

#GLFBiodiversity



A biodiverse food system for an inclusive, resilient and safe future

One
World
One
Health

28.29
OCTOBER
2020

White paper

This White Paper is supported by



On behalf of:



of the Federal Republic of Germany

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Background

The COVID-19 pandemic has starkly revealed the vulnerability of the world's current food systems to shocks. The period of recovery after the COVID-19 pandemic has passed must be managed in a way that builds future resilience. Local and global circular economies that advance biodiverse agricultural landscapes are the way forward.

Crop- and livestock-based agriculture has expanded to meet the food demands of a burgeoning population that is expected to rise to over **9 billion by 2050**. Agriculture is the largest land use sector, taking up between 30 percent and 40 percent of the Earth's land surface with a disproportionate effect on **biodiversity**, **climate change** and **human well-being**. Agricultural landscapes around the world have evolved from places where mixed crops and livestock were grown, to sites of intensively produced monocrops and livestock.

Authors:

Dr. Anja Gassner
World Agroforestry (ICRAF)

Philip Dobie
World Agroforestry (ICRAF)

Dr. Chetan Kumar
International Union for Conservation of Nature (IUCN)

Swati Hingorani
International Union for Conservation of Nature (IUCN)

Charlotte Haeusler Vargas
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Ileana Graf
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Andreas Gettkant
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Joerg Lohmann
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

A new decade and new political challenges require a shift in how land is utilized and how food is produced

Eradication of hunger remains a global challenge, but equally so is the conservation of biodiversity, the restoration of vital ecosystem services and the need to limit emissions to prevent catastrophic climate change. The multiple demands on agro-ecosystems beyond that of food production is reflected in both the [Zero Hunger](#) SDG target, which urges an increase in the proportion of agricultural area under productive and sustainable agriculture, as well as the proposed, new agriculture target in the [Global Biodiversity Framework](#). The world's understanding of food security has also greatly advanced since the last century. The world is differentiating between "distribution gaps" – referring to the lack of access to food – and "nutrition gaps", referring to insufficiently diverse food to ensure our health and well-being.





Photo by Charlotte Haeusler, Veggies/GIZ

The effects of the current COVID-19 pandemic have raised even more questions about the viability of modern agriculture. Many have lost their jobs, and millions of poor people have been driven further into poverty and cannot afford to buy food. Crop exports, especially high-value exports that depend on air freight to reach markets, have been badly affected, as air borders have closed and commodities have been dumped. Demand for commodities in developed countries has slumped, as many reduced consumption during lock-downs, leading to surpluses building in exporting countries.

There is a growing consensus that COVID-19 has revealed the vulnerability of the world's economies and that a "green recovery", based on principles of sustainability, must be pursued. It will be important to shift to sustainable systems that are much more resilient to shocks than current approaches. This need coincides with a growing global recognition that current food systems are effective at delivering large quantities of a restricted variety of food (mainly sources of starch and protein) but ineffective in delivering adequate amounts of other forms of nutritious food. This has impacted

poor people (high levels of micro-nutrient deficiencies) as well as those that are better off (rising obesity and associated non-communicable diseases). The food systems that are needed as part of national economic recovery packages should, therefore, be ecologically sustainable, resilient to shocks and capable of ensuring that people can eat adequate amounts of nutritious food.

This can only be achieved by moving away from geographic specialization and simplified agricultural landscapes, shortening value chains and stimulating local and national food businesses that deliver on the dietary needs of a growing urban populations. Global food trading will continue to be important, including the export of agricultural commodities from developing countries. But there needs to be a shift in balance, with a growing domestic market and greatly increased added value along national value chains. Diverse agricultural landscapes that combine modern farming technologies with practices that are based on agro-ecological principles will be key to deliver the transformational change that is needed to build biodiverse, inclusive, resilient and safe food systems for all.



Photo by Tri Saputro/CIFOR

Further Information

- Making the post-2020 global biodiversity framework a successful tool for building biodiverse, inclusive, resilient and safe food systems for all
- Podcast: Building back better-investing in farming under covid-19
- FEATURE: Go green and white: EU must mainstream natural capital accounting for sustainable food production and consumption
- FEATURE: Why financing is tied to the future of a biodiverse planet

Partners

This paper was jointly developed by World Agroforestry (ICRAF) (Dr. Anja Gassner, Philip Dobie); the International Union for Conservation of Nature (IUCN) (Dr. Chetan Kumar, Swati Hingorani); and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) (Charlotte Haeusler Vargas, Ileana Graf, Andreas Gettkant and Joerg Lohmann).

The experts and project leaders gratefully acknowledge the leadership and support of the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety.

Participating organizations

GLF Biodiversity Digital Conference 2020 would not be possible without the support and participation of the following hosts, partners and organizations. For a full list of everyone involved, please visit:

events.globallandscapesforum.org/biodiversity-2020/partners

Global Landscapes Forum

The **Global Landscapes Forum** (GLF) is the world's largest knowledge-led platform on integrated land use, dedicated to achieving the Sustainable Development Goals and Paris Climate Agreement. The Forum takes a holistic approach to create sustainable landscapes that are productive, prosperous, equitable and resilient and considers five cohesive themes of food and livelihood, landscape restoration, rights, finance and measuring progress. It is led by the Center for International Forestry Research (CIFOR), in collaboration with its co-founders UN Environment Programme and the World Bank and Charter Members.

Charter Members: CIAT, CIFOR, CIRAD, Climate Focus, Conservation International, Crop Trust, EcoAgriculture Partners, EFI, Evergreen Agriculture, FSC, GEF, GIZ, ICIMOD, IFOAM - Organics International, ILRI, INBAR, IPMG, IUFRO, Rainforest Alliance, Rare, RRI, SAN, UN Environment Programme, Wageningen Centre for Development Innovation, part of Wageningen Research, WFO, World Agroforestry, World Bank Group, WRI, WWF International, Youth in Landscapes Initiative.



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