



The Problem of Food and Nutrition Security: A Global and Local Challenge

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Abstract

The study addresses food and nutrition security and emphasises the important role of local authorities alongside United Nations initiatives. It recognises that effective solutions must be tailored to local circumstances and the specific needs of communities. The study examines the paradox of abundance and hunger and points out that despite sufficient global food production, around 800 million people suffer from hunger and malnutrition. The greatest challenges arise from unequal access to adequate food, particularly the differences between urban and rural regions, as well as the complications arising from the decentralisation of food security policies.

The study uses analytical tools such as national and international legal frameworks, guidelines from organisations such as the FAO, case studies of territorial food projects, assessments of local food policies and examples of decentralised cooperation. The results suggest that local authorities are better able to adapt global strategies to the specific characteristics of their regions and thus improve food security due to their proximity to real-life conditions. The study also emphasises the importance of the six dimensions of sustainable agriculture and nutrition: availability, access, utilisation, stability, capacity and sustainability. In summary, a territorial approach that emphasises adaptation to local conditions and the involvement of local actors is an effective means of formulating a more inclusive and effective food and nutrition security policy. The research argues in favour of strengthening social protection systems, supporting smallholder farmers, promoting social justice and encouraging sustainable agricultural practises.

Keywords: Consensus, Qualities, Sustainability, Systems, Policy

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Introduction

The greatest challenge of the 21st century is food and nutrition security, which is relevant at both global and local levels. Although global food production is theoretically capable of feeding the entire population, the paradox of a surplus alongside hunger is unmistakable. Around 800 million people still suffer from hunger and malnutrition, highlighting the inadequacies of current food systems in ensuring equitable and sustainable access to sufficient food for all. Therefore, the key concern is not the quantity of food produced, but the complex endeavour of guaranteeing sustainable, equitable and reliable access to adequate nutrition for everyone.

This problem goes beyond the mere availability of food and encompasses a variety of interrelated factors. Urban areas tend to have better market access and a wider choice of food, although their agricultural production is limited. Conversely, rural areas, which make an important contribution to food production, often have limited and inconsistent access to food. In addition, challenges such as poverty, unemployment, inadequate healthcare and education, environmental degradation, political instability and armed conflict further exacerbate food insecurity. Given these complex interrelationships, it is crucial to analyse food systems that are constantly influenced by globalisation, urbanisation, climate change and demographic shifts. A comprehensive understanding of these dynamics and their impact on health, taking into account local realities, is crucial for formulating sustainable solutions that are tailored to the specific needs of communities.

Food and Nutrition Food security is one of the biggest challenges on the world stage (HLPE, 2020). In the context of the Sustainable Development Goals (SDGs), in particular SDG 2, the international community has committed to eradicating hunger and malnutrition in all its forms. Despite this collective commitment, progress towards these vital goals has been slow. The recent COVID-19 pandemic has exacerbated existing difficulties and emphasises the urgent need for comprehensive strategies to address this undefined crisis (HLPE, 2020). It is imperative that all stakeholders collaborate and innovate to promote resilience and ensure that everyone has access to sufficient and nutritious food.

Part 1: The qualities of a sustainable food system: a complex overview

A consensus has been reached on the essential attributes of a sustainable food system. These attributes focus on the system's ability to ensure food and nutrition security for all people, both now and in the future, while protecting resources and promoting social equity. The concept of sustainability in food systems encompasses the entire life cycle of food, i.e. production, processing, distribution, consumption and waste management.

The six dimensions of food and nutrition security:

Food security is a multi-layered and dynamic concept that has evolved considerably over time. Originally defined by four core dimensions, the Sustainable Agriculture and Nutrition framework has now expanded to include two additional dimensions: actionability and sustainability, providing a more holistic and integrated view.

The four basic dimensions are as follows:

Availability (Stefano & Olivotti, 2023) (productivity and prosperity): This dimension refers to the actual availability of food (Mesure de La Sécurité Alimentaire Au Maroc, 2024) resources in sufficient quantity and quality to meet individual needs. It includes elements such as food production, stocks and trade dynamics (OECD, 2017).

Access (Stefano & Olivotti, 2023) (equity and inclusion): This dimension focuses on the physical and economic ability of individuals to access available food (Mesure de La Sécurité Alimentaire Au Maroc, 2024). It must be ensured that all people have fair and nondiscriminatory access to healthy and nutritious food. Factors such as income, infrastructure, market conditions and food aid are crucial to this dimension (OECD, 2017).

Utilization (Stefano & Olivotti, 2023) (health and nutrition): This dimension refers to the practices of food preparation, processing, storage and consumption, with a focus on nutrition and health aspects (Mesure de La Sécurité Alimentaire Au Maroc, 2024). The effective use of food is influenced by knowledge, practices and sanitary conditions (OECD, 2017).

Stability (Stefano & Olivotti, 2023) (resilience): This dimension refers to the ability to maintain access to adequate food over an extended period of time (Mesure de La Sécurité Alimentaire Au Maroc, 2024), even in the face of disruptions such as market fluctuations (HLPE, 2020), natural disasters or conflicts (FAO, FIDA, & PAM, 2016).

The two additional dimensions:

International Journal of Kurdish Studies Vol.11 / 1 (March 2025)

Capacity to act (Stefano & Olivotti, 2023) (respect and empowerment): This dimension emphasizes the ability of individuals and communities to make independent decisions about their food preferences and production techniques. It encompasses the freedom to determine one's own diet, participate in shaping agricultural food policy and design food systems in accordance with personal values (HLPE, 2020).

Sustainability (Stefano & Olivotti, 2023) (regeneration): This aspect focuses on the ability of food systems to ensure long-term food and nutrition security while protecting the environmental, economic and social foundations that are important for future generations (HLPE, 2020).

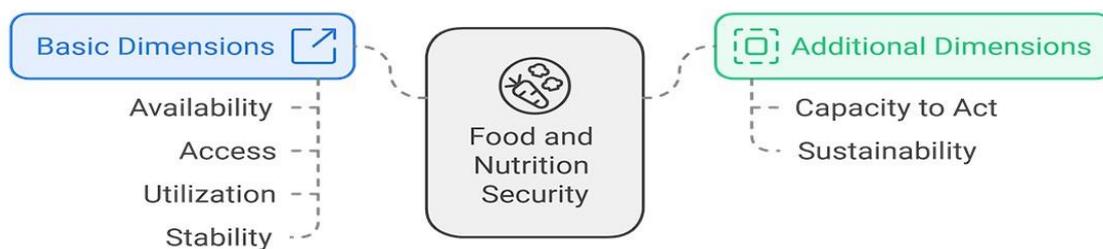


Figure 1 by researcher

Interdependence and complexity of dimensions:

It is important to recognize that the six dimensions of Sustainable Agriculture and Nutrition are interconnected; they not only relate to each other but also interact and form a complex system. A food system can only be considered sustainable if it fulfils all of these criteria (HLPE, 2020). While the availability of food (Stefano & Olivotti, 2023) is a prerequisite for access to food, it does not guarantee that all people will be able to obtain it (HLPE, 2020). The effective use of food is determined by its availability and accessibility, as well as by knowledge and practices. Stability is crucial to achieving long-term sustainability (HLPE, 2020). Furthermore, ownership is a fundamental element in all dimensions of health, empowering individuals and communities to actively participate in creating equitable and sustainable food systems (HLPE, 2020).

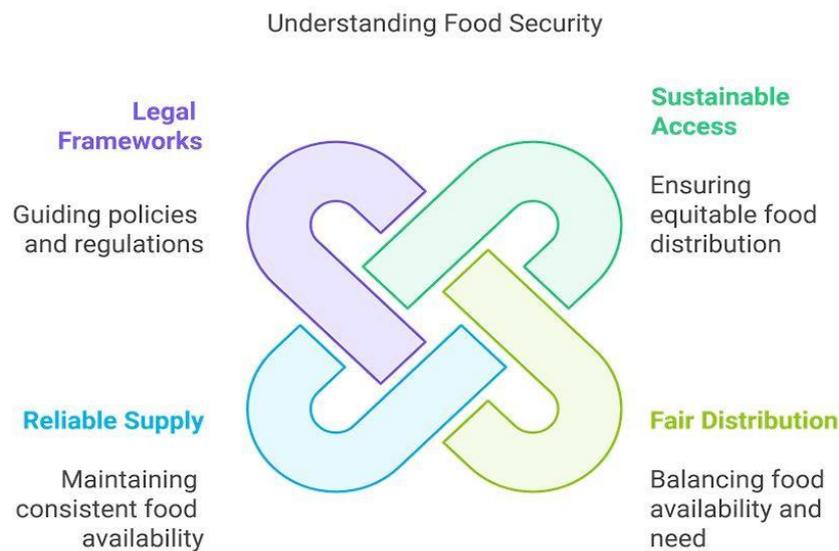


Figure 2 by researcher

Part 2: The complexity of food security

The core concern of food security, whether at the global or local level, lies in the complex task of ensuring sustainable, fair, and reliable access to an adequate food supply for all people, despite theoretically sufficient global food production. This problem goes beyond the simple availability of food and involves a multitude of interrelated factors that vary according to local conditions. Furthermore, examining the legal frameworks that guide the actions of local authorities in relation to food security at both international and national levels is a complicated and multilayered challenge, made up of various key documents and initiatives.

On a global level:

The paradox of abundance and hunger: although global food production is sufficient to feed the entire population, around 800 million people suffer from hunger and malnutrition (OCDE, 2017). Inequality of access: Access to food is unevenly distributed worldwide. Urban regions often benefit from better market access and a wider choice of food despite limited agricultural production, while rural areas, which are the main source of food production, often struggle with limited and unreliable food supplies (OCDE, 2017).

Factors contributing to food insecurity: Problems (Stefano & Olivotti, 2023) such as low income, unemployment, lack of access to healthcare (OECD, 2017), inadequate education, environmental degradation, political instability, food price volatility and armed conflict exacerbate the risk of food insecurity (HLPE, 2020).

Transformation of food systems: Global food systems are undergoing rapid change due to globalisation, urbanisation, climate change and demographic shifts. These developments can have both positive and negative impacts on food security and require continuous adaptation and effective policy interventions (HLPE, 2020).

The right to food: The right to food is recognised as a fundamental human right and is enshrined in the Universal Declaration of Human Rights (FAO, 2019) and the International Covenant on Economic, Social and Cultural Rights. This right guarantees access to sufficient, healthy and nutritious food for all people (FAO, 2019).

The FAO Guidelines on the Right to Food (2004) provide an important frame of reference. Although they are not legally binding, they encourage countries to take legal measures to progressively realise the right to adequate food (FAO, 2019). They also emphasise the importance of international cooperation to support national food security initiatives (FAO, 2019). National framework laws: Many countries have created national framework laws that focus on food security and nutrition and are based on international agreements and FAO guidelines. These laws set out the objectives, principles and governance structures related to food security.

Sector-specific legislation: In addition to the general framework legislation, there are specific regulations tailored to different aspects of food safety, covering food labelling, marketing practises and the monitoring of food losses and waste.

International Organisations:

Committee on World Food Security (CFS): the CFS was established in 1974 (Stefano & Olivotti, 2023) and acts as the main intergovernmental platform for addressing food security and nutrition issues. Following its reform in 2009, the CFS has integrated representatives (Stefano & Olivotti, 2023) of civil society and the private sector into its governance framework (FAO, 2019). The Committee is tasked with developing standards, guidelines and recommendations to improve food security and nutrition worldwide.

Food and Agriculture Organisation of the United Nations (FAO): The FAO plays a crucial role in promoting food security and nutrition initiatives. It provides technical support to countries, creates important knowledge and tools and promotes international co-operation in this area (FAO, 2019).

Other UN agencies: A number of other United Nations agencies (FAO, 2019), such as the International Fund for Agricultural Development (IFAD), the World Food Programme (WFP) and the World Health Organisation (WHO), also contribute significantly to the promotion of food security and nutrition through their various programmes and initiatives (Stefano & Olivotti, 2023).



On the community level:

Food insecurity is often a result of poverty and unequal distribution of resources. Smallholder farmers, who make up about a third of the world's population, are particularly vulnerable to rising food prices due to their limited financial ability to invest in essential agricultural inputs. Women, who make up a large proportion of these smallholder farmers, often face additional barriers to accessing resources and opportunities.

Regional specificities (OECD, 2017): The causes and manifestations of food insecurity are very different in different regions (OECD, 2017). Consequently, food security measures must be adapted to local conditions, taking into account socio-economic conditions (OECD, 2017), infrastructure, natural resources, cultural practises and local institutions (OECD, 2017).

Regional food policy (Thomas & others, 2024): A regional approach to food security emphasises the importance of multi-stakeholder (Serrano, Tanguay, & Jean-Louis , 2023) and multi-level (Serrano, Tanguay, & Jean-Louis , 2023)governance, involving local authorities, civil society organisations (d'Abondance, 2020), producers, consumers and other stakeholders in the area

(d'Abondance, 2020).

Decentralisation challenges: Although decentralisation of food security policy is crucial for better adaptation to local realities (OCDE, 2017), it also brings challenges related to coordination, capacity building at the local level, funding and coherence with national policies (OCDE, 2017). Importance of localised food systems: Given the increasing reliance on globalised food systems

(d'Abondance, 2020) and their vulnerability to external shocks, the importance of localised (d'Abondance, 2020) food systems is increasingly recognised. These systems promote local production and consumption, crop diversification and the strengthening of short supply chains (CO-CONSTRUIRE UN PROJET P A T ALIMENTAIRE TERRITORIAL).

In reality, the fundamental issue of food security goes beyond ensuring an adequate food supply. It involves creating sustainable, equitable and resilient food systems that guarantee access to sufficient food for all, taking into account local specificities and involving all relevant actors.

To overcome this challenge, it is crucial to emphasise social justice in the proposed solutions, which can be achieved through the following measures:

- * Strengthening social protection systems to ensure that the most vulnerable populations have reliable access to food.
- * Supporting smallholder farmers by improving their access to finance, agricultural inputs, markets and innovative technologies.
- * Promote gender equality by ensuring that women have equal access to land, resources and economic opportunities.
- * Promote sustainable and resilient agricultural practises adapted to local conditions to create a more stable and equitable food production system.
- * Develop quality and solidarity-based distribution channels to make local and sustainable products accessible to all, especially by involving people affected by food insecurity in the creation of these initiatives.

At the national level of Algeria:

A legal framework for food control and safety was established at national level in Algeria, as stated in a WHO report from 1982 (admin, 2018). This framework has been significantly developed over the years through a series of specific decrees, including:

Executive Decree No. 12-203, issued on 6 May 2012, which establishes regulations on food safety, warning and traceability.

Executive Decree No. 12-214, issued on 15 May 2012, which regulates the use of food additives

Executive Decree No. 13-328 of 26 September 2013, which establishes the criteria for the approval of laboratories for the protection of consumers and the prevention of fraud

Executive Decree No. 17-140 of 11 April 2017, which establishes hygienic and sanitary standards for food intended for human consumption.

Various national organisations play an important role in ensuring food safety, including: The Ministry of Industry and Mines, which is responsible for the development of the agro-food sector and food quality and has a department for industrial quality and safety (Bouزيد, Bédrani, & Lazereg, 2018).

The Algerian Centre for Quality Control and Packaging (ACQCP), a public institution under the Ministry of Commerce in charge of monitoring the quality and packaging of food products.

The Algerian Accreditation Body (ALGERAC) (admin, 2018), which grants accreditation to conformity assessment bodies operating in the food industry.

The National Committee of the Codex Alimentarius (admin, 2018), affiliated to the Ministry of Trade, which coordinates initiatives and makes recommendations on food quality and international trade.

Grain production, especially wheat, plays an important role in the Algerian food system. Although it is susceptible to climatic fluctuations, its production is crucial for improving the country's food supply.

The promotion of local agriculture aims to increase the production and consumption of local products and thus improve food security in different regions. Initiatives such as short supply chains are implemented to support this goal.

Community catering management includes the monitoring of food quality and procurement in school canteens and various public institutions. Local authorities can introduce a procurement policy that emphasises the use of local and seasonal produce, while educating canteen managers about the importance of nutrition and food safety.

Improve nutritional awareness: Launch information and education initiatives to promote healthy eating habits. Partner with healthcare professionals and community organizations to address malnutrition and nutrition-related health issues.

Combat food waste: Create programs that aim to reduce food loss and waste throughout the food supply chain. This could include working with organizations that are committed to minimizing food waste, conducting consumer awareness campaigns and implementing composting systems.

Considerations:

Decentralized framework: The successful implementation of these initiatives depends on the financial and human resources available to local authorities, as well as their technical (HABIRECHE, 2018) and organizational skills.

At the national level of France:

The new legislation on agriculture, food, and forestry, which came into force in 2014: represents a major change by promoting the decentralisation of food production and making local authorities the main actors in stakeholder governance (Serrano, Tanguay, & Jean-Louis , 2023).

The territorial food projects (TFP): created by the previous law act as the main instrument for this decentralization. Their aim is to create a local food governance structure that involves all relevant actors (Guide Odd et Collectivites 2019 Interactif, 2019) in the region, including municipalities, associations, and farmers.

The Regional Food Committees (CRALIM): which were established by Decree No. 2019-313 on April 12, 2019, are made up of representatives from various administrative authorities, municipalities, and economic sectors. Their purpose is to support the implementation of the National Food Policy (NFP) (Bodiguel & others), which defines the objectives and priorities for public action related to food and must clarify the roles of local and regional authorities in its implementation (Bodiguel & others).

The General Code of Local Authorities (GCLA): defines the roles and responsibilities of the various local authorities.

Beyond this statutory framework, local authorities have access to a range of collaborative mechanisms to work together to improve food security (Guide Odd et Collectivites 2019 Interactif, 2019), including:

Decentralised cooperation: French local authorities (FDA) have considerable experience in decentralised cooperation and can obtain co-financing to support international initiatives. Rural network: This initiative (Bodiguel & others), which stems from a European program, promotes cooperation between rural regions.

Territorial economic cooperation poles: these bodies enable participants in the social and solidarity economy to work with local authorities to develop projects (Bodiguel & others).

Territorial contracts: Developed jointly by local authorities, the state, and socio-economic actors, these agreements facilitate the creation of a local action program in line with France's environmental commitments (Bodiguel & others).

Conclusion

Food security is a fundamental human right, the realisation of which requires a joint commitment from all sectors of society. Creating a sustainable food system is a multifaceted challenge that requires a holistic global approach. The aim is to ensure that every individual has access to healthy and nutritious food while protecting natural resources and promoting social justice.

To achieve sustainable food and nutrition security goals, it is crucial to pursue a proactive strategy that takes into account emerging trends, new challenges, and innovative solutions. The impact of population growth, urbanisation, and climate change on food production systems is unprecedented. In addition, changing consumption patterns, particularly the increasing preference for processed foods, are further complicating the landscape. Tackling these problems requires creative solutions. Sustainable agriculture, agro-ecology, and advances in digital technology— such as precision agriculture, block-chain, and digital platforms—offer promising ways to improve the production, distribution, and consumption of food. In addition, innovative financing mechanisms such as guarantee funds and solidarity taxes, as well as territorial food policies that promote cooperation between local actors, are important strategies to ensure sustainable and inclusive food and nutrition security.

In order to strengthen food and nutrition security, it is essential to take specific and sustainable measures. The following solutions, recommendations, and relevant examples should be taken into account:

Planning and monitoring instruments:

Results frameworks: the United Nations Development Program (UNDP) promotes the introduction of results frameworks in the areas of project planning (Guide De La Planification, Du Suivi Et De L'évaluation Axés Sur Les Résultats Du Développement), monitoring and evaluation. These frameworks should prioritize results and ensure that development (Guide De La Planification, Du Suivi Et De L'évaluation Axés Sur Les Résultats Du Développement) goals are adopted by the respective nations.

Performance indicators: It is crucial to define relevant indicators (guide de la planification, du suivi et de l'évaluation axés sur les résultats du développement) that assess (LAVAGNON, 2011) the success of projects and monitor their progress. Continuous evaluation of products and initiatives helps to identify necessary adjustments and promotes a culture of learning (Lavagnon, 2011).

Evaluation matrices: These matrices are used to systematically organize evaluation criteria, essential questions, data sources and analysis techniques to ensure a comprehensive evaluation of projects.

Innovative financing mechanisms:

Guarantee funds: guarantee funds (FAO, 2019) can encourage private sector investment in agriculture by reducing risks for investors (DGM, 2012).

Corporate sponsorship: Corporate sponsorship can promote sustainable agriculture and nutrition for food and nutrition security projects by providing financial resources and expertise (FAO, 2019).

Solidarity taxes: Taxes levied on specific goods or services can create dedicated funding streams for food and nutrition security initiatives (FAO, 2019).

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References

- admin. (2018). *Les systèmes de gestion de la sécurité sanitaire des aliments dans les entreprises agroalimentaires algériennes*. Cread.
- Bodiguel, L., & others. (s.d.). *L'action publique en matière d'alimentation locale. Les compétences accordées par la loi et les règlements aux collectivités locales (régions, départements, communes) dans le domaine de la production, la transformation et la consommation d'aliments locaux*. <https://hal.science/hal-01842263>.
- Bouزيد, A., Bédrani, S., & Lazereg, M. (2018). *Revue Stratégique de la Sécurité Alimentaire et Nutritionnelle en Algérie*. Algérie: Cread.
- Co-Construire Un Projet P A T Alimentaire Territorial*. (s.d.). https://www.grdr.org/IMG/pdf/grd-_guide_pat_a5-lowdef-.pdf.
- d'Abondance, L. G. (2020). *Vers la résilience alimentaire*. <https://resiliencealimentaire.org/wpcontent/uploads/2021/01/VersLaResilienceAlimentaireDigitaleVersion-HD-1.pdf>.
- DGM. (2012). *Rapport d'experts internationaux groupe pilote*.
- FAO. (2019). *Les Directives sur le droit à l'alimentation: quinze années de mise en œuvre*. <http://www.fao.org/documents/card/en/c/ca6140fr>.
- FAO. (s.d.). *Financements Innovants Pour Le Développement Mécanismes de Financement Innovants Pour l'agriculture, La Sécurité Alimentaire et La Nutrition Liste Commentée*. https://assets.fsnforum.fao.org/public/files/81_Innovative_financing/Annotated%20list_FR%282%29.pdf.
- FAO, FIDA, & PAM. (2016). *Suivi de la sécurité alimentaire et la nutrition à l'appui du Programme de développement durable à l'horizon 2030*. Rome: Bilan et perspectives.
- FDA. (s.d.). *Guide De La Planification, Du Suivi Et De L'évaluation Axés Sur Les Résultats Du Développement*. (s.d.).
- Guide Odd et Collectivites 2019 Interactif*. (2019). <http://www.comite21.org/docs/doc-nonmisen-ligne/2019/guide-oddetcollectivites-2019-a4-pap-interactif2.pdf>.
- Habireche, L. A. (2018). *The Application of Territorial Intelligence Dimensions in the Legal System of Territorial Collectivities in Algeria*. Algeria: Al Turath Journal.
- HLPE. (2020). *Sécurité alimentaire et nutrition: énoncé d'une vision globale à l'horizon 2030*. Rome.
- Lavagnon, I. (2011). *Les Facteurs Clés De Succès Des Projets D'aide Au Développement*. <https://archipel.uqam.ca/3953/1/D2133.pdf>.

Mesure de La Sécurité Alimentaire Au Maroc. (2024).

http://jms2020.hcp.ma/assets/fiches_fr/3.ODD/28.Mesure%20de%20la%20s%C3%A9curit%C3%A9%20alimentaire%20au%20Maroc.pdf.

OCDE. (2017). *Adopter une approche territoriale dans les politiques de sécurité alimentaire et nutritionnel*. Paris: Éditions OCDE.

OECD. (2017). *Utilité d'une perspective territoriale pour la sécurité alimentaire et la nutrition*.

https://www.oecd-ilibrary.org/urban-rural-and-regional-development/adopter-uneapproche-territoriale-dans-les-politiques-de-securite-alimentaire-et-nutritionnelle/utilite-dune-perspective-territoriale-pour-la-securite-alimentaire-et-lanutrition_97892642.

Serrano, J., Tanguay, C., & Jean-Louis, Y. (2023). *Le rôle des collectivités locales dans la gouvernance alimentaire: le cas du projet alimentaire territorial de ToursMétropoleVal-de-Loire*. <https://doi.org/10.4000/economierurale.8563>.

Stefano, d., & Olivotti, S. (2023). *Lignes Directrices sur la Sécurité Nutritionnelle*. <https://www.coopi.org/uploads/home/165e57caed4f0c.pdf>.

Thomas, A., & others. (2024). *Durabilité des systèmes pour la sécurité alimentaire - Combiner les approches locales et globales*. Quæ.