



Globally Securing Food in an Insecure World - Opportunities and Challenges

Mariam Hussein

SPECIAL EDITION

Introduction

The Fertile Crescent

Since the beginning of time, there was seed and plant. Then, came Man. Five thousand years ago, as humans roamed Eastern West Asia (the Middle East), they settled around the Tigris and Euphrates rivers (currently equivalent to Syria, Turkey, and Kuwait), as they started gathering food and surviving off the soil. It is historically known as the land where humans first successfully developed agriculture, also referred to as "The Cradle of Civilization" (Mark 2018). Over the following several thousand years, Man got more intelligent and discovered a method of selecting and cultivating the finest of seeds from the most nutritious foods. Ever since, humans and plants have created a symbiotic relationship, never to be severed. The seed needed Man to plant, and Man needed the seed to sprout. The area between the two rivers became known as the Fertile Crescent, providing humans with all they need to prosper, reproduce, and multiply nutritious intake. The Fertile Crescent was over-exploited, and when it was no longer fertile it was eventually abandoned as a deserted wasteland (Mark 2018).

What is food security?

Originally, "food security" was interchangeably used with the word "hunger". However, in the past decades, food security came to mean something more with the emergence of concepts such as "hidden hunger". 'Hidden hunger is a form of chronic hunger. Due to an unbalanced diet, important nutrients are lacking, such as iron, iodine, zinc or vitamin A. At first glance, the consequences are not necessarily very visible, but over the long-term these nutrient deficiencies lead to serious diseases' (Welt Hunger Hilfe 2020). Hence, according to the Food and Agriculture Organization (FAO), food security is achieved 'when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life' (FAO 2020). To be able to achieve food security at a global level, the global governance of food security, being a mechanism facilitating the convergence of views,

debates, and coordination of actions to enhance food security at national, regional, and global levels (FAO 2020), is a crucial concept.

Purpose of the study

It is widely believed that global governance is key to resource management and to solving food insecurity-related issues worldwide. However, Jennifer Clapp, Professor at the School of Environment, Resources and Sustainability (University of Waterloo 2013) claims that the governing global food system is indirectly allowing for inequalities where millions don't get enough to eat, while others have too much (2013). Accordingly, this study aims to examine the opportunities and challenges of the current global governance system of food security, as well as discuss its importance, effectiveness, and its attempt at securing food amid globally recurring events that create insecure circumstances. First, with a focus on countries and multinational companies (MNCs), this paper will look into the necessity of a global governance system for food security. Secondly, it will explore potential mechanisms to drive MNCs involvement in the global governance of food security into a more inclusive path. Lastly, the paper explores a more sustainable side to globally governing food security.

1. The Necessity of a Global Governance System for Food Security: A Dire Need or Greed?

It is believed that global governance law is key for food security (UCL Institute for Global Health 2013). Fiona Smith, Chairman of the World Trade Organization's Scholars Forum, claims that there are two actors involved in the provision of food security and that this is where law can play a role (UCL Global Health 2013). Firstly, come countries, as they usually face domestic problems about feeding individual people. She goes on to explain that following the 2010 food riots which took place in Africa because of food shortages, it became clear that, at the international level, the issue is very much about making sure that states that do produce enough food are allowing access to those states that don't produce enough food. Secondly, when it came to MNCs, who although can create a path forward to food security, are often criticized for further worsening the states of food insecurity.

Russia's grain export ban - Countries in need

Many countries, such as Japan, have been victims of food insecurity because of the 2010 Russian Export Ban, which occurred following the Russian heatwave (Win 2019). With Ukraine following the same policy, two huge wheat producers were no longer exporting. Economic literature has shown that export bans do relieve the short-term problem domestically (UCL Global Health 2013). However, they create huge food shortages internationally, especially for countries such as Japan, which are net food importers. Smith

explains that the problem with this incident was the lack of governance law in the Russian region (2013).

The incident should have been regulated by the World Trade Organization (WTO) since it is the organization that has to do with what countries can and cannot do with their trade policies; but at the time, Russians were not members of the WTO. However, Smith explains that these "rules" are very much about monitoring behaviour rather than governing it. Therefore, worries about crisis in global food supplies would still be in place.

MNCs - Land grabbing and greed

Post the 2008 World Food Crisis, a World Bank study, among many others, showed there was a real need for more investment in agriculture to feed the 9 billion starving individuals predicted by 2040 (World Bank 2015). The growing demand to invest in agriculture was not only a foreign drive but also an African Continental drive, as many countries during this period began committing to the Comprehensive African Agricultural Development Programme, devoting 10 per cent of their national budget to agriculture. Because, for various reasons, there had been serious underinvestment, some countries, such as Tanzania, which have many natural resources and plenty of land, needed help with making their land fertile (Smith 2013). These countries, which have rather underdeveloped legal systems, accept help from foreign investors, such as middle eastern sovereign wealth funds, whose nations' climate prevents growing crops. As these state-created companies invest in underdeveloped nations, the issue lies in the host nations being able to control the behaviour of the foreign investors (Smith 2013).

For instance, Smith continues to explain that countries with weak legal systems are not able to control the sophisticated actions of corporations (2013). Adding to that notion is Jokinen, who claims that international regulations are usually in favour of the companies (2015). He continues to state that this is the case because the assumption is that once a company has invested in a country, they become the vulnerable actor (Joniken 2015), while the state is considered by the global governing systems as the "all-powerful", and the actor that has all the laws in place (regardless of its legal system's level of strength). Consequently, corporations might become more protected than the host nations in underdeveloped countries. As companies may try to violate the rules of the agreement with the rather underdeveloped host nation, say by taking extra land that wasn't agreed upon, and exploiting the local population; bizarrely, the countries might end up having to pay compensation to the company because they've tried to regulate the agreement after the investment took place (Smith 2013). It is important to mention that these events might take such a turn possibly because of political agendas, pushing the state to allow these situations instead of using the necessary legal mechanisms to ensure that they comply with agreements.

Further, many companies, when embarking on multi-stakeholder initiatives, won't prefer initiatives that are not aligned with their own corporate vision and objectives, for instance, in their corporate social responsibility policies (Aubert 2021). Regardless, other global governance actors and food security initiatives are always keen on integrating the "big players". Therefore, they tend to align and compromise their initiatives' objectives and projects to what MNCs have already planned to do (Aubert 2021).

2. Global Governance Mechanisms Towards a More Effective Approach

MNCs and multi-stakeholder initiatives: An industry-mediated vision of sustainability Recently, multi-stakeholder initiatives have gained prestige as part of a new approach to food security and nutrition governance (FAO 2012). As big corporations can contribute to food security due to their position in most food supply chains and because of their huge investment capacity, Aubert argues that this is not likely to happen unless certain changes occur (2021). Firstly, these changes concern the kind of projects corporations choose to invest in, along with the agricultural models they wish to support (Aubert 2021). However, according to Trine, these innovations might not be favoured by most multi-stakeholder initiatives if they stay as they are (2019). Hence, an important change would be for multi-stakeholder initiatives to reinforce their governance framework, particularly in two ways (Aubert 2021; Trine 2019):

- 1. Addressing power asymmetries: It is necessary to recognize the differential of power that is associated with the different participants of the initiative. For instance, if the net profit of a corporation is double a country's GDP, let alone how much it exceeds let's say the annual budget of a small farmer organization, the power asymmetries must be addressed when decisions are taken, and discussions organized.
- 2. Stronger accountability framework: The necessity to adopt a strong accountability framework that assesses the potential and actual impacts of a project, with the creation of a reporting mechanism according to which impacts can be traceable to actors who can be held accountable.

The importance of Global Value Chain approaches in achieving food security objectives. The Global Value Chain (GVC) framework enables a holistic approach to investigate food security in terms of examining goods through retailing activities, distribution, and production (Guinn et al. 2014). This is because the GVC framework allows policymakers to address the issue of food insecurity on multiple levels. It is no wonder then that the private sector plays a critical role in the structure and governance of GVCs. In fact, corporate-led global value chains have the power to determine sustainable development

for developing economies (Browne 2014). Therefore, it is essential to address issues of sustainable governance in GVCs, which are linked to the relationships between local and regional MNC subsidiaries, that are developed with local host country agents.

By governing the GVCs to have them link small farmers with global food distribution chains and technology networks, the food sector will grow (OECD 2018, 2017, 2016). Hence, to maximize the benefits of GVC participation, local governments are important actors in global governance, as they need a mix of both domestic and global policy action to achieve food security objectives (OECD 2018). Governments then could help in better designing policies promoting domestic value-added generation, that are working towards transforming international inputs into export goods (OECD 2018).

Linking land governance to food security: Large scale land acquisition impact of food insecurity

According to the FAO, 'land governance is the process by which decisions are made regarding access to the use of land and natural resources, how those decisions are implemented, and the way that conflicting interests are reconciled' (2009). It is believed that a big challenge to attain sustainable land governance, is the way to deal with the pressures on land as well as competing claims, especially those relating to domestic and foreign actors whose goals may contradict with local communities reliant on land for their livelihoods (Baltissem and Betsema 2016).

The three learning trajectories in Uganda, Ghana, and Ethiopia have clearly shown that there are diverse and complex linkages between land governance and food security. The research, experiences, and the case studies brought forward in the different countries also show that these linkages are highly context-specific and dynamic. This stipulates that any intervention, whether it be from NGOs trying to provide sustainable livelihoods and local food security, from governments trying to implement land registration programs, or from private corporations engaging in agriculture, needs to take into consideration those different linkages between food security and land governance, respective of each country. Moreover, this would imply that food-related issues cannot be tackled by one actor alone and necessitates collective action frameworks as well as multi-stakeholder initiatives (Baltissem and Betsema 2016). Hence, this would imply that normative policy setting (standardised and fit-for-all) would not align with fair and effective land governance, and so, would neither align with effective food security frameworks. Therefore, some scholars call for the implementation of "National Sustainable Development Goals Strategy" (Neesham, Adams and Abhayawansa 2021). This would entail attaining SDGs within a national value creation framework, specially customized for a country and its people's needs.

The tendency of large-scale transfers of arable land and natural resources is not new. When investors operate on behalf of a foreign government, these cases of land grabs are sometimes condemned as a revival of colonialism by developing nations. Today's manifestations of land grabbing take on a new dimension, owing in part to the variety of national and international players seizing land. In the overwhelming majority of instances, it is achieved without resorting to force, but rather via political and economic methods, particularly in regions where people's rights to their resources are unprotected by law.

Moreover, the agribusiness methods of the corporations that are often responsible for land grabs are designed to generate export commodities and, in doing so, sometimes usurp the resources necessary for smallholder agricultural growth. As international treaties obligate states to safeguard, respect, and implement the right to food, it is therefore particularly relevant in the context of land grabbing because it places people and states at the centre of decision-making processes, thus addressing the critical issue presented by land grabbing.

3. Seeds of Change: Global Governance of Food Security and Sustainability

Agriculture: Today's existential dilemma?

Undoubtedly, when rethinking food security from the ground up, one can't help but find linkages between sustainability and agriculture. However, according to the Millennium Ecosystem Assessment survey, agriculture is now the number one human threat to global biodiversity. In fact, 70 per cent of the earth's farmland is planted with annual crops, which are the main cause of the problem (2014). Knowing that soil is not renewable for the most part (National Geographic 2014), stirs up questions such as: 'how can global governance systems maintain the food supply, without further degrading wildlife and lands?'.

"Regeneration": The new "sustainability"

The way we frame a problem determines the kind of solutions that we get. As food systems stretch planetary boundaries, a sustainable approach to globally governing land does not seem like the ultimate solution when the problem of food security is framed as 'how to produce' rather than as 'how much to produce'. While sustainable agriculture seeks to slow down degradation by making choices with the lowest economic impact and reusing resources rather than exploiting the planet for new ones, regenerative agriculture is rather restorative of lands (UNEP, 2016). In fact, it empowers farmers, helps them adapt to climate change, adds value locally, and privileges short value chains (lands (UNEP 2016).

More food equals more hunger – The productivist paradigm and food waste

It is widely acknowledged that poverty is at the root of global food insecurity, and not the lack of global food supply (Darnhofer et al. 2013). Yet, the global governance system persists in embracing solutions of producing more food to feed a rapidly growing



population. This phenomenon is referred to as the *productivist paradigm*; 'a commitment to an intensive, industrially driven and expansionist agriculture with state support based primarily on output and increased productivity' (Darnhofer et al. 2013). This phenomenon diverts attention away from issues of equitable distribution, overconsumption, and the ongoing nutrition transition towards high-resource foods (such as meat and dairy) (Duncan and Margulis 2015). Although this paradigm is economically efficient for farmers and workers, economic growth within this framework has not proven to be socially and environmentally sustainable (Margulis and Duncan 2016).

Hence, the emerging literature on food systems highlight that the main driver for increases in frequency and intensity of food insecurity is the inability to afford the cost of adequate and healthy diets (FAO 2021), despite widespread food availability. The persistence of socioeconomic inequalities, particularly income inequality, accentuates the need for systemic changes in food systems to increase vulnerable and historically marginalized populations' access to productive resources, technology, data, and innovation, thereby empowering them to act as change agents toward more sustainable food systems (FAO 2021).

Food sovereignty: Food for thought

Food sovereignty is referred to as 'the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their food and agriculture systems' (Food Secure Canada 2013). Introduced in 1996 by 'La Via Campensia', an international farmers organization founded in Belgium, food sovereignty is a global movement from the bottom up. The movement consists of farmers and food producers who describe and express their vision of a better food secure future, free of hunger and malnourishment. The movement mainly relies on the concept of farmers self-rule, for whom farming is both a way of life and a means of producing food (Food Secure Canada). In other words, food sovereignty calls for democracy and producers to be put at the heart of global food systems (SeedChange, USC Canada 2015). Moreover, it directly resonates with sustainability and supports and enables for 'regenerative' food systems, as well as recognizes several layers of discrimination that place a burden on family farmers such as indigenous people, women, and youth (SeedChange, USC Canada 2015). Hence, the power of food sovereignty in global food security governance is fuelled by the mobilization of a broad range of food producers under one clear and common vision.

However, the relationship between food security and food sovereignty is contested, context-dependent, and complex (Duncan and Margulis 2015). While some emerging scholars argue that food sovereignty is imperative to global food security (Baltissem and Betsema 2016), others challenge the potential of food sovereignty in solving global food insecurity (Mckeon 2011).

The rise of food sovereignty as a significant factor in global food security governance does, however, serve to highlight the connections that exist between and across local and global governing structures; for example, this is shown the growing recognition of food sovereignty in more formal governmental contexts (Duncan and Margulis 2015). In addition, Food sovereignty has been included in the laws or constitutions of Bolivia, Ecuador, Mali, Nepal, Senegal, and Venezuela at the national level (Duncan and Margulis 2015). Moreover, at the 2012 Regional FAO Conference for Latin America and the Caribbean, one of the issues proposed for the agenda and was agreed upon by the participants was that 'FAO will organize a broad and dynamic debate with the participation of the civil society and academia to discuss the concept of food sovereignty, the meaning of which has not been agreed upon by FAO Member States and the United Nations System.' (FAO 2012: paragraph 25).

Therefore, food sovereignty is indeed gaining traction in global food security governance, not only as a framework for positioning alternatives to dominant neoliberal food systems but also as a tool for mobilising small-scale food producers to build links between local and global food security governance and take a more active role in these arrangements. As a result, knowing food sovereignty as a movement, a collection of activities, and a political framework is critical to comprehending the global food security governance dynamics.

Despite 'availability', 'access', 'utilization' and 'stability' of food security remains central to the concept, they exclude certain components considered necessary for changing food systems in the direction necessary to achieve the SDGs. Specifically, as previously stated in HLPE reports, the concepts of 'agency' and 'sustainability' have been added as critical dimensions of food security that flow directly from the principle of the right to food and, while not novel, deserve to be elevated further within conceptual and policy frameworks (HLPE Report 2020).

As agency is generally recognized as a critical component of the development process (The World Bank 2005), it encompasses more than access to material resources; it encompasses empowerment, in terms of individuals' capacity to take actions that contribute to their own well-being, as well as their capacity to engage in society in ways that have an impact on the broader context, including their exercise of voice in policymaking (The World Bank 2005). All in all, the right to food acknowledges agency, since human rights are fundamentally about the capacities and freedoms of individuals and communities.

Investing in women: A gendered lens on globally and sustainably governing food security Despite the long cultural and historical associations between food and women, it is only recently that a feminist perspective has emerged in the study of food security (Kimura 2016). In fact, according to the UN Women Watch, women play a key role in maintaining



the four pillars of food security, which are availability, access, utilization, and stability (2012). Hence, it would be only natural to wonder; 'to what extent do women have power to shape food and nutrition policies?'. However, this is a critical question, as food policies frequently have contradictory insinuations for women (Kimura 2016). Indeed, according to Danielle Nierenberg, co-founder and president of Food Tank (National Geographic 2014), women makeup 43 per cent of the agricultural labour force, and yet get very little in terms of services, such as inadequate access to education or extension services and financial services (2014), yet 60 per cent of the world's chronically hungry are women (FAO 2020).

Further, women don't get access to inputs and services that male farmers do (Nierenberg 2014). If they were given those services and the global governance system found ways to create that access, the FAO predicts that we can lift 100 to 150 million people out of hunger and poverty (FAO 2017). Indeed, through the Committee on Food Security and its effort on the right to food, the FAO has proven to support the involvement of rural women in global governance for food security (UN Women Watch 2013). Other noteworthy initiatives have included providing decent working opportunities, including policy and technical assistance, to enhance gender equitable agricultural policies and food security (FAO 2015). Moreover, child malnutrition and hunger lie in the shadow of women. This is because the nutrition status of lactating and pregnant mothers directly impacts that of children (Kimura 2016). It is widely understood then that gender inequality is both a consequence and a cause of food insecurity.

However, it is important to clarify that women should not be held responsible for local situations of food insecurity so that they aren't overburdened in the process. In many communities, they already have several responsibilities they are committed to in relation to food security such as producing, selling, preparing, and ensuring that the food environment is sanitary for the safe consumption of food. Deriving from that perspective, the role of the global food governance framework should not only be limited to providing resources to women and ensuring they have opportunities but the core effort should be addressed to understanding the gender dynamics in certain local communities that create inequalities. Therefore, it would be ultimate to address these gender dynamics in a way that creates opportunities for women, which will at its turn, give them the choice to pursue opportunities they want and are willing to pursue.

There are major and vast opportunities to advance gender equality and the empowerment of women in the quest for the eradication of hunger and malnutrition. Interestingly, the Food and Agriculture Organization has published a study titled 'Gender Equality and Women's Empowerment in the Context of Food Security and Nutrition' (September 2020).

This study identifies key issues and opportunities for the global governance systems to address in order to reach women empowerment and gender equity in the context of nutrition and food security as follows:

1. Solving policy incoherence:

The two policy domains of food security and nutrition, as well as gender equality, are disconnected at all levels, including among the SDGs. Although SDG 2 (Food Security) and SDG 5 (Women's Equality) reflect collective commitment, gender considerations are rarely represented in food security and nutrition policies. This incoherence manifests itself in the absence of gender equality pledges in sectoral goals and plans, and in the duplication or conflicting efforts of many actors. For instance, recommendations would aim towards better linking land and food policies in multi-stakeholder initiatives, that are in line with recently developed international frameworks.

2. Normative policy setting:

Other international policy frameworks, such as legally binding international human rights treaties and conventions that governments should maintain, promote gender equality and women's empowerment. States that ratify these accords take on obligations and responsibilities under international law to uphold, defend, and fulfil gender equality-related human rights. The enabling environment will be improved by adjusting regulatory frameworks to comply with these treaties; for instance, removing practices and measures from domestic policies and laws that are incompatible with treaty objectives, and/or taking positive action to facilitate the enjoyment of basic human rights.

3. Sustainable collective commitment:

As SDG 2 (Food Security) and SDG 5 (Women's Equality) reflect collective commitment, more integration with other SDGs will certainly lead to policy coherence. Therefore, addressing challenges such as food security and nutrition in the context of labour, climate change, social protection, ecosystems, and health, for example, can help to speed up development. Further, to pursue gender equality and women's empowerment in food systems, voluntary sustainability standards and responsible investment frameworks should be more cohesive and consistent. In addition to consistency, enforcement mechanisms should exist. Refining policies consistently and gradually implementing them can make a difference.

On the other hand, it is necessary to note that some cultural and social norms perpetuating inequalities in certain countries will not necessarily be abolished only through policies. As such, the global governance system should start looking for creative solutions to sensitively address gender inequalities.

Conclusion

To conclude, food won't solve the problem of hunger. This paper calls for the reshaping of a global governance system that better matches the root causes of food insecurity, rather than tries to solve hunger with food aid and provision. Of course, food aid is important, but relying solely on food aid while trying to solve food insecurity is not the solution. More focus should be directed onto educational programs and empowerment for local communities, in favour of enhancing food sovereignty. This author has concluded that asking the right questions is a good way to start. The global governance system should rather acknowledge that questions such as 'for whose benefit?' are just as important as 'how to produce more?'. Although effective, International Governmental Organizations should further consider how global rules affect different people, who will bear the risks, who will get the benefits from changes, who are disempowered, and whose ability to control is neglected or enhanced. Global food policy should not just be about feeding people, but rather feeding them equitably, appropriately, and sustainably. This brings about a new global food regime that's integrative of the human right to food.

As food insecurity stems from major global trends and human rights, one of the dilemmas that this paper has showcased is that of food security and sustainability/regeneration. On the one hand, climate change has consequences for global food security, while at the same time, the increase in certain food production intensifies environmental damage, possibly leading to future issues such as environmental racism. This author suggests that an effective global food security governance system must consider food security more as an action-guiding tool/process, and less as a development objective. Eventually, the world will live to witness the realization of all human rights, including a *progressive* realization of the right to adequate food.

Bibliography

Abraham, M. 2020. 'Regenerating the Food System and Agriculture System'. https://www.worldbenchmarkingalliance.org/news/regenerating-the-food-and-agriculture-system/ (accessed on 17/06/2021)

Aubert, P. 2021. On the Growing Participation of Multinational Corporations in Food Security Governance. Retrieved from: https://foodgovernance.com/on-the-growing-participation-of-multinational-corporations-in-food-security-global-governance/ (accessed on 17/06/2021)

Baltissen, G. and G. Betsema 2016a. 'Linking Land Governance and Food Security in Africa. Outcomes from Uganda, Ghana & Ethiopia'. https://www.researchgate.net/ publication/

343281249 Linking land governance and food security in Africa Outcomes from Uganda Ghana Ethiopia (accessed on 16/06/2021)

Baltissen, G. and G. Betsema 2016b. 'Food Security and Responsible Business'.: https://www.landgovernance.org/themes/foodsecurity/ (accessed on 16/06/2021).

CFS. 2020. Gender Equality and Women's Empowerment in the Context of Food Security and Nutrition. http://www.fao.org/fileadmin/templates/cfs/Docs1920/Gender/GEWE Scoping Paper-FINAL040ct.pdf (accessed on 18/06/2021).

Cheatham, A., C. Felter and S. Baumgartner. 2020. 'Rising Hunger: Facing a Food-Insecure World'. https://www.cfr.org/article/rising-hunger-facing-food-insecure-world (accessed on 17/06/2021).

Darnhofer et al. 2013. Rethinking the links between farm modernisation, rural development and resilience in a world of increasing demands and finite resources. https://boku.ac.at/fileadmin/data/H03000/H73000/H73000/PJ/rethink/
RETHINK ConceptualFramework final.pdf (accessed on 14/06/2021)

Guinn. et al. 2014. 'Global Value Chain Analysis and Food Security'. https://sites.duke.edu/minerva/files/2013/08/4-2014 CGGC Research-Brief Food-Security-and-GVC.pdf (accessed on 17/06/2021).

Duncan, J. and M. Margulis. 2016. 'Global Food Security Governance: Key Actors, Issues and Dynamics'. https://www.researchgate.net/publication/

309160763 Global Food Security Governance (accessed on 17/06/2021).

Food and Agriculture Organization. 2012. 'Food Security and Sovereignty'. http://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1268249/ (accessed on 18/06/2021)



Food and Agriculture Organization. 2021. 'The State of Food Security and Nutrition in the World 2021'. http://www.fao.org/documents/card/en/c/cb4474en (accessed on 17/06/2021)

Food and Agriculture Organization. 2016. 'Improved Global Governance for Hunger Reduction Programme'. http://www.fao.org/in-action/improved-global-governance-for-hunger-reduction/en/ (accessed on 17/06/2021)

Food and Agriculture Organization. 2020. 'Policy Support and Governance Gateway: Food Loss and Food Waste'. http://www.fao.org/policy-support/policy-themes/food-loss-food-waste/en/(accessed on 17/06/2021)

Food Secure Canada. 2013. 'What is Food Sovereignty'. <a href="https://foodsecurecanada.org/who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/what-food-who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/who-we-are/

sovereignty#:~:text=%22Food%20Sovereignty%20is%20the%20right,injustice%20in%20the%20food%20system. (accessed on 16/06/2021)

HLPE. 2020. 'Food Security and Nutrition: Building a Global Narrative Towards 2030'. http://www.fao.org/3/ca9731en/ca9731en.pdf (accessed on 01/09/2021)

Jokinen, P., T. Mononen and R. Sairinen. 2015. 'Climate Change and Food Security. Three Case Studies on Uncertainty'. https://www.academia.edu/28854669/
CLIMATE CHANGE AND FOOD SECURITY THREE CASE STUDIES ON UN CERTAINTY (accessed on 17/06/2021)

Kimura, A. 2016. 'Hidden Hunger: Gender and Politics of Smarter Foods'.https://library.oapen.org/bitstream/id/2b84b4e3-ff7c-4d19-ac00-9d9cdff2d7b3/642709.pdf (accessed on 18/06/2021)

Margulis, M. Duncan, J. 2016. 'Global Food Security Governance'. https://www.researchgate.net/publication/309160763 Global Food Security Governance. (accessed on 18/06/2021)

Mark, J. 2018. 'Fertile Crescent.' https://www.worldhistory.org/Fertile Crescent/ (accessed on 15/06/2021)

National Geographic. 2014. 'Why Sustainable Food Systems Matte l Future of Food'. [Video]. YouTube. https://www.youtube.com/watch?v=YEGISWTEgyU (accessed on 18/06/2021)

Neesham, C., A. Adams and S. Abhayawansa. 2021. 'Accountability and governance in pursuit of Sustainable Development Goals: conceptualising how governments create value'. https://www.emerald.com/insight/0951-3574.htm (accessed on 17/06/2021)

Trine, F.2019. 'Multistakeholder partnerships: How do they contribute to food security and nutrition?'. https://impakter.com/multistakeholder-partnerships-how-do-they-contribute-to-food-security-and-nutrition/ (accessed on 17/06/2021)

UN Women Watch. 2012. 'Empower Rural Women – End Hunger and Poverty'. https://www.un.org/womenwatch/feature/ruralwomen/overview-food-security.html (accessed on 18/06/2021)

UNEP. 2016. Recasting agriculture in a resourcesmart food systems landscape. https://www.globalagriculture.org/fileadmin/files/weltagrarbericht/IAASTD-Buch/01Reports/JacquelineMcGlade-IAASTD-pages-62-67.pdf. (accessed on 18/06/2021)

UCL Global Health. 2013. 'Why Is Governance Important for Food Security? – Fiona Smith'. [Online video]. https://www.youtube.com/watch?v=LOZ50txAJWo&t=49s. (accessed on 17/06/2021)

University of Waterloo. 2015. 'Food Security and the Global Supply Chain'. 'https://uwaterloo.ca/environment/research-stories/sdgs/food-security-and-global-supply-chain (accessed on 17/06/2021)