Agroecology

CONTEXT

Worldwide, agri-food systems are facing a triple challenge: Ensuring food security for a growing world population, maintaining healthy ecosystems to support livelihoods, and reducing climate risks and impacts. Additionally, agri-food systems should guarantee a fair income, good working conditions and better transparency between producers and consumers. The multiple global crises of hunger, climate change and biodiversity loss show, how closely intertwined food, health, and ecosystems are. Current food systems are, however, unable to meet these challenges. There is growing global consensus that transformative action is inevitably needed to provide sustainable, socially just and healthy foods within the planetary boundaries – now and in the future. Agroecology can contribute towards the solution to these crises and the achievement of international commitments such as the 2030 Agenda for Sustainable Development with its Sustainable Development Goals (SDGs) and the three so called Rio Conventions – the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD) and the United Nations Convention to Combat Desertification (UNCCD). Furthermore, agroecology embraces the broader 'One Health' approach, thus strengthening human, animal and environmental health.

What is agroecology?

Agroecology is an integrated approach from agricultural production to consumption, which incorporates ecological, socio-cultural, technological, economic and political dimensions. It emerged as a science and now includes agricultural practices and a social movement. These different backgrounds and its transformative character were consolidated by the international High-Level Panel of Experts on Food Security and Nutrition (HLPE) in July 2019 and defined by 13 agroecological principles.

These principles are applied in practice, combined, and adapted to local conditions, and result in a variety of agroecological measures on different scales. The principles are building blocks to shape a systemic response and to describe a transformative pathway towards sustainable food systems. While some principles are applied within farms and extend to agroecosystems, others address and alter the framework of food systems leading in combination to a systemic change. The agroecological approach and its principles contribute to SDG's addressing the different current crisis as shown in **Figure 1**.



A PROMISING LEVER FOR A SOCIAL-ECOLOGICAL TRANSFORMATION

Agroecology is a dynamic, transdisciplinary and intersectoral approach (see Figure 2). The agroecological principles contribute, in different direct and indirect ways, to food and nutrition security. Agroecology draws on indigenous and local knowledge and enables its integration and contribution to modern technologies and scientific developments. As a bottom-up and territorial process agroecology enables sustainable, diverse and resilient land-use and contributes to local and regional rural development. It promotes diverse production systems and farming with nature and biodiversity. In addition to conserving the natural environment, it strengthens farms and the regional economy to become more resilient to crop failures and climate change and more independent from price fluctuations of imported goods such as fertilizer or seeds. The joint promotion of on-site product processing and distribution through local or direct sales channels creates additional and secure income opportunities with fair wages, especially for women and youth, boosting their economic status.



Agroecological approaches are rooted in participation and empowerment by ensuring access to resources and markets for all, connecting producers and consumers more directly. The holistic approach provides perspectives for farmers, local communities, and global agrifood systems, as it allows producers and consumers to actively shape the future of their agri-food system.

DEVELOPMENT POLICY PERSPECTIVE

In recent years, agroecology has gained significant importance in the international discourse on future-proof agri-food systems. Agroecology offers concrete, triedand-tested solutions – which need to be disseminated and implemented on a broader scale.

During the UN Food systems summit 2021, the Agroecology Coalition was founded to share experiences and knowledge on how to implement, finance and support agroecological approaches. Today, more than 50 countries and 110 organisations, including the EU, AU and FAO joined the coalition. As a member of the coalition since June 2023, Germany is committed to extend its support for agroecology both in the international political debate as well as in projects on the ground.

The coalition agreement of the current German government further affirms the resolution by the German Bundestag in 2019, which called upon the German Federal Government to expand and strengthen its commitment to agroecology with respect to development cooperation and the promotion of rural areas.

Commitment of the German Federal Ministry for Economic Cooperation and Development

The German Federal Ministry for Economic Cooperation and Development (BMZ) is increasing its support for agroecology. In its core area strategy "Sustainable Agri-Food Systems" (2021), BMZ anchored an agroecological transformation as one of its four activities in the area of rural development. This translates into numerous commitments to financial and technical cooperation projects and activities on agroecology.

In Germany, the German Federal Ministry for Economic Cooperation and Development (BMZ) regularly organises expert discussions on agroecology with the participation of civil society, the private sector and other federal ministries, and is involved in conceptual and policy debates on the topic.

Commissioned by BMZ, the GIZ Sector Project "Rural Development" provides advice on agroecology to the ministry. Furthermore, the project supports capacity development of global, regional and national partners providing trainings, knowledge products, support in strategy development, and network opportunities. For example, it supports exchanges between policymakers on agroecology and supports the development of leadership competencies on agroecology and organic agriculture in African organisations.

On behalf of BMZ, GIZ implements projects related to agroecology, among others, as part of the BMZ Special Initiative "Transformation of Agricultural and Food Systems". Some examples of this work on agroecological approaches are described below.



EXAMPLES OF OUR WORK

Through the global programme "Soil protection and rehabilitation for food security" (ProSoil), co-funded by the European Union (EU), GIZ supports and advises small farmers in Ethiopia, Benin, Burkina Faso, India, Kenya, Madagascar and Tunisia on agroecological practices and transformation processes. Alongside the respective government agencies of each country, stakeholders from the scientific community, civil society and the private sector are also actively involved in the measures. Since 2014, more than 241,000 smallholder farmers apply sustainable soil management and have been able to rehabilitate more than 565,000 hectares of land, directly benefiting the lives of 1.7 million people. Almost 40 percent of the farmers targeted are women. On area rehabilitated, farmers can achieve on average a yield increase of approximately 40 percent. Thanks to climate-smart soil management solutions and since healthy soils are an important carbon sink, the carbon footprint was simultaneously significantly reduced.

The project "Support to Agroecological Transformation Processes in India" (SuATI) aims to strengthen ongoing agroecological transformation processes in India. SuATI improves knowledge and its dissemination through a combination of knowledge platforms and networks on agroecology as well as national and state-level research partnerships. India has a growing number of climate-friendly business models combining traditional circular farming practices with innovative technological and management approaches. Therefore, SuATI supports upscaling of successful agroecological business models and market development, with a focus on the states of Karnataka, Madhya Pradesh and Assam.



In cooperation with the national partner, SuATI supports landscape-based planning, implementation and monitoring of agroecological approaches. On a national level, SuATI fosters cross-sectoral and cross-policy exchanges and strengthens Indo-German dialogue and cooperation on agroecology.

Through training courses, model farms, digital services, radio or village cinema and other measures, the global programme "Knowledge Centres for Organic Agriculture in Africa" (KCOA) helps to expand organic agriculture and agroecology. Focus is placed on an online platform that enables access to and dissemination of knowledge for multipliers and interested people all over the continent and beyond. The programme is coordinated from Germany and implemented by non-governmental organisations in North, West, Eastern, Central and Southern Africa. The offered services cater to associations, advisors, trainers, producers, processing enterprises, retailers and consumers. In addition, the project encourages networking among key stakeholders in production, processing and marketing along selected value chains. This is done through enabling better access to markets on the basis of adapted certification methods.

More Information: https://www.giz.de/en/worldwide/104357.html

Published by: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices Bonn and Eschborn, Germany

Dag-Hammarskjöld-Weg 1 - 5 65760 Eschborn T +49 61 96 79-0 F +49 61 96 79-11 15 E info@giz.de I www.giz.de

July, 2023

Project: Sector Project "Rural Development" E svle@giz.de

Design/layout/illustration: Atelier Löwentor, Darmstadt, Germany

Photo credits/sources: © GIZ/Jörg Böthling, © Victoria Uwemedimo Agroecology Fund, © divyasacharphotography

Map material:

The cartographic representations are for informational purposes only and do not imply any recognition of borders and territories under international law. GIZ assumes no responsibility for the topicality, correctness or completeness of the map material provided. Any liability for any damage arising directly or indirectly from the use of the map material is excluded.

Published by



Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



On behalf of

Federal Ministry for Economic Cooperation and Development