Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Submission to the UNFCCC Sharm El-Sheik Joint Work on implementation of climate action on agriculture and food security

Topics:

a) **Views on the elements of the joint work referred to in paragraphs 14–15, including views on topics for the workshops referred to in paragraph 15(b)**

b) **Views on the operationalization of the portal referred to in paragraph 16**

Bonn, 27 March 2023

Content

Introduction and key messages

The Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) is a German federal enterprise that provides services in the field of international cooperation for sustainable development on behalf of commissions from the German Government and other donors.

GIZ welcomes the opportunity to submit its views on the elements of the Joint Work on Implementation of Climate Action on Agriculture and Food Security (1/CP.27), and the establishment of this Joint Work[1]. With this submission, **GIZ aims to share its experience and expertise in the field of climate action on agriculture, rural development, food, and nutrition security to inform the Joint Work**.

The political momentum felt around the transformation of agri-food systems at COP27, also resulting in the Joint Work, is **an opportunity over the coming four years that must be used** to:

a) build on the exchange between Parties and stakeholders under the Koronivia Joint Work on Agriculture (KJWA) and **bring agriculture and food and nutrition security discussions under the UNFCCC to the level of implementation**. For this, a **holistic approach based on the transformation of the agri-food systems**, looking at the whole value chain, sustainable land use systems and production and consumption, is necessary.
b) **identify challenges and barriers for implementation** in all countries as well as **mobilize additional financial and capacity development support** that is in line with a pathway towards low GHG emissions and climate-resilient development.
c) **highlight the important role of the most vulnerable** in this context, in particular rural women, children and indigenous peoples and point out ways in which they can be best supported in unfolding their potential in feeding their communities while protecting the climate.

Key facts

- The IPCC_AR6_Report[2] once again emphasizes the **urgency of deep, rapid and sustained mitigation and accelerated implementation of adaptation actions, especially in developing countries**.
- **Agri-food systems are associated with 23 - 42% of global GHG emissions**, while there is still widespread food insecurity and malnutrition.[3]
- Emissions associated with food loss and waste are responsible for 8 -10 percent of anthropogenic GHG emissions, comparable to emissions from all global road transport. A global hotspot analysis shows that in 2018, 29 percent of all food produced was lost or wasted. **Dietary change can significantly reduce emissions**, with a technical mitigation potential of 2.7 - 6.4 billion tons of carbon dioxide equivalent. **Transitioning to dietary standards such as**

[1] Onwards, this submission refers to the Joint Work on Implementation of Climate Action on Agriculture and Food Security as "Joint Work".
[2] IPCC, 2023. Synthesis Report of the IPCC Sixth Assessment Report, IPCC_AR6_SYR_SPM.pdf
[3] IPCC, 2022. Climate Change 2022. Mitigation of Climate Change. Contribution of the WGIII to the AR6 of the IPCC, https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf

the EAT-Lancet diet, which relies on more plant-based food, will reduce food system emissions by 70 percent by 2050.[4]

- The estimated global gap for adaptation is large and widening and progress is unevenly distributed, and lack of finance is an important driver of adaptation gaps[5]. Developing countries reported over USD 800bn in costed adaptation needs in their NDCs[6].
- **Climate change is already having a devastating impact on agricultural and food systems in many regions**. Extreme weather events such as floods and droughts, but also slow onset events like changes in global mean temperatures and precipitation patterns threaten the harvests and lives of millions of people in rural areas. **A rapid transformation into climate-resilient and low-emission agri-food systems is necessary to achieve a life without hunger**. By 2050, 8 - 80 million more people could face hunger - especially in sub-Saharan Africa, South Asia, and Central America[7].
- **We need to shift towards healthier and more sustainable diets, reduce food loss and waste[8], and adopt nature-positive food production practices**. Only by applying a holistic, multisectoral agri-food systems approach that incorporates actions in the areas of diets, food loss and waste, sustainable land use and production we can meet global climate commitments[9], stem biodiversity loss, and ensure food security and healthy diets for a growing population.[10]
- **Nutrition and food security, rural development and agriculture remain part of the German government's priorities**. The reform concept "BMZ 2030" names "Transformation of agricultural and food systems" as one of 6 core topics. The core message is that “A world without hunger within planetary boundaries is possible!”.

GIZ portfolio in key areas of the transformation of agri-food systems

Between 2014 and 2021, GIZ supported over 150 projects related to climate, rural development, food security and agriculture with more than 1.2 billion euros. In addition to climate mitigation activities, adaptation measures in the African agricultural sector were a particular focus.

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[4] Shelton, S., et al. 2023. Expansion of Plant-Based Meat and Its Impacts on Climate and Food Security. In: Campbell, B.M., et al. (Eds), Transforming Food Systems Under Climate Change through Innovation. Cambridge University Press, Cambridge. doi.org/10.1017/9781009227216.

[5] IPCC, 2022. Impacts, Adaptation and Vulnerability. Contribution of the WGII to the AR6 of the IPCC, https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FullReport.pdf

[6] UNFCCC Standing Committee on Finance, 2022. Report on progress towards achieving the goal of mobilizing jointly USD 100 billion. https://unfccc.int/sites/default/files/resource/J0156_UNFCCC%20100BN%202022%20Report_Book_v3.2.pdf

[7] IPCC, 2022. Impacts, Adaptation and Vulnerability – Chapter 5 Food. Contribution of the WGII to the AR6 of the IPCC. https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FullReport.pdf

[8] FAO, 2019. The State of Food and Agriculture. Moving forward on food loss and waste reduction. https://www.fao.org/3/ca6030en/ca6030en.pdf

[9] WWF, 2021. The Missing Ingredient: A food systems approach for a 1.5°C world. WWF, Gland, Switzerland. https://wwfint.awsassets.panda.org/downloads/cop26_food_manifesto.pdf

[10] WWF, 2022. Solving the great food puzzle: 20 levers to scale national action. https://wwfint.awsassets.panda.org/downloads/solving_the_great_food_puzzle_wwf_2022.pdf

a) Food and nutrition security

GIZ has a diverse portfolio in the area of **food and nutrition security**, both with a long-term perspective geared towards sustainable change and in acute crisis situations. As part of the **transformation of agri-food systems**, the measures implemented aim to promote the consumption of sufficient and healthy food within planetary boundaries.

- Proven approaches to food and nutrition security include the targeted promotion of affordable nutrient-rich foods through **diversified, nutrition-sensitive agriculture** and the promotion of sustainable fisheries and aquaculture.
- Knowledge on healthy nutrition, care practices and hygiene measures is imparted alongside measures for the empowerment of women.
- GIZ also promotes **dialogue with partner governments** on the political and economic framework conditions that are conducive to successful transformation of the agri-food system.
- Furthermore, **GIZ develops and pilots new approaches and formats, such as supporting the capacity development of selected multi-actor partnerships**, in order to advance their transformation agendas.
- Where crises and conflicts prevent the immediate implementation of the above-mentioned interventions, **GIZ develops integrated solutions and combines cross-sectoral approaches to acute crisis mitigation** with conflict mitigation and stabilisation measures in the sense of the Humanitarian-Development-Peace Nexus.

b) Rural Development

GIZ supports climate action on rural development, agriculture, food, and nutrition security by disseminating systemic, transformative, and cross-sectoral approaches. This is achieved i.a. by:

- **promoting climate-resilient and low-emission land management** that conserves natural resources, creates good living conditions in rural areas and is economically viable.
- **comprehensive risk management** – in the context of climate risk and agricultural insurance, climate risk analyses, (digital) climate information services and early warning systems.
- **agroecological approaches** that conserve and restore resources, ecosystems and their services, for example through circular economy approaches and nature-based solutions
- **integrated water resources management and water- and energy-saving technologies** that adapt agricultural and food systems to increased resource scarcity.

c) Agriculture

GIZ aims at sustainably increasing productivity, employment and income of smallholder farmers in order to contribute to climate protection and climate adaptation.

- Specifically, **GIZ promotes climate-resilient and low emission innovations**, access to green finance, climate information services and climate insurance.
- It develops **compensation mechanisms for farmers** to incentivize the adoption of more sustainable farming practices while simultaneously contributing to livelihood security.
- On the demand side, GIZ promotes the **shift to less emission-intensive food** and the reduction of losses and waste in supply chains.
- GIZ also supports the German government (BMZ) in **promoting international climate initiatives in and related to the field of agriculture** (NDC partnership, Global Methane Pledge, Global Forest Finance Pledge) and the cooperation with key international partners.

Key recommendations on topic a)

The Joint Work, paragraph 17, invites parties and observers to share their **views on topics for workshops** related to agriculture and food and nutrition security to be held at the first regular sessions of the subsidiary bodies each year.

Building on the information provided above, **GIZ recommends the following**:

- The Joint Work should make efforts to build a **common vision around a socially and economically just and ecologically sustainable transformation of agri-food systems within planetary boundaries as a central guide for the next four years**. The Joint Work should put at the center the role of farmers and small-scale food producers as key agents of change. It should also **emphasize and strengthen the role of vulnerable, but also critical groups in the transformation of agri-food systems,** in particular rural women, youth, local communities, and indigenous peoples. **The Joint Work should also consider the other two Rio-Conventions (in particular the Kunming-Montreal Global Biodiversity Framework)**, and include aspects of conservation, restoration and sustainable use of ecosystems and biodiversity, integrated water resource management as well as animal welfare.
- **Effective climate action in the agricultural sector and the agri-food systems is key**. Not only to achieve the Paris Agreement, but also to contribute to the Agenda 2030 and its Sustainable Development Goals, in particular food and nutrition security.
- **The Joint Work must build on the discussions under Koronivia Joint Work on Agriculture (KJWA) and bring agriculture and food and nutrition security discussions under the UNFCCC to the level of implementation**. For this, **a holistic approach based on the transformation of the agri-food systems, looking at the whole value chain, sustainable land use systems**

and production and consumption, is necessary. This should build on the work by the UN Food Systems Summit, including the national pathways. **Taking a food systems perspective includes every aspect of agriculture related to food production**, and widens the scope to production, processing, distribution, preparation and consumption of food, thus, including food loss and waste. These aspects have **enormous potential for climate action for both adaptation and mitigation**.

- **GIZ suggests holding the first workshop as soon as possible, ideally already at COP28, or at SB60 in June 2024 at the latest**. This is important to build on the momentum achieved at COP27 and on the road to COP28, especially around the transformation of agri-food systems.

More specifically, GIZ would like to suggest the following topics for a series of workshops:

Workshop 1: The transformation of agri-food systems under climate change – vision, concepts and state-of-the-art; Rationale: The Joint Work should start with a common understanding and vision that this first workshop could facilitate.

Workshop 2: Shifting towards climate friendly and healthy diets; Rationale: Diversification of production, including fruits, vegetables, and legumes, as well as the nutritional value under climate change needs to be considered in order to provide nutritious and affordable food for all.

Workshop 3: Reducing food loss and waste; Rationale: Global food loss and waste equals 8 - 10% of total GHG emissions and thus has a great potential in mitigating emissions.

Workshop 4: Livestock sector emissions; Rationale: Building on the workshop hold on this topic during the KJWA, the focus should be on concrete examples for implementation, as the life stock sector constitutes still a considerable source of emissions globally[11].

Workshop 5: Best practice examples for the transformation of agri-food systems; Rationale: Transformative approaches and tools can offer possibilities to increase resilience and adaptive capacity of agri-food systems. This workshop could focus on the presentation of best practices including case studies and discussion on upscaling (e.g. including digital climate advisory services and climate resilient agro-pastoral systems).

Workshop 6: Positive incentive systems for both public and private investments; Rationale: The workshop could explore how repurposing public support and incentivising private finance in agri-food systems could contribute to country-level actions towards nature- and climate-positive agriculture that is needed to achieve the SDGs, Biodiversity Targets and Paris Agreement.

Workshop 7: Breaking down the transformation – what does it mean for small-holder farmers in LDCs/ different agri-food and land use systems?; Rationale: Small-holder farmers are key agents of change for the transformation of agri-food systems. Especially the role of indigenous peoples and local communities, women

[11] WWF, 2022. Solving the great food puzzle: 20 levers to scale national action. https://wwfint.awsassets.panda.org/downloads/solving_the_great_food_puzzle_wwf_2022.pdf

and youth should be strengthened. The workshop should provide practical insights into the relevance and impacts, climate action will have on selected LDCs, different agri-food and land use systems, underlining the importance of the named stakeholders.

Workshop 8: Transforming agri-food systems by linking the Rio-Conventions (UNFCCC, UNCCD, CBD); Rationale**:** Presentation and discussion of synergies and linkages between the Rio-Conventions, highlighting, among others, the role of nature-based solutions/ ecosystem-based adaptation, agroecology, and sustainable land management systems. Addressing synergies of the three interconnected and interdependent Conventions is essential in achieving transformation in agri-food systems.

Workshop 9: The role of rural governance and sustainable land management in fostering climate resilience and mitigation in agri-food systems; Rationale: Rural governance and sustainable land management are important concepts in integrating competing interests and trade-offs in the use and protection of natural resources. They offer a systemic approach, taking into account the complexity of supporting climate adaptation and mitigation in agri-food systems.

Key recommendations on topic b)

The Joint Work, paragraph 18, invites parties and observers to share their **views on the operationalization of the portal** referred to in paragraph 16.

GIZ recommends considering the following points for the development and implementation of the portal:

1. **Aim of the portal**

The aim of the portal (1/CP.27) is the sharing of information on projects, initiatives, and policies for increasing opportunities for implementation of climate action to address issues related to agriculture, rural development and food and nutrition security. The online portal would further be useful to support the discussion and exchanges during the workshops of the 4-year Joint Work and the information collated could support the formulation of the final synthesis report.

2. **Added value of the portal**

The portal has to fit in and be of actual added value in the landscape of existing portals. Only after a sorrow screening and evaluation of existing portals the added value of the portal of the Joint Work.

3. **Lessons learned from other online portals**

GIZ acknowledges the existence of other online portals providing information on climate action on agriculture, rural development and food and nutrition security. The portal should be complementary to existing portals, platforms and sources of information, avoiding duplicating efforts and maximizing the use of sources and information already available.

The portal should fit in and build upon those platforms (e.g. MRV Platform for Agriculture, GRA website, FAO Climate Change Knowledge Hub, EIP-AGRI Website,

REDD+ Portal). In particular, the REDD+ Portal, which has the following useful features might be suitable to replication:

- Project information can be found by different entry points like submitting country, submitting organization and topic. Other entry points, which could be added, are project country, financial data, status of the project (e.g. planned, in progress, implemented).
- Information Hub on results of the projects regarding CO2 emission reductions. This could be added by further graphics and statistics on the projects/ initiatives, which enables the parties to assess in which countries and on which topics needs exist.
- Information in relevant upcoming and past meetings, to keep informed and promote relevant meetings.

In addition, GIZ has its own experience with designing and operating portals. For instance, **GIZ is operating the "Adaptation Community" portal** offering background information, case studies and further resources in the field of climate change adaptation. The Adaptation Community encompasses a variety of resources, such as a Compendium of Analytic Tools for Practitioners addressing the transformation of agri-food systems, among others. GIZ is also supporting WWF Germany in the development of a **NDC toolkit with a focus on agri-food systems**, which could be complementary to or integrated into the Portal of the Joint Work.

4. Administration of the portal

The portal should be developed by the Secretariat, alone or in conjunction with other UN-bodies. The portal should be populated with information from Parties, UN bodies and outside actors.

5. Who can access the portal and who can add info?

The portal should be open and transparent, but there should be limitations to who is allowed to upload information, and what kind of information can be uploaded. It should be ensured that the information on the portal is relevant, accurate, public, etc.

6. Deadline for completion

The first version of the online portal should be set up following a decision at COP28, or earlier if an agreement can be reached at SB58.

7. Information/ requirements the portal has to fulfill

The portal should include information on national or international best-practice projects enhancing climate action on agriculture, rural development and food and nutrition security delivered by the countries. Other information could include the duration of the projects, focus regarding adaptation, mitigation and their co-benefits; food security and nutrition; stakeholders involved, funding provided, documentation, etc. It should also include **information on funding opportunities**, in particular information on current calls for project proposals of relevant funding mechanisms. The portal should also offer a possibility for registered users to **list (research, project, implementation) needs to connect with other users** that have similar needs or might provide peer learning possibilities.

Over the course of the four years **the portal should be further developed** and linked to or involve information provided by other platforms and projects funded by GEF, GCF etc. Also, it should be explored how it could be linked to the platform to be established by Article 6.8.

Once the portal is operational, it will be important for Parties to receive regular updates on the **statistics of the portal's use and accesses** as well as an assessment of its usefulness.

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Annex: Selection of relevant GIZ publications and websites

Publication/ website	Link
Transformation of Agricultural and Food Systems	https://www.bmz.de/en/news/publications/100758-100758
Adaptation Community	https://www.adaptationcommunity.net/
CompensACTION Policy Brief	https://cgspace.cgiar.org/bitstream/handle/10568/125381/brief.pdf
Climate change and rural development	https://www.giz.de/en/downloads/giz2021-en-bmz-climate-change-and-rural-development.pdf
Agriculture and climate	https://www.bmz.de/en/issues/climate-change-and-development/agriculture-and-climate