component of the global grassland ecosystem and has experienced a more rapid increase in extreme surface air temperatures compared to the summer mean in recent decades (2001–2020, relative to 1971–1990). This excess hot-extreme warming (EHEW) is particularly pronounced in the southern IEA, where extremely hot temperatures have increased twice as quickly as the summer mean warming, which itself already exceeds global-land warming by more than threefold. A quantitative analysis based on a Lagrangian temperature-anomaly equation along air-parcel backward trajectories initiated on hot days across IEA reveals that the observed EHEW is primarily attributable to increased diabatic heating, which predominantly occurs from 2 days before to the hot days. Meanwhile, changes in heat-prone synoptic-scale circulation only exert a limited influence on the excess

warming. Soil drying within IEA appears to be a critical factor contributing to increased diabatic heating through soil moisture–atmosphere coupling, as it limits evaporation and enhances sensitive heat flux, thereby triggering positive soil moisture-temperature feedback. The analysis underscores the significant impact of local soil moisture deficits on the intensified extreme heat. Urgent implementation of grassland and livestock management strategies, coupled with drought mitigation measures, is essential for adaptation and ecosystem conservation.

Learn more

In a recent Alliance of Bioversity International and CIAT co-authored systematic map protocol, the authors outline how they will compile a comprehensive global inventory of studies investigating the impact of differing grassland management practices on soil carbon in livestock systems.

Read more

Future increase in compound soil drought-heat extremes exacerbated by vegetation greening

Li, Jun, et al. (2024), Future increase in compound soil drought-heat extremes exacerbated by vegetation greening, *Nature Communications.*

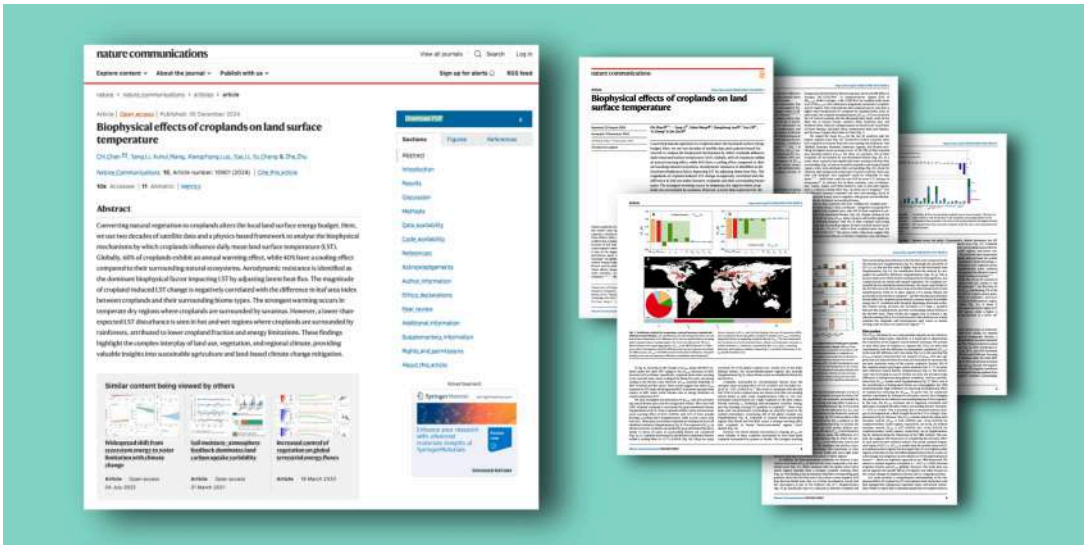
Compound soil drought and heat extremes are expected to occur more frequently with global warming, causing wide-ranging socio-ecological repercussions. Vegetation modulates air temperature and soil moisture through biophysical processes, thereby influencing the occurrence of such extremes. Global vegetation cover is broadly expected to increase under climate change, but it remains unclear whether vegetation greening will alleviate or aggravate future increases in compound soil drought-heat events. Here, using a suite of state-of-the-art model simulations, the authors show that the projected vegetation greening will increase the frequency of global compound soil drought-heat events, equivalent to 12–21% of the total increment at the end of 21st century. This increase is predominantly driven by reduced albedo and enhanced transpiration associated with increased leaf area. Although greening-induced transpiration enhancement has counteracting cooling and drying effects, the excessive water loss in the early growing season can lead to later soil moisture deficits, amplifying compound soil drought-heat extremes during the subsequent warm season. These changes are most

pronounced in northern high latitudes and are dominated by the warming effect of CO2. The study highlights the necessity of integrating vegetation biophysical effects into mitigation and adaptation strategies for addressing compound climate risks.

Learn more

In drylands, where pressures on soil, land, and freshwater are severe, CGIAR is encouraging sustainable management to enhance agrifood productivity through The CGIAR 2030 Global Strategy for Resilient Drylands. This includes promoting conservation agriculture with drought-tolerant crops, efficient water management, and soil health improvements to reduce land degradation.

Read more



Biophysical effects of croplands on land surface temperature

Chen, Chi, et al. (2024), Biophysical effects of croplands on land surface temperature, *Nature Communications.*

Converting natural vegetation to croplands alters the local land surface energy budget. Here, the authors use two decades of satellite data and a physics-based framework to analyse the biophysical mechanisms by which croplands influence daily mean land surface temperature (LST). Globally, 60% of croplands exhibit an annual warming effect, while 40% have a cooling effect compared to their surrounding natural ecosystems. Aerodynamic resistance is identified as the dominant biophysical factor impacting LST by adjusting latent heat flux. The magnitude of cropland-induced LST change is negatively correlated with the difference in leaf area index between croplands and their surrounding biome types. The strongest warming occurs in temperate dry regions where croplands are surrounded by savannas. However, a lower-than-expected LST disturbance is seen in hot and wet regions where croplands are surrounded by rainforests, attributed to lower cropland fraction and energy limitations. These findings highlight the complex interplay of land use, vegetation, and regional climate, providing valuable insights into sustainable agriculture and land-based climate change mitigation.

Learn more

In this CGIAR co-authored publication, the authors review the biophysical mechanisms by which forests influence climate and synthesize recent work on the biophysical climate forcing of forests across latitudes.

Read more

Skillful seasonal predictions of continental East-Asian summer rainfall by integrating its spatio-temporal evolution

Ma, Jieru, et al. (2024), Skillful seasonal predictions of continental East-Asian summer rainfall by integrating its spatio-temporal evolution, *Nature Communications.*

Skillful seasonal climate prediction is critical for food and water security over the world's heavily populated regions, such as in continental East Asia. Current models, however, face significant difficulties in predicting the summer mean rainfall anomaly over continental East Asia, and forecasting rainfall spatiotemporal evolution presents an even greater challenge. Here, the authors benefit from integrating the spatiotemporal evolution of rainfall to identify the most crucial patterns intrinsic to continental East-Asian rainfall anomalies. A physical-statistical prediction model is developed to capture the predictability offered by these patterns through a detection of precursor signals that describe slowly varying lower boundary conditions. The presented model demonstrates a prediction skill of 0.51, at least twice as high as that of the best dynamical models available (0.26), indicating improved prediction for both the spatiotemporal evolution and summer mean of rainfall anomalies. This advance marks a crucial step toward delivering skillful seasonal predictions to populations in need of new tools for managing risks of both near-term climate disasters, such as floods and droughts, and long-term climate change.

Learn more

In this study, the spatiotemporal variability of Ethiopian soil moisture (SM) has been characterized, and its local and remote influential driving factors are investigated.

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OTHER CLIMATE CHANGE PAPERS OF INTEREST

Dass, Bhargabnanda, *et al.* (2024), **Hydrogeochemical characterization and water quality assessment of mountain springs: Insights for strategizing water management in the lesser Indian Himalayas**, *Journal of Hydrology: Regional Studies.*

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Cheung, William W. L., *et al.* (2024), **Hope or Despair Revisited: Assessing Progress and New Challenges in Global Fisheries**, *Fish and Fisheries.*

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Keya, Sanjida Sultana, *et al.* (2024), **Thirsty, soaked, and thriving: Maize morpho-physiological and biochemical responses to sequential drought, waterlogging, and re-drying**, *Plant Stress.*

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Bechetti, Leonardo, *et al.* (2024), **Exposure to climate shocks, poverty and household well-being**, *Environment and Development Economics.*

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Ghimire, Pramit, *et al.* (2024), **Mapping Spatio-Temporal dynamics of irrigated agriculture in Nepal using MODIS NDVI and statistical data with Google Earth Engine: A step towards improved irrigation planning**, *International Journal of Applied Earth Observation and Geoinformation.*

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Dissa, Arouna, *et al.* (2024), **Navigating seasonality in cotton-based farming systems in southern Mali**, *Climate Risk Management.*

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Gentle, Popular, *et al.* (2024), **Commitment, actions, and challenges on locally led climate change adaptation in Nepal**, *Climate Risk Management.*

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Stockhause, Martina, *et al*. (2024), **Implementing FAIR data principles in the IPCC seventh assessment cycle: Lessons learned and future prospects**, *PLOS Climate.*

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Williams, Tim G., *et al.* (2024), **Power dynamics shape sustainability transitions in a modeled food system**, *One Earth.*

Click here for DOI

Handmer, John, *et al.* (2024), **Addressing the diversity of Loss and damage in Pacific Island countries to foster a just transition towards a climate-resilient future**, *Climate and Development.*

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Compiled and written by Laura Rabago, with contributions from Aditi Mukherji . If you are publishing a climate-related paper and would like to be featured, please email Laura Rabago (l.rabago@cgiar.org).