



Project Result 5: Digital Course in Circular Agriculture

"SKILLS"

https://www.euskills.info/home

"Strengthening Key Competences in Agriculture for Value Chain Knowledge"

























Digital Course: Introduction to Circular Agriculture

Chapter 3 Sustainability of Food Security in Circular <u>Agriculture</u>

"SKILLS" https://www.euskills.info/home

"Strengthening Key Competences in Agriculture for Value Chain Knowledge"





















Chapter 3.1 Definition of Food Security in the Context of CA





Exploring Food Security within Circular Agriculture

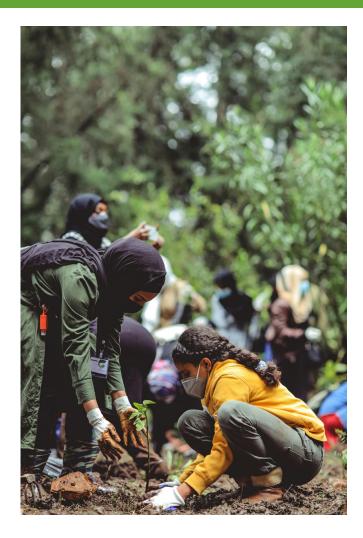
<u>Definition</u>: Food security involves availability, access, utilization, and stability of food resources.

<u>Importance</u>: Ensures access to sufficient, safe, and nutritious food; critical for human well-being.

Food security in circular agriculture focuses on sustainable practices, minimizing waste, and optimizing resource use to ensure a resilient and regenerative food system.

(Photo: https://unsplash.com/photos/two-rolled-hay-bales-on-grass-field-during-golden-hour-NqaJAIO3u7w?utm_content=creditShareLink&utm_medium=referral&utm_source=unsplash)

Dimensions of Food Security *****



- **1. Availability**: Stable food supply through adequate production and distribution.
- **2.** Access: Economic and physical access to food for all individuals.
- **3. Utilization**: Effective use of food involving nutrition, clean water, and healthcare.
- **4. Stability**: Consistent access to food despite potential disruptions.

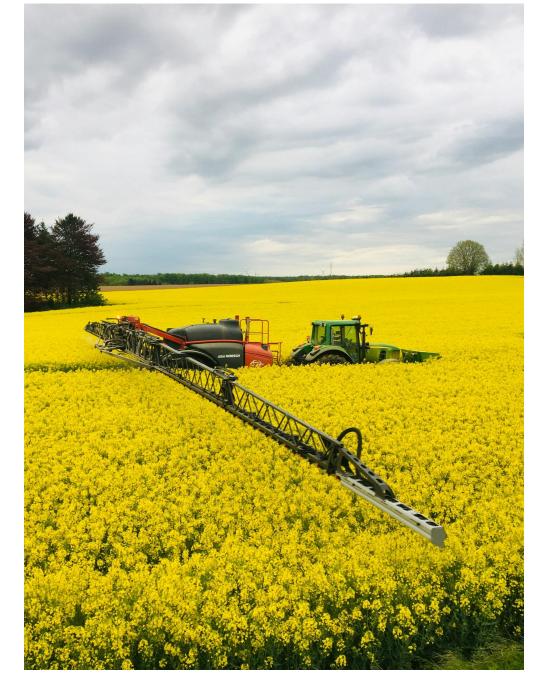
Understanding these dimensions helps in creating strategies to ensure that everyone has reliable access to the food they need.

Influencing Factors



- <u>Sustainable Agriculture</u>: Practices like crop rotation and agroforestry.
- <u>Infrastructure</u>: Efficient transportation and storage facilities.
- <u>Economic Stability</u>: Robust economy and market access.
- <u>Technological Advancements</u>: Innovations like improved crop varieties.
- <u>Education</u>: Knowledge of modern agricultural practices.

Multiple interconnected factors contribute to food security, emphasizing the need for a holistic approach to sustainable food systems.



Individual Roles in Food Security 🤘





https://unsplash.com/photos/a-black-and-white-photo-of-a-row-of-trees-ApqOSOjZ 5wg?utm content=creditShareLink&utm medium=referral&utm source=unsplash



- Diet Diversity: Balanced diets with various foods.
- Sustainable Choices: Purchasing local and seasonal foods.
- Home Gardening: Growing own food.
- Reducing Food Waste: Meal planning and proper storage.
- Community Engagement: Supporting local farmers and food initiatives.



Individuals play a crucial role by making responsible choices that support sustainability and enhance local food security.

Global Food Security 🤘



- Supply Chains: Global trade and distribution networks.
- Climate Change: Impact on agricultural productivity.
- Economic Interdependence: Global food prices and stability.
- Conflict and Migration: Disruptions in food systems.
- International Cooperation: Collaborative efforts and knowledge exchange.

Global food security challenges require international cooperation and innovative solutions to ensure a stable and equitable food supply.

Nurturing a Sustainable Future 🕊

Key Points

- Comprehensive Understanding: Multidimensional nature of food security.
- Sustainable Practices: Importance of circular agriculture.
- Global Cooperation: Collective efforts for a secure food system.

Takeaways

- Food security is multifaceted and essential for well-being.
- Sustainable agriculture is key to long-term food security.
- Everyone has a role in promoting food security.

References 🦋



- World Bank: What is Food Security?
- · Concern USA: What is Food Security?
- FAO: Food Security Concept Note
- · OECD: Food Security
- · IFPRI: Food Security
- Yohanna Diaz-Amaya, Zoe Star, Scott T. McClure, "Food security and diet quality, not vitamin D status are significantly associated with depression: Results from NHANES 2015–2018," *Journal of Affective Disorders*, 347, 150-155, 2024.
- · Zhao Yu-han, Qian Chen, Zhang Yu-mei, Li Xian-de, Kamiljon T. Akramov, "Food security amid the COVID-19 pandemic in Central Asia: Evidence from rural Tajikistan," *Journal of Integrative Agriculture* (proofs), 2023.
- Chien-Chiang Lee, Jingyang Yan, Fuhao Wang, "Impact of population aging on food security in the context of artificial intelligence: Evidence from China," *Technological Forecasting and Social Change*, 199, 12306, 2024.
- Edem Segbefia, Baozhen Dai, Philip Baba Adongo, "The politics of food insecurity in Sub-Saharan Africa: A conceptual perspective," *International Journal of Health Planning and Management*, 2024.



SKILLS



"Strengthening Key Competences in Agriculture for Value Chain Knowledge"

Programme: Erasmus+

Key Action: Cooperation among organisations and institutions

Action Type: Cooperation partnerships in higher education (HED)

Call: 2021 - Round: 1

Grant Agreement No.: 2021-1-EL01-KA220-HED-000023289

Project Duration: 28/02/2022 – 27/08/2024 (30 Months)

Total Budget: 138.158,00€



https://www.euskills.info/home

Financed by the European Union. The European commission support for the production of this publication does not constitute an endorsment for the contents which reflects the views only of the authors and the commission cannot be held responsible for any use which may be made of the information contained therein.