

Course Reader

Food Security: A Course Reader

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COURSE SUMMARY

This course aims at unpacking the deeper structural causes of food insecurity and malnutrition by analysing economic, social and gendered power asymmetries that underlie global and local food systems. Students will become familiar with the conceptual, political and institutional differences between food security and food sovereignty and further link it to global politics. For instance, by observing the ways in which these concepts contribute to reach the Millennium Development Goals, or the whys and whereof of the hierarchies of knowledge in development practice. They will be introduced to food regime analysis, to value chain analysis, to the food systems approach as well as to feminist political ecology and thereby improve their skills to critically reflect environmental concerns and diverse power asymmetries in agrifood development. Students will be familiarized with current institutions and actors of food security governance and will be introduced to alternative food movements at international and local levels, their ideas about food sovereignty and questions of inequalities.

COURSE OBJECTIVES

- Understanding the concepts of food security and food sovereignty, and distinguishing different approaches to analyse food systems.
- Analysing food security related issues from a transdisciplinary perspective: political economy; feminist political ecology; health and nutrition; ecological biodiversity and agroecology; social movement theory; food marketing etc.
- Bringing discussion and further reflection around the future of food security and alternative paths emerging in achieving it.

INSTRUCTION AND EVALUATION METHODS

The course will be organized in 14 sessions, in addition to a conclusive session consisting of a closing discussion around all the topics brought up throughout the course. This reader provides with a summary of the main issues related to each session, in addition to a discussion section around which different interactive teaching methods will be used during the class.

Regular attendance to the classes is required and students are expected to go through each session's

main readings in order to participate in the class's discussions and workshops.

The course evaluation will be based on participation, short assignments, oral presentation, and a final paper.

COURSE STRUCTURE

<i>Session 1</i>	Introduction: Food security or food sovereignty?
<i>Session 2</i>	Food regimes: historical political economy
<i>Session 3</i>	Institutions and actors of food security governance
<i>Session 4</i>	From agricultural value chains to sustainable food systems
<i>Session 5</i>	Food production: contract farming, smallholders and gender inequalities
<i>Session 6</i>	The power of knowledge and expertise in food production
<i>Session 7</i>	Community management of natural resources: feminist political ecology
<i>Session 8</i>	Food sovereignty, agrarian reforms and land rights
<i>Session 9</i>	Certification Standards: sharing the costs of producers' welfare?
<i>Session 10</i>	Lost and found: biodiversity in practice
<i>Session 11</i>	From food security to nutrition security
<i>Session 12</i>	Sustainable food consumption and transitioning food habits
<i>Session 13</i>	Transnational food activism: The case of La Vía Campesina
<i>Session 14</i>	Alternative Food Networks and local food systems
<i>Session 15</i>	Conclusions: Food regimes and inequalities from a transnational perspective

Session 1

Introduction: Food Security or Food Sovereignty?

Keywords: food (in)security; food sovereignty; sustainability; development economics indicators; inequalities; redistribution

Learning objectives: The purpose of the introductory session is to have a clear overview of the current situation regarding food security and its evolution at a global and regional level. It also aims to familiarize the students with the differences between the concepts of food security and food sovereignty.

The state of food and nutrition security

Figure 1: FAO hunger map 2015: Millennium Development Goal 1 and World Food Summit Hunger Targets (<http://www.fao.org/3/a-i4674e.pdf>)

The year 2015 marks an important year regarding the global development goal's evolution, as it was the end of the monitoring period of the Millennium Development Goals (MDG) hunger targets. After 15 years, what is the state of food and hunger around the world?

Today, one in every nine people in the world is food insecure, and 12.9% of the population in developing regions are undernourished. These numbers show a clear improvement since 1990-1992, even though there are still some efforts to be done to lower them. In fact, it appears that developing regions have not reached MDG's hunger target (MDG 1c), but the statistics show that it is very close to it at a global level. However, the disparities between regions are still very significant and even worsened between *Central* Africa and Western Asia and the rest of the developing world (FAO, IFAD, and WFP, 2015).

When it comes to nutrition security, results are rather mitigated. Underweight and related health conditions take longer to eradicate than undernourishment analysed in terms of access to food quantities and calories intake. Regional disparities are even more obvious in nutrition security outcomes, where Sub-Saharan Africa achieved a very limited improvement, showing a greater need to structurally tackle all issues that contribute to food insecurity (access to healthy environments, clean water, food quality, etc.) (FAO, IFAD, and WFP, 2015).

The FAO report's (FAO, IFAD, and WFP, 2015) key findings on how to reduce food security mostly relate to growth and productivity improvement through market liberalisation. However, it also stresses out the necessity to implement social protection policies and the importance for smallholders to access production assets and resources, in addition to capacity building for the rural poor and smallholder farmers to improve their income opportunities (FAO, IFAD, and WFP, 2015). In

appearance, this perspective is viable; nevertheless, it is based on the dominant 'neoliberal globalisation' view that is debated amongst the institutions participating directly or indirectly in food insecurity reduction.

Figure 2: Effects of trade liberalization on food security (FAO, IFAD, and WFP, 2015: p.34)
(<http://www.fao.org/3/a-i4646e.pdf>)

Introducing the concept of food security and its evolution

The widely accepted definition of food security is the one formulated by the FAO in 1996 at the World Food Summit, and is described as:

"[. . .] a situation that exists when all people at all times have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life." (FAO, 2002 p.38)

The FAO also defines food insecurity in more comprehensive terms, where the notions of access, availability and utilisation are taken into consideration, and where nutrition security is as important as food availability:

"Food insecurity: A situation that exists when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development and an active and healthy life. It may be caused by the unavailability of food, insufficient purchasing power, inappropriate distribution, or inadequate use of food at the household level. Food insecurity, poor conditions of health and sanitation, and inappropriate care and feeding practices are the major causes of poor nutritional status. Food insecurity may be chronic, seasonal or transitory." (FAO, 2002 p.38)

Issues related to food security were brought to the centre of the international agenda during the 1990s, even though food security concerns were discussed during the 20th century, especially during and at the aftermath of the World Wars. Lang and Barling (Lang & Barling, 2012) argue that since the 1930s until the end of the last century, policy discourses about food security have been focused on food production and availability. Therefore, policy response to fight hunger and food stress was to produce more and find ways to intensify agriculture to increase productivity and yields. However, this old paradigm has evolved today, making the notion of food security attempt to embrace the complexities of the reality. In fact, the 'emerging' perspective on food security includes the socio-economic, environmental, health and nutritional dimensions related to food production and consumption (Lang & Barling, 2012). In this debate, the food crisis of 2007-2008 was a turning point, where the urgency for considering food security in terms of food systems and not in terms of increasing production became evident.

After the latest food crisis, several questions regarding the state of food security arisen, questioning the levels at which this issue should be tackled, using which institutional and governance structures and instruments, prioritising which perspective, and the ways in which policy responses to all the

dimensions of food security can be financed. There are no definite answers to these questions, however, different actors and institutions have different perspectives on how to reach a global state of food security. It is in this respect that the concept of food sovereignty emerged during the late 1990s by La Via Campesina, a transnational food movement that brought a perspective on food security that is radically different from the international organisations' one.

Figure 3: Evolution of food security analyses (Lang & Barling, 2012: p.5)
(<http://openaccess.city.ac.uk/12902/>)

As a reaction to the neoliberal trade rules imposed on the majority of the countries that shape food and agricultural systems, La Via Campesina movement came a strong voice of peasants and farmers from industrialised and developing countries who want their livelihoods and socio-ecological systems to be prioritised in the debates about food security. The notion of food sovereignty also goes beyond farmers' welfare. It has a strong political dimension defending the postulate that, in order to guarantee food security, nations have to increase their capacity to be self-sufficient in terms of food production and decrease their dependence on imports from other countries as much as possible to guarantee stability and national security through sovereignty (Burnett & Murphy, 2013):

"Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems." (Declaration of Nyéléni, 2007)

Thinking further:

Readings' questions:

- What are the indicators of global food security based on?
- What is the concept of food security criticized for? What are the policy problems the concept of food security brings about?

Discussion:

Do you think that referring to the concept of food security is outdated in today's context? Why? What are the alternatives?

Main readings:

- Lang, T., & Barling, D. (2012). Food security and food sustainability: reformulating the debate. *The Geographical Journal*, 178 (4), pp. 313–326.
- FAO, IFAD, and WFP. (2015). *The State of Food Insecurity in the World. Meeting the 2015 international hunger targets: taking stock of uneven progress*. Rome.
- Burnett, K., & Murphy, S. (2014). What place for international trade in food sovereignty? *The Journal of Peasant Studies*, 41 (6), pp. 1065-1084.

Optional readings:

- Holt-Giménez, E. (2010). Food Security, Food Justice, or Food Sovereignty? *Institute for Food and Development Policy*, 16 (4).
- Holt-Giménez, E., & Altieri, M. A. (2013). Agroecology, Food Sovereignty, and the New Green Revolution. *Agroecology And Sustainable Food Systems*, 37 (1).
- Pieters, H., Guariso, A., & Vandeplas, A. (2013). Conceptual framework for the analysis of the determinants of food and nutrition security. *Working paper 13*.
- Declaration of Nyéléni. (2007). *Forum for Food Sovereignty*. Sélingué, MALI.

Session 2

Food regimes: Historical Political Economy

Keywords: food regime analysis; agrarian reforms; world capitalism; green revolution; peasant turn

Learning objectives: This session introduces the political economy dimension of food regimes and their historical evolution. The purpose is to identify the 3 main food regimes since the 19th century and bring about the key elements to analyse their evolution, from the international state system to the technical and environmental changes in agricultural practices.

The notion of “food regime analysis” was first brought by Harriet Friedman and Philip McMichael in 1989 in their essay “*Agriculture and the State System. The rise and decline of national agricultures, 1870 to the present*” (Friedmann & McMichael, 1989). During the rise of neoliberal globalisation after the end of the cold war, the authors introduced the food regime analysis in order to give a historical political economic overview of agriculture within the capitalist world economy since 1870. They first identified two main eras of food regimes in the world; the first is when the British Empire was a hegemonic colonial power between 1870 and 1914, and the second is the post WWII world economy where the US was the dominant power. After the end of the cold war, this food regime analysis kept on being developed to include the current evolution of power structures within a transitioning global political economy.

The purpose of looking into the food regime analysis is to understand how international relations and the world order impact the dynamics of food production, consumption and trade. Defining the actors involved, their roles and capacity to influence agriculture is also becoming central to this analysis.

What is a “food regime” and why a food regime analysis?

The notion of *food regime* “links international relations of food production and consumption to forms of accumulation broadly distinguishing periods of capitalist transformation” (Friedmann & McMichael, 1989 p.95).

The food regime analysis addresses several questions such as where, how and who produces/consumes which food in the current political economic context, or how international power structures in terms of food production and consumption impact our social and ecological systems (Bernstein, 2015).

Analysing the dynamics and evolution of agriculture from a political economy perspective allows

having a more comprehensive overview of how the world order and power structures impact food production and consumption in the age of globalisation.

An overview of food regimes from the 19th century until today

The first food regime was revolving around Europe, where the UK was a dominant player because of its access to agricultural produce from around the world through its imperial and colonial power. On the one hand, they had access to grains and meat produced at low costs in settler states in the Americas and Oceania (E.g. Canada or New Zealand), and on the other hand, they specialised in colonial trade as they still had colonies in Asia and Africa.

This regime started to structurally change when the World Wars weakened the European powers', not only because of the economic depression of the 1930s and the political instability in a divided continent, but also because of the wars of independence in the colonies.

The end of World War II marked the beginning of the second food regime, when the US rose as a world hegemonic power. The US at that time faced an agricultural overproduction that was overcome by its liquidation through food aid to Europe and '*the third world*'. This "Atlantic pivot" (Friedmann, 1993, cited in Bernstein, 2015 p.8), supported by farm politics in the New Deal, resulted in an agricultural industrialisation through greater use of machinery and agro-chemicals, and the emergence of major powerful agro-food corporations.

Just as the transition between the first and second food regime lasted almost 30 years, from the beginning of WWI until the end of WWII, the world order is also going through a major transition nowadays since the end of the Cold War. As this transition is still ongoing, the conception of food regime is also transforming as McMichael explains:

"McMichael (2013) now uses the notion of 'The Food Regime Project' which is especially pointed given that the first food regime manifested the historical period of 'The Colonial Project', the second that of 'The Development Project', and the third (and current) that of the 'The Globalization Project' (McMichael 2006, 170-171)" (Bernstein, 2015 p.3).

The current food regime's main characteristic is the increasing *North/South* divide. The global South, mostly composed of relatively newly independent countries, is facing two main challenges in terms of international food trade: their dependency on food imports and the declining profitability of traditional exports. It came as a result of the 'neoliberal globalisation' promoted by the North through international organisations such as the WTO, where countries in the South were bound to open their markets facing fierce competition from the agro-food industry giants and subsidised agricultural production in the North. Consequently, since the 1990s, the increasing power of agro-food corporations created a counter movement that criticises this system, and brings about social and

environmental concerns that were overlooked so far. Therefore, the main shift in the world system structure nowadays is the increasing importance of new strong actors, not only nation-states, such as private actors, but also international organisations and transnational social movements.

Thinking further:

From the “*green revolution*” introduced to help increase the industrialisation of agriculture and improve productivity during the second food regime, to nowadays’ “*green capitalism*”, how did the dynamics and global power structures evolve?

Having such a complete overview of food regimes’ evolution since 1870 helps analysing the current transition, perhaps identify the characteristics of the next food regime, and prospect the ways in which the food and nutrition security and sustainability can be reached.

Main readings:

- Friedmann, H., & McMichael, P. (1989). Agriculture and the State System. The rise and decline of national agricultures, 1870 to the present. *Sociologia Ruralis*, XXXIX (2).
- Bernstein, H. (2015). Food Regimes and Food Regime Analysis: A Selective Survey. *Land grabbing, conflict and agrarian-environmental transformations: perspectives from East and Southeast Asia*.

Optional readings:

- Friedmann, H. (2005). From colonialism to green capitalism: Social movements and emergence of food regimes. *Research in rural sociology and development*, 11, p. 227.

Session 3

Institutions and Actors of Food Security Governance

Keywords: international food governance; international organizations; political economy and corporate power; food trade agreements; protectionism; tariff and non-tariff barriers

Learning objectives: Students are expected to have a clear idea about the different institutions and actors involved in food security governance at international, national and regional levels and the ways they interact with each other. This includes a discussion about trade agreements from a political economy perspective and the analysis of power structures' impacts on food sustainability.

The evolution of the global discourse about sustainability

1972: *Club of Rome*

1983: *Brundtland Commission*

1988: *Intergovernmental Panel on Climate Change (IPCC)*

1992: *UN Conference on Environment and Development*

1997: *Kyoto Protocol*

2000: *Millennium Development Goals*

2002: *Johannesburg Summit*

2015: *Paris Agreement*

The Brundtland report of 1987 was a turning point that brought environmental concerns to the agenda at a global level. It is the point from which discussions about sustainability, and later on food security, translated into concrete actions. This was indeed followed up by the Agenda 21 set up during the Rio conference of 1992 at the United Nations Conference on Environment and Development (UNCED), and the Kyoto Protocol of 1997, an international treaty that acknowledges the negative impacts of human activities on climate change and obliges its parties to reduce their greenhouse gas emissions. Since then, several agreements for environmental protection have been adopted (E.g. Montreal protocol; Stockholm convention; UNFCCC) and different international institutions (E.g. GEF as a governing and coordinating body; UNEP, World Bank, or WTO as implementing bodies) were created in order to create an international governance system for sustainability.

The discussion about sustainability in food system governance only became a major issue in the international agenda after the crisis in 2007-2008 when the food prices dramatically increased, and serious concerns about the ability to produce enough food for the world population without causing long term environmental damage:

“Over the past decade, the promotion of sustainability in food systems has risen to the top of the agenda in most governance arenas addressing food security, including both formal intergovernmental arrangements as well as voluntary and market-based initiatives” (Clapp, 2016 p.2).

Different actors, different agendas?

Food systems are complex and include a wide variety of actors with matching or competing interests, thus, all types of actors are involved in the debates about international food trade, from states and national governments and international institutions (trade; labour; socio-economic rights; environment; etc.), to research institutes and academics in addition to civil society, without forgetting private actors and agro-food corporations.

It is therefore important to understand the different visions these institutions and actors have for reaching the same goal of food security and sustainability, but also to analyse how they interact with each other, and the ways in which they bring their perspective to the international agenda.

International institutions

Each one of these actors puts a greater focus on a certain aspect of food sustainability governance. However, within international institutions, at a global level agriculture is also considered as any other commodity in international trade; therefore, it is subjected to the rules of trade liberalisation set up by the Agreement on Agriculture during the Uruguay Round of 1994, and consolidated by the World Trade Organisation (WTO). The current guiding principle in terms of international food governance is that trade liberalisation can be a vector of food sustainability, a principle that was emphasised during the Doha Round of 2001.

As Jennifer Clapp explains (Clapp, 2016), all international institutions for food and /or sustainability governance support the rules of trade liberalisation set up by the WTO as means for promoting sustainability and food security. The UNFCCC promotes cooperation between the parties agreeing to the convention, especially countries, in order to support sustainable economic growth and development through an open international economic system. The Food and Agriculture Organization (FAO), the executive body of the UN Committee on World Food Security (CFS), is considered to be the first and main institution coordinating issues on global food security, nevertheless, it does not get involved in food trade related matters. As a matter of cooperation between international institutions, the FAO supports the WTO's agenda of trade liberalization without interfering with its mandate (Clapp, 2016).

A critical perspective on the current food security governance mechanisms

Different actors involved in the food security and sustainability debate are critical towards this vision of international institutions guided by the global economic powers such as the US or the EU, where the agro-food lobby is strong enough to significantly influence the decision-making (Clapp, 2016). (Clapp, 2016) It is therefore important to identify their arguments against the current food governance system, and the extent to which they are able to influence international politics.

Some of the developing and emerging countries have been contesting the rulings of the WTO and the ways in which the organisation advantages industrialised countries' interests. The conference of Cancùn in 2003 was the culmination of this contestation where a coalition of developing countries succeeded in remaining strong enough to fail the negotiations (Montero Melis, 2004). When it comes to food governance, what is criticised is the ability of the major economic powers such as the US or the EU of having heavily subsidised agriculture while applying strict rules upon developing countries for them to open their markets (Clapp, 2016)

Civil society and academics have questioned several aspects, first of which is the commodification of food. Agriculture fulfils several functions (social, ecological, etc.) within a society, and should be dealt with differently than just a tradable commodity. The legitimacy of the WTO's power has also been raised, as there are several institutions which mandate is solely focused on food security governance, but the WTO is not one of them; yet, this institution is responsible for all the food trade related issues. Civil society or Food Security Movements, such as La Via Campesina, has used this argument as a foundation for their criticism towards the current global food system (Burnett & Murphy, What place for international trade in food sovereignty?, 2014). In addition to that, (political) economists criticise the neoliberal economic model because it has several limitations and is based on unrealistic assumptions about the market and its agents' behaviour. Therefore, they find the correlation between market liberalisation and sustainability difficult to prove. The question of representativity has been raised, especially by civil society in all its forms. The role of civil society is crucial in the food governance system, and this role is acknowledged in the Agenda 21 since 1992. However, the role of civil society in terms of information dissemination, advocacy, or service provision may operate through formal or informal channels. In fact, even though the benefits of integrating civil society in international debates are undeniable, they are mostly considered as legitimate partners within the UN bodies (Gemmill & Bamidele-Izu, 2002). The UN committee on World Food Security (CFS) for instance fully includes NGOs in the deliberations since 2009, but only as observers (McKeon, 2009).

Thinking further:

Readings' question:

- What are the different institutions influencing food governance? How do they interact with each other?
- What is the role of the State in the current food governance system and how did it evolve?

Discussion:

The role of civil society in food governance has been influencing the debates about sustainability and food security since the issue has been brought to the center of the global agenda, either through raising consumer awareness or by holding parallel gatherings.

What did civil society involvement bring to the debate about food security? What are the barriers to their participation and what strategies do they use to overcome them?

Main readings:

- Clapp, J. (2016). Trade and the Sustainability Challenge for Global Food Governance. In ISS (Éd.), *Global governance/politics, climate justice & agrarian/social justice: linkages and challenges, Colloquium Paper No. 1*. The Hague, The Netherlands.
- Murphy, S. (2015). Food security and international trade: Risk, trust and rules. *Canadian Food Studies/La Revue Canadienne Des Études Sur L'alimentation*, 2(2), 88.

Optional readings:

- Burnett, K., & Murphy, S. (2014). What place for international trade in food sovereignty? *The Journal of Peasant Studies*, 41 (6), pp. 1065-1084.
- Gemmill, B., & Bamidele-Izu, A. (2002). The role of NGOs and civil society in global environmental governance. *Global environmental governance: Options and opportunities*, pp. 77-100.
- McKeon, N. (2009). *The United Nations and Civil Society: Legitimizing Global Governance-Whose Voice?* London: Zed Books.

Session 4

From Agricultural Value Chains to Sustainable Food Systems

Keywords: Value chain approach; food systems approach; agricultural economy; sustainable livelihoods; gender inequality

Learning objectives: This session discusses the shift in the approaches to analyse agrifood governance – that is from the strictly economic perspective (value chain approach) to the more comprehensive one that grasps the different dimensions of food related issues (socio-economic, ecological, anthropological, etc.) as a system (food systems approach).

For many years and up until today, the main approach to analysing all the steps through which agricultural products go through, from production to consumption. It is a valuable framework that allows to understand “how inputs and services are brought together and then used to grow, transform, or manufacture a product; how the product then moves physically from the producer to the customer; and how value increases along the way.” The value chain approach allows analysing each link of the production to consumption chain, and the relationships that connect them. This type of analysis’s main purpose is to identify the mechanisms that can increase efficiency, add value to the products, and therefore increase income.

On the one hand, even though the value chain approach is a very useful tool to analyse all material and non-material inputs put into the end product, taking into consideration all the actors participating in the process, it remains an approach that greatly focuses on the economic side of the exchange. The notion of food security on the other hand is complex and multi-scalar, and involves several aspects that the value chain analysis does not fully grasp. In this regard, what alternative approach can grasp more closely these complexities?

Why a system and what does a food system entail?

The dynamic system theory is applied to many fields as a reaction to linear analyses of different socio-economic systems that failed to grasp the latter’s complexity (Monasterolo, Pasqualino, & Mollona, 2015). A food system is the set of activities that lead a product from farm to fork, including the production (growing or harvesting) and non-production (processing or marketing) aspects of it. This strict definition of food systems might seem close to the value chain's one. However, (Ericksen, 2008) also explains that a broader definition of food systems includes not only the activities described above, but also “the interactions between and within biogeophysical and human environments” (Ericksen, 2008).

The notion of food security revolves around 3 main aspects; food availability, access, and utilisation.

The way in which a food system approach is a more holistic way to analyse food related issues is that it looks into these 3 features, in addition to other social, political and environmental factors external to the value chain, but that may have a significant impact on it. It looks deeper into how the outcomes of production and non-production activities in terms of availability, access, and utilization, affect the socio-ecological environment and vice versa.

Overview of existing food system models

Three types of food system models are identified by Stave and Kopainsky (2014). First, there are the widely used models based on general equilibriums or production factors' optimization. For instance, the Basic Link System (BLS) model is a general equilibrium one that aims to link different agricultural systems at a national level in order to understand how they affect each other, taking into considerations some environmental factors such a climate change. However, the BLS models does not account for environmental and social trade-offs an agricultural economic activity entails.

The second type of model includes Life Cycle Assessment, Material Flow Analysis, and Environmentally Extended Input-Output Models. The strength of these models is that they greatly focus on the interactions within socio-ecological systems, such as the impact of policies on ecological systems. Even though they provide a rather comprehensive analysis, these models analyse these complex interactions at the farm level or sector level at most, which excludes several links in the full agricultural value chain.

Finally, the models identified as the most comprehensive in analysing food systems are the Simulation Models (agent-based models and system dynamics models). By focusing on interactions among biophysical, socio-economic and institutional factors at different levels rather than static causal relationships between them, simulation models help structurally understand the components of food systems and allow analysing their resilience to change. The only weakness of these models, pointed out by Stave & Kopainsky (2014), is the difficulty to use them as they require an excessive amount of data.

Food systems' evolution and its outcomes

Food systems have drastically changed during the past decades, especially since great efforts were put into the industrialisation of agricultural production during the second food regime. In a nutshell, at a global level, the average farm size has increased due to the intensification of agriculture and the growth of powerful agro-food corporations. This industry shifted the trends in food production, mostly in terms of on-farm hired labour and the control of agricultural inputs. In addition to that, farming is not the main activity in the agricultural value chain anymore, as processing, packaging and marketing activities have significantly grown in importance. At the consumption level, changes have

been noticed in terms of dietary habits, with higher demand for animal products, sugars and oils (Ericksen, 2008).

Thinking further:

Readings' questions:

- What is the added-value of a food system approach? What features beyond the concept of food security does it bring about?
- What can the system approach be criticized for and how can we think beyond it? How do different institutions put this approach into use?

Discussion:

Acknowledging all of the above, and at the aftermath of the recent world food price crisis of 2007-2008, how did these drastic changes in food systems impact the socio-ecological environments we live in? How can these impacts be analysed?

In other words, who benefits from these changes and who is excluded? What does it imply in terms of sustainability? And how do different actors and institutions react to it and what influence do they have in shaping the current food system?

Main readings:

- Ericksen, P. (2008). Conceptualizing food systems for global environmental change research. *Global Environmental Change* 18 (1) pp. 234-245.
- Stave, K. A., & Kopainsky, B. (2014). Dynamic thinking about food system vulnerabilities in highly developed countries: Issues and initial analytic structure for building resilience. *32nd International Conference of the System Dynamics Society*. Delft, The Netherlands.

Optional readings:

- Montero Melis, D. (2004). From Cancún to São Paulo: The Role of Civil Society in the International Trading System. *Afro-Asian Civil Society Seminar*. New Delhi: Centre for International Trade, Economics & Environment (CUTS).

Session 5

Food Production: Contract Farming, Smallholders and Gender Inequalities

Keywords: gender inequality; small-scale farming; family farming; agricultural contracts (outgrower schemes); agro-industry

Learning objectives: The purpose of this session is to focus on the issues related to food production and producers' welfare. The students are expected to critically analyse the interrelationship between gender inequalities in rural areas and the current political economic tenants of food production.

The previous chapters introduced several concepts that allow better understanding and analyzing the notion of food security, with a general overview of the global trends in food systems' evolution. The following chapters will focus on more specific issues that shape the complexity of what food security implies. Therefore, this chapter starts by looking into issues of (smallholder) farmers' welfare in the current food system.

Figure 4: Female share of the population economically active in agriculture (%) (https://farmingfirst.org/women_infographic/ from FAOSTAT)

Gender in food systems: Layers of inequalities within the current neoliberal globalisation

As the liberalisation imposed itself on global agricultural and food markets, and the agri-business corporations have been benefiting from these trade rules, it is important to understand how small farms are facing these changes. In fact, not only the competition for markets is fierce, but the access to agricultural inputs can also be compromised for the smaller players. Smallholders are less likely to benefit from the expansion of export-led agriculture as their transaction costs are many times higher than those of larger farms, they do not have an easy access to material capital and resources (E.g. water), and depending on the countries, they have less chances to benefit from public support services (E.g. road infrastructure; extension services).

Figure 5: Alternative Farming Models and Gender-Sensitive Support Measures (FAO and ADB, 2013: p.41) (<http://www.fao.org/wairdocs/ar259e/ar259e.pdf>)

These consequences do not affect all smallholders in the same way. Other existing structural inequalities, based on geographical location or socio-economic status or gender, magnify the negative impacts of market liberalisation on smallholder farmers' livelihoods. For instance, even though they are less likely to own land, women are overrepresented amongst smallholders when men are in larger agri-business companies (ADB, 2013). Such structural inequalities result in higher vulnerability of women when faced with external shocks, and makes female smallholders less resilient to crises such

the food price crisis of 2007-2008 (ADB, 2013).

Figure 6: Disproportionate Effects of Global Crises on Women (FAO and ADB, 2013: p.12)
(<http://www.fao.org/wairdocs/ar259e/ar259e.pdf>)

Figure 7: Women's Land Ownership in 2012 (Share of women land holders compared to all landholders) (FAO and ADB, 2013: p.24) (<http://www.fao.org/wairdocs/ar259e/ar259e.pdf>)

Contract Farming Arrangements (CFA) for smallholders' welfare?

In order to ease smallholders' inclusion to the markets, Contract Farming Arrangements (CFA) were promoted both in industrialised countries where the major agro-food corporations are based, and in developing countries where the largest share of smallholders is.

What is a CFA?

CFAs are contracts where a buyer and a farmer agree on the specific terms about how the production and marketing of farm products will be carried out. Within these agreements, the farmer is no longer free to decide upon varieties/species, quantities, quality, or timing, without the buyer agreeing with the decision. However, these agreements allow smallholders to guarantee themselves a stable market where to liquidate their production, and secure their incomes. CFAs can be referred to as a form of vertical integration; nevertheless, according to economic contracting theories, vertical integration would imply that financial investments and risks are fully borne by the so-called buyer, while within CFAs investment and risks are shared by both parties (Wang, Wang, & Delgado, 2014).

From participation to livelihood improvement: The Empirics of CFA impacts on smallholders

Research on the impacts of CFAs on smallholders has been focused on two main aspects: farmers' participation, i.e. their likelihood to engage in a CFA, and therefore increase their chances to access the market; and farmers' livelihood improvement.

In terms of participation, it seems that smallholders are in general keen on having a CFA, especially if the terms of the contract involve that the buyer provides inputs and technical assistance, and that the output quantities and price options are flexible (Gumataw, Bijman, Kemp, Omta, & Tsegaye, 2013). Such a general statement is to be taken carefully, as these trends depend on various governmental policies, from agricultural subsidies to the degree to which the economy is liberalised, but also socio-political and historical factors that affect farmers' risk aversion and trust. As a matter of fact, female farmers are significantly less likely to commit to a CFA in China, Madagascar and Kenya for example, and this trend was attributed to the disadvantageous contracting opportunities women are offered in several developing countries (Wang, Wang, & Delgado, 2014).

Assessing the welfare effect of CFAs is more difficult to observe, as there is still no consensus in the literature about whether or not it improves smallholders' livelihoods. On the one hand, several studies suggest that farm households under CFAs have better livelihoods; on the other hand, a clear causality between engaging in a CFA scheme and improving a farm household's livelihood is not proven yet, considering that other external factors –not systematically taken into account – might contribute to this improvement as well. In addition to that, impacts at household levels are still being observed, in the sense that if a crop grown by women becomes more profitable, how does the power shift within the household? (Barrett, Bachke, Bellemare, Michelson, Narayanan, & Walker, 2012).

Thinking further:

Readings' questions:

- What are the advantages and drawbacks in contract farming? How do they impact different social and gender categories?
- What are the arguments that explain such different outcomes in analysing the impacts of CFAs?

Discussion:

The literature about CFAs is rather divided, and there are as many arguments and data supporting the effectiveness of this specific form of vertical integration, as arguments against and failed experiences. The diversity of outcomes is partly due to the fact that CFAs were introduced in different manners in each country, and smallholders reactions to it are also country dependent, if not depending on each local community.

In this sense, one can try and further discuss contract farming among smallholders by raising the following questions:

- As the dichotomy between industrialised and developing countries is not relevant in analysing the contract farming, what indicators can allow us to draw patterns of smallholder farmers' behaviour in terms of participation? And what factors, combined with CFA opportunities, contribute to the improvement of smallholders'?
- What model can be better suited to analyse farmers' welfare dynamics? Why?
- What other solutions were initiated in order promote smallholders' welfare in the current food regime, where food systems are bound to neoliberal rules of trade?

Main readings:

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Optional readings:

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- Goodhue, R., Hoffman S. (2006). Reading the Fine Print in Agricultural Contracts: Conventional Contract Clauses, Risks and Returns. *American Journal of Agricultural Economics*, Vol. 88, No. 5, p 1237-1243.
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Session 6

The Power of Knowledge and Expertise in Food Production

Keywords: scientific knowledge; agricultural extension; indigenous knowledge; traditional knowledge; local knowledge; knowledge hierarchy

Learning objectives: The objective is to be able to question the hierarchy of knowledge in food production and sustainability, and the ways in which political and socio-economic power structures are interrelated with the legitimacy of each type knowledge and/or expertise.

While dismantling the concept of food security, the previous chapters set the ground to understand the evolution of the dynamics affecting food systems and their social and ecological environments. Analysing the actors and institutions that shape these systems and the dominant discourses that set the strategies to address food security issues therefore leads us to the following important question: the power hierarchy in knowledge systems.

During the past two decades, an increasing interest towards scrutinising the value of indigenous and local knowledge, in opposition to scientific/modern knowledge, not only in academic research, but also among international institutions and organisations. The purpose of this chapter is to identify the drivers behind this interest for indigenous knowledge recognition, analyse the ways in which it is recognised compared to scientific or western knowledge, and assess the efforts for its integration in development practice.

Different knowledge systems and their stand within the current global power structures

Indigenous knowledge can be defined as the local knowledge accumulated throughout generations and held by a specific society or culture. Its increasing importance within the international discussions about sustainability and food security is explained by the ability of indigenous communities to benefit from, and at the same contribute to the conservation of, the biological resources of their SESs, which allowed them to sustain their livelihoods for generations up until today (Parajuli & Das, 2013).

This type of knowledge system differs from scientific knowledge from different perspectives. These differences are threefold as Agrawal (1995) analysis suggests. The first one lays in the relation between the knowledge itself and the community holding it; the second one is methodological and epistemological, meaning that both systems perceive the realities of the world differently; and the third one is contextual, in the sense that indigenous knowledge is more bound with its socio-ecological context than western knowledge.

The development discourse's focus on indigenous and local knowledge emanated from the failure of

development institutions in improving the rural poor and smallholders' livelihoods, while relying on top-down, technically-oriented solutions (Agrawal, 1995). However, even if the diversity in knowledge systems is now acknowledged, it does not necessarily imply that the viability of non-scientific knowledge is recognised as being equal to the scientific one. Santos (Introduction) explains that during this era of globalisation and the praise of multiculturalism, the recognition of diversity in the world is growing at different levels, but this does not apply to the recognition of epistemological diversity. As a consequence, the same authors that, as long as there is a hierarchy in the value of different knowledge systems, there will be no global justice: "*There is no global justice without global cognitive justice*" (Santos, Nunes, & Meneses, 2008).

Thinking further:

Readings' questions:

- What are the different forms of domination in terms of knowledge today?
- What is the difference between the idea of "*knowledge as regulation*" and "*knowledge as emancipation*"?

Discussion:

Where does the future of globalization of knowledge headings towards (homogenisation; constellations of knowledge; etc.)?

In which ways will this affect the management of the commons?

Main readings:

- Agrawal, A. (1995). Dismantling the divide between indigenous and scientific knowledge. *Development and Change*, 26, pp. 413-439.
- Santos, B. d., Nunes, J. A., & Meneses, M. P. (2008). Opening Up the Canon of Knowledge and Recognition of Difference. In B. d. Santos, *Another Knowledge is Possible: Beyond Northern Epistemologies*.

Optional readings:

- Bohensky, E. L., & Maru, Y. (2011). Indigenous knowledge, science, and resilience: what have we learned from a decade of international literature on "integration". *Ecology and Society*, 16(4), 6.
- Folke, C. (2004). *Traditional knowledge in social-ecological systems [editorial]*. *Ecology and Society*, 9(3), 7.
- Parajuli, D. R., & Das, T. (2013). Indigenous Knowledge And Biodiversity: Interconnectedness For Sustainable Development. *International Journal of Scientific & Technology Research*, 2 (8).
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Session 7

Community Management of Natural Resources: Feminist Political Ecology

Keywords: political ecology; ecofeminism; community-based management; common pool resources; human institutions; socio-ecological systems; environmental economics; cooperation/cooperatives

Learning objectives: Community management of natural resources has been proven effective in sustainably sharing and using common pool resources in many cases. This chapter aims at critically looking into this model in the case of food production from a feminist perspective on political ecology.

Common pool resources: A 'tragedy' or an opportunity?

The "*tragedy of the commons*" brought up by Hardin in 1968 draw attention to the ways in which human institutions manage common pool resources (CPR), and how these institutions affect environmental change. The central idea behind his analysis is based on the assumption that individuals have no incentive on preserving natural resources and the environment if everybody, or a large group of persons, has access to it. His analysis was often criticised as it oversimplifies how institutional arrangements function in reality. He only identified two ways that can guarantee the protection of CPRs and the environmental services they provide; either they should be privately owned or owned by a central government.

In terms of food security, discussing the case of CPRs through a political ecology and new institutional economics perspective is interesting, especially if analysed as food systems. They bring up issues of availability and access, farmers and rural poor's welfare, and sustainability. They also question neoliberal political and economic models, and give importance to food and knowledge sovereignty issues. Food security related CPR management case studies are mostly related to land and irrigation water utilisation, or water resources exploitation (fisheries).

The problem identified by Hardin is very critical, and today more than ever, as the population is rapidly growing, consumption is following, and technologies to exploit natural resources are increasing in efficiency. However, empirical research in new institutional economics and feminist political ecology have proven that by building robust socio-ecological systems (SES), common pool resources can be sustainably managed by a community (Anderies, Janssen, & Ostrom, 2004). The hypothesis this literature is based on is that CPRs are not doomed to turn into open access resources, but it is the collapse of social capital and institutional arrangements that turn a CPR into an open access resource, and thus its depletion. Consequently, using privatisation as a solution to the "*tragedy*

of the commons” fails to address all the issues revolving around such a complex socio-ecological system; CPRs do not only provide livelihoods to the rural poor, but they also fulfil ecological functions. Marothia (2002) argues that the decrease of “common property land resources” induced an increase in cultivated land, including the cultivation of forest land (Marothia, 2002).

The feminist perspective on community management

Studies linking gender, development, and the environment have been carried out in parallel to the mainstream discussions about global environmental challenges and sustainability. Considering the rapid evolution of gender division of work, rights and responsibilities, in rural communities as much as in rural areas, feminist political ecologists such as Rocheleau (1995) started pointing out the importance of analysing sustainability issues from a gender perspective since the 1990s.

The author argues that in many rural communities, women are responsible for the production of daily subsistence and maintenance of complex ecosystems; yet, their work and resources are often invisible as it is(was) not measured by productivity indicators because, for instance, they are less likely to own land. Considering the trends in male work force’s increasing interest in local or urban wage labour or cash crops, women’s responsibilities in terms of use and maintenance of complex rural landscapes and community environmental duties are increasing. These activities formerly shared with men fall under women’s responsibility, when they are faced with a decrease in labour force while their access rights to resources remain restricted (Rocheleau, 1995).

The important role women are taking in community management of complex ecosystems should imply their increasing participation in setting up institutional arrangements to manage CPRs. In fact, in order to ensure effective governance of the commons, Dietz et al. (2003) explain that the two first steps are to monitor the evolution of resources availability and utilisation, but by keeping communication open within the community to build trust and strengthen the social capital. If the changes are not monitored and discussed within the community, effective institutional arrangements will not be established and enforced. In the case of women for example, if their reproduction responsibilities remain unchanged, while taking over more agricultural production activities at the household level, and environmental activities at the community level, they will be more likely to give up on their duties towards the community than to the subsistence of their households.

Challenges of common management and how to overcome them: Ostrom’s Nested principle

As explained before, some authors that focused on the theory of commons such as Elinor Ostrom, argue that establishing and enforcing effective institutional arrangements is challenging, especially

when the resource users do not communicate and/or fail to agree on rules and norms for managing the resource. However, this only implies that more research has to be done, and knowledge shared, in order to find ways to sustain SESs, instead of discarding the option of community management of CPRs. The nested principle developed by Anderies, Janssen and Ostrom (2004) suggests that effective governance of CPRs is only possible if the relationships and interactions among all the level and sub-levels of a SES are identified and analysed. The 4 main levels of these systems are composed of the resource system itself, the resource units that compose the system, the governance system in place, and finally the resource users (Anderies, Janssen, & Ostrom, 2004).

Bringing another perspective to the debate in the same line of thought, Vandana Shiva (Marothia, 2002) has also criticised the recourse to privatisation in order to solve CPR related issues, especially regarding the increase in using Intellectual Property Rights and patents in the domain of biodiversity promoted by the WTO land (Marothia, 2002). She explains that IPRs prevent the rural poor from using a survival resource for the benefit of the 'rich and powerful', while many rural and/or indigenous communities' guiding principles are consistent with the idea of mutual interdependence. Therefore, she argues for the recourse to usufruct rights for the community, an alternative halfway between private ownership and state property, that does not devoid the community from its vital resources while institutionally establishing their responsibilities towards their ecosystem (Marothia, 2002).

Thinking further:

Readings' questions:

- What does the "tragedy of the commons" imply?
- How do the different institutions involved in food governance respond to it?
- What are the vectors of SESs robustness?

Discussion:

Debates about the management of the commons oppose very different views on today's political and economic world order, with the dominant practice of neoliberal models on the one hand, and the ones that challenge it on the other. In this respect:

What are the other alternative solutions to overcome the 'tragedy of the commons'? What is the likeliness of their success within the current food regime?

How can the arguments brought up by feminist political ecologists and environmentalists in terms of management of the commons be linked to issues of food sovereignty and hierarchy of knowledge?

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- Agrawal, A. (2001). Common property institutions and sustainable governance of resources. *World development*, 29(10), 1649-1672.
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- Dietz, T., Ostrom, E., & Stern, P. C. (2003). The Struggle to Govern the Commons. *Science*, 302 (1907).

Optional readings:

- Marothia, D. K. (2002). Introduction and overview. In D. K. Marothia, *Institutionalizing Common Pool Resources*. Concept Publishing Company.
- Ostrom, E. (2009). A general framework for analyzing sustainability of. *Science*, 325(July), 419–422.
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Session 8

Food Sovereignty, Agrarian Reforms and Land Rights

Keywords: food sovereignty; agrarian reforms; land access, land rights; land grab; women's and indigenous land right; dispossession

Learning objectives: This session introduces to issues of land rights as an important aspect and prerequisite for food sovereignty. Students get acquainted with different forms of land tenure and changes in the context of agrarian reforms and land grabbing.

Constant pressure on land and competing uses of natural resources are pushing a significant number of countries around the world to undertake land reforms. As a matter of fact, the world population is expected to reach 9.6 billion by 2050, thus, food production will have to increase by 70-100%; however, the available land suitable for crop production remains the same. In addition to that, the effects of climate change are increasing the pressure on land, as weather patterns become more extreme and unpredictable, causing food insecurity by jeopardising food production, rural livelihoods' quality, and food prices' stability. In this regard, the 2007-2008 food crisis resulted in a "global land rush" that includes large-scale foreign investment deals (Archambault & Zoomers, 2015).

This chapter's purpose is to shed the light on the consequences of land scarcity on food security and the livelihoods of rural populations, and the political and institutional responses to this pressing global issue.

Agrarian land reforms: Institutional overview

If in some regions of the world there is practically no more available arable land, the prospect of agricultural expansion is still possible in parts of Latin America and the Caribbean, or sub-Saharan Africa. It is in these regions where the rush for land by governments and transnational corporations is the most visible (Archambault & Zoomers, 2015). The pressing need for more land has led national governments, but also the World Bank to promote agrarian reforms of land tenure.

The reforms led by the WB are in line with the neoliberal economic perspective of international institutions, promoting land market facilitation initiatives such as land titling and registries, and ownership mapping. Basically, these reforms aim to privatise land in order to change it from a common property of the rural populations to a commodity. Therefore, by only focusing on market-driven solutions, these reforms failed to address the structural causes of poverty and exclusion, resulting in the loss of land for the poorer farmers in some cases, or the outburst of violent conflicts

within some rural communities where farmers privately own the land now (Rosset, 2009).

It has been shown that, at least in Latin America, land reforms and redistribution that successfully benefited the rural poor were government led; however, the experiences are very diverse and vary from a country to another depending on the institutional power dynamics in place. On the one hand, in Cuba, the 2nd land reform of the 1990s was successful because a majority of the rural population had access to land as state farms have already been broken into smaller production units (individuals or cooperatives), but also because of the financial and technical support from the state that advanced research by combining scientific and local knowledge. On the other hand, the Venezuelan experience failed because the landlords' resistance is too strong, and the counter-action from the peasantry is not organised and unified, even though several experiences have proven the capacity of civil society to push for reforms favourable to the rural populations (Rosset, 2009).

Food security and land reforms: An issue of sovereignty

One of the most influential examples of civil society's advocacy efforts in terms of food security and peasants' rights is La Via Campesina. This movement that started in 1996, introduced the notion of food sovereignty, and stressed its importance as an even higher goal to reach rather than food security. The logic behind supporting food sovereignty is that rural people have a right to their land and a right to produce in it. In addition to improving the peasantry's welfare, supporting farmers' rights to produce does not only boost the national and local economy, but also protects the national interests of the country by increasing its independence in terms of food. The assumption upon which the concept of food sovereignty relies is that self-sufficiency in food production is a matter of national security and the nation's sovereignty: depending on imports for food makes a country vulnerable, at the mercy of too many exogenous factors it cannot control (economic crises; powerful countries' policies; etc.) (Rosset, 2009).

When it comes to land reforms, La Via Campesina strongly advocated for fair and inclusive land reforms through their "Global Campaign for Agrarian Reform" (GCAR). This campaign had a significant impact at the global level on the land reform debates, and even though the movement's efforts did not result in significant policy reforms, it still brought about a new alternative vision on land policy (Borras Jr., 2008).

Gender considerations in land reforms

Women's role in agriculture is gaining more importance throughout the years, mainly because men are increasingly engaging in paid labour and migrating from rural to peri-urban and urban areas in the perspective of increasing the household's income. As (Archambault & Zoomers, 2015) explain, women produce a major share of the world's food, and in some countries, they account for more than

half of the agricultural labour force. However, women mostly still have secondary rights in terms of access to productive resources such as land, even though including women's interests in land reforms can prove to be beneficial for women themselves, their households and communities, and the economy (Archambault & Zoomers, 2015).

Figure 8: Gender-asset gap (Meinzen-Dick & al., 2014: p. 95)

In this respect, Archambault & Zoomers (2015) argue that, on the one hand, guaranteeing tenure security for women can give them more bargaining power within the household, and research suggest that in these cases, women are less likely to suffer from abusive partnerships and domestic violence. In addition to that, a study by the FAO shows that if women gain greater access to land and productive resources, or as much as men, they could produce up to 30% more food (Archambault & Zoomers, 2015). On the other hand, the same authors despise that, despite the significant changes land reforms are bringing, "attention to the gendered impacts of tenure reform and explicit efforts at addressing women's tenure security are often insufficient or meeting with limited success." (Archambault & Zoomers, 2015).

Thinking further:

Readings questions:

- What are the cyclical and structural factors that led to the 'global land rush'?
- Which institutions participate in shaping and influencing land policies and reforms? What types of strategies are used to ease land pressure?
- How do these reforms impact different socio-economic and gender categories? What type of land tenure would be more inclusive of women's rights and interests?

Discussion:

"Yet many of these radical changes do not carefully apply a gender lens in their designs, and thereby perpetuate the issues regarding secondary ownership and access rights that often exist for women, in some cases making de facto secondary rights de jure secondary rights, or even turning de facto primary rights into de jure secondary ones." (Archambault & Zoomers, 2015: p.1)

The 2007-2008 food crisis has undoubtedly exacerbated the phenomenon of land grabbing, however, some type of land reforms have already made the economic and political environments favourable for such practices. In this respect, what are the dynamics of land grabbing today and to whom does it benefit? What are the impacts of land grabbing on the autochthonous SESs and how will they evolve in the face of the certain demographic and ecological challenges to come?

Main readings:

- Archambault, C. S., & Zoomers, A. (2015). The pressing need to secure women's property rights under unprecedented land pressure and tenure reform. In G. T. impacts. London & New York: Routledge.
- Borras Jr., S. M. (2008). La Vía Campesina and its Global Campaign for Agrarian Reform. *Journal of Agrarian Change*, 8 (2 & 3), pp. 258–289.

Optional readings:

- Rosset, P. (2009). Fixing our Global Food System: Food Sovereignty and Redistributive Land Reform. *Monthly Review*, 61(3).
- Borras, S. M., And, J., & Franco, J. C. (2012). Global Land Grabbing and Trajectories of Agrarian Change: A Preliminary Analysis. *Journal of Agrarian Change*, Vol. 12 No. 1, January 2012, pp. 34–59

Session 9

Certification Standards: Sharing the Costs of Producers' Welfare?

Keywords: International accountability standards; certifications; corporate responsibility; soft law; fair trade(Max Havelaar); 4C; women's cooperatives

Learning objectives: Considering their multiplication and the significant efforts put into building sustainability standards and certifications by different institutions, this session aims at analysing their impacts and effectiveness on producer welfare and environmental sustainability.

Market liberalisation has made the competition unfavourable to smallholder farmers around the world, especially in the global South. Nevertheless, poor and marginalised small farmers still contribute to a large share of certain commodities' production, such as coffee, tea, or cotton. In 2002 for instance, 70% of the world's coffee was produced by small-scale family farms in 85 countries around the world, farms that participate in the global value chain but remain extremely poor.

In a global context that is increasingly wary about food quality and producers' welfare, International Accountability Standards (IASs) were introduced as market solutions to tackle inequalities within global value chains.

What do International Accountability Standards stand for?

IASs have been introduced in order to increase companies' accountability towards the social and ecological environments they impact. Considering that the current economic system of neoliberal globalisation fails to enforce mechanisms that protect the environment and the smallholders' livelihoods, there was a need for a global institution that coordinates companies' social and environmental responsibility efforts. It is indeed argued that the emergence of IASs is the result of the void in international governance mechanisms to regulate social and environmental issues, and the increasing inequalities that the current economic system is creating and/or strengthening (Gilbert, Rasche, & Waddock, 2011).

IASs differ from companies' codes of conduct in the sense that they are defined by third parties using a multi-stakeholder approach, while codes of conduct are established by the companies themselves. Gilbert et al. (2011) explain that IASs are characterised as 'soft law', as they are made to encourage corporate responsibility, but their enforcement is not legally binding but only voluntary to some extent, and their formulation is not as meticulously precise as 'hard law'. However, there is a scenario where soft law hardens in the longer run as Gilbert et al. (2011) clarify, especially considering that the emergence of IAS and their expansion in the first place is a consequence of pressures from

activists from all boards (scholars and researchers, civil society, and consumers).

Assessing the effectiveness of IASs

There is no classification of IASs universally agreed on, but Gilbert et al. (2011) categorise them as follows: principle-based standards; certification standards; reporting standards; and process standards. Certification standards will be focus on in order to identify the strengths and weaknesses of such mechanisms, and the extent to which they contribute to sustainability and producers' welfare.

The idea behind certifications is to create several new products differentiated from the same commodity in order to include different social and environmental determinants in the products' price; it is described as a process of "de-commodification". The price increase is then explained by the basic market mechanisms, where the restricted supply quantities are relatively low compared to the demand, and therefore increases the product's price (Blackmore, Keeley, with Pyburn, Magnus, & Yuhui, 2012).

The first benefit farmers draw from certifications is then the increased incomes from the products' increased prices, and the greater the efforts they put into improving their product's quality, the bigger share of the consumer price they can collect. The following positive aspect relates to the improvement of farm practices and farm management, which in the longer run increase the land's productivity and eco-systemic properties. Also, the improvement in farm management skills can be a result of the strengthening of internal control systems that allow farmer to keep their certifications. In addition to that, especially when farmer-based organisations acquire the certification rather than individual farmers, the bargaining power of smallholders is stronger in front of larger companies and corporations. Finally, acquiring a certification scheme reduces the risks related to price volatility, which is particularly relevant in the case of food product after the last crisis. It is because certified farmers have higher chances of having more stable long-term relationships with their trading partners (Blackmore, Keeley, with Pyburn, Magnus, & Yuhui, 2012).

Considering all the elements above, it seems that IASs, or certifications more specifically, are an ideal solution to improve smallholders' livelihoods. However, some studies show that farmers do not always enjoy having a direct link either to the end consumer or retailer, and that despite being certified, there are still many other players in the supply chain that capture the highest share of the product's value. There is also evidence that certifications do not benefit the poorer farmers, and that can even exclude them even more.

As a matter of fact, subscribing to a certification scheme can be costly, as not only it includes the costs of implementing the certification requirements with its internal control systems and

infrastructure, but also administrative fees and charges (E.g. for annual inspections). These costs are mostly borne by the farmers themselves, and only in few exceptional cases, other supply chain actors co-invest in this process with the farmers. The costs of certification therefore de facto exclude the poorer smallholders who cannot afford such an investment. In addition to that, because more farmers have incentives to get certified, the ones that cannot afford it have to face two types of competition: the transnational corporations' who benefit from economies of scale and the niche markets of certified products (Blackmore, Keeley, with Pyburn, Magnus, & Yuhui, 2012). Finally, the number of certifications and their diversity can also be considered as a negative aspect. In fact, some of them compete with each other, which lead to market segmentation, where farmers have to identify the appropriate ones for their type of production and needs, and combine different standards, some of which overlap (Ruben & Zuniga, 2011).

Thinking further:

Readings' questions:

- Beside certifications, what are the other IASs and how are they implemented? What are their impacts on food systems?
- How can the weaknesses of IASs be overcome?

Discussion:

From a consumer perspective, what are the impacts of IASs and certification schemes on consumption behaviour?

Main readings:

- Blackmore, E., Keeley, J., with Pyburn, R., Magnus, E., & Yuhui, Q. (2012). *Pro-poor certification: Assessing the benefits of sustainability certification for small-scale farmers in Asia*. London: IIED Natural Resource Issues No.25.
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- Ruben, R., & Zuniga, G. (2011). How standards compete: comparative impact of coffee certification schemes in Northern Nicaragua. *Supply Chain Management: An International Journal*, 16 (2), pp. 98-109.

Optional readings:

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Session 10

Lost and Found: Biodiversity in Practice

Keywords: traditional crops; food habits; biodiversity; climate change; adaptation strategies; conservation; biobanks

Learning objectives: The issues at stake in food sustainability are not only addressing food availability in terms of quantity and redistribution, but also in terms of food quality and ecological systems balance. This is the central idea behind this session, highlighting the efforts that have been made so far in terms of traditional or indigenous food species conservation and utilisation. The students will also learn to critically reflect the adaptation strategies' implementation and effectiveness.

Agricultural productivity is in big part based of biodiversity richness of the environment surrounding the agricultural land. However, depending on the types of practices, agriculture is also considered as one of the factors behind biodiversity loss. Therefore, biodiversity conservation, hand in hand with the adequate agricultural production systems, can sustainably alleviate risks of food insecurity.

Are biodiversity, agriculture and food security compatible?

It is argued that small-scale traditional farming is also the most likely to protect and maximize the surrounding ecosystem's biodiversity, mainly because of crop and livestock diversification, as most of the small farms are utilised both for subsistence and commercial purposes. Traditional agroforestry is also considered as a system that supports high biodiversity that even prevents pests, insects and diseases, as the ecosystem balances itself. Agrobiodiversity also includes autochthonous species' conservation, as these so-called "landraces" have complex genetic compositions suited for the ecosystems they developed in, and that benefit the agricultural production. From a social point of view, practices tied to biodiversity protection and improvement are bound to cultural backgrounds and local knowledge that supported the livelihoods of local populations for generations.

Unfortunately, since the industrialisation of agriculture and the green revolutions, the global trends in agricultural tend towards more homogenisation than diversity. Several crop and livestock species disappeared already or are about to be extinct and agricultural production is sought to be monocultural, as it appeared to increase productivity in the short run, even though the soil degradation results in much lower productivity in the longer term. This type of agricultural systems is also very demanding in agro-chemicals (fertilizers, pesticides, etc.) as the ecosystem loses its balance. Nevertheless, since food security issues have been brought to the centre of the agenda, and research has shown the necessity of biodiversity conservation and the adverse effects of the dominant

agricultural model of monocultures, more efforts are being made in this respect, both at the international and state levels.

Assessing biodiversity conservation initiatives: Ecological and social impacts

Assessing the effectiveness of projects, programmes or policies designed for biodiversity conservation is challenging, as most of the evaluations are place-based, and sometimes do not include ex-ante data to compare the improvements to. For instance, in absolute terms, protected areas are effective in improving the ecosystems' biodiversity compared to non-protected areas; however, it also seems that it is mostly areas that are unlikely to be useful for alternative activities, and/or are not at risk of degradation, that are chosen to be protected. In addition to that, Ferraro and Pattanayak (2006) explain that most of the conservation efforts are not evaluated in a comprehensive manner, that takes into account the whole political and socio-ecological system where the initiatives are implemented. Therefore, it becomes difficult to accurately identify the problems in case of failure, or it disables the reproduction of successful experiences.

From a system dynamic point of view, it is challenging to analyse and assess human and natural systems, and their interactions. Yang et al. (2013) explains that it is because the concept of "Human Well-Being" (HBW) itself is constantly evolving, subjective, and complex, therefore, Ecosystem Services (ES) are necessary to fulfil it, but not sufficient. Other institutional, demographic or contextual factors such as conflicts influence HBW as much as ES do (Yang, Dietz, Kramer, Chen, & Liu, 2013).

Focusing on the linkages between conservation efforts and poverty, there is a consensus about the positive correlation between biodiversity loss and poverty; however, there are heated debates about the social impacts of conservation programs on poverty levels and livelihood improvement. In fact, keeping up with the example of protected areas, their ecological impacts have mostly been positively evaluated. Nonetheless, when these programmes were implemented, a little attention was drawn to its socio-economic impacts on local populations, who end up paying the highest price for this ecosystem service as they have been evicted in some cases from these lands and banned from using its resources that secured their livelihoods (Adams & al., 2004).

Thinking further:

Readings' questions:

- What evaluation mechanisms can be used to better assess the outcomes of biodiversity conservation initiatives?
- What are the different strategies/positions adopted in the poverty v.s. conservation debate?
- Among the institutions involved in food security and food sovereignty issues, how are ES and HWB concerns prioritised?

Discussion:

There are many aspects related to biodiversity conservation that had negative socio-economic impacts, such as seed conservation:

What does the debate about seed conservation revolve around and which institutions/actors hold which position in it? How can this debate be related to food sovereignty and the value of indigenous/local knowledge?

Main readings:

- Adams, W. M., & al., e. (2004). Biodiversity Conservation and the Eradication of Poverty. *Science*, 306 (1146).
- Yang, W., Dietz, T., Kramer, D., Chen, X., & Liu, J. (2013). Going Beyond the Millennium Ecosystem Assessment: An Index System of Human Well-Being. *PLoS ONE*, 8 (5).

Optional readings:

- Ferraro, P., & Pattanayak, S. (2006). Money for Nothing? A Call for Empirical Evaluation of Biodiversity Conservation Investments. *PLoS Biol*, 4 (4).
- Thrupp, L. A. (2000). Linking agricultural biodiversity and food security: the valuable role of agrobiodiversity for sustainable agriculture. *International affairs*, 76(2), 283-297.

Session 11

From Food Security to Nutrition Security

Keywords: hidden hunger; health; food fortification; food industry; biodiversity

Learning objectives: This session introduces students to the discursive shift from food security to nutrition security in international circles. Factors of hidden hunger, such as biodiversity loss, will be analysed and solutions will be critically discussed.

Methodology:

Major improvements have been made during the last two centuries in the quality of living and health conditions worldwide. Mortality rates due to infectious diseases significantly decreased, more so in industrialised countries where they were eradicated by the end of the last century, than in the rest of the world. This progress can be attributed to the technological advances in medicine, but it is argued that it is mostly due to improved hygiene and sanitation, but also to better nutrition that prevents diseases (Semba, 2008). As a matter of fact, malnutrition is at the origin of 50% of the diseases today (Weingärtner, 2005).

Until the mid-1990s, the focus was mainly put into food security in terms of hunger eradication, i.e. food quantities and redistribution. Gradually, the notion of nutrition security started to emerge, as its advocates explain that food security cannot be dissociated from nutrition concerns considering that the metabolism can only prevent diseases if it benefits from an adequate nutritional status (Shetty, 2015).

Figure 9: Conceptual Framework of Malnutrition according to UNICEF (Black & al., 2008)
(<https://www.unicef.org/nutrition/training/2.5/4.html>)

Food nutrition security and poverty: A cause or a consequence?

As defined by Benson, food security is a state where a household has access to food in sufficient quantity and quality at all times. The concept of temporality is very important in this respect, considering that the poorest households can also be smallholders who have access to food during and after harvest seasons, but not beyond. Also, observing food security at a household level allows perceiving gender and socio-economic inequalities in terms of access to food. The notion of nutrition security adds another layer to this definition by including the dimension of food utilisation within the household, as it is also an indicator of access to knowledge health concerns and the capacity to respond to it (Benson, 2004).

The current vision on food security focuses on three indicators: access, availability, and utilisation. It has been extensively proven that poverty is one of the major causes of food insecurity, or at least in terms of access. However, when perceived through a nutrition security perspective, Weingärtner

(2005) explains that undernutrition has negative economic and social impacts at the micro and macro levels. The explanation he gives is that undernourishment hinders the physical and mental capabilities of the individual and increases mortality rates, which in turn results in significant productivity losses. In the long run, the population enters a vicious circle, where they overexploit the land in order to meet their pressing basic needs, which keeps on reducing the capacity of the land to regenerate and provide food for the next generation (Weingärtner, 2005).

Gender and nutrition security

From a gender perspective, the previous chapters have shown that food security affects women differently in different aspects, and nutrition is not an exception. In fact, women are more likely to suffer from nutrition insecurity, especially during pregnancy and lactation because of iron deficiencies for instance. At the same time, due to their restricted access to land and agricultural inputs, women usually have a weaker decision-making power over food production. Therefore, it seems important to take gender specificities, roles, and needs into account in the food and nutrition security system (Weingärtner, 2005).

Another reason that makes gender considerations crucial in food and nutrition issues is the correlation between gender, income, and intra-household welfare. It has been observed that women spend a significantly more important share of their incomes, relative to men, on food for their households. Therefore, improvements in women's incomes and decision-making power over food production have proven to have positive effects on the nutritional and health status of the members of their households. Greater efforts should be done in order to close the existing gender gaps, especially in rural areas, so that women and girls can contribute with their full potential to improving food and nutrition security at a global level (Weingärtner, 2005).

Prevention and policy responses

There are two main aspects that policy focuses on in order to prevent or reduce food and nutrition security: the market (food products; labour; production inputs; etc.) and the infrastructure (physical; institutional; socio-economic; etc.). Policies focused on both these aspects affect households' incomes, assets and behaviour. It is only by impacting all these factors that food production, along with food demand, is enhanced, which provides a market oriented solution to food insecurity. A sole focus on production is not sufficient, as it only secures food availability but not necessarily the households' access to it, or its use optimization (Weingärtner, 2005).

The policies for food and nutrition insecurity reduction are implemented at a macro level, and have to be comprehensive as there are cross-cutting issues. For instance, promoting food diversification can be a nutrition-oriented agricultural policy that tackles food supply instabilities structurally.

However, reducing food deficits during times of crisis is more challenging, thus mitigation strategies have to be implemented, especially in countries or regions prone to natural disasters and/or political instability. These strategies can materialise into food security reserves and funds or different early warning systems and market information systems (Gerster-Bentaya, 2005).

Thinking further:

Readings' questions:

- How did the discourse shift from food to nutrition security concerns?
- What are the different types of strategies adopted to overcome food and nutrition security challenges?

Discussion:

How does nutrition insecurity affect industrialised, developing and least developed countries respectively?

What are the agricultural practices or food systems that are more likely to prevent and reduce food and nutrition insecurity?

Main readings:

- Weingärtner, L. (2005). The Food and Nutrition Security Situation at the Beginning of the New Millennium. In K. Klennert, *Achieving Food and Nutrition Security: Actions to Meet the Global Challenge A Training Course Reader*.
- Shetty, P. (2015). From food security to food and nutrition security: role of agriculture and farming systems for nutrition. *Current Science*, 109 (3).

Optional readings:

- Benson, T. (2004). *Africa's Food and Nutrition Security Situation: Where Are We and How Did We Get Here?* (Vol. 2020 Discussion Paper 37). IFPRI.
- Counihan, C., & Van Esterik, P. (2012). *Food and culture: A reader*. Routledge.
- Gerster-Bentaya, M. (2005). Instruments for the Assessment and Analysis of the Food and Nutrition Security Situation at Macro Level. In K. Klennert, *Achieving Food and Nutrition Security. Actions to Meet the Global Challenge A Training Course Reader*. InWent.

Session 12

Sustainable Food Consumption and Transitioning Food Habits?

Keywords: consumption; transition theory; food habits; social norms; food taboos; gendered food practices; critical food studies

Learning objectives: This session focuses on food security from the consumer perspective, and the ways in which food consumption and habits have evolved during the past years, as awareness about sustainability has been raised gradually. Students learn to analyse the ways in which food habits have been adapting, or not, according to the evolution of political concerns and social norms.

Food plays a major role in society. Apart from fulfilling one's biological needs, food is engrained in each society's history, culture and political and social economy, which explains why by analysing our food systems, we have a better understanding of the dynamics of the world we live in. The commodification of food and the marketization of human relations, extolled by the current neoliberal system, has altered our relation to food and the environment, which led to the sustainability and food security issues the world is facing. In this context, food justice movements started to emerge during the past decades, trying to advocate for alternative food systems respectful of the environment, the welfare of the supply chain actors, and where customers are not passive consumers anymore but active citizens (Levkoe, 2006).

The path to food citizenship

Our food systems today are dominated by large agri-business corporations which control food production and distribution with the sole purpose of maximizing their profits, excluding nutritious, environmental, or socio-economic considerations. This has resulted in the distancing and disempowering of people from the food they eat, its quality, and the way it is produced. Food justice activist groups' purpose is to re-establish this connection between citizens and the SES their food comes from (Levkoe, 2006).

Their ideologies foundations are based on raising awareness about producer and consumers' rights and welfare, connecting human and environmental health concerns, and advocating for policy changes. Based on a "Community Food Security" (CFS) discourse, many of these movements focus on building capacities for local food production and distribution, and environmental and social justice, by building and supporting community-based initiatives that aim to create long-term self-sufficiency (Levkoe, 2006). It is these types of initiatives that enhanced the development of the concept of "food citizenship".

Being a food citizen entails that one has certain rights and duties in relation to her/his food choices. The idea behind it is not only to reconnect food consumers with the SES their food is produced in, but also to encourage their engagement and responsibility towards it by reflecting on their food choices. However, engaging as a food citizen can present some challenges that Wilkins (2005) translates into 4 barriers. First of all, accessing food produced in a community-based system might not be an easy task in some areas, where available food in supermarkets is dominated by processed or refined food. This is partly the result of agricultural policies that subsidise – in some countries – products that are neither healthy for humans or the ecosystem, and which represents the second barrier to food citizenship. Institutional policies can also challenge the efforts to eat responsibly, such as the collaborations between educational institutions and agri-business large firms, where schools derive additional income from exclusive rights to sell the company's product (e.g. sugary soft drinks). Finally, the last barrier the author refers to is the independence and engagement of academics and professionals in the domains of nutrition, agriculture, or food systems, in the face of increasing corporate influence on research. She although explains that there is a growing number of professionals and researchers leading food citizenship movements and initiatives (Wilkins, 2005).

Activism or hype? The consumer “attitude-behavioural intention gap”

There is nowadays a multiplication of initiatives for the promotion of local and/or food consumption, and even though consuming through these channels is still not mainstreamed and covers for a small share of the food globally produced, the phenomenon is expanding gradually. One of the major successes of food justice movements is the pressure it puts on the industry to put more efforts related to their corporate environmental and social responsibility as a result of a pressing demand from ‘food citizens’.

These initiatives of sustainable, organic and local food consumptions, while becoming popular, gave birth to new types of consumers that are reflexive of cultural norms related to food and/or are concerned with the ethical consequences of their choice of product. Nevertheless, even though new attitudes towards food consumption emerge, these alternative products that are organic, fair-trade and/or local are still narrow niche products and do not contribute more than 1% to market shares (Vermeir & Verbeke, 2006). This has been termed the “attitude-behavioural intention gap” whereby consumption is still driven by purchasing habits, price and norms that seem resistant to change. Vermeir and Verbeke (2006) attempt to explore the reasons behind the persistence of such a gap including how low perceived availability of sustainable products might hinder the purchase of such products from people with positive attitudes, while other with more negative attitudes might still purchase suitable products due to peer pressures. The authors also argue that improving involvement, PCE, certainty, social norms and perceived availability through communication campaigns by

sustainability food chains' stakeholders can prove successful in stimulating the intention to buy of many consumers.

Thinking Further:

Readings' questions:

- What are the different types or levels of food activism from consumer perspective? How do they materialise and what are their impacts on sustainability and social justice?
- What are the different discourses used to analyse food security issues, and what are their implications for food activism?

Discussion:

Adopting alternative modes of consumption can sometimes require important changes in food habits. In this respect, it is interesting to reflect on the cultural and psychological barriers that hinder consumer's engagement in responsible and sustainable food consumption. Thus, how are food habits changing, and what are the socio-economic and cultural challenges to the sustainable transition in food consumption (income; knowledge; taboos; beliefs; migration; etc.)?

On the opposite register, alternative food consumption attitudes can bring about some latent issues in the current globalised world and its power structures. How can then food activism relate to post-colonial theory and cultural appropriation debates? How do these discussions shape activist strategies within food justice movements?

Main readings:

- Levkoe, C. Z. (2006). Learning democracy through food justice movements. *Agriculture and Human Values*, 23, pp. 89-98.
- Vermeir, I., & Verbeke, W. (2006). Sustainable Food Consumption: Exploring the Consumer "Attitude - Behavioral Intention" Gap. *Journal of Agricultural and Environmental Ethics*, 19, pp. 169–194.
- Wilkins, J. L. (2005). Eating right here: Moving from consumer to food citizen. *Agriculture and Human Values*, 22, pp. 269-273.

Optional readings:

- Counihan, C., & Van Esterik, P. (2012). *Food and culture: A reader*. Routledge.

Session 13

Transnational Food Activism: The Case of La Via Campesina

Keywords: Environmental activism; food activism; global advocacy; local movement; peasant movement; food consumer; food citizen

Learning objectives: As a follow-up to the previous session, this one looks into the dynamics of food activism, and its impacts on the upswing in terms of food sustainability, both for the value chain actors and the ecological system they are part of. Taking the La Via Campesina movement as an example, this session aims at exploring how local and global activist groups introduced the concept of "food citizenship".

The previous chapters helped identify the different institutions participating in debates about food security, and identify their roles in the international governance system. This chapter focuses on the role of civil society and NGOs, through the specific case study of La Via Campesina.

In the current food regime, the international governance dynamics are such that States are gradually losing influence and power in the face of other actors, like international organisations, transnational corporation, or civil society organisations (CSOs). The power of these institutions has increased since the 1990s, but to different extents. Indeed, even though the importance of the participation of civil society groups in global governance is proven, and they have had an impact on the discourse about food security, their ability to influence decision-making processes and policies is still debatable (Gemmill & Bamidele-Izu, 2002). Gemmill and Bamidele-Izu (2002) argue that CSOs should play a major role in gathering and disseminating information related to food security and sovereignty, be consulted in policy development, implementation, and assessment and monitoring, in addition to advocacy for environmental and social justice. However, the authors explain that the existing global governance structures do not allow CSOs to fulfil these roles effectively (Gemmill & Bamidele-Izu, 2002).

In this respect, the claims, actions, and impacts of La Via Campesina movement on food security will be analysed, considering that it is one of the most influential transnational activist group that claims environmental and social justice, by introducing the issue of food sovereignty and bringing it into the international debate.

La Via Campesina: A movement for food sovereignty

La Via Campesina movement was born in 1993 by farmers' representatives from 4 continents in resistance to the WTO globalisation model. As it was the dawn of the current food regime guided by neoliberal globalisation, small farmers saw the need to organise and speak with one voice in order to

influence agriculture and food policies as their well-being was excluded from the debates, while they are the first ones to be affected by these policies. The movement's central struggles revolve around food sovereignty and agrarian and land reforms, promoting a model of small scale sustainable agriculture that would benefit producers, consumers, and the environment, by encouraging local production and consumption and lower a country's dependency on imports, which weakens its economy and bargaining power in international trade and negotiations. The movement's main goal is to promote peasant's rights and environmental and social justice, not only in the face transnational corporations and international institutions' exclusive policies, but also within the peasant communities (La Via Campesina, 2016)

At its origins in the 1980s, the movement was created by rural organisations from countries where the state was gradually disengaging from rural areas, especially in Latin America, and where CSOs had to strengthen. In the early 1990s, different peasant organisations around the world were agreeing on the same struggles and the same course of action in order to promote socio-environmental justice. Throughout the decade and beyond, peasant organisations leaders have succeeded in contributing to international debates, taking up global leadership in food sovereignty related issues, and challenged institutions that attempted to speak on their behalf while omitting the essence of their struggle (Martinez-Torres & Rosset, 2010).

Box1: Definition of Food Sovereignty at Forum for Food Sovereignty 2002

Food Sovereignty is the RIGHT of peoples, communities, and countries to define their own agricultural, labour, fishing, food and land policies which are ecologically, socially, economically and culturally appropriate to their unique circumstances. It includes the true right to food and to produce food, which means that all people have the right to safe, nutritious and culturally appropriate food and to food-producing resources and the ability to sustain themselves and their societies. (NCO/CSO Forum for Food Sovereignty , 2002)

Achievements and challenges

While becoming such an influential civil society actor in international and national debates for sustainability and social justice, the movement also faced challenges. For instance, the coordination between such a large and diverse group of peasant CSOs from around the world can be a strength, as much as a weakness.

One of the most important campaigns of LVC is the one pushing for agrarian and land reforms favourable to the peasantry (GCAR). In light of this campaign, one can observe the movements' achievements as an influential power in the food sovereignty debate. According to Saturnino M. and Borras Jr's analysis, the major strength of LVC is its ability to frame debates and bringing issues from

a new perspective to the agenda, by mobilising its network at local, national, and international levels. Also, the movement succeeded in pushing for procedural changes in some international institutions, such as IFAD or FAO, where it managed to “re-politicise” the interaction between CSOs and international organisations. However, the movement is still struggling to have a significant impact on policy formulation, or enhance structural changes favourable to LVC’s goals amongst institutional powers, or not even encourage them to commit to their goals (Borras Jr., 2008).

The movement is also facing fundamental challenges that have to be worked on in order to sustain their strength and improve their weaker points. LVC first needs to maintain the ideological cohesion within its network to be a force of influence internationally, but at the same time, local struggles have to remain visible, making successful local actions the alternative solution for global issues. In addition to that, the movement can only achieve its goal by keeping on building strong alliances that join their forces for global social justice. The movement also needs to ensure equality and inclusiveness, not only within its constituency, but also in its campaigns. Finally, one of the most salient challenges LVC is facing is related to the protection of its members from the increasing criminalisation of social struggles, therefore the network has to strengthen its solidarity network in order to defence its members and supporters (La Via Campesina, 2014).

Thinking further:



Main readings:

- Borras Jr., S. M. (2008). La Vía Campesina and its Global Campaign for Agrarian Reform. *Journal of Agrarian Change*, 8 (2 & 3), pp. 258–289.
- Burnett, K., & Murphy, S. (2013). What Place for International Trade in Food Sovereignty? *Food Sovereignty: A Critical Dialogue. Conference Paper #2*. The Journal of Peasant Studies.
- La Via Campesina. (2014). *Report of The VI International Conference of La Via Campesina*. Jakarta.

Optional readings:

- Declaration of Nyéléni. (2007). *Forum for Food Sovereignty*. Sélingué, MALI.
- Gemmill, B., & Bamidele-Izu, A. (2002). The role of NGOs and civil society in global environmental governance. *Global environmental governance: Options and opportunities*, pp. 77-100.
- La Via Campesina. (2016). *La Via Campesina. Organisational Brochure*.

Session 14

Alternative Food Networks and Local Food Systems

Keywords: Alternative food systems; local food systems; organic food systems; short value chain; community supported agriculture (CSA)

Learning objectives: The students are invited to explore the different alternative food systems that emerged during the last decades as a reaction to the unsustainability of intensive agriculture, with a greater focus on local food systems. The idea is to identify what supports or hinders the development of these alternative systems, and the ways in which they impacted our socio-ecological systems up until now.

Many aspects of the current global food systems can be criticised as the previous chapters have shown. But identifying the problems is just as important as exploring alternative solutions, assessing their effectiveness, and thinking about ways to improve them, in this case through the example of Local Food Systems (LFS).

What characterises Local Food Systems (LFS)?

Local Food Systems (LFS) have been identified as an alternative way of to market and consume food products, and that are aligned with the principles of food sovereignty. By promoting local food value chains, the producers' welfare improves as they have better access to the markets with little or no intermediaries' capturing a significant share of their income, and they have more independence on their land use (types of crop and livestock species; rotations; fallow; etc.) which encourages practices that enhance biodiversity conservation. Plus, the products' carbon footprint is lower due to the shorter distances food has to travel to reach end consumers (Blouin, Lemay, Ashraf, Imai, & Konforti, 2009).

What defines a LFS is first the proximity between farm and the table, which can be geographical, temporal, political and administrative, or based on the natural boundaries of an ecosystem. Some authors also add the social proximity to this list, referring to the direct contact between farmers and consumers. Also, what makes an LFS is the objective behind its organisation, and the ways in which it meets the expectation of the actors involved in the value chain. For instance, in some cases, producers' economic welfare is at the forefront, while in others, the environmental or health benefits are prioritised. The difference in expectations differs from a "locality" to another, as in some regions food culture loss is an imminent issue, when in others rural populations' exclusion is a main concern (Blouin, Lemay, Ashraf, Imai, & Konforti, 2009).

Putting the benefits of LFS into perspective: An ideal solution?

The expected positive outcomes of LFS are multidimensional, and have been extensively described

in the literature and through campaign promoting this mode of production and consumption. But after more than a decade that these systems started to be (re)adopted, it is interesting to look into their impacts based on empirical observations.

From a socio-economic perspective, LFS have had significant positive impacts on both farmers' welfare and their communities. Farmers capture a larger share of the products' value added, they have easier access to stable markets, which prevents from the adverse effects of price volatility and exogenous shocks on the harvest, and they are more likely to create employment opportunities at the local level. Also, a positive correlation between LFS initiatives and health has been observed, for instance in educational institutions that adopted farm-to-school programmes (Blouin, Lemay, Ashraf, Imai, & Konforti, 2009).

It is mostly from an environmental point of view that the positive outcomes of LFS are debatable, as they are not systematic. It is not because food travels shorter distances that its carbon footprint is lower; this rather depends on the farm's production system, and it can be intensive monoculture production and local. Also, it has been shown that travelling to local farms to get provided in food can increase the products' footprint, making it less environmentally friendly than the food shipped to supermarkets (Blouin, Lemay, Ashraf, Imai, & Konforti, 2009).

LFS have their strengths and weakness, but their overall positive impacts are undeniable. However, it still seems that this system is hardly mainstreamed, and account for a small share of global agricultural production, as it is usually carried by small to medium farm holders. In this respect, this model supported by La Via Campesina does not seem to be supported by national or international policies in most of the countries. As Blouin et al. (2009) argue, engaging in such a food system within a "hostile environment" will only be encouraged through public policies, by giving access to financing for local food projects and providing support and technical assistance to producers who want to convert to this alternative system.

Thinking further:

Readings' questions:

- What attributes define a LFS? What importance is given to each of them?
- What are the different distribution mechanisms in LFS?
- What are the barriers to LFS's development and how do they relate to the current global governance system?

Discussion:

What other alternative food systems can you think of? What are their strengths and weaknesses in terms of food security, sovereignty, environmental sustainability, and peasantry's welfare?

Conventional, local, organic, urban, etc.? In your point of view and acknowledging the socio-economic system you live in, what do you think is the most suitable food system to adopt and/or to support? What are your criteria? Would your choice be different if you were living elsewhere?

Main readings:

- Blouin, C., Lemay, J.-F., Ashraf, K., Imai, J., & Konforti, L. (2009, September). Local Food Systems and Public Policy: A Review of the Literature. *Équiterre and the Centre for Trade Policy and Law*.
- Martinez, S. (2010). Local food systems; concepts, impacts, and issues. Diane Publishing.

Optional readings:

- Bowen, S., & Mutersbaugh, T. (2014). Local or localized? Exploring the contributions of Franco-Mediterranean agrifood theory to alternative food research. *Agriculture and human values*, 31(2), 201-213.
- Altieri, M. A., & Toledo, V. M. (2011). The agroecological revolution in Latin America: rescuing nature, ensuring food sovereignty and empowering peasants. *Journal of Peasant Studies*, 38(3), 587-612.

Session 15

Conclusion: Food Regimes and Inequalities from a Transnational Perspective

Discussions about food politics are omnipresent nowadays, and the contribution of such a diverse range of actors in it is more urgent than ever. Awareness is constantly raised about the need for resilient and/or sustainable food systems to protect the environment and ensure food availability in different regions of the world. Policies and guidelines for future strategies are set even at a global level, such as the UN's 17 Sustainable Development Goals.

However, food politics affect almost every aspect of --, many of which have been brought up throughout this reader. In this respect, a special attention has to be put on food justice with regard to the existing power structures in place and the inherent inequalities they create, from the global to the individual level. For instance, grounds related to ethnicity, race, gender and privilege are still not tackled in the extents to which they impact the affected communities' livelihoods. Civil society organisations and movements are playing a crucial role in this regard; nevertheless, parts of their discourse is not embedded in the planners' agenda yet. In their book "*Cultivating Food Justice: Race, Class and Sustainability*", Alkon and Agyeman (2011) focus on these issues and bring not only a framework to understand these dynamics within the food security debate, but also gives useful insight for all the different actors in order to redirect the political ecology of food towards different strategies.

Discussion:

It is important at the end of this reader to start reflecting on our role in the food security debate as individuals, households, communities, nations, regions, and as global citizens.

The following questions can be used to question and discuss the ways in which one is affected by and contributing to the resilience of the social-ecological systems on evolves in:

- Can you identify your realities in terms of food (in)security? How does it affect you and the community you identify with?
- What are the power structures at play? How are these dynamics shaping your social-ecological system in terms of policies, knowledge hierarchy, and livelihood quality?
- What are the strengths and weaknesses of the different actors that shape this SES? Who are they with regard to their ethnicity, race, gender and class?
- How are food consumption and production patterns transitioning around you?

- In what ways is the local civil society anchored to the global sustainability movement? How would you critically analyse its robustness, from the ways in which it assigns its goals and strategies, to their success or failure to achieve them?

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- Agarwal, A. (2001). Common Property Institutions and Sustainable Governance of Resources. *World Development*, 29 (10), pp. 1649-1672.
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About **trAndeS**

trAndeS is a structured postgraduate program based at the Pontificia Universidad Católica del Perú (PUCP) that contributes to sustainable development in the Andean region through its research and training activities. The project partners are Freie Universität Berlin and Pontificia Universidad Católica del Perú (PUCP).

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The objective of **trAndeS** is to create and promote knowledge that can contribute to the achievement of the United Nations Agenda 2030 with its 17 Sustainable Development Goals (SDG) in the Andean Region. It focuses its efforts on identifying how the persistent social inequalities in the region present challenges to achieving SDG targets and how progress toward these targets can contribute to the reduction of these inequalities.

Further information at www.programa-trandes.net

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