The Politics of Agroecology as a Discursive Frame in Global Food Governance

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners. I understand that my thesis may be made electronically available to the public.

Abstract

This dissertation is an investigation of the political processes that shape the evolution of transformative political visions in global governance spaces. Focusing on the example of agroecology as a discourse in the global governance of food, I explore the ebb and flow of this counter-hegemonic paradigm in venues of global cooperation. Guided by the research question "What explains the rise of agroecology as a significant discourse in the global governance of food?", I present an in-depth analysis three case studies: the United Nations Food and Agriculture Organization (FAO), the Committee on World Food Security (CFS), and the United Nations Food Systems Summit (UNFSS).

Drawing on 50 expert interviews and extensive document analysis, this research project presents an analysis of agroecology as a significant discourse for food systems transformation. Guided by grounded theory research methods, I present the evolution of agroecology in global governance discourse over a hundred years, from the late 1920s to the present, in the form of interview-rich narrative text. I argue that agroecology entered global governance discourse through a complex interaction of three factors: 1) the multiple systemic crises confronting global food systems; 2) the sustained advocacy of supporters of the political vision of agroecology; and 3) the scientific aspects of agroecology creating a credible basis for diverse actors to engage with the term. While agroecology has become a significant paradigm for food systems transformation, there remain two central sites of contestation around agroecology as a discursive frame in food governance: the inclusion / exclusion of agroecology in policy recommendations and governance texts, and the holistic vision of agroecology independent of other paradigms, such as innovation. Making sense of the complex evolution and political function of agroecology as a governance paradigm, I argue that the current political function of agroecology can be conceptualized in terms of three distinct features: ambiguity, resistance, and transformation.

This research illustrates the significance of different actor groups in shaping the discourse of global food governance, the strengths and challenges of agroecology as a paradigm for the political transformation of food systems, and the political opportunity for change within governance spaces. As one of the leading ideas for food systems change, agroecology has undergone a long and contentious journey into global governance venues. I present the story of agroecology in global food governance discourse and thereby present one of the first comprehensive analyses on this topic in the scholarship. This research makes specific contributions to the scholarship: it illustrates the significance of non-state actors in shaping global governance discourse thereby adding a perspective on the complexity of the directionality of governance; it contributes a clear analysis to the co-optation of agroecology debate by analyzing the sites and mechanisms of contestation around the political vision of agroecology in global governance venues; it describes the political function of agroecology as a governance paradigm; and it illustrates in detail the mechanisms and procedures by which policy recommendations are contested.

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List of Acronyms

AC	Agroecology Coalition
BMGF	Bill and Melinda Gates Foundation
CAP	Common Agriculture Policy
CBD	Convention on Biological Diversity
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CFS	Committee on World Food Security
CGIAR	Consultative Group on International Agricultural Research
CIDSE	International Cooperation for Development and Solidarity
COP	Conference of the Parties
CLOC	The Latin American Coordination of Rural Organizations
CSIPM	Civil Society and Indigenous Peoples Mechanism of the CFS
CSO	Civil Society Organization
ECVC	European Coordination Via Campesina
FAO	United Nations Food and Agriculture Organization
FISA	First International Symposium on Agroecology of the FAO
FPI	United Nations Food and Agriculture Organization Food Price Index
FSN	Food Security and Nutrition
FSCH	Food Systems Coordination Hub
FS4P	Food Systems 4 People
GFSI	Global Food Security Index
GHI	Global Hunger Index
HLPE	High-Level Panel of Experts on Food Security and Nutrition (HLPE-FSN)
IAASTD	International Assessment of Agricultural Knowledge, Science and Technology for Development
IFAD	International Fund for Agricultural Development
IPES-Food	International Panel of Experts on Sustainable Food Systems
IPC	International Planning Committee for Food Sovereignty
KJWA	Koronivia Joint Work on Agriculture
LVC	La Via Campesina

MAPA	Brazilian Ministry of Agriculture and Livestock
MDA	Ministry of Agrarian Development and Family Agriculture
MYPoW	CFS Multi-Year Programme of work
NeSNI	Net State of Nutrition Index
PSM	Private Sector Mechanism
SCAR	European Union's Standing Committee on Agricultural Research
SDGs	Sustainable Development Goals
SFSs	Sustainable Food Systems
SISA	Second International Symposium on Agroecology of the FAO
SOCLA	The Latin American Scientific Society of Agroecology
SOFI	State of Food Security and Nutrition in the World
SPI	Science Policy Interface
TAPE	Tool for Agroecology Performance Evaluation of the FAO
UNDP	United Nations Development Program
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNDROP	United Nations Declaration on the Rights of Peasants
UNEP	United Nations Environment Program
UNFSS	United Nations Food Systems Summit
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations International Children's Emergency Fund
VGFSyN	Voluntary Guidelines on Food Systems and Nutrition
VGGT	Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security
WEF	World Economic Forum
WHO	World Health Organization

1. Introduction

Introduction of Research Project

Context

Global food systems are in a state of multiple compounding crises (Béné et al., 2019; Clapp, 2023; Claeys, 2015). Indicators of the critical state of global food systems range from global hunger to ecological destruction and biodiversity loss, from farmer income and generational renewal crises to malnutrition, from climate change to rising food prices (HLPE, 2019; FAO, 2024a). The ideas and language systems used to negotiate the challenges presented by food systems failures are defining (Béné et al., 2019). How the failures of food systems are articulated by different interest groups, and the paradigms used to establish organizing principles, determine possible responses (Anderson & Rivera-Ferre, 2021). For example, those that understand reliable and efficient production to be the central challenge in food systems, call for solutions such as innovation and digitalization in agriculture (Sharma et al., 2024; Mishra & Mishra, 2024). Others, that consider the humanitarian impact of food systems to be the central concern, advocate for a rights-based transformation of food systems (Claeys & Lambek, 2014; De Schutter, 2017). There are many competing understandings of the problems in global food systems and their governance, which results in many competing visions of possible solutions (Leeuwis et al., 2021; De Schutter et al., 2020). However, the fact that global food systems are in a state of failure is well established and frequently referred to as a crisis (Rosin et al., 2013; Béné et al., 2019; Clapp, 2023; Claeys, 2015). How governance actors negotiate the challenges that arise from food systems failures is the focus of this dissertation. I present an analysis of the factors and processes that enable new ideas to enter global food governance venues in the form of discursive negotiations around food systems transformation.

The call for fundamental changes in global food systems has a long history (McKeon, 2015). Global food governance venues have traditionally resisted this call to transformation (Abbass et al., 2025; McKeon, 2021) with a few changes occurring in response to the 2007/2008 food price crisis (Margulis, 2016). At the same time there has been a clear trend of global food systems becoming more concentrated and oligopolistic, with associated negative impacts for vulnerable people and the environment (Clapp, 2025; Connor, 2003; Clapp, 2021; Keenan et al., 2021). With mounting crises, the call for transformation is also finding new articulation.

Recently, agroecology has appeared in scholarship, governance, and advocacy networks as a vehicle for food systems change (Bezner Kerr et al., 2021; Bless et al, 2023; de Molina, 2013; FAO, 2018a; HLPE, 2019; Pimbert, 2018). This dissertation presents an analysis of how it was possible for agroecology, a paradigm that challenges the central assumptions of traditional food governance, to be taken up as a serious approach to address food systems failures on the global level. In September 2014 the United Nations Food and Agriculture Organization hosted the First International Symposium on Agroecology for Nutrition and Food Security (FISA). While there were several important prior mentions of agroecology in global governance texts, the FISA in 2014 marked the entrance of agroecology as a discursive frame in the global governance of food.

Research Question

This dissertation is a grounded theory research project that presents the voices of policy makers, civil society, private sector and others who were involved in the publication of defining texts and negotiations on agroecology in global food governance venues outlined below. The central research question of this dissertation is: **What explains the rise of agroecology as a significant discourse in the global governance of food?** Through chronicling the one-hundred-year history of agroecology's entrance into global governance texts, this dissertation presents a quotation-rich analysis of how a paradigm that challenges the status-quo was taken seriously in traditionally conservative governance venues as a means to address food systems failures. The guiding analytic thread throughout this work is also the central thesis of this dissertation: I argue that the complex interplay of three factors, namely crises, advocates, and the legitimating discourse of science, were each instrumental in first bringing agroecology into the discursive arena of global food governance. These three factors operate in a mutually enforcing manner, with mounting crises leading to stronger advocacy for alternative solutions, and the scientific aspect of agroecology enabling this process. Using agroecology as a lens, I explore the dynamics that allow counter-hegemonic ideas to enter global governance venues. I present an analysis of the political function of agroecology as a paradigm for addressing the compounding systemic crises in global food systems.

Drawing on expert interviews and in-depth document analysis, the dissertation is structured as a chronological narrative exploration, guided by a constructivist approach to grounded theory research, with governance venues as case studies. The dissertation starts with a review of the history and definition of the term agroecology (Chapter 2), followed by the rise of

agroecology into global governance discourse through the United Nations Food and Agriculture Organization (FAO) (Chapter 3). After the FAO began working on agroecology, the Committee on World Food Security (CFS) and its High-Level Panel of Experts (HLPE) also focused their attention on agroecology, which is the subject of Chapters 5 & 4 respectively. The final section (Chapter 6) presents an analysis of agroecology in the United Nations Food Systems Summit (UNFSS).

Research Framing

Agroecology as a Paradigm

The word "agroecology" is a combination of "agriculture" and "ecology". It presents a holistic ecological conceptualization of food systems. Throughout this dissertation I refer to agroecology as a paradigm, in the sense of agroecology representing a worldview (Mills et al., 2010a). While there was early debate about the use of the word "paradigm" in the social sciences (Kuhn, 1974; Burrell & Morgan, 1979), it has since become common practice to refer to philosophical frameworks as paradigms (Mills et al., 2010a; Du Plessis & Brandon, 2015). A "paradigm" in this dissertation is understood to refer to a set of beliefs and priorities about the nature and structure of value and knowledge in food systems. In that sense agroecology represents a "philosophical or theoretical framework" (Merriam-Webster, n.d.) through which different food systems actors seek to articulate and advocate for ideas and values in food systems. Agroecology is referred to as a paradigm throughout the literature (Altieri, 1989; Adriaensens, et al., 2025; Valenzuela, 2016; Norgaard & Sikor, 2018).

The articulation of paradigms occurs through discourse, and consequently agroecology is also referred to as a "discursive frame" throughout this dissertation. In defining discursive frames Mills et al (2010) state that: "[…] a discourse evolves as a system of thought reflexively created with particular ideas and beliefs, actions and practices, attitudes and preferences, and the subjects and worlds these systematically construct". Consequently, I understand the discursive negotiations about agroecology to be about world building and the boundaries of conceptual inclusion and exclusion of the term. A discursive frame describes how the language used to define, include, alter, and contain the paradigm impacts what is made possible through the negotiations on agroecology within food systems governance. While the evolution of agroecology is a central theme that runs throughout this work, Chapter 2 thoroughly engages with the question "what is agroecology?" both from a conceptual and a historic perspective.

Crises, Advocates and Science

As mentioned above, the research farming that resulted from the grounded theory research approach to this dissertation is the mutually enforcing interplay of three central factors that explain the emergence of agroecology as a discursive frame in global food governance: crises, advocates, and the legitimating discourse of science. I briefly outline the rationale for each of the three factors and how they are used in the dissertation below. The research methods and findings are discussed in more detail later in this Introduction.

Given the narrative style of the dissertation, I chose not to structure each of the chapters according to the three factors. While each factor was essential in bringing agroecology into the discursive arena of global food governance, the significance of each factor varied in the different case studies. In the beginning of the dissertation, Chapters 2 and 3, which detail the early uptake of agroecology in global governance discourse, I discuss the role of each factor individually. The following Chapters 4, 5, and 6, investigate the function of agroecology once it was established in global governance discourse. These chapters present narrative analyses of the contestations and negotiations surrounding agroecology in each governance venue. These case studies present an analysis of how the paradigm agroecology was a site of contestation within governance discourse, once agroecology was taken up in the work of these venues. Consequently, this dissertation contains both a theory about the emergence of agroecology in global governance discourse, as well as the political function of the paradigm. I found that the data of the case studies of the HLPE, CFS, and UNFSS are most accurately presented in a narrative format independent of the three explanatory factors. Consequently, I did not impose the format of crisis, advocate, science, on each chapter throughout this dissertation. Instead, the reader will find each chapter organized uniquely, with the three factors running as threads throughout the analysis and discussion of the data.

<u>Crises</u>

The word “polycrisis” is frequently used to describe the current disintegration of environmental systems and international cooperation alongside the rise of geopolitical tensions and humanitarian crises (Henig & Knight, 2023; Lawrence et al., 2024). While there are multiple interpretations of the term, alongside an interesting intellectual history, a useful definition of

polycrisis is: “the causal entanglement of crises in multiple global systems in ways that significantly degrade humanity’s prospects (Lawrence et al., 2022)” (Delannoy et al., 2025). Within this literature the definition of “crisis” has “evolved from an acute, time-bounded event when path-changing decisions can be made, to a condition of volatility without clear spatial, temporal, or sectoral boundaries” (Delannoy et al., 2025). As acute states of destabilization and disintegration become a new period of mutually enforcing patterns of volatility, policy makers struggle to respond in an appropriate and timely manner. How existing governance venues interact with the state of polycrisis is a critical and evolving challenge (Boin, 2009).

Global food systems are central to global crises, as food systems both cause and are profoundly impacted by environmental and political instability. Global food systems themselves are also understood to be in a state of crisis (Gliessman, 2022; Clapp & Moseley, 2020). Multiple indicators of food systems functions align with the definition of crisis as “an unstable or crucial time or state of affairs in which a decisive change is impending, especially one with the distinct possibility of highly undesirable outcome. I.e. a situation that has reached a critical phase” (Merriam-Webster, n.d. a). Examples that will be discussed in this dissertation include global hunger and food price instability, the interaction of food systems with biodiversity loss and climate change. Consequently, it is important to recognize the evolving nature of mutually enforcing patterns of systemic destabilization when considering crises in food systems.

Crises do not necessitate transformation, as they can also lead to the entrenchment of dysfunctional elements in systems and to a deepening state of crisis (Delannoy et al., 2025; Clapp, 2023). However, crises can and have created opportunities for, and instances of, institutional openness for reform. For example, Keeler (1993) found that “policy windows” for reform have existed throughout diverse political spaces and are shaped by two factors: “political developments” and “societal problems”. Similarly, the COVID-19 pandemic created opportunities for some International Organizations to expand their influence (Josepha Debre & Dijkstra, 2021). Early stages of crises present unique opportunities for evidence-based governance, which becomes more complex as multiple crises overlap (Zaki et al., 2024). How political actors respond to crises is defining, particularly political entrepreneurs i.e. “endogenous drivers of policy change” are critically important in this dynamic (Hogan & Feeney, 2012).

This dissertation contributes an analysis of a window of opportunity for change, in the face of mounting crises in global food systems, as articulated through agroecology. I argue that

the destabilization that accompanies crises, alongside other factors, created opportunities for agroecology to enter global governance discourse. Advocates, including "political entrepreneurs" are central to this process (Hogan & Feeney, 2012). Consequently, crisis is one of the three theoretical pillars of this dissertation. I argue that the mounting food systems failures were instrumental in bringing agroecology into serious consideration by governance institutions and actors. This was particularly relevant in the start of the uptake of agroecology, and consequently it is a focus in the first part of the dissertation. The indicators of food systems failure and resulting crises are discussed in detail in Chapter 2 and Chapter 3 of this dissertation. Specifically, Chapter 2, which is an analysis of the history and definition of agroecology, traces the first mentions of agroecology in global cooperation through the publication of the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) report in 2009. It shows how the first mention of agroecology in a report that was intended to assess the state of knowledge on agriculture in the world, occurred as a response to early indicators of crises in global social and environmental circles. Chapter 3, which is the case study of FAO, discusses in detail the critical indicators of crises in food systems and how these played into the organizational uptake of agroecology. Specifically, measures of the humanitarian impact of food systems (food price and global hunger) and the environment (climate and biodiversity) are discussed. Given the FAO's mandate of global hunger eradication, I show how the crises in global food system are reflected in key measures of global food systems[1], and how these impacted the institutional openness to new paradigms, such as agroecology.

Advocates

Agroecology would not exist in contemporary governance discourse the way it does without the tireless and sustained advocacy of diverse supporters of the paradigm. This dissertation describes which actor groups were important in the process of shaping agroecology and bringing the paradigm into global governance venues, and how these advocates shaped global governance discourse on the topic. Alongside an analysis of individuals and actor groups,

[1] The authors of key reports, such as the State of Food Security and Nutrition in the World, also attribute lack of progress on hunger alleviation to crises: **"**Conflict, climate variability and extremes, economic slowdowns and downturns, lack of access to and unaffordability of healthy diets, unhealthy food environments, and high and persistent inequality continue to drive food insecurity and malnutrition all over the world" (SOFI report, 2024).

I also discuss the political context that allowed these actors to gain influence on the governance venues that are the case studies of this dissertation. Understanding the systemic enabling factors for advocacy is central to explaining windows of opportunity for institutional and discursive change in governance. Consequently, the advocate sections of this dissertation include broader political analysis to outline the political climate and the role of elected officials in shaping the emergence of the agroecology in global institutional discourse.

This research details a diversity of actors and actor groups that were driving advocates in brining agroecology in global food governance. Alongside the importance of institutional staff, i.e. "political entrepreneurs as endogenous drivers of political change" (Hogan & Feeney, 2012), advocacy groups and academics are also key in shaping discourse. Particularly the coalition of small-scale and subsistence farmers through civil society organizations, alongside the institutional mechanisms that bring these groups into global governance debates, play an important role in this discussion. The research on advocates presented in this dissertation builds on a long scholarly tradition investigating the critical role of coalitions in advocating for political change (Keck & Sikkink, 2014; Sabatier & Jenkins-Smith, 1993; Nohrstedt & Heinmiller, 2024; Tarrow, 1996). For example, the Advocacy Coalition Framework (ACF) is a theoretical framework first developed in the 1990s (Sabatier & Jenkins-Smith, 1993), which continues to be widely used in understanding the dynamics of policy change (Jenkins-Smith & Weible, 2025). The ACF presents a framework that theorizes policy change beyond the "bottom-up" and "top-down" dynamics of governance, in which "the dynamic interplay of learning and policy change among competing groups has been and continues to be a central theme" (Jenkins-Smith & Weible, 2025). This theoretical framework is used in the political sciences (Pierce et al., 2017), environmental studies (Bodin, 2017), and in food systems studies (Nedergaard, 2008) to describe the interplay of advocacy groups and policy change. In the global governance scholarship, the critical role of advocacy groups in shaping governance discourse is also a well-studied phenomenon (Dellmuth & Bloodgood, 2023). This dissertation contributes a further data set to the scholarly literature, by analyzing the role of advocacy groups in shaping food governance discourse thereby illustrating the complex directionality of influence on policy processes.

In Chapter 2 of this dissertation, I detail the importance of civil society and academics in building agroecology as a paradigm that was able to be taken up by formal governance venues. Chapter 3 then discusses the enabling factors in the broader political climate, as well as the

legitimating impact of existing governance frameworks on the ability for advocates to emerge and to influence the discursive arena of FAO. I present this broad overview of the geopolitical climate in order to illustrate how the national politics of key countries in the United Nations shaped the emergence and efficacy of advocates of agroecology. Particular attention is paid to the role of the Director General of FAO alongside key advocate groups that shaped the paradigm agroecology in this UN organization. From there, the case studies of the HLPE, CFS, and UNFSS all serve as illustrations of the continued advocacy for agroecology from diverse actors to both exist within global governance discourse, as well as for the political integrity of the paradigm.

Science

The third factor that explains the uptake of agroecology as a discursive frame in the global governance of food is the scientific nature of the paradigm. Agroecology is deeply rooted in the scientific discipline of ecology and consequently benefits from the privileged position of "epistemic authority" that is characteristic of scientific discourse (Croce, 2018; Jäger, 2025). Agroecology is unique in the landscape of transformative paradigms for food systems, as it contains both political and scientific aspects (Bernard & Lux, 2018; Jarosz, 2014). Other articulations of food systems transformation lack either the scientific aspect (e.g. food sovereignty), or the rights-based social justice approach (e.g. sustainable intensification) (Godfray, 2015). A detailed analysis of the constituting elements of agroecology and how it relates to western science is the subject of Chapter 2 below.

The relationship between scientific knowledge and policy development is a complex field of study. In policy development, there is a need for common basis of understanding from which to negotiate political recommendations. In the literature, the experts responsible for the establishment of a common knowledge base through scientific articulation and negotiation of complex problems are referred to as "epistemic communities" (Haas, 1992). The study of epistemic communities "demonstrate[s] that control over knowledge and information is an important dimension of power and that the diffusion of new ideas and data can lead to new patterns of behavior and prove to be an important determinant of international policy coordination" (Haas, 1992). Consequently, the information and language that is used to discuss policy recommendations is deeply significant. The importance of discursive arenas in global

governance, alongside the privileged position of scientific knowledge in these venues, is foundational to this dissertation. While the theory of epistemic communities was initially focused on scientific actors, more recent work has also argued for the inclusion of other transnational actors in the category (Mai'a, 2012). This dissertation presents evidence for the argument that many actors, alongside scientists, shape policy recommendations.

The importance of epistemic communities in shaping policy is also demonstrated by the existence of science-policy interfaces as the basis of global governance policy processes (van den Hove, 2007; Watson, 2005). For example, the climate negotiations through the United Nations Framework Convention on Climate Change (UNFCCC) are grounded in the findings from the Intergovernmental Panel on Climate Change (IPCC), the Convention on Biological Diversity (CBD) has it's own science-policy interface, and the Committee on World Food Security (CFS) has the High Level Panel of Experts (HLPE) that assess the current state of knowledge to facilitate policy development. The science-policy landscape of global food systems governance has been brought into debate through the establishment of the United Nations Food Systems Summit (UNFSS) (Turnhout, 2021). I discuss the UNFSS and its impact on global food governance, in relationship to agroecology, in detail in Chapter 6 of this dissertation.

While the scientific discourse of epistemic communities is defining in policy development, scientific authority does not translate directly to political action (Azikuri, 2026). The relationship between scientific knowledge and governance exists in a complex interplay of truth and power. Recent developments in political discourse have also challenged the importance of scientific knowledge, leading to the present being referred to as a "post-truth" moment in political discourse (Haas, 2023; Kienhues et al., 2020). At the same time, research has also shown that epistemic communities can have ironic impacts in the policy processes through political actors creating "alternative interpretations" as vehicle for delegitimizing the epistemic community (Dunlop, 2017). Despite these nuances and recent developments, there is a strong foundation of political institutions being informed by scientific experts (Kohler, 2019). In addition, there is a developing recognition for the importance in collaboration between different kinds of epistemic communities in building solutions to complex challenges (Rist et al., 2024; Global Alliance for the Future of Food, 2021). Consequently, the role of scientific knowledge is an evolving and deeply significant aspect of the processes and factors by which global governance policies are negotiated.

In my research on agroecology, I have found the paradigm to exist in a complex relationship with scientific knowledge. On the one hand, the legitimacy of agroecology's scientific aspects created opportunities for the paradigm to enter governance spaces that are closed to non-scientific paradigms, as discussed in Chapter 3 of this dissertation. On the other hand, scientific discourse is used to delegitimize and de-politicize agroecology, as discussed in Chapter 7. Given the important and complex role of scientific discourse in understanding the emergence and evolution of agroecology in global food governance the topic can be found throughout the dissertation. In Chapter 2, I detail the history of agroecology and how the paradigm is rooted in both western science and social movements, and consequently is frequently referred to as a "science, movement, and practice" (Wezel et al., 2009). Chapter 3 details how the scientific disciplines associated with agroecology enabled the paradigm to enter the work and language of the Food and Agriculture Organization of the United Nations. Chapters 4 and 5 engage with the science-policy interface of the Committee on World Food Security, as well as the details of the policy negotiations of the CFS on agroecology. Finally, Chapter 6 and 7 address the mechanisms by which scientific discourse is used to depoliticize and delegitimize agroecology.

Research Contribution

I take a constructivist approach to presenting a narrative grounded theory analysis of data derived from expert interviews and text analysis. The central argument of the dissertation is that agroecology was able to enter global governance as a discursive frame through the interplay of crises, advocates, and scientific legitimacy, as outlined above. I also present an analysis of the political function of agroecology by tracing how the paradigm evolved over the years it was the subject of negotiations in the global governance venues that are the case studies of this research. I argue that the political function of agroecology can be understood in terms of ambiguity, resistance, and transformation, as discussed in the research findings section below.

The unique contribution that this dissertation makes to the scholarship is that it presents a comprehensive analysis of the role of agroecology as a paradigm in global food governance. In doing so, I demonstrate the significance of non-state actors in shaping global governance discourse and thereby present a perspective on the complexity of the directionality of governance. I also present a thorough analysis of the definitions of agroecology and contribute

new data and insight to the co-optation of agroecology debate. The case studies present a unique insight into the mechanisms and procedures by which policy recommendations are contested. They look closely at the sites and mechanisms of contestation around the political vision of agroecology in global governance venues. As a result, I present an analysis of the political function of agroecology as a governance paradigm. The analysis of this important paradigm for food systems transformation reveals the most contentious and contested topics within food systems governance and the global policy responses to mounting crises.

Literature Review: Global Food Systems

The scholarly context within which this research is situated is an interdisciplinary landscape of food systems studies, environmental studies and global governance. I have drawn on a diversity of theories and debates to contextualize the research findings and interview data, and to answer the central question of this research project. I begin the literature review by presenting key theoretical frameworks that conceptualize global food systems, then engage with the literature of food systems governance, finally I present debates in the literature that my research speaks to. This section is the main literature review of the dissertation, as it situates this dissertation in the larger scholarly context. Elements of Chapter 2 engage in greater detail with the scholarship on agroecology and consequently build on of the literature review to deepen the engagement with the scholarship on agroecology in global food governance.

Global Food Systems Theory

Food systems are complex webs of political and financial interests characterized by agricultural production methods and associated food cultures and supply chains. They carry great significance, as they co-determine the fundamental human need for sustenance, nutrition, and cultural expression. Global food systems have been theorized extensively. The literature presented here articulates different conceptions of the complex and fast-changing systems of global food supply. FAO defines food systems as: “The entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they

are embedded" (FAO, 2018). Food systems, while they are economic systems with vast financial infrastructures and environmental impacts, at their essence serve to feed people. When people have sufficient nutritious food, they are said to be food secure, with the internationally agreed-upon definition of "food security" being: "Food security 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" (SOFI, 2024). This is a state that is shockingly rare, with an estimated 2.3 billion people in the world experiencing moderate to severe food insecurity (SOFI, 2025). The interaction of food systems and food security, and how well food systems meet the needs of people to achieve food security is a matter of debate (Ericksen, 2007). The co-occurrence of this global state of lack of food security with the vast environmental damages of global food systems, discussed in later chapters, pose a strong imperative to change the way food systems are organized and governed. My research speaks to the adoption of, and engagement with, one of the leading ideas of food systems reform, agroecology, in global governance venues.

The scholarship of food systems is as wide and varied as food systems themselves. It engages with issues ranging from hunger to land tenure, from nutrition to financial systems, from Indigenous food cultures to human rights and much more. Food systems scholarship encompasses the disciplines of environmental studies, sociology, geography, political economy, Indigenous scholarship, governance and international relations, amongst others. Understanding the current state of food systems is an important aspect of achieving impactful and sustainable change within them. Scholars argue that food systems are complex systems that cannot be understood or transformed with a single theoretical model (Fanzo et al., 2020; Godfray, 2015; HLPE, 2017; Leach et al., 2020). In addition, there is the recognition that food systems require multi-dimensional scholarship (Béné et al., 2019). There are three main conceptual frameworks that are used in the scholarship to theorize global food systems: food regimes, political economy, complexity scholarship. Below, I discuss these conceptual frameworks in relation to agroecology and this dissertation.

Food Regimes

The framework of "food regimes" originated in Marxist political theory in the 1980s as an explanatory framework of the historic evolution of global food systems (Friedman &

McMichael, 1989). The purpose of food regimes is to describe political power in the context of food as a world ordering system. The theory was foundational in food systems scholarship and gave rise to a new literature on food regimes theory (Magnan, 2012). It argues that there are periods of transition that alternate with periods of "stable patterns of accumulation" (McMichael, 2013). These regimes describe "international relations of food production and consumption to forms of accumulation broadly distinguishing periods of capitalist transformation since 1870" (McMichael, 2013). The food regime concept is a model used to understand power and politics in development and food systems through a comparative historical lens.

According to this model, the contemporary stable pattern of accumulation is the "capitalist food regime" characterized by food being used as a tool in securing transnational circuits of money and commodities & displacing smallholders in the global labour force (McMichael, 2013). It is characterized by "politics of quality" in which niche export products are moved from the Global South, while at the same time the "massification of food production" occurs by way of huge volumes of western foods being imposed on local markets in the Global South (Sage, 2013). An essential feature of this regime is the financial mechanisms that are entwined with the food systems (Burch & Lawrence, 2009). The global network, which supplants locality with branding, has been referred to in the literature as "food from nowhere" (Campbell, 2009; McMichael, 2013), reflecting the obfuscating and alienating impact that the global corporate food system has on the relationship between the eater and their food. Commodity markets and trade systems rely on the anonymity and interchangeability of food products, particularly in agricultural commodity markets such as grains. In this model, corporate actors are the hegemon in global food systems.

Holt-Giménez & Altieri (2013) describe the corporate food regime as the new Green Revolution embedded in neoliberal economic policies that continue to drive an open-market and technological increase in production. This corporate food regime has been widely criticized for its damaging environmental and humanitarian impacts (McMichael, 2009; Anderson, 2021). There is debate about whether this regime is currently stable or restructuring, (Magnan, 2012; McKeon, 2015; McMichael, 2013), with the "corporate-environmental food regime" being a possible new stable pattern within the regime structure (Friedmann, 2005). Recent research theorizes the assimilation of alternative food systems visions into this corporate environmental food regime by way of analysis of corporate narratives of regenerative agriculture (Bless, 2025).

Agroecology, with its emphasis on diverse territorial markets, is seen as a counter-hegemonic worldview in this context (Campbell, 2009; Levidow, 2015; Loconto et al., 2018). Whether or not agroecology is being co-opted by the corporate or corporate-environmental food regime is an ongoing debate in the scholarship as discussed below, as well as an important theme throughout this dissertation. I present data and theoretical analysis which describe the mechanisms of co-optation in global governance discourse and the means of resistance to this assimilation.

Political Economy

A related yet distinct theoretical framing of global food systems comes from political economy scholarship. Instead of understanding food systems in terms of distinct periods of (de) and (re)stabilization, as per food regimes theory, this framework articulates global food systems in terms of evolving organizing principles. It argues that, although there exist a multitude of food systems on regional and local scales, the global food system operates according to set logics across geographical boundaries. These logics are characterized by rapid expansion of trade, enabling state policies, corporate concentration and corporate control, increased financialization of food, and agricultural productivism (Clapp, 2020; Howard, 2021). Local and regional food systems interact with the global food system in complex and interesting ways (Blay-Palmer et al., 2015; Born & Purcell, 2016; Delaney et al., 2018). In this theoretical model global food systems are understood as an "hourglass-shaped system" characterized by many producers, many consumers, and a few companies mediating between them (Howard, 2021; Vorley, 2003).

The global food system is comprised of oligopolies, in which a few corporate actors operate without competition. These corporate actors shape the food system to meet their own needs through the creation of new governance spaces (Clapp, 2020). The development of these oligopolies has been uneven in terms of time, geography, and food systems positionality (Howard, 2021), with globalization being a major driving force behind the evolution of the corporate global food system (Clapp, 2020). There are four main forces that have driven the globalization of food: the state-led expansion of industrial agriculture & transnational food trade, uneven trade liberalization, the rise of transnational corporate actors in all aspects of food and agriculture, and the financialization of food (Clapp, 2020). In addition, the emergence of digitalization in agriculture and food systems is a new and significant force in shaping food

systems (Clapp, 2025). Clapp (2020) describes the world food system as characterized by growing distance, commodification, asymmetry, volatility, and ecological fragility.

Whether articulated as food regimes theory or political economic forces and processes, food scholars understand the contemporary global food system to be shaped primarily by corporate actors as mediating force between those that grow and those that eat food sourced through global systems of trade. In this context, agroecology is a paradigm through which different actors advocate for, and enact, food systems that are organized according to fundamentally different principles. As discussed in Chapter 2, agroecology is a holistic paradigm based in diversity. Agroecological food systems seek to reduce the distance between consumers and producers, diversify agricultural production and systems of ownership, centre the principles of human rights and self-determination, govern equality, and strengthen ecological systems through agriculture. This dissertation analyses how the tension between corporate food systems and the politically transformative visions articulated through agroecology are negotiated within global governance venues.

Complexity Scholarship

A third theoretical perspective on global food systems is complexity scholarship and systems thinking. For example, Erickson (2007) proposes a definition of food systems which includes in the environmental and social impacts of the food production, processing, and consumption, as well as the interaction between the different factors. Erickson argues that the societal outcomes of the interaction of food systems and environmental change are threefold: food security, ecosystem services, and societal welfare. In this model, food systems are "complex and heterogeneous over space and time and replete with non-linear feedbacks" (Ericksen, 2007). Nevertheless, it is possible to identify "key processes and determinants that influence outcomes" within these complex systems (Ericksen, 2007).

The framework of food systems as complex heterogenous systems with multiple levels of interacting feedback systems is a model used by many scholars (Leeuwis et al., 2021; van Bers et al., 2019; van Mil et al., 2014). For example, Béné et al. (2019) describe food systems as "not just as a linear chain of activities spreading from production to consumption – the famous "farm to fork"- but as a complex, heterogeneous and circular system replete with linear as well as non-linear feedback. The framework also stresses the multi-causality of food systems resulting from

multiple interactions among those interdependent components" (Béné et al., 2019). Consequently, while theorizing specific aspects of food systems, such as transformation, it is necessary to consider the feedback between and interaction of different components of these systems on multiple scales. Agroecology is one of the leading paradigms of food systems transformation because it speaks to the complexity of food systems with a multi-level and dynamic complex definitional structure, as discussed in Chapter 2 of this dissertation.

Recent scholarship, in grappling with the compounding crises in global food systems, has built on theorizing food systems as complex systems with work focused on understanding the organizing principles within these complex systems. For example, scholars have described how political economy logics such as trade rules (Murphy & Manduna, 2025), corporate concentration (Clapp, 2025), and financialization (Clapp & Isakson, 2018) shape food systems. The scholarship on organizing logics within the complex systems of food has enabled an understanding of factors that have contributed to systemic shocks in global food systems, most notably the 2007/2008 food price crises and the impact of the COVID pandemic on food systems.

A further aspect of the scholarship on food systems as complex systems with lock-ins and strategic opportunities for change in these systems, is the scholarship on elements of sustainable systems. For example, the work of Eakin et al. (2017) identifies specific attributes of food systems that contribute to sustainability in these systems. These attributes include diversity, modularity, transparency, innovation and congruence. Similarly, Allen & Prosperi (2016) identify properties and elements that are intrinsic to sustainable food systems, in that they lead to specific desired outcomes, such as food security. There is a vast literature associated with this line of enquiry (HLPE, 2025; Morales-Garcia & Rubio, 2024; Peano, 2015; Jagustivić et al., 2019; van Mil et al., 2014; Whitfield et al., 2015). Agroecology is an important paradigm in the scholarship of sustainable systems, as it presents a complex, well-structure set of organizing principles for sustainability in food systems (Altieri & Nicholls, 2020b; Wezel et al., 2020; Ewert et al., 2023). Other ideas that are part of the literature on sustainable systems are food sovereignty (Patel, 2009; McKeon, 2015; Rivera-Ferre, 2018), de-growth (Guerrero Lara et al., 2023; Lorek & Fuchs, 2013) and foundational or heterodox economies (Hermann, 2025; Russell et al., 2022; Klitgaard, 2013). The relationship between agroecology and food sovereignty is

significant in understanding the position of agroecology in global discourse, this will be discussed below when reviewing the scholarship on agroecology.

Discussion

The three theoretical approaches food regimes, political economy scholarship, and complexity scholarship use different language and theoretical models to organize and describe food systems and how they evolve. In this dissertation I rely on the conceptual frameworks as articulated by political economy scholarship, as I have found the intellectual tools to be the most useful in understanding the dynamics that my research investigates. Consequently, this dissertation seeks to understand how, in an environment of oligopolies and corporate actors shaping all aspects of food systems, it was possible for the counter-hegemonic visions articulated through agroecology to enter global governance venues.

This dissertation provides a perspective on the dynamic of co-optation, or assimilation into the corporate environmental food regime, of agroecology. I argue that agroecology is an open site of contestation in this context, with the political vision of agroecology being upheld by dedicated advocates through multiple venues. I do not use the language of food regimes in the following analysis, as my research focus is narrow and specific in looking at discourse in governance. The focus of the larger historic scale of the regimes framework is not an ideal match for the detailed discourse analysis that I am presenting. I have found the intellectual tools of political economy scholarship to be most useful in making sense of the research data. The discourse analysis presented is limited to a few years, 2014-2025, and is focused on a smaller scale than the regime framework. Consequently, in my analysis I draw primarily on the political economy scholarship discussed below. An understanding of food regime literature, and the perspective it provides on the evolution of the political organization of global food systems in relation to past geopolitical events, is nevertheless indispensable. In particular the comparative historical lens offered by food regimes allows for an understanding of the dynamics within which the advocacy for agroecology has evolved.

In this dissertation I use the language of "global food systems" and "corporate food systems" to refer to the global rules and processes through which food is grown, transported, traded, and consumed. I understand global food systems to mean the political economic trends, power dynamics, regulations, and logics that determine the way food is produced globally, traded

transnationally, and the far-reaching impacts this has on land and livelihoods (as described by the scholarship of Clapp, McMichael and others discussed above).

Global Food Systems Governance

Given what we know about global food systems outlined above, how do these systems interact with the governance venues that seek to influence the complex global systems through policy? It is helpful to understand the global governance of food as a subset of the larger academic discipline of global governance. Drawing on the definitions of both Zürn (2018) and Weiss & Wilkinson (2014), I understand global governance to be about processes of negotiating supra-regional conflicts and interests. Consequently, my understanding is in line with Weiss & Wilkinson's (2014) definition: "global governance is the sum of the informal and formal ideas, values, norms, procedures, and institutions that help all actors—states, IGOs, civil society, and TNCs—identify, understand, and address trans-boundary problems" (Weiss & Wilkinson, 2014). However, this definition lacks an explicit reference to the centrality of power and authority in theorizing global governance. Zürn's (2018) conception of global governance as "the exercise of authority" is an important conceptual addition to that proposed by Weiss & Wilkinson (2014). Consequently, I understand global governance to be processes of contestation between governance systems of supra-regional interests that are enacted and negotiated through power dynamics. In this conceptualization states are one, albeit important, actor. Furthermore, it is important to note that governance is understood as distinct from government, which is bound to the nation state (Ruggie, 2014). This understanding of global governance contextualizes the theoretical understanding of food systems governance in the larger literature.

Global food systems are described as corporate systems, in that corporate power is disproportionately influential in shaping food systems, as outlined above (Clapp, 2020; Clapp, 2022; Howard, 2021). Nevertheless, there is a complex web of actors that engage in regulating, advocating, and shaping global food systems. Corporations operate in the context of a multitude of actors (such as nation states, multi-national agreements, foundations, international organizations) and processes (such as financialization (Clapp, 2020), exclusion (Sassen, 2014), scientization (Kinchy, 2012), governance by numbers (Fukunda-Parr & McNeill, 2019), development, and the technological imperative). Consequently, I understand the global governance of food to refer to the actors and processes operating in global venues such as

intergovernmental institutions, agreement negotiations, and standard setting, that mediate contestation between political and financial interests that are enacted and negotiated through power dynamics and shape food systems outcomes. My research presents a perspective on these dynamics by illustrating how the concept of agroecology is used by different actors in diverse settings and the impact this has on food systems governance. In doing so, my research speaks to three central themes of food systems governance: fragmentation, regulation, and normative power.

Fragmentation

Fragmentation is understood to be a ubiquitous feature in the "architectures of global governance", and describes the degrees of cohesion, or lack thereof, in governance systems (Biermann et al., 2020). The degrees of fragmentation present in any given governance system or issue area on the global level is variable, with high degrees of fragmentation presenting unique challenges to addressing the relevant issues requiring governance (Biermann et al., 2009). Fragmentation is a central feature of global governance, and a core concept in the literature. "All global governance architectures are fragmented to some degree; that is, they consist of distinct parts that are hardly ever fully interlinked and integrated" (Biermann et al., 2009). Fragmentation can be understood to exist in global governance venues and multilateral agreements (Bermann et al., 2009) as well as the constellations of institutions, actors, norms, and discourses that shape global governance (Pattberg et al., 2014). Global food governance is also characterised as fragmented, with the food "regime complex" being comprised of institutions (such as FAO and CFS), frameworks and agreements (such as trade and human rights), and voluntary industry standards and agreements (Margulis, 2013; Clapp & Cohen, 2009). The fragmented governance landscape of global food systems interacts with the imperative of food systems reform in a web of complex power relationships (van Bers et al., 2019; Candel, 2014).

With the establishment of the UNFSS, and the associated UN Food Systems Hub, fragmentation is an important topic in global food governance, as discussed in Chapter 6 of this dissertation. There are differences in opinion to the degree of integration or fragmentation that is desirable in global food systems governance. While fragmentation in food systems governance creates challenges of accountability and implementation (Pekdemir, 2018), scholars also see opportunities for political diversity and the "multipolar world" to be represented through

fragmentation (Acharya, 2016). For example, there has been a recent call for a single governing body of food systems (referred to as the IPCC of Food) in the context of the UNFSS (Caro et al., 2023). Many years before this idea emerged in the UNFSS, McKeon (2015) argued that a single regulatory body is not desirable in food systems. Instead, McKeon argues for a system that reinforces public policy spaces at their most relevant level (focused on the inclusion of the most affected in governance), alongside measures for accountability and mechanisms for turning public deliberations into binding law.

This dissertation engages with the scholarship on food governance fragmentation by showing how increased fragmentation, in the creation of a new governance venue, can undermine previous advocacy work. With the formation of the UNFSS, the centrality and legitimacy of the CFS as the venue for global food governance was brought into question. Consequently, the advocacy work that went into bringing agroecology to the CFS, detailed in Chapters 4 and 5 of this dissertation, had to begin anew in the new governance venue created by the UNFSS. I argue that the trajectory of agroecology in global food governance discourse, as a paradigm for food systems change, shows that increased fragmentation on the global level of food governance has resulted in diluted focus of the transformative vision articulated through the paradigm. With the creation of the UNFSS (and the Food Systems Hub) a new advocacy network for agroecology (the Agroecology Coalition) was created (as discussed in Chapter 6). With increased numbers of governance venues, actors, and advocacy groups, the use of agroecology in governance discourse is expanding, and the word "agroecology" is now present in the work of many food systems actors, civil society and corporate alike. The dynamic of dilution of political intention through fragmentation can be understood to be an instance of expulsion from governance through complexity, as theorised by Sassen (2014). According to this model, expulsion (i.e. the systematic exclusion of perspectives) is created through unnecessarily complex governance spaces and processes (Sassen, 2014). Consequently, increased complexity results in reduced efficacy of counter-hegemonic perspective, as transformative movements become diluted in complexity. Acharya (2016) argues that fragmentation can have the opposite impact, increased representation by creating new opportunities for engagement. The data of this research project illustrates the dynamics by which fragmentation, through the creation of the UNFSS, impacts the landscape of agroecology as a paradigm for food systems transformation.

Regulation

Given the complexity of food systems, and the fragmented governance landscape, regulating the global systems that constitute food systems is a complex challenge that is an entire field of scholarship. Within that scholarship, McKeon's (2015) presents a detailed history of the global governance of food systems, alongside a political economy analysis of trends and opportunities for transformation in them. According to McKeon, the fact that corporations (and financial actors) have vast amounts of power (including mechanisms to bypass national laws, framing binding multilateral trade agreements, defining and maintaining standards, self-regulation initiatives) without effective regulation or accountability is a major challenge for food systems. In addressing regulation challenges, McKeon points to some hopeful initiatives including, financial transaction taxes (FTTs), financial regulation measures, human-rights based campaigns, 2011 Maastricht Principles, and transition from soft to hard regulation. In addressing accountability challenges, McKeon argues that neo-liberalization (decreased importance of national governments) has led to an absence of systems of global accountability, whilst national conflicts often occur within global politics, "accountability" has been neo-liberalized to enhance productivity, and accountability as means to disciplining dissent. Multi-scalar government presents new opportunities for regulation: "Mobilization from below can open spaces for change and liberate constructive possibilities in systems" (McKeon, 2015). Binding regulations with systems of accountability would dramatically transform food systems governance. This dissertation is an illustration of how even non-binding policy recommendations are challenging and problematic. Consequently, the project of establishing binding policy obligations and laws for food systems transformation in line with agroecological principle is a formidable task. The resistance faced by the political vision of agroecology in the CFS negotiation, detailed in Chapter 5 of this dissertation, are indicative of the challenges faced by any efforts of reform on the global level. If voluntary guidelines face such strong opposition, binding laws and obligations will also face massive resistance. However, it's interesting to consider what mechanisms might exist to create spaces for accountability and binding policy and laws for food systems transformation, as voluntary measures do not result in the impact that current state of crises necessitate.

An interesting avenue for impacting food systems through regulation is through trade. The role that global trade rules and systems have on food sovereignty, and the self-determination of

different food systems actors within these economic systems is both critical and complex (Burnett & Murphy, 2017; Margulis, 2014). As Margulis notes:

> Power relations within geopolitical food orders require a set of intuitional architectures to legitimize and facilitate them. Trade rules under the embedded liberalism of the General Agreement on Tariffs and Trade (GATT) and its neoliberal successor, the World Trade Organization (WTO), are such architectures. (Margulis, 2014)

In that, the tension between systems of global trade and local markets presents a multitude of complex challenges (Winter, 2003). Though the WTO is not as relevant now as it once was, the scholarship of trade and taxation provides insight into the economic architecture of food systems and possibilities for regulation in them (Friel et al., 2020; Hawkes & Murphy, 2010). The research presented in this dissertation shows that there is extensive room for further scholarship on the specific interaction of global trade systems, localization, and agroecology as a paradigm for food systems transformation. Similarly, the rules and regulations that govern agricultural inputs in different geographies and commodity markets is key to understanding the most contentious topics within global food systems governance, as reflected in the agroecology negotiations analyzed in Chapter 5 of this dissertation.

Private Interests

An indispensable compliment to the scholarship on regulations (such as those governing trade and agricultural inputs) in structuring food systems and their evolution is the scholarship on financial interests in food systems. This literature deals with theorizing the role of different actors and systems in shaping food systems and their outcomes. For example, it poses important questions around the fact that businesses shape governance outcomes (Clapp, 2021; Fuchs, 2007; Fuchs & Kalfagianni, 2010). The role of agribusiness in creating, and potentially changing, food systems lock-ins is also a topic outside of academia (UNEP, 2025). The entanglement of the private sector with global food systems is comprehensive and complex, with businesses engaging in global governance through "lobbying and campaign finance activities, rule-setting activities as well as influence deriving from structural dependencies, and efforts to influence governance-relevant norms and ideas" (Fuchs, 2007). Consequently, any paradigm that seeks to reform food systems must necessarily also engage with the financial interests that shape and uphold current systems.

The role of financing in food systems transformation is also an important topic in food systems scholarship. This area of debate engages with the degree to which private sector financing is necessary to address the multiple compounding crises of contemporary food systems. On the one hand, scholars and policy makers argue that challenges are so formidable and costly that it is not possible to address the costs of food systems failures (such as global hunger and climate disasters) with public money and consequently there is a need for the private sector (Diaz-Bonilla, 2023; Lipper et al., 2021). The necessity of the involvement of corporate actors in shaping food systems is the premise of the United Nations Food Systems Summit (UNFSS) for example (von Braun, 2023), as discussed in Chapter 6 of this dissertation. On the other hand, there is research that argues that with the appropriate reforms in public spending and procurement there are sufficient financial resources to address food systems challenges without the private sector (Pimbert, 2025; Reuben et al., 2021). Public financing opportunities include for example changes in subsidy programs, such as the European Union Common Agriculture Policy (EU CAP), taxation of corporate profit, regulation of financial investment in agricultural commodities (Pimbert, 2025).

A recent publication by Pimbert (2025) makes an important contribution to this line of enquiry by analyzing opportunities for policy and funding reform to finance agroecological transitions. Pimbert argues that there are large amounts of public money available to finance agroecological transitions through changing taxation (wealth taxes), research funding, and subsidies (both agricultural and energy subsidies). Pimbert's research illustrates the vast potential in enquiry about the interaction between the scholarship of describing food systems as they are (political economy) and that of envisioning what they could be (agroecology) is limited (examples include McKay et al., 2025; Paz, 2024; van der Ploeg, 2021). The scholarship on transition pathways speaks to this question. Theoretical enquiry into avenues for financing agroecological transitions are important and timely. The fact that the economic logics of agroecology differ fundamentally to those of dominant global food systems is a major challenge, as illustrated by this research. Even within policy recommendation, the differences of perspectives in terms of value and priority cause major barriers to enacting responses to food systems crises. The governance mechanism of science-policy interfaces exists to bridge these differences, but the implementation of this ambition is challenging, as discussed in Chapters 4 and 5 of this dissertation.

How to carry the costs of food systems transformation is an important topic of debate in food systems scholarship. How to address the environmental damages that have previously been unaccounted as externalities in highly financially profitable food systems? What role should corporate actors play in the governance and financing of food systems changes? What are the mechanisms by which public funds can finance food systems transformation? Who is responsible for costs of environmental damage, such as climate change, and how do those responsible carry costs for the compounding crises? These are a few questions that are central to this line of debate. The research presented in this dissertation illustrates the impact of global governance discourse in terms of agenda setting and normative agency on the topic of finance of food systems transformation. The language used in the CFS policy recommendations, and the actors involved in the UNFSS, present two case studies of how the global governance of food impacts financing for food systems transformation.

Normative Power

Discourse is a major source of power in global governance (Conca, 2015; Holzscheiter, 2005). Discursive negotiations are also a very important part of power negotiations in global food governance (McKeon, 2015). Discourse as a form of governance refers to the power to shape representation and to construct the categories by which political decisions are made and articulated (Hall, 2007). The language used to articulate governance challenges and possible responses creates the building blocks that constitute the "architecture of global governance" (Biermann et al., 2009). The articulation of political issues is negotiated in discursive arenas, which include policy recommendations and negotiations. The detailed analysis of the Committee on World Food Security's negotiations on policy recommendations on agroecology, presented in Chapter 5 of this dissertation, illustrates the detail to which contestation around language (and punctuation) is engaged in. The discursive arenas are venues in which structural power is negotiated, in that actors shape the systems within which political actors operate (Strange, 1988). Considering for example the United Nations Food Systems Summit (UNFSS), discussed in Chapter 6 of this dissertation, the language of "food systems transformation" is used as a signifier referencing something different than what the advocates of food sovereignty might refer to with these words for example. Consequently, how language is used, in what context, and within which political structures, is both impactful and contested. A thread throughout my

research illustrates this fact, as agroecology is framed as an "innovation" throughout global governance texts, which has profound implications on the meaning and impact of the term, as discussed in Chapters 4 and 5.

Discourse also affects the directionality of governance. In global governance scholarship there is a distinction between those that govern, and those that are governed (Weiss & Wilkinson, 2018). The lack of representation of those that are governed in global governance is referred to as "the democratic deficit" of global governance (Triandafyllidou, 2017). While representation in global governance forums is complex, there are nuances to the categories of "those that govern" and "those that are governed" as well as the power dynamics between them. Keck & Sikkink (2014) in their book *Activists Beyond Borders: Advocacy Networks in International Politics* detail how international networks of activists influence political discourse on the global scale. Weiss & Wilkinson (2018) use the language of "governance from below" to describe this phenomenon of hierarchical permeability in global governance discourse. This is a central conceptual framework that characterizes my research findings. The research presented in this dissertation is an illustration of the mechanisms by which discourse contestation is a vehicle for non-traditional governance actors, such as civil society, private sector, and philanthropy to shape governance venues and outcomes. Global governance is not a top-down process in which rules are imposed on people with a clear distinction between those that govern, and those that are governed. Instead, by shaping the political discourse in governance venues, a broad range of actors (from corporate to civil society to states) both shape governance and are also the recipients of the rules imposed.

Discourse is a central site of political contestation between entrenched interests and those that seek to change systems. Who frames the debate and what language is used is particularly relevant for global food systems, that are characterized by increased corporate concentration (Clapp, 2021). Though some proposed solutions appear apolitical, food systems reform is an inherently political process (Leach et a., 2020) and proposed solutions have political agendas and implications attached to them, though they may not be explicit. In addition, the framing of the problem impacts what solutions are considered possible. The problem definition process is not value neutral, with different actors and financial interests shaping the narratives around food systems reform (Kinchy, 2012; Howard, 2021; McKeon, 2015). The increased rate of privatization and reliance on public-private- partnerships have increased the political power of

corporate actors by way of generating "moral legitimacy" as corporate actors are perceived as experts and "better regulators than government" (Fuchs, 2007). Fuchs argues that discursive power is particularly impactful in political power dynamics, as "discursive power intervenes at the earliest point and in the broadest possible way in the political process" (Fuchs, 2007). Similarly, Strange (1988) argues that "control over knowledge, beliefs and ideas" is an important aspect of structural power, as it shapes the range of possible operating spaces for actors by way of providing the language systems within which choices are made. This dynamic is also reflected in my research findings, in which corporate actors use the language of agroecology to describe their corporate social responsibility initiatives, as discussed in Chapter 6.

Food systems scholarship entails important debate about discourse analysis, investigating the discursive frames that shape food systems sustainability (Béné et al., 2019), theories of change (Leach et al., 2020), sustainable agriculture (McNeill, 2019), development paradigms (McKeon, 2015), women's rights in food systems (Collins, 2021), and the role of discourse in land-grabbing (Margulis et al., 2013). Within this scholarship, the work of Kinchy (2012) is also important to my research. Kinchy explores how scientific discourse acts as a gatekeeper in global food governance. She argues that there is systemic exclusion of actors in decision making around policy and regulatory control based on scientific credentials (Kinchy, 2012). She refers to this as "scientization" in which there is a "transformation of social conflict into a debate, ostensibly separated from its social context, among scientific experts" (Kinchy, 2012). Kinchy argues that "changing the terms of the debate is essential to the pursuit of more sustainable, socially just forms of agriculture" (Kinchy, 2012). My research is an analysis of the process of "changing the terms of the debate" through agroecology. In that, the political function of scientific discourse as a gatekeeper to global food governance venues is an essential part of the dynamics that determine the role of agroecology in food governance. This dissertation explores how the hegemonic discourse of productivism and concentration of power is challenged in global governance forums.

Global Food Systems: Crises and Opportunities

Alongside the scholarship that theorizes the present state and the evolution of global food systems, there is also extensive work on how global food systems could be organized differently and transition processes and pathways to these different global food systems (Caron et al., 2018;

Dentoni, 2017; Stefanovic, 2020). The evidence that food systems transformations are necessary from an environmental and humanitarian perspective is overwhelming (FAO, 2024a; IPES-Food, 2023a). In addition, there is a strong economic case to be made for the benefits that can be gained from food systems transformations (FSEC, 2024). The transformation of global food systems is truly complex and presents a series of wicked problems, in the sense of entangled and entrenched problems that have no simple solutions (Walls, 2018). The fragmented governance landscape of global food systems poses unique challenges for implementing reforms, as entrenched powers and systems, in combination with diffuse governance actors, leave the implementation of reform to a wide variety of actors (Clapp, 2023; IPES-Food, 2023b; McKeon, 2015), a topic that will be discussed in more detail below.

What is interesting in food systems scholarship is the substantial agreement about the fundamental challenges and problems in food systems (e.g. corporate concentration, lack of rights-based approach, lack of governance oversight). I discuss these symptoms in the context of crises throughout this dissertation. There is also broad agreement in the literature about the urgent need to address the symptoms of these challenges (e.g. global hunger, climate change, biodiversity crises). However, how to address these problems and their symptoms opens a vast area of scholarship, referred to through-out this dissertation as food systems transformation.

In addition, science policy interface of the Committee on World Food Security's High-Level Panel of Experts has published extensively on possible avenues for food systems transformation. For example, the HLPE 2020 report *Food Security and Nutrition: Building a Global Narrative Towards 2030* articulates a "sustainable food systems framework" which describes the complexity of food systems in terms of drivers of change in food systems (e.g. demographic drivers, economic and market drivers, technology innovation and infrastructure, amongst others), features of food systems and food environments (e.g. diets, consumer behavior, food supply chains), and the impact and outcomes of these systems embedded in a policy landscape. The report argues that "food system policy and governance that are guided by the principle of the right to food are most likely to support the six dimensions of food security" (HLPE, 2020). In addition, the HLPE engages with the barriers to transformation: "The social innovation and political-economic transitions that are needed to bring about the ecological, human health and socio-economic changes for transforming food systems must contend with numerous barriers, "lock-ins" and general resistance to change from the status quo" (HLPE, 2019). Similarly, the

most recent HLPE report (2025) focuses on features that generate resilience in food systems referred to as "equitable transformative resilience (ETR)", emphasizing the importance of Indigenous food systems and knowledge systems, the right to food, and agency as key features of sustainable systems (HLPE, 2025). Consequently, the scholarship that theorizes food systems is an evolving conversation that describes the complexity of global food systems, identifies organizing principles within them, and articulates features of these systems and their outcomes.

Within the literature on food systems analysis and transformation there are many concrete policy recommendations. To name only a few: addressing corporate influence in governance by creating more separation between industry and government (Clapp, 2025); creating wealth taxes that would finance agroecological transitions (Pimbert, 2025); protecting and cultivating Indigenous knowledge and food systems (HLPE, 2025), building a rights-based food system through re-structuring trade (Fakhri, 2021); integrating agency and sustainability into food security frameworks (Clapp et al., 2022). Generating the political will to implement these suggestions is the major struggle of the present. Through this dissertation I make a humble contribution to the discussion about implementation of changes to food systems by analyzing the political process of a paradigm for food systems change in governance on the global level.

Considering the global forums that exist to govern food systems, what happens to paradigms that might be a vehicle for implementing some of the suggestions outlined above? How do transformational paradigms enter global governance discourse and how do governance spaces integrate, reject, and change counter-hegemonic paradigms? This dissertation illustrates how, even in inclusive global governance spaces, paradigms for food systems transformation encounter systematic and sustained opposition. At the same time, however, the advocacy of those that push for change in the way food systems are governed is impactful with concrete outcomes.

While the challenges for food systems governance comprise complexity, institutional failure, and corporate concentration, these challenges may also present opportunities, as new governance actors and dynamics shift in ever-changing food systems. One of the venues in which the negotiation of power relationships take place is in discourse, as different political actors seek to define the problems of the present and shape the discussions around policy responses that will shape the future of global food governance (Fuchs & Kalfagianni, 2009). Within this complex landscape of contestation, agroecology appears throughout the literature and policy landscape of food systems reform (Altieri & Nicholls, 2020; Anderson et al., 2019).

Looking at the history of food systems, it is evident that global food systems are not static, and that there have been particular moments of instability in the systems that transform them (Clapp & Moseley, 2020). These transformations have, in recent history, predominantly taken the form of increased expansion of trade integration and industrialization, resulting in food systems that are particularly vulnerable to stresses (Clapp & Moseley, 2020). The historic cycle of instability and restructuring of food systems and their political economic contexts is the foundation of the food regimes model discussed above.

Moments of systemic destabilization present opportunities for reform, as new governance and social movement responses materialize. For example, De Schutter (2012) details how the 2007/2008 food price crisis was a major point of transformation for the Committee on World Food Security (CFS), during which three trends emerged: 1) the importance of civil society engagement on the global governance level through, for example, the advocacy for the right of peasants to the UN (see also Claeys, 2015); 2) the acknowledgement of the significance of monitoring & accountability (De Schutter, 2012); 3) the importance of scientific knowledge in protecting against governance failures, which led to the establishment of the High-Level Panel of Experts that advise the CFS and enable double loop learning (De Schutter, 2012). Consequently, crises present opportunities for food systems reform, with the 2007/2008 food price crisis leading to concrete governance transformations. McKeon (2015) presents an insightful analysis of the significance of the multilateralism of the CFS in the historic evolution of global food governance, arguing that in policy making it is important to consider those most impacted by the policy when considering "whose evidence counts" (McKeon, 2015). McKeon argues that the CFS "logic of subsidiarity" creates governance close to the citizens through civil society and the involvement of the food sovereignty movement.

While for the most part, crises have led to the deepening of corporate food systems (Clapp, 2022), there have also been instances of increased democratization of global food governance as a result. For example, the CFS opening non-voting membership to civil society and the private sector was the result of the 2007/2008 food price crisis (McKeon, 2015; Duncan, & Claeys, 2018). Scholars argue that as the COVID-19 pandemic destabilized global food systems and presented an opportune moment to implement fundamental changes (Clapp & Moseley, 2020; Petetin, 2020; Ragasa & Lambrecht, 2020). Whether the compounding and rapidly occurring crises of the present, termed the era of "polycrisis" (Helleiner, 2024; Lawrence et al., 2024),

presents similar affordances is an open question. This dissertation details how crises and destabilization, alongside sustained advocacy, also creates opportunities for counter-hegemonic paradigms to enter traditional governance spaces. Consequently, the interplay of entrenched political economic interest with those seeking fundamental transformation to these systems is described through the contestation of agroecology.

Transformation vs Reform

Throughout this dissertation I speak about the transformation of global food systems. It is important to note that there is a debate in the literature about the details of food systems transformation that is articulated in the transformative versus reformist approach to food systems. Essentially, the debate is about whether appropriate responses to the failures of global food systems require varying degrees of changes to the existing systems (reformist), or whether systematic re-organization and re-structuring of central features of food systems are needed (transformative). The debate of transformation vs reform is articulated by Holt-Gimenez & Shattuck (2011) in their study on the response to the 2007/2008 global food price crisis. They identify four political responses to food systems crises. The authors classified these responses as 'Neoliberal', 'Reformist', 'Progressive', and 'Radical', indicating the degree of engagement with re-structuring of food systems advocated by actors within each group. In this context, re-structuring food systems is articulated through challenges to "the legitimacy and hegemony of the corporate food regime" (Holt-Gimenez & Shattuck, 2011).

The work of Holt-Himenez & Shattuck (2011) shows a spectrum of response to food systems crises in terms of the call for re-structuring vs making changes within existing dynamics. Similarly, Hall et al. (2015) studied the discursive and political responses to land-grabbing. Hall et al. (2015) found that there are varying degrees of reformist and transformative sentiments in the political response to land-grabbing. They articulate this response in terms of resistance versus demands for better terms of incorporation. Consequently, there is a spectrum of political response that ranges from calls to change the political economic systems that make land grabbing possible in order to stop the phenomenon, to calls for improving the terms of land acquisition for those affected.

The work of Hall et al. (2015) and Holt-Himenez & Shattuck (2011) are two examples of scholarship addressing the transformative vs reformist debate within the larger literature (Kraak

& Niewolny, 2024; Leeuwis et al., 2021; Narula, 2024). This debate has wide-reaching political implications, as transformative approaches are challenged and subsumed into reformist paradigms in order to uphold hegemonic systems. In food systems scholarship and policy debates the reformist and transformative approaches encounter each other continually. This is also the case in my dissertation research, in which the sustained advocacy for agroecology as a transformative, and not reformist, paradigm is a central feature of the political function of agroecology as a discursive frame in global governance. The scholarship on agroecology as a transformative paradigm is discussed below.

Agricultural Inputs

The topic of permissible agricultural inputs can be understood as a subset of the reformist vs transformative political approaches to food systems crises. The literature on inputs, and associated debates, is addressed separately here due to the significance of the debate about permissible agricultural inputs in the political dynamics of agroecology as a paradigm for food systems transformation. One of the defining features of agroecology is the use of ecological agricultural practices. The use of petrochemical fertilizers and pesticides is not in alignment with the ecological systems approach of agroecology. Nevertheless, there is a debate about what inputs can be used in agricultural systems that are described as being agroecological.

We know that different agricultural practices have different environmental impacts (Clark & Tilman; 2017). However, there is a large are of debate in the scholarship about the details of the use of synthetic agricultural inputs and associated food systems. Are petrochemical fertilizers so harmful and un-ecological that they should be forbidden entirely (Faber, 2020; Werner, 2025)? Is it even possible to outlaw the use of pesticides (Garcia-Caro, 2023)? Is the use of synthetic agricultural inputs unavoidable (Anand & Krishnan, 2025)? Should the use of synthetic inputs be limited and more targeted (Maitra et al., 2021)? Is it possible to create enough yield on-farm without synthetic inputs (Dumont et al., 2021; Dittmer et al., 2023, Global Alliance for the Future of Food, 2021)? These questions, and the associated scholarship, point at the heart of the debate about whether agroecological farming includes, excludes, or partially permits petrochemical fertilizers and pesticides. The response to this debate has implications for food systems at large, as different agricultural practices are associated with different markets, labour dynamics, and food systems as a whole.

The debate about permissible agricultural inputs in agroecological food systems is linked to other key debates in the political landscape of food systems reform, reflected in the agroecology negotiations analyzed in this dissertation. In the CFS agroecology negotiations that are the subject of this dissertation, the language around the use of agricultural inputs and synthetic fertilizers was one of the key topics of subject-specific contestation within the negotiations. The highly politically contentious topics of seed sovereignty and gene modification are examples of the debates associated with permissible agricultural inputs. Other examples include the environmental externalities in agricultural systems and associated costs and imperatives for food systems transformation, the confounding pressures of global hunger and environmental protection, and financial profit and ownership of food and food systems.

The use of agricultural inputs is also reflected in the structure of the mechanisms of engagement with the Committee on World Food Security. The Private Sector Mechanism (PSM) to the CFS largely represents farmers that rely on petrochemical inputs on farm, whereas the Civil Society and Indigenous People's Mechanism (CSIPM) represents farmers that tend to practice agricultural methods that do not to rely on these inputs. While this is an over-generalization, it is a useful heuristic in understanding the significance of farm-inputs in the discursive arena of agroecology in food governance. As outlined below, the PSM argued throughout the negotiations that the farming practices represented by the PSM are the only legitimate response to global hunger, and agroecological approaches are mostly ideology. The CSIPM in turn argued for the importance of sustainability and sovereignty in subsistence, small-scale, Indigenous agricultural methods (including the diversity of food getting and agriculture that includes fishing and hunting) through the paradigm of agroecology. Agricultural inputs play a central role in the contestations around co-optation of agroecology as a political paradigm.

Global Food Systems: Transformation through Agroecology

Agroecology is an active field of scholarship. The academic database Scopus shows just over 8100 publications with "agroecology" either in the title or the keyword descriptor. While early publications on agroecology began in the 1920s, as discussed in Chapter 2 of this dissertation, there was a marked increase in publications on agroecology in the early 2000s. There is a continued trend of increased publications on agroecology, with 1000 publication on agroecology appearing in Scopus for the year 2025 alone. The four most cited authors in the field

are Gliessman, Altieri, Wezel, and Bezner-Kerr. In the context of this research project, I was able to interview three of these four experts on agroecology. The publications are predominantly located in the subject areas of Agricultural and Biological Sciences (30% of all publications), Environmental Sciences (21% of publications), and Social Sciences (16%). These publication data reflect agroecology as a science, a movement, and a practice (Wezel et al., 2009), as discussed in Chapter 2 of this dissertation. Agroecology as a paradigm in food systems transformation is reflected by 257 publications on "agroecology" plus "food systems" plus "transformation". Within this scholarship there is a small subset of academics that are looking at agroecology in the context of global food governance. The Scopus search for "agroecology" plus "global governance" resulted in 5 publications, a different 5 publications were found with "agroecology" plus "CFS", twelve documents were found in the search "agroecology" plus "world food security". This shows that the scholarship on agroecology in the context of global governance is a small subset of the larger scholarship on agroecology. Below I present an overview of the literature on agroecology in global food governance and discuss how it relates to this dissertation.

Agroecology is discussed throughout the literature as a paradigm that presents an alternative to corporate global systems and thereby is a vehicle for food systems change (Altieri, 1989; IPES-Food, 2022; IPES-Food, 2020; Wezel et al., 2009). The central question that the literature is concerned with as regards agroecology in global food governance is the question of co-optation. There is an active debate about the co-optation of agroecology. Some see agroecology as a double-edged sword, being co-opted and used as both "means and barrier to the expansion of capitalist agriculture" (Holt-Gimenez & Altieri, 2013). Others see agroecology as a narrative to realize the much-needed food systems transformations, for re-localizing and re-locating "food from nowhere" into relationship based territorial markets (Campbell, 2009). My research presents a novel perspective on this debate, as I present the first detailed analysis of the emergence of agroecology as a paradigm in global food governance, and trace the evolution of agroecology through the three global governance venues, the case studies of this dissertation. This analysis has led me to develop a comprehensive analysis of the political function of agroecology as a paradigm in global governance. This analysis shows the mechanisms of co-optation and resistance to co-optation, as well as the different political functions of agroecology.

Consequently, I present new data and analysis to the understanding of agroecology as a paradigm for food systems transformation.

The Co-optation of Agroecology

Agroecology is a composite concept, meaning that it is not defined by a single statement, but by complex definitional structures. Both FAO and the HLPE established, through separate processes, formal definitional structures of agroecology that together have become the dominant definitions in global governance discourse. To arrive at a coherent definition of agroecology, FAO staff engaged in a global consultation process, which resulted in the 2018 publication of the 10 Elements of Agroecology (FAO, 2018). The HLPE of the CFS expanded on this definition by publishing the 13 Principles. There is wide agreement amongst scholars and practitioners that the 13 Principles are an addition to the 10 Elements that does not contradict them meaningfully (Wezel et al., 2020; Gliessman, 2021). The 10 Elements and the 13 Principles are definitional structures that share substantial overlap. There is no inherent difference between an "element" and a "principle", they are simply two different words used to refer to the core defining characteristics of the concept. The defining features, and the process of definition of agroecology, are analysed in depth in Chapter 2 of this dissertation

Before the global institutional work of defining agroecology began, there were multiple definitions of agroecology published in the academic context (Wezel et al., 2009; Daalgard et al., 2003; Brym & Reeve, 2016). In addition, social movements engaged in a process to arrive at a definition of agroecology. The process began in 2007 and culminated in February 2015 with the publication of a definition of agroecology in the 2015 Nyéléni Declaration. Arising out of the peasant movement La Via Campesina, in response to international trade agreements and in support of food sovereignty, the International Forum on Food Sovereignty took place in Mali in 2007. The result of the International Forum was the 2007 Nyéléni Declaration, which articulated the vision of global food sovereignty of peasants, fisherfolk, Indigenous peoples, civil society, and academics (Nyéléni, 2025). Eight years later, in February 20215, the second Nyéleni event took place, the Nyéléni Forum for Agroecology, which resulted in the 2015 Nyéléni Declaration. The 2015 Nyéléni Declaration included a consensus definition of agroecology by peasants, fisherfolk, Indigenous peoples, civil society, and academics. The 2015 Nyéléni Declaration, with

its definition of agroecology, was arguably the moment that social movements claimed the term in the global arena.

Despite the presence of these structured definitions, there is a debate about the conceptual integrity of agroecology. There are scholars that argue that agroecology lacks conceptual clarity and does not hold a fixed meaning (Anderson & Maughan, 2021; Méndez et al., 2013). The lack of conceptual clarity is seen in the literature as opening the term up to co-optation. Scholars argue that agroecology is at a conceptual crossroad between being a reformist or radical tool in food systems governance (Anderson & Maughan, 2021; Giraldo & Rosset, 2018; Holt-Giménez & Altieri, 2013; Walthall et al., 2024). Bellwood-Howard & Ripoll (2020) understand agroecology as a discursive vehicle for "scientization" (Kinchy, 2012) of agricultural development in Africa, with a complex relation to the African Green Revolution. At the same time, scholars see agroecology as an important paradigm for upholding diversity in agricultural systems (Moseley, 2024; Gliessman, 2004; Pimbert, 2016). Consequently, there is a debate amongst scholars about whether agroecology has been and/or is being co-opted (Rivera-Ferre; 2018; Giraldo & Rosset, 2018; Gliessman et al., 2019).

Anderson & Maughan (2021) argue that one of the mechanisms of co-optation is the framing of agroecology. Anderson & Maughan (2021) present an analysis of the conceptual integrity of agroecology in relation to the "innovation paradigm" that was introduced in the HLPE report. They argue that "innovation can serve to contain and co-opt the transformative potential of agroecology" by delegitimizing the social and political components of agroecology (Anderson & Maughan, 2021). The finding that the presentation of agroecology as a subset of multiple innovation technologies has implications for the interpretation of agroecology as a narrow set of tools or a broader political movement, is also an important aspect of the analysis presented in this dissertation. This dissertation illustrates how the innovation paradigm has been present in the global governance discourse on agroecology since the IAASTD report, discussed earlier in this chapter. While the 10 Elements and the 13 Principles of agroecology present rigorous definitional structures of agroecology, the framing of the agroecology paradigm in global governance discourse allows actors to engage with agroecology as a technology at the exclusion of the political aspects of agroecology.

This dissertation shows that that the contestation surrounding agroecology is largely about the inclusion and exclusion of the term in global governance texts as well as the framing of

agroecology in these texts. My research shows that the definitional structures of the FAO and the HLPE were protective of the conceptual integrity of agroecology in governance negotiations. However, some aspects of these definitions, such as the field-level practices, are more widely accepted than others, such as the political and governance practices. While each of the elements and principles of the 10 Elements and 13 Principles are clearly interdependent and essential to the definition, actors do not engage with all aspects of the definition in their work while still calling their projects "agroecology". I used the idea of the "library object" (Trompette & Vinck, 2009) in the introduction to explain this feature of agroecology. The selective engagement with some elements/ principles above others allows for agroecology to act as a boundary object, as discussed in the introduction of this dissertation.

The definitional structures of agroecology make the paradigm measurable. The 10 Elements and 13 Principles of Agroecology enable scholarly investigation of agroecological projects (Geck et al., 2023; Mottet et al., 2020; Patton, 2021), provide the structure for coherent policy initiatives and measurement of projects (see for example the FAO Tool for Agroecology Performance Evaluation (TAPE)), and it acts as a vehicle for advocacy for food systems transformation by actors across differences in priorities and perspectives. In addition, the definitional structures of agroecology protect against the pitfalls that come with vague language in political discourse that other terms such as "nature positive", "regenerative" or "climate smart" (Bless et al., 2023; Tittonell et al., 2022).

While global policy negotiations show agroecology to be a coherent concept, when it comes to interpreting the policy recommendations, there is a large difference in the focus of different governance actors (Bellwood-Howard & Ripoll, 2020; Rivera-Ferre, 2018). Who benefits from agroecological projects depends on what interpretation of agroecology is supported by political actors such as countries and international funding bodies. Research into this topic has identified five different interpretations of agroecology in use in government, civil society, and academia: no knowledge of the term, descriptive science, science for sustainability, environmental farming practices, political agroecology (Bellwood-Howard & Ripoll, 2020; Rivera-Ferre, 2018). These five interpretations reflect the existence of different "agroecologies", depending on context and actors. The definitional interpretation of agroecology into regional policies, with associated funding, has implications for the types of projects that are supported and the aspects of agroecology that are emphasized in these projects (Bellwood-Howard & Ripoll,

2020; Gonzales et al., 2018; Petersen et al., 2013). Research has shown that, despite agroecology being a holistic concept which includes whole food systems thinking including governance, many agroecological projects focus on the field-level aspects of agroecology (Dumont et al., 2021).

Agroecology is a complex term that poses many open questions for scholars and policy makers, especially in implementing agroecological projects. Challenges arise, as the implementation of the agroecological vision on a global scale would necessitate a fundamental change to the organizing principles of global food systems, both in the trade and the financial logics of the systems. In addition, there is also criticism of agroecology's colonial heritage (Gómez et al., 2012; Marfurt et al., 2023), and lack of specificity (Dumont et al., 2021). The criticism of agroecology lacking specificity highlights the many open questions surrounding agroecological transition pathways in relation to existing power structures, such as land tenure (Wittmann & James, 2022), global trade (Hoffmann, 2015), and labour (Van Der Ploeg, 2021). In this dissertation, I refer to "political agroecology" or "politically progressive agroecology" to reference the definitional structures that centre the governance and political aspects of agroecology and are therefore based in the social movements' definitions of agroecology as a vehicle for food sovereignty and fundamental transformation of global food systems.

Agroecology in Global Governance Discourse

The specific topic of this dissertation, the role of agroecology as a discursive frame in the global governance of food, has been the subject of some academic enquiry (Conti, 2023; Loconto & Fouilleux 2019). The three most important studies in relation to my work are detailed below. These studies analyze different conceptualizations of agroecology in use in government, civil society, and academia:

First, Rivera-Ferre (2018) in an analysis of "political agroecology" in FAO documents, government documents from France and Nicaragua, and in the food sovereignty movement, identified five narratives that occur within the discourse of agroecology. Groups of political actors use these narratives to emphasize different dimensions of agroecology. The five dimensions are: 1) agricultural development, 2) performance, 3) natural resources, climate change & food security, 4) ecosystem's ecological management, 5) people's & women solidarity (Rivera-Ferre; 2018). These five dimensions reflect the existence of different "agroecologies",

depending on context and actors. Rivera-Ferre concludes that the idea of agroecology is being used by different actors to enact "reformist" and "transformative" visions of food systems, depending on their political agenda. Alongside a trend in co-optation, Rivera-Ferre argues that there is a process of "re-signification of agroecology" at the present, in that agroecology is an active concept in political discourse that acts as a vehicle for "green capitalism".

Second, Bellwood-Howard & Ripoll (2020) focus their analysis of the "politics of knowledge" surrounding agroecology within the first of Rivera-Ferre's five dimensions, namely within the field of agricultural development. The authors outline four "development regimes", which outline the different ideas of significant actors in the African development field. The regimes identified are: African Green Revolution, 21st century agroecology, smallholder agriculture, large-scale agriculture. According to Bellwood-Howard & Ripoll (2020), the different understandings that political actors have of agroecology interacts with these development regimes. Specifically, a scientific understanding of agroecology constitutes a development paradigm in line with the African Green Revolution leading to silencing of political debates. A political understanding of agroecology is found to stand in tension with this descriptive science perspective. Interestingly, the authors argue that there is a lack of contestation between the different ideas of agroecology, with a disconnect between the discursive frames of different development regime actors. Bellwood-Howard & Ripoll (2020) understand agroecology as a discursive vehicle for scientization of agricultural development in Africa.

Third, Anderson & Maughan (2021) published a discourse analysis of agroecology in the development of the High-Level Panel of Expert's Report on Agroecology (HLPE, 2019). The authors focused on the discourse of innovation in relation to agroecology during the consultation process leading up to the publication of the report. They found that the idea of innovation delineated narrow parameters of what was considered acceptable evidence in evaluating the impact of agricultural transformation. Consequently, they argue that "innovation can serve to contain and co-opt the transformative potential of agroecology" by delegitimizing the social and political components of agroecology (Anderson & Maughan, 2021). Anderson & Maughan highlight the importance of political agency in the outcomes of governance reports and recommendations, and that the contestation around discursive frames is the venue within which the locus of this agency is negotiated.

The research of Rivera-Ferre (2018), Bellwood-Howard & Ripoll (2020), and Anderson & Maughan (2021) illustrate the political contestation of agroecology in diverse venues. While all three papers argue that political actors are co-opting the concept of agroecology to promote reformist and technological understandings of this idea in different venues, they also describe agroecology as a tool for food systems transformation.

My research speaks to these findings by situating them within the large context of the evolution of agroecology in global food governance. Aspects of each of these studies are reflected in my work. Particularly the relevance of the innovation paradigm as a vehicle for governance actors to undermine the political vision of agroecology (Anderson & Maughan, 2021) appears throughout my research findings and analysis. The gap in the literature that my dissertation fills is a comprehensive analysis of the political function of agroecology in global governance of food. The unique contribution of my research is an analysis of the context which brought the discursive frame "agroecology" into this important position within the global governance of food systems. In answering the research question "What explains the rise of agroecology as a discourse in food systems governance?" I present an analysis of the dynamics that lead to the rise of agroecology, the major sites of contestation, as well as an analysis of the conceptual integrity of the term in order to speak to the co-optation debate outlined above. The analysis presented in this dissertation outlines the strengths of the conceptual framework of agroecology, as well as identifying areas that require more attention. In addition, my research presents a case study for the scholarly community, illustrating the complexity of global governance far beyond a top-down mechanism, with an emphasis on diverse actors from all corners of governance, industry, and society shaping the discourse on global food systems transformation.

Discussion

What does the scholarship say about food systems transformation through agroecology? As outlined above, there is extensive scholarship that measures and argues the positive impact of agroecological systems for biodiversity (Chappell & LaValle, 2011; Wanger et al., 2020; Liere et al., 2017; Jeanneret et al., 2021), climate (Dittmer et al., 2023; Snapp et al, 2021l; Amoak et al., 2022; Leippert et al., 2022), environmental sustainability (Yadav et al., 2021; De Molina, 2013), agricultural productivity (Anderson et al, 2021; Dittmer et al., 2023; D'Annolfo et al., 2017;

Garbach et al., 2017), farmer agency (Van Der Ploeg, 202; Utter et al., 2021), and as a paradigm for realizing the right to food (De Schutter, 2011). Criticisms of agroecology as a paradigm for food systems transformation include reduced productivity, referred to as the "yield gap" in the literature (Snyder et al., 2017; Silva & Ramisch; Gatti et al., 2023), "backwardness" (Mugwanya, 2019), as well as the argument that agroecology is not scalable to meet global demand (Bernard 7 Lux, 2017), or not realistic, too political, or not practical (as discussed in Chapter 5 of this dissertation).

The increased interest in agroecology as a food systems paradigm in academia and governance venues speaks to the fact that agroecology offers a viable framework through which to engage with food systems transformation. However, translating the positive potential of agroecology into systemic transformation comes with formidable challenges. Anderson et al (2021) argue that there are "six domains of transformation" through which food systems transformation interacts in enabling and disabling ways with dominant systems: Rights and access to nature, knowledge and culture, systems of economic exchange, networks, equity, and discourse. The analysis presented by Anderson et al (2021) in their book is a deep engagement with each of these domains and the enabling and disabling conditions that exist for these domains of agroecological transformation. In the context of the publications for the UNFSS, Niggli et al (2023) articulate four domains in which agroecological transitions can be cultivated: knowledge systems, markets, collaborations and policy coherence. In conceptualizing agroecology as a vehicle for food systems transformation Gliessman (2012) published the 5 levels of transformation, as discussed in Chapter 2 of this dissertation. Consequently, there is substantial theoretical engagement in the scholarship with the domains and levels through which agroecological transitions can be enacted. There is also substantial potential in public systems to finance agroecological transitions (Pimbert, 2025), while there continue to be people that argue that corporate finance is necessary for agroecological transitions (Diaz-Bonilla, 2023; Lipper et al., 2021).

It is an open question whether the political vision of agroecology can stand against the financial corporate interests that constitute global food systems. This is expressed in the literature on cooptation discussed above. My unique contribution to the scholarship is an analysis of how this transformative potential of agroecology interacts with global governance venues. By tracing the emergence of agroecology in global governance venues, and the evolution of the paradigm

through policy negotiations, I present new data and analysis on what happens to the transformative visions of agroecology in global food governance venues.

Methodology & Theoretical Framework

Researcher Positionality

Scholars of qualitative research methods emphasize the need for researchers to situate themselves in their work (Holmes, 2020; Leach et al., 2020; Creswell & Creswell, 2017). The purpose of stating the researcher positionality is to make explicit the perspective from which the research is conducted in order to acknowledge inherent biases (Holmes, 2020). By stating the assumptions, beliefs, and experiences the researcher brings to their work, the social science researcher fulfils an ethical obligation for transparency and thereby increases the credibility and validity of the research (Holmes, 2020; Creswell & Creswell, 2017). Here I present myself in relation to this research project: I am an outsider to the governance spaces that are the subject of this research. I came to this research question through the guidance of my supervisor, somewhat unaware of the political importance of agroecology, and consequently not carrying any particular attachment to the concept. My research is an instance of "studying up" (Fairbairn, 2021) in food scholarship, in which I interviewed the people that shape governance discourse in elite venues. This outsider perspective allowed me to keep an open mind towards the ideas put forward by the texts and interviews I encountered. I was able to overcome the major challenge of outsider research of gaining access to interviewees (Holmes, 2020) through the social networks of my PhD supervisor. Both the good reputation of my supervisor and the rapport I was able to build with interviewees facilitated many open and thorough interviews, despite limited time on behalf of the interviewees.

I come to this research as a well-educated, privileged, cisgendered white woman, which gives me the skills and resources to be able to conduct the research and interviews without major hurdles. I also come to this research as a new mother looking for hope in the future my children will one day live in. I have held onto this research throughout personal and political times of upheaval to anchor myself in trying to develop an understanding of how sustainable political transformation might be brought to life. I, of course, come to this research with my own biases and perspectives, which have shaped every step of this research. Through years of scholarship in food systems, as well as working in various non-government and civil society organizations

aimed at supporting vulnerable people in accessing nutritious food, I have a deep appreciation for the fact that the problems of global food systems are political. What is experienced by people as poverty and the inability to access nutritious food is a slippery fish with a complex political economic tail. Global hunger is not a question of production, but of what is valued in food systems, how it is valued, and the distribution of the material, cultural, natural and knowledge resources that are present. The devastating social and environmental impacts of global food systems are supported and subsidized by government rules and finances. Consequently, I approach this research with an interest in the constitution and malleability of governance in food systems. In doing so, I take a constructivist approach to the analysis of the research question. Guided by the premise that the meaning invested in words and language sets contribute to the construction of political realities, this dissertation presents a constructivist approach to understanding discourse contestation in global food governance, as discussed below.

Research Methods

This dissertation is a grounded theory research study. "Grounded theory design is a systematic, qualitative procedure used to generate a theory that explains, at a broad conceptual level, a process, an action, or an interaction about a substantive topic" (Creswell, 2015). In this case, I used a grounded theory research approach to explain the rise of agroecology as a discursive frame in global food governance. Grounded theory research is a systematic process through which data is analyzed to develop an explanatory model. It stands in contrast to research that is based on hypothesis testing. Using the constructivist design of grounded theory research, I engaged in iterative processes of data gathering and coding to arrive at an explanatory theory to answer my research question. Grounded theory research methods acknowledge the subjective experience of the researcher as a person that "brings values, experiences, and priorities" (Creswell, 2015) to the data analysis.

Concretely, I began with a multi-year literature review process in the form of PhD coursework and comprehensive examination at the Balsillie School of International Affairs beginning in September 2019. The literature review was followed by several focused discussions with my supervisor, leading to my initial research question. I then began conducting expert interviews, which were recruited through snowball sampling. Interviewees are not named in this dissertation unless they provided explicit consent, as discussed below. All appropriate ethical

procedures were followed in the recruitment and interview process, including university research ethics approval and conducting a process of informed consent prior to each interview. A total of 50 interviews were conducted between 19 October 2022 and 12 April 2023 through videoconferencing and ranged in length between 20 and 90 minutes.

The data gathered in the interviews, in combination with in-depth document analysis, formed the analytic basis of this dissertation. I conducted 50 interviews with a diverse set of experts described below. My research is a contribution to the global governance scholarship of "studying up", as research participants were highly influential and/or knowledgeable in the subject matter of this dissertation and consequently can be described as "elite interviews". The research approach of "studying up" has its roots in Anthropology scholarship, in which Laura Nader (1972) argued the need to study "the colonizers rather than the colonized, the culture of power rather than the culture of the powerless, the culture of affluence rather than the culture of poverty" (Nader, 1972). This call for studying elite populations occurred in reaction to Anthropology scholarship being primarily concerned with field work in the Global South at the time. My research shows that, in the contemporary context of governance discourse, Nader's dualities of powerful and powerless, colonizer and colonized, affluence and poverty, are not clearly distinguishable as such. While there are clear power imbalances in who has access to governance spaces and consequently shapes discourse (Hoffman, 2012; Barnett & Finnemore, 1999; Griffin, 2010), with a worrying amount of corporate influence in global food governance in particular (Clapp & Fuchs, 2009), the work presented in this dissertation shows that inclusive governance design, such as the Civil Society Mechanism of the Committee on World Food Security, enables non-elite actors to shape governance discourse. This topic is reflected in the discussion about the complexity in the directionality of governance throughout this dissertation.

Studying up is a common research approach in global governance scholarship (Holmes, 2019; Stepputat & Larsen, 2015; Aykut, 2024; Conti & O'Neil, 2007). The strengths of this research approach include: a unique insight into the perspectives and experiences of the people shaping the discussion about food systems governance on the global level, insights into the topics and instances of resistance and contestation around governance language, access to ideas that were excluded from formal documents, and access to the stories of the circumstances that led to events and publications. The limitations of this research approach include: lack of representation of the perspectives of governance actors that are tasked to enact policy

recommendations, unequal availability and interest in participating in research from different actor groups, and limited generalizability from data. In conducting the interviews, I found that research participants were, for the most part, forthcoming and generous with their time and perspective. To avoid adopting perspective as truth, I was able to verify claims through text analysis and fact checking sources. Consequently, this research project also contains extensive document analysis.

In classifying the affiliations of the research participants, I found that they could be assigned to one of the following categories: civil society (n=15), academic (n=10), research institute (n=7), political convenor or government employee (n=5), foundation (n=5), FAO employee (active and/or retired) (n=5), and industry (n=3). These categories are loose affiliations with some overlap. The categorization provides an overview of the results of the snowball sampling and the perspectives and biases that might be present in the research data. Given the nature of the research question, I was substantially more successful in recruiting civil society representatives than private sector actors for interviews. Private sector interviews are not quoted directly as the consent to do so was not granted. However, I was able to interview people that were directly involved in the development of agroecology as governance discourse through institutional programs of work and policy recommendations in each of the case study venues analysed in this dissertation. Research participants included academics that have written and recorded the history and definition of agroecology (Chapter 2), active and former FAO staff that worked on the agroecology program in the time-period that I am analyzing (Chapter 3), authors of the HLPE report (Chapter 4), people who participated in the CFS negotiations (Chapter 5), and authors of reports and founders of coalitions discussed in other governance venues (Chapter 6). While every interview shaped my thinking on the topic, I have included quotes from 24 interviews, which is just under 50 percent.

The interviews were semi-structured open-ended interviews based on 5 guiding interview questions. Attached in Appendix A are the interview questions, and the informed consent script. Each interview started and ended with my research question being read to the interviewee. Interviews were recorded through the videoconferencing software Zoom. These recordings were transcribed using transcription software called Otter, the quality of which was insufficient (especially with non-English accents) and consequently both myself and a research assistant

proofread all transcripts in relation to the audio recording of the interview, to ensure accurate interviewee quotes throughout the dissertation. This process was completed by October 2023.

I used an open coding process (Creswell, 2007) to sort data according to emerging themes and to build the narrative timeline of events. Major themes that emerged from the data were “actors”, “definition of agroecology”, “history”, “CFS negotiations”, “HLPE and FAO reports”, “why agroecology”, “trade”, “subsidies, funding, and finance”, and “criticisms of agroecology”. These themes were sorted into case study chapters and formed the analytic basis of each of the chapters. The central argument of this dissertation is that a complex interaction of crises, advocacy, and scientific discourse shaped the emergence of agroecology as a discursive frame in global food governance venues. These three central themes emerged through inductive analysis (Bingham, 2023; Charmaz, 2014) from the combination of the literature review process (primarily on the theme of crises), and from the initial emergent coding process. In addition, document analysis was conducted on key documents, as presented in the following chapters, which served both as primary data and as data triangulation for interview data (Bingham, 2023; Creswell, 2007). Coding, document analysis, and triangulation were completed in late 2024 and I began writing the findings then. The research was interrupted by two periods of parental leave.

The research analysis resulted in the narrative articulation of agroecology as a discursive frame in the global governance of food through case studies of leading global governance venues, as articulated in the following chapters. In addition, the following theory framework that describes the political function of agroecology in global food systems was developed. This dissertation contains long verbatim quotes from the interviews. The use of quotations is a conscious stylistic choice aimed at bringing the voices of the interviewees into the text as fully and richly as possible. This decision to include long-form quotations is in alignment with the constructivist understanding of meaning being shaped by narrative (Bamberg, 2012).

As a final step, to ensure ethical conduct in quoting the interviewees, I sent a draft of the final dissertation to all research participants in November 2025. I provided each interviewee with the page numbers on which they were quoted, or mentioned by other interviewees, and asked for written consent with one month time to review the file and their quotes. In this final sept of the informed consent process some interviewees agreed to being named and others wanted to stay anonymous. Quotes were adjusted accordingly, and I have not published a list of names and

affiliations of interviewees to protect the anonymity of interviewees that did not want to be identifiable.

Theoretical Approach

This research contributes to the interdisciplinary field of food studies. I present an analysis of food systems transformation informed by political economy and global governance scholarship. I take a constructivist approach to the enquiry, basing my research in the ontological understanding that how people think and talk to each other about the world shapes it. There is a vast scholarship on constructivism with associated debates and differences in opinion about the definition, scope and articulation of the concept, particularly as it relates to international relations scholarship (Onuf, 1989; Mc Court, 2022). Specific areas of difference within the scholarship, as outlined by Hoffmann (2006) include: "the relative importance of agency versus structure, change versus continuity, and the operationalization of key theoretical elements" (Hoffmann, 2006). Despite these differences Hoffmann (2006) argues that there is a constructivist scholarship, which fundamentally describes an approach in which the symbolic and linguistic world is of profound importance:

> Constructivists have in common a philosophy that "the manner in which the material world shapes and is shaped by human action and interaction depends on dynamic normative and epistemic interpretations of the material world" (Adler 1997: 322). There is a world of meanings and knowledge as well as an objective, material world. This intersubjective world—a world of shared knowledge where objects require human agreement to exist—is where the important "action" of world politics takes place. (Hoffmann, 2006)

The perspective that politics is negotiated in an intersubjective engagement through language is referred to throughout this dissertation as discourse negotiation. The premise of this dissertation is that an analysis of the discourses articulated through agroecology in global governance venues contributes to an understanding of the complex challenge of governing global food systems. A constructivist approach enables a critical enquiry of the discursive contestation of food systems transformation. Consequently, the research is premised on ideas such as: the words used to describe and define agroecology is significant in the political function of the term, whether or not agroecology is present in policy recommendations has an impact on how food systems are

imagined and policy is enacted, agroecology impacts the intellectual search-space of solutions to the multiple compounding crises confronting global food systems, the language systems within which counter-hegemonic ideas are articulated can empower or contain these constructs. A useful example in the literature comes from Barnett & Finnemore (1999), who argue that a sociological constructivist lens allows us to understand International Organizations (IOs) as independent actors. While this dissertation does not focus exclusively on IOs, they do play an important role in global governance negotiations, and the work of Barnett & Finnemore articulates the constructivist study of these actors in an insightful manner. The source of IOs independent agency arises from IOs' ability to shape and control knowledge, thereby shaping the global political landscape by "classifying the world", "fixing meanings", and "creation and diffusion of norms, actors, and principles" (Barnett & Finnemore, 1999). Similarly, my research can be seen as an illustration of the multiplicity of actors and venues that have sought to "classify the world" through defining and claiming "agroecology" in the past twenty years.

Within the global governance literature, constructivist scholarship has been the subject of multiple criticisms. However, as constructivism is a diverse and varied concept, these criticisms frequently pertain to a particular aspect of constructivist analysis. The central criticism of constructivist approaches in the global governance scholarship is the framework's analysis of power. For example, Barnett & Duvall (2005) argue that constructivist analysis emphasizes normative structures over power: "Although constructivists have emphasized how underlying normative structures constitute actors' identities and interests, they have rarely treated these normative structures themselves as defined and infused by power, or emphasized how constitutive effects also are expressions of power." (Barnett & Duvall, 2005). Similarly, Hamati-Ataya (2002) argues that constructivism (the belief that political order is structured by ideas, beliefs, identities, shared knowledge), whilst claiming to be value free, suffers from the same anthropocentrism that positivism and post-positivism do. Hamati-Ataya (2002) argues that constructivism is consequently disconnected from the scholarship of critical theory. Hamati-Ataya (2002) argues that the anti-dote to the power-blindness of constructivism is self-awareness of the researcher through "reflexive awareness of the historicity of our thought and values" (Hamati-Ataya, 2002). Similarly, Acharya (2014) argues that a historically informed scholarship based on regionalism, and the equal representation of different perspectives, is a vehicle to avoid problematic exceptionalism in constructivist scholarship. Another articulation of this argument is

the importance of post-colonial approach to political science scholarship through recognizing the political agency of subaltern actors (Chandra, 2013).

By choosing to focus my analysis on the contestation within global governance venues, and the discourses that shape their output and impact, I have also chosen to limit my scope of enquiry to the realm of discourse contestation. This has led to a dissertation that stops short of critical analysis of the global governance structures themselves, the dynamics of different power relationships, as well as the implementation and on-the ground impact of these negotiations. Consequently, a constructivist theoretical frame best describes this work. It is unfortunate that I could not expand the scope of this research further. There is however an extensive literature on the critical engagement of global governance venues (see for example: Abbott, 2019; Curran et al., 2009; Duncan, 2015; Dimitrov, 2020). Despite the lack of critical and post-colonial analytic approaches in this research, the strength of this dissertation is that it presents a detailed and focused analysis of a particular question, thereby shedding light on the systems within which governance actors seek consensus about the future of food systems. Specifically, understanding how the counter-hegemonic discourse of agroecology is contained and re-framed within governance discourse and policy negotiations, as well as the sustained resistance to this containment and advocacy for the political vision of agroecology, illustrates the depth and complexity of the imperative of food systems transformation.

Findings

This dissertation presents a narrative exploration of significant governance venues of global food systems. The central argument of the dissertation is that a complex interaction of crises, advocates and scientific discourse explains the rise of agroecology as an important discourse in governance venues. The venues that are examined as case studies in this dissertation are the United Nations Food and Agriculture Organization (FAO), the Committee on World Food Security (CFS) and it's High Level Panel of Experts (HLPE), and the United Nations Food Systems Summit (UNFSS). The following chapters describe how the compounding environmental, financial, and social crises in global food systems created the conditions in which there was an openness to different ideas for addressing these problems. The sustained advocacy of civil society and academics, over approximately 20 years, built agroecology into a strong concept that other important advocates, such as individual politicians and countries (amongst

others), could leverage at key moments of institutional openness. In addition, the scientific aspect of agroecology has acted as a door opener and legitimizing discourse, allowing agroecology to enter traditionally science-oriented productivist governance spaces. At the same time, the scientific aspect of agroecology is used by entrenched interests to undermine the transformative political vision of agroecology, frequently in the presentation of agroecology as one of many innovations. This research shows that there are two ways in which agroecology is contested and negotiated in global governance discourse: the inclusion / exclusion of the word in important texts and discourses, and the articulation of the politically transformative aspects of the paradigm.

The political function of the paradigm "agroecology" in global food systems governance can be conceptualized in terms of three distinct functions: ambiguity, resistance, and transformation. The ambiguity argument describes agroecology as a "boundary object" (Star & Griesemer, 1989) that is ambiguous and consequently serves the political function of different political interests engaging with the term while referring to different practices and food systems visions. The resistance argument describes agroecology as a paradigm that stands in opposition to the logics of corporate consolidation with systems based on diversity. In addition, it resists the expansion of productivist agricultural logics and associated food systems into the existing agroecological food systems. The transformation argument conceptualizes agroecology as a paradigm to change existing global food systems. In analyzing the rise of agroecology as a discursive frame in the global governance venues, I found that while there is a lot of emphasis of agroecology as a vehicle for food systems transformation in scholarship (Slater et al., 2022; Gliessman, 2016; Anderson et al., 2019), the political function of agroecology in the venues and texts I analyzed fell into the other two categories. Consequently, the role of agroecology as a paradigm in food systems governance is an evolving contestation about the depth of engagement with the political vision of agroecology, as well as the localities and food systems that are upheld through agroecology. The transformation of global food systems through agroecology, in the sense of taking existing systems and changing aspects of them to become something else, is however in its infancy as there remain many open questions about the role of agroecology in interfacing with core aspects of global food systems.

Ambiguity

The fact that agroecology is a composite construct, as discussed in Chapter 2 of this dissertation, creates ambiguity around the paradigm that has the potential to either uphold or undermine the political vision of agroecology, depending on the context. The concept of "boundary objects" coined by Star and Griesemer (1989) can be used to make sense of agroecology's political function as an ambiguous paradigm. As articulated by Star and Griesemer (1989), a boundary object is "a term that facilitates communication across disciplinary borders by creating shared vocabulary although the understanding of the parties would differ regarding the precise meaning of the term in question" (Star & Griesemer, 1989 cited by Brand & Jax, 2007). The idea of the boundary object is a theoretical construct that describes the interaction of people with very different world views cooperating over a particular issue (Trompette & Vinck, 2009). Boundary objects articulate the ability for a word to be integrated in the work of competing or heterogenous world views. Agroecology, for example, can be found in the productivist world view of the Nestlé Corporation, as discussed in Chapter 6, and in the food sovereignty perspective of La Via Campesina, as described in Chapter 4. At the same time, the complex definitional structures allow agroecology to be accepted into rigorous scientific discourses, such as that of the Intergovernmental Panel on Climate Change (IPCC)[2]. These competing worldviews can engage with agroecology, as it is a boundary object that is broad enough to be made sense of within both worldviews. Trompette & Vinck (2009) describe the function of boundary objects as follows:

> These boundary objects are supposed to maximize both the autonomy of these social worlds and communication between them. The notion is therefore closely linked to issues of shared meaning and interpretation. It supposes the existence of a minimal structure of knowledge which is recognized by the members of the different social worlds, which can take very diverse forms: the malleable object which can be shaped by each and every one; the library object from which each individual can take what he or she needs; the object which can be either simplified (abstraction), allowing us to ignore the properties

[2] The decision text of the UNFCCC's COP27 in 2022 *CP. 27 Sharm el-Sheikh Implementation Plan* (UNFCCC, 2022) mentioned agroecology in a draft version of the text, but the word was removed for the final publication. While agroecology was not mentioned in the final decision texts, it was included in issue-specific reports preceding the COP27 meeting, specifically Chapter 5 of the IPCC report, *Food, Fibre and Other Ecosystem Products* (Bezner Kerr et al., 2022).

> we do not need; and finally, the interface or exchange standard. (Trompette & Vinck, 2009)

This idea of the "library object" is a useful description of the boundary function of agroecology in governance discourse, as it is common for actors to engage with a few, but not all, of the many definitional aspects of agroecology. The articulation of the 10 Elements of Agroecology and the 13 Principles of Agroecology have established agroecology as a well-defined paradigm that nevertheless serves an ambiguous role. Depending on which aspect of agroecology is emphasized in any given document or policy recommendation, there is a broad range of possible purposes the paradigm can serve. The undermining of the transformative vision of agroecology in governance venues occurs primarily through the pairing of agroecology with the conceptual framework of innovation, as discussed in Chapters 4 and 6, in which agroecology is presented as a "tool in a basket of tools" instead of a unique and distinct paradigm.

Throughout the literature, as presented in the literature review in the introduction of this dissertation, the ambiguity of agroecology is discussed in terms of co-optation, with scholars arguing that agroecology is at a "conceptual crossroad between being a reformist or radical tool in food systems governance" (Holt-Gimenez & Altieri, 2013) (Anderson et al., 2019; Anderson & Maughan, 2021; Constance et al., 2018; Giraldo & Rosset, 2018). Co-optation is understood to be the reduction of agroecology to a set of technical agricultural practices devoid of political meaning (Anderson et al., 2019; Giraldo & Rosset, 2018). While this form of co-optation is a well-documented phenomenon that is also reflected throughout the following chapters, conceptualizing agroecology as a boundary object allows for a nuanced analysis of the political functions of the paradigm, beyond the duality of reformist or radical tool. Describing agroecology as a library object enables an understanding of the mechanism of cooptation as the selective engagement with the defining elements of agroecology, through picking and choosing what is convenient for the actor. The articulation of agroecology as a library object in global governance discourse describes that it is not the whole paradigm that is reduced to technical practices, but instead the technical elements are focused on to the exclusion of the political. For examples, see Chapter 6 and the discussion on how the world's largest food corporations are using the word agroecology in their work.

My research shows that the advocates of agroecology strongly promote and defend the transformative vision of agroecology, while the scientific nature of the concept opens doors into

diverse governance spaces. Consequently, the boundary object nature of agroecology allows for multiple contradictory political functions of agroecology to co-exist. For example, the fact that agroecology is an established paradigm in some scientific discourses, as discussed in Chapter 2, was a contributing factor in creating enabling conditions for the concept to be brought into the work of traditionally politically closed spaces, such as the biodiversity division of FAO (Chapter 3).

The "scientization" of discourse, especially in agriculture and food systems, is used as a technology of gatekeeping and alienation in governance arenas (Kinchy, 2012). The scientific aspect of agroecology, which is often pointed to in the co-optation literature as undermining agroecology's transformative potential, creates openings in institutional venues and discourses that would otherwise be closed to politically holistic concepts. At the same time, while food sovereignty is a core construct in the definition of agroecology, the evolution of political discourse away from the rights-based focus of food sovereignty to the paradigm and "library object" (Trompette & Vinck, 2009) of agroecology can be seen as weakening the political focus of the advocacy for food systems change. Shifting the focus away from food sovereignty to a much broader paradigm through agroecology creates openings for the focus to shift away from a rights-based approach to food systems governance. The language of rights-based frameworks (the "right to food" and "right to food sovereignty") has a rich history and significance for food systems scholarship and advocacy (Claeys, 2015). Consequently, one of the political aspects of agroecology in global governance discourse is as a well-defined paradigm with ambiguous function; a boundary object that opens doors while being contested in terms of its political articulation. This ambiguity allows agroecology to serve multiple competing political functions in global governance discourse simultaneously. Consequently, agroecology can be understood to be well defined but narrowly interpreted to serve different functions in governance discourse. The characteristic of agroecology as a well-defined construct that can be selectively represented to suit a specific political interest is an important component of understanding why this particular paradigm has gathered the political support and traction that it has.

Resistance

The second political function that agroecology serves in global governance discourse is that of resistance. Agroecology provides the discursive frame to resist the well-documented trend

of increased corporate consolidation and control of all aspects of global food systems, discussed above. The champions of this resistance are primarily social movements and academics, as documented throughout this dissertation in the central role of advocates in upholding the political vision of agroecology. The resistance to expanding corporate food systems occurs on two levels: in terms of "culture construction" (Kinchy, 2012) and in terms of protecting existing agroecological farming systems.

Agroecology is used by advocates as a vehicle for the resistance to the trend of increased specialization in global food systems (from monocropping to the corporate consolidation of power), with a whole-food-systems approach based on diversity (both in terms of crop diversity and in terms of global systems). The counter-hegemonic discourse of agroecology can be understood in terms of culture construction. The concept of "culture construction" is an important idea that runs throughout global governance scholarship and represents the idea that "cultural imagination" shapes political reality (Managhan, 2017). Triandafyllidou (2017), quoting Spivak (1985) refers to this process as "worlding", which is the basis upon which "hegemonic discourse" operates. The essence of this line of reasoning is that the categories within which the world is organized, particularly by powerful actors, shapes the lived reality of those that are governed (Ong, 2006).

"Governance technologies" (Ong, 2006) such as "governance by numbers" (Fukuda-Parr & McNeill, 2019) shape the work of governance actors. The predominant example of this is the Sustainable Development Goals framework (Fukuda-Parr & McNeill, 2019), that acts as an organizing principle in the global governance landscape of the present. One aspect of culture construction is norm diffusion. Scholars study the diffusion of norms to gain insight into how change occurs over global governance networks (Och, 2010; Hafner-Burton & Pollack, 2002; Ruggie, 2014). With culture construction being understood as a political process, Tsing (2005) argues that globalization can be understood as "unification towards a single narrative", one which needs to be disrupted through "communication across difference" (Tsing, 2005).

Agroecology is used by advocates of the politically transformative vision of agroecology as a discursive frame that creates spaces of diversity in unifying global food systems. Narrative construction is a form of world building. The advocacy that has enabled the discourse of agroecology to enter global governance venues, documented in this dissertation, show the political will and power of the supporters of this counter-hegemonic worldview in food systems

governance. This dissertation shows how those that are classically considered "the governed" (Ong, 2006) are shaping governance discourse through civil society networks (Keck & Sikkink, 2014). The case studies presented in this research illustrate the complex governance landscape of global cooperation in the face of multiple systemic crises. I illustrate the essential governance function that non-state actors, such as civil society networks, international organizations, and academics, serve in building the discursive landscape of food systems governance.

The research presented in this dissertation details the extensive advocacy that has gone into upholding agroecology as a counter-hegemonic discourse in global governance venues. The contestation around the inclusion of the word in policy documents and discussions can be understood through the theoretical frameworks of the global governance scholarship of both Sassen (2014) and Ong (2006). Sassen refers to the systematic exclusion of ideas and people from governance as "savage sorting", in which institutions and governance systems are increasingly geared to serve corporate economic growth and those that do not serve this purpose are not included (Sassen, 2014). Ong uses the language of "states of exception" to describe the geopolitical dynamics of the present, in which strategic use of free-market ideology instead of government ("neoliberalism as exception") and exclusion of particular people and geographies from this process ("exceptions to neoliberalism") are essential governance strategies (Ong, 2006). Using the language of Ong (2006), agroecology is a vehicle to resist the governance strategies of "exceptions to neoliberalism" and thereby to resist the exclusion of voices that don't conform to free-market ideology. By upholding the political vision of agroecology, advocates resist the exclusion of diversity-based worldviews. This is a central site of contestation fought through the paradigm of agroecology in global governance venues. The tension between consolidation and diversification is a central theme that runs throughout the following chapters.

Another aspect of resistance that agroecology brings into global governance venues is the protection of existing traditional food systems. While this is not a major theme in this dissertation research, it is an important function of agroecology. Despite the corporate nature of global food systems, the majority of people in the world continue to be fed through local and territorial markets or subsistence agriculture outside of these global systems, at least to some extent (IPES-Food, 2024). These local food systems are understood to represent agroecological food systems (IPES-Food, 2024). With the neoliberal logic of continual growth and corporate expansion, global food systems threaten local food systems through this expansionist nature

(Clapp, 2021). For example, the "supermarket revolution" in South Africa significantly changed the food-getting and -growing of low-income people in the country in the last 20 years (Das Nair, 2020; Peyton et al., 2015).

In the global governance venues that are the subject of this dissertation, an early acknowledgement of agroecology as a paradigm that represents Indigenous knowledge systems can be seen in the early mentions of agroecology in the Rio Conventions. As discussed in Chapter 6 of this dissertation, early appearances of the term agroecology in the Rio Conventions presented agroecology as paradigm for Indigenous knowledge, instead of the framing of agroecology as an innovation, that would later dominate the use of the term in governance texts.

The defense of existing agroecological food systems from the expansion of corporate food systems is also reflected in the dynamic of which government department houses agroecology. Whether Global North countries, that are developed and for the most part deeply embedded in global food systems, consider agroecology as an articulation of their international development policies or for local and national agricultural policies reflects the function of agroecology as a discourse for resistance vs transformation. The interviews conducted for this research showed that there was a tendency for developed countries to use agroecology as part of their international development work, instead of considering agroecology as a priority for national agricultural policies. The countries that supported agroecology in the Committee on World Food Security negotiations, as discussed in Chapter 5, have different national strategies as part of their approach to agroecology. For example, while France is unique amongst the developed nations of the UN with an active national agroecological policy, it's approach to agroecology does not reflect that of the Latin American countries that originated the social movements support for agroecology, as discussed in Chapter 2. Switzerland, on the other hand, which was also an important supporter of agroecology in the global arena, has taken up agroecology primarily as an international development policy, with national agroecological projects meeting extensive resistance from farmer unions. Consequently, the locality in which the policy recommendations are to be enacted is deeply significant in the transformative vs protective function of the concept.

Transformation

One of the foundational premises of this dissertation is that agroecology is a leading discursive framework through which food systems transformation is being advocated for. However, considering agroecology as a paradigm for food systems transformation necessitates that the paradigm engages with corporate food systems in order to transform them. As argued above, agroecology serves a coherent and powerful political function of resistance to productivist-oriented global food systems. At the same time, there remains substantial room for growth in the articulations of agroecology in transforming existing systems. The "messy particulars" (Tsing, 2005) of the interaction between global food systems and agroecological systems requires further attention, particularly as they relate to the global scale. For example, in one interview (conducted in Sept 2022) the relationship between agroecology and global agricultural trade systems was described as "the elephant in the room" (Interview 3) of the global discourse on agroecological transitions because of the lack of attention on global trade systems in agroecological transition advocacy and research. While there remain many unanswered questions in how to reform and structure agricultural trade, there is renewed focus and political energy on this topic due to multiple compounding crises and the shifting trade relationships caused by the 2025 USA Trump presidency (Dommen et al., 2025; Giuliani & Baron, 2025). Agroecology is an important part of this discussion (Nyéléni, 2025). There is a rich history of social movements opposing exploitative global trade rules and building food sovereignty to learn from when facing contemporary challenges (McKeon, 2009). In addition, there have been unique moments in history where existing trade relationships were dramatically altered. For example, the US embargo on Cuba brought about the "Cuban agroecological transition" of the 1990s ((Machado, 2017). This dramatic shift of import-dependent agricultural systems to agroecological self-sufficiency contains many important lessons for scholarship and governance (Machado, 2017; Fernandez et al., 2018).

While there are a multitude of local and regional agroecological initiatives (see for example the Tool for Agroecology Performance Evaluation (TAPE) of the FAO), a systematic analysis of how local initiatives interact with transformation of global food systems is needed. In this sense, food systems transformation refers to the changing of existing power, ecological, and economic relationships, rather than the co-existence of multiple systems. What specifically does agroecology propose to transform some of the major systematic concerns in contemporary food

systems discussed above? Articulating the mechanisms and pathways by which agroecology might interface with global food governance problems remains a challenge. The subject areas through which these problems are confronted include land tenure, labour and sustainable farmer livelihoods, corporate concentration and consolidation, knowledge and generational renewal, and the global trade systems that displace local and territorial food systems. Each of these areas are being engaged with by scholars and governance actors. For example, there is interesting work on addressing corporate concentration in food systems through strengthening antitrust legislation (Zhu, 2024; Lloyd et al., 2024; Graddy-Lovelace & Roman-Alcalá, 2024). In addition, the topic of agroecological land-tenure is central for reconning with histories of oppression and dispossession, such as the systematic dispossession of people from their land in apartheid South Africa (Moseley, 2024), and also in Brazil and Canada (Wittman & James, 2022). However, on the level of global governance discourse, there remains a lot of room for precise articulation of the positive vision of global systems and cooperation that would enable ecological transitions.

The global discourse on agroecology as a vehicle for transformation presents limited avenues of engagement with existing systems that create and maintain inequitable and environmentally destructive food systems. The interaction of agroecological systems with corporate ones is a topic of recent academic scholarship in the context of the agrarian studies (McKay et al., 2025) and political economy (Pimbert, 2025). The concept of "transition pathways" is central to agroecological discourse (Duru et al., 2015; Fonseca et al., 2024; Gliessman, 2016), and there is substantial room for further scholarship on the interaction of agroecological transition pathways and corporate systems. While it is unrealistic to imagine that one discursive frame could present solutions to the multitude of complex challenges and systems lock-ins faced by global food systems, there is a need to articulate, with precision, visions and pathways for transformation of these systems.

There is a body of research that theorizes food systems transformation and barriers to transformation (Slater et al., 2022; Lawrence et al., 2015), however how agroecology interacts with this scholarship is an open question. For example, scholars have argued that an agroecological transformation of global governance would necessitate the shift to bottom-up governance, contingent upon local actors claiming agency in the process of food systems transformation (Anderson et al., 2019). On the other hand, researchers dismiss the either-or framing of agroecology vs productivism, arguing for a multi-pronged approach, in which

different systems coexist (Ramankutty & Dowlatabadi, 2021). However, bottom-up governance as well as the co-existence of multiple systems does not necessitate transformation of existing systems. Given that corporate global food systems are expansionist, meaning that they seek to turn ever more biological and intellectual material into corporate profit, there is a need to consider true transformation of these systems. For example, considering Clapp's (2020) description of the globalization of food, what do agroecological visions for change have to say about: state-led expansion of industrial agriculture & transnational food trade, uneven trade liberalization, the rise of transnational corporate actors in all aspects of food and agriculture, the financialization of food, and increasing impact of digital technologies throughout food systems?

The transformative potential of agroecology lies in the fact that it presents a governance framework based on multiplicity. This means that in the global context agroecological food systems transformation would necessitate a strong regulatory control that counteracts corporate concentration, such as through anti-trust legislation, to create more diversity in the economic environment of global food systems (Clapp, 2024). Regulatory control of corporate actors in global food systems opens the question of the relationship between rules-based orders and corporate actors, which is truly complex particularly given the current political situation in the USA. Higgins & Lawrence (2007) observe a trend of state retreat in agricultural governance with the 1995 World Trade Organization's Agreement on Agriculture. They articulate this observation by positing an "agri-food globalization theory", which states that "the rise of transnational corporations (TNCs) in the agribusiness industries, and global governance agencies – such as the World Trade Organization (WTO), International Monetary Fund (IMF) and World Bank - has resulted in a reconfiguration of political power in which the state is no longer the predominant actor" (Higgins & Lawrence, 2007). Driven by post-war liberal consensus and neoliberal policies, hybrid organizational institutions (such as multi-level partnerships and private regulation) emerge in places the state has vacated (Higgins & Lawrence, 2007). Scholarship by Renckens (2020), has shown that states are re-engaging with, and selectively regulating, these private regulatory initiatives. There is potential for scholarship to deepen the analysis of agroecological governance of food systems and how this relates to existing trends and structures in global systems.

Dissertation Outline

Chapter Overview

In Chapter 2, I analyze the definitional structures of agroecology and explore important events in the emergence of agroecology as a governance paradigm. I argue that, in the agroecology negotiations that are the subject of this dissertation, the definitional structures of the FAO and the HLPE were protective of the conceptual integrity of agroecology. The history of agroecology presented in this chapter details important events that preceded FAO's work on agroecology that were formative in the emergence of agroecology as a global governance paradigm.

Chapter 3 is focused on the role of the United Nations Food and Agriculture Organization in this complex dynamic. I outline the processes and factors that lead to agroecology becoming a significant part of the UN FAO's work starting in 2014, and what became of this work. I argue that the combination of crises and geopolitical affordances created an enabling environment for the advocates of agroecology to move agroecology into an organizational focal point through a multi-year program of work with lasting impact on the organization. Drawing on expert interviews and organizational documentation this chapter details the dynamics of this transition.

Chapters 4 and 5 present a comparative analysis of the HLPE and the CFS *Policy Recommendations on Agroecological and Other Innovative Approaches for Sustainable Agriculture and Food Systems that Enhance Food Security and Nutrition* and detail the political process that led from the HLPE report to the CFS policy recommendations. I trace the evolution of the work on agroecology through these global food governance venues. In Chapter 4, I answer the question of how agroecology entered the global governance venue of the CFS/HLPE and place the work of the HLPE and CFS in context of previous occurrences of agroecology in global governance discourse. Chapter 5 presents a comparative analysis of the HLPE and the CFS policy recommendations, as well as outlining the negotiations that lead to the final CFS document. Particular attention is paid to the mechanisms by which policy recommendations are influenced. I also analyze the negotiations that lead to the final CFS document. The case study of the agroecology negotiations reveals the core points of conflict in food systems governance, and associated challenges in achieving the positive visions of food systems transformation put forward by the HLPE.

Chapter 6 describes how the organization of the contentious United Nations Food Systems Summit (UNFSS) lead to the formation of a global network advocating for agroecology, the Agroecology Coalition (AC). I argue that the UNFSS is a reminder of corporate dominance in global food systems and discuss the importance of corporate and philanthropic actors in shaping the contemporary landscape of food systems as regards agroecology.

The concluding chapter summarizes the key findings and arguments of the dissertation research and situates them within the literature discussed in Chapter 1. I engage with the central argument of the dissertation, that crises, advocacy, and scientific discourse were the leading factors in bringing agroecology into global food governance. The chapter includes a discussion about how the research presented throughout the dissertation supports the central argument of the dissertation. I also argue that my research shows two sites of contestation aground agroecology: inclusion/exclusion and framing. Finally, I discuss the significance of the findings of this dissertation research and how the findings relate to the scholarship on global food systems.

Timeline of Significant Events for Analysis

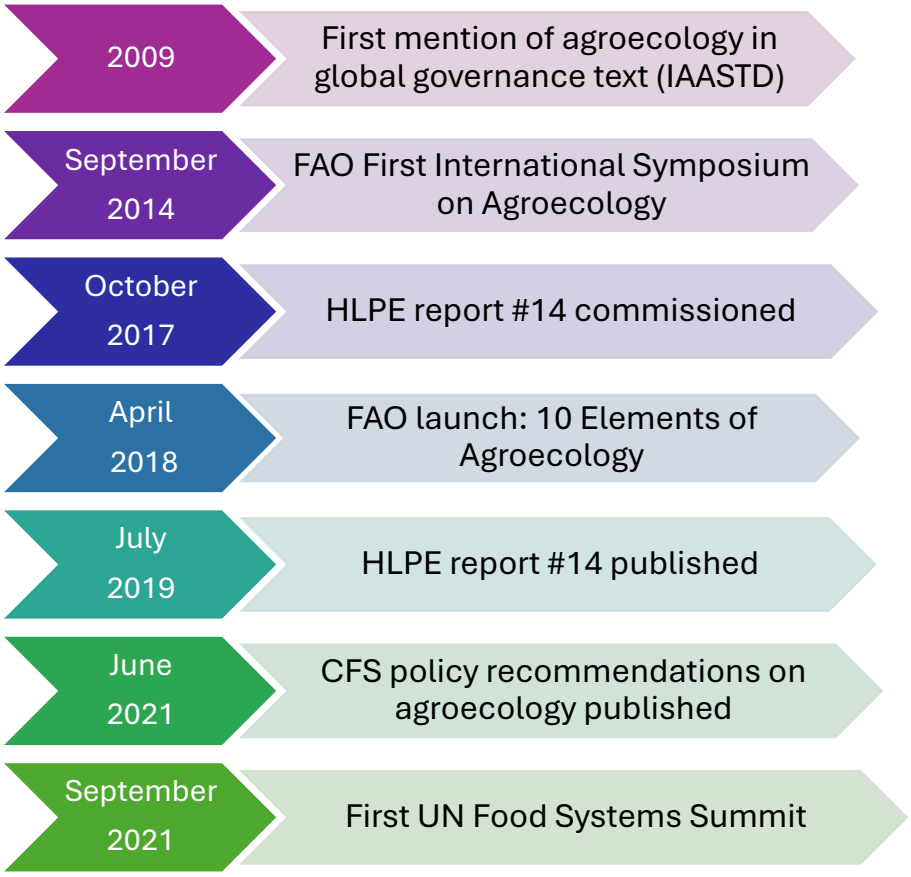


Figure 1: Timeline of Analysis

2. What is Agroecology? The History and Definition of Agroecology as a Global Governance Construct

Introduction

Agroecology occupies a central role in the discursive arena of food systems transformation. While agroecology may not be ubiquitous in policy documents, it is certainly one of the central paradigms of food systems transformation (Bezner Kerr et al., 2021; Bless et al., 2023; de Molina, 2013; Pimbert, 2018). It can be found throughout the contested landscape of ideas about the future of food systems, in which scholars see agroecology as a paradigm for addressing many of the challenges faced by food systems governance. Scholars argue that agroecology is a vehicle for achieving a sustainable transition in agriculture (Anderson et al., 2020; Kinchy, 2012), supporting the Sustainable Development Goals (FAO, 2018; Sorens et al., 2025; Thakur et al.., 2021), increasing equity and power in agricultural communities (Bezner Kerr et al., 2019; van der Ploeg, 2021), realizing food system COVID-19 pandemic recovery (Altieri & Nicholls, 2020; Loker & Francis, 2020), and generating diverse positive food systems outcomes (Bezner Kerr et al. 2021). While there is also no shortage of criticism of agroecology (Mugwanya, 2019; Jansen, 2015; Bernard & Lux, 2017; Falconnier et al., 2023), a lot of hope for positive food systems transformation is articulated through the paradigm of agroecology.

This chapter provides context for the research findings presented in this dissertation, which is an analysis of the role of agroecology in global governance forums. In this chapter I review important events in the historical emergence of agroecology as a governance paradigm and introduce the definitional structures of agroecology. The history and definition of agroecology are presented separately for analytic purposes; however, this separation is mostly theoretical as the definition and history of agroecology are deeply entwined and co-evolving aspects of the paradigm. This chapter is not organized chronologically, as the evolution of agroecology through time has been published elsewhere (HLPE, 2019; McKeon, 2021; Rosset et al., 2022; Wezel & Soldat, 2009). Instead, I this chapter is an elaboration of the literature review presented in chapter one, in that it synthesizes and presents novel data in the form of quotes from interviews, about the process of constructing agroecology as a paradigm before FAO and the CFS began working on agroecology. I focus on providing the theoretical backdrop for understanding the

early emergence of agroecology in global governance venues. I explore the confluence of crises, advocates, and science in the work on agroecology before FAO formally launched its work on agroecology in the 2014 First International Symposium on Agroecology. In the history section, I start with an analysis of the first mention of agroecology in a global governance text, the IAASTD report published in 2009. The IAASTD report was published in response to the mounting awareness of compounding crises in the environmental and social systems that are essential to agricultural systems. Consequently, this analysis is presented in the "crises" section. Under the heading "advocates" I present the early work of academics and social movements in defining and constructing agroecology. The "science" section introduces the significance of the scientific aspects of agroecology in understanding the paradigm fully. In the definition part of this chapter, I present a comparative analysis of the leading definitions of agroecology. The purpose of presenting these definitions is for the reader to fully understand the paradigm and how it has been articulated by different actor groups. This chapter sets out to answer the question "what is agroecology?" for the reader to fully engage with the research materials and analysis presented in the case studies.

I provide an overview of the definitional structures of agroecology and the questions that they raise. I argue that, in the agroecology negotiations that are the subject of this dissertation, the definitional structures of the FAO and the HLPE were protective of the conceptual integrity of agroecology. While there are extensive and complex debates about the definition of agroecology, in the global governance negotiations the contestation around agroecology is twofold: there is contestation about the inclusion / exclusion of the word "agroecology" in governance texts, as discussed in Chapter 5; and there is contestation in the framing of "agroecology" as either a comprehensive paradigm as articulated by the 10 Elements and 13 Principles below, or as a subset of food systems innovations. The "library object" (Trompette & Vinck, 2009) nature of agroecology, discussed in the introduction, opens the definitional structure to selective representation in discourse, with actors not always engaging with all 10 Element or 13 Principles.

The history of agroecology presented in this chapter details important events that preceded FAO's work on agroecology that were formative in the emergence of agroecology as a global governance paradigm. I organize these events according to the guiding structure of crises, advocates, and science that runs throughout this dissertation. In addition, I argue that the first

international report to mention agroecology, the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) report, shows interesting parallels to the work of the CFS on agroecology, specifically in terms of the innovation paradigm. In addition, I outline the definitional structures of agroecology and how they relate to each other.

History

The history and definition of agroecology are co-constructed. The definitional structures of agroecology have co-evolved with the history of the term. For the sake of analytic clarity, I am presenting the history and definition of agroecology in two sections in this chapter, even though they are deeply entwined. The co-construction of the history and definition of agroecology is evident in the attribution of agroecology's origin. There is substantial variation amongst scholars' periodization of agroecology, with the origins of agroecology being located from the 2nd Century BC (Caporali, 2015) to the 1980s (Lowrance et al., 1984 as per Wezel et al., 2009). Within the literature that dates the origins of agroecology in recent history, there is also substantial variation with scholars locating the beginnings of agroecology in the late 1920s (Wezel et al., 2009), the 1940s (Pimbert, 2018), the 1970s (Ikerd, 2009), and the 1980s (Gómez et al., 2012). The differences in periodization can be partially explained by variations in the focus and the breadth of scholars' definition of agroecology. For example, Gómez (2012) conceptualizes agroecology as a modern social movement and therefore locates the origins of agroecology in the 1980s. Caporali (2015), on the other hand, traces the epistemological roots of agroecology to the 2nd Century BC and to the Latin agricultural tradition of Cato. Other scholars understand agroecology as synonymous with Indigenous food cultures and therefore locate the origins of agroecology in the origins of Indigenous agricultural practices (Price et al., 2022; GAFF, 2021).

In making sense of these disparate histories, a leading paradigm for framing the history of agroecology is that of Wezel et al. (2009) and Wezel & Soldat (2009). Wezel et al. (2009) famously defined agriculture as a science, practice, and a social movement. This characterization is reflected in the author's model of the history of agroecology. The model, pictured below, illustrates the science, practice and social movement of agroecology, each with distinct but entwined histories. Wezel & Soldat (2009) organize the academic publications on agroecology

on a timeline, showing the broadening definitional scope of agroecology from a field-level science to a social movement, as represented by the graph below:

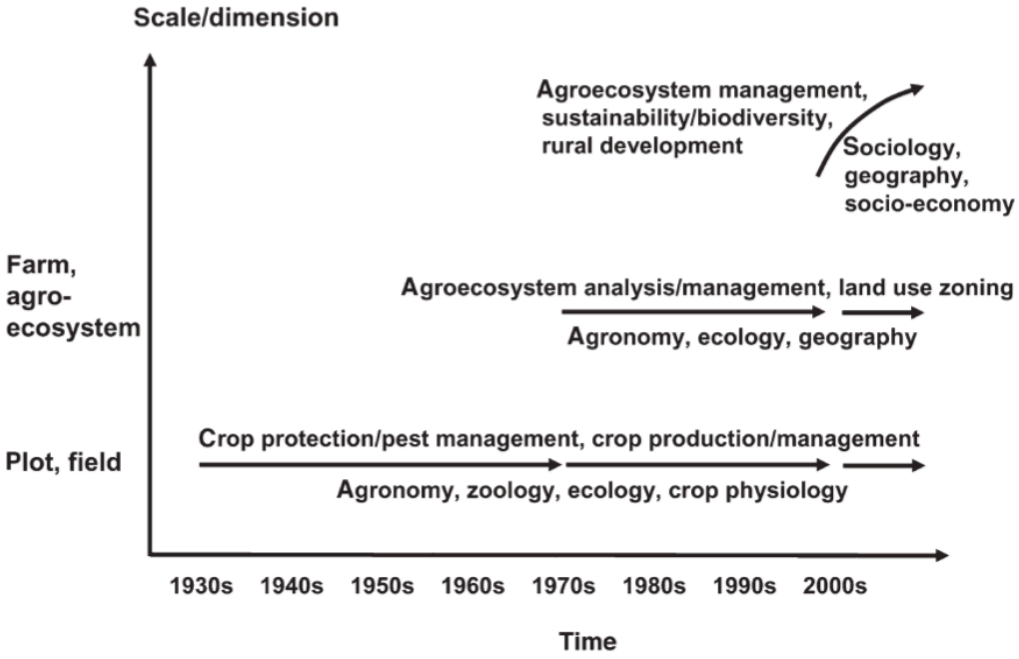


Figure 2: History of Agroecology (Wezel & Soldat, 2009)

According to Wezel & Soldat's model, agroecology had tentative beginnings in German and American scholarly explorations in the sciences of ecology in the 1920s, followed by a long period of publication silence, and a revival in publications that has steadily grown in number and scope since the 1970s (Wezel & Soldat, 2009). This periodization of the history and origin of agroecology was taken up, with some additions, by the High-Level Panel of Experts of the CFS (HLPE, 2019). The interest for ecologically aligned agricultural practices can be understood in relation to the increased mechanization and mono-cropping of agriculture, with associated impacts on food systems, that arose in the USA in the 1920s and in the wake of World War One (Benedict, 1950). The trend for mechanization intensified internationally with the Green Revolution (Bellwood-Howard & Ripoll, 2020). How social movements began claiming the term agroecology for themselves, particularly in South America, is a rich and interesting history (Intriago et al., 2017; Pimbert, 2018; Rosset et al., 2022). These histories are told and theorised elsewhere in detail, and it is beyond the scope of this brief overview to delve deeply into them

(HLPE, 2019; McKeon, 2021; Rosset et al., 2022; Wezel & Soldat, 2009; Caporali, 2015; Rivera-Núñez et al., 2020).

The histories of agroecology are as diverse as the definitions of the term. The subject of this dissertation is the emergence of agroecology into global governance discourse. How and why leading governance forums such as the FAO and CFS brought agroecology into the focal point of their work will be detailed in later chapters. The formative roles of crises, advocates, and science that enabled the emergence of agroecology into global governance venues were also present in the history of agroecology preceding the FAO's 2014 work on agroecology. The context that made the later work of the FAO and the CFS on agroecology possible can also be understood in terms of the three organizing principles emphasized in this thesis: crises, advocates, and science.

Crises

Towards the turn of the century, escalating social and environmental problems gave rise to two important events that are relevant in the history of agroecology: the 1992 Rio Earth Summit and the 2009 IAASTD report. As early warning signs were starting to accumulate that earth's systems and human development were facing major challenges, there followed efforts to address these problems. The early warning signs of the turn of the century have evolved into the complex state of polycrises that we are in at present, as discussed in the introduction chapter of this dissertation. These two instances of global convening are significant in setting the stage for the work that was to follow, and consequently for understanding the circumstances that gave rise to agroecology as a significant paradigm for social movements.

The 1992 Rio Earth Summit was the largest environmental summit of its time. It consisted of both the official UN gathering, as well as the Global Forum, which was a parallel gathering of Non-Government Organizations (Lanchberry, 1996; Vaillancourt, 1993). While the 1992 Rio Earth summit has been widely criticized, it is also understood to have shaped the modern sustainable development agenda (Lanchberry, 1996; Monteduro et al., 2015). The importance of the Rio Convention was also noted in interviews for this research. Specifically, Interview 20, a FAO staff member working on agroecology projects, emphasized the importance of the 1992 Rio Convention as a formative and significant international coming-together of social and environmental movements, with far-reaching impact on the vision for global

development work. During this meeting the groundwork for a political vision that combined social and environmental outcomes was established, as articulated by Interview 20:

> In 1992 there was the Rio Summit in Brazil. It was very important. It was really something that changed our minds, as social and rural workers, because it showed that the environmental and ecological topics were not only an urban thing, but they were also something related to food systems. So, we the people that were working in rural areas, as agronomists' technical workers, were involved in this because of agrochemicals, because of the deforestation, because of the losses of biodiversity and soil. (Interview 20)

This quote illustrates clearly both the fact that the early manifestations of problems in global food systems (agrochemicals, deforestation, biodiversity loss, soil erosion) were a driving force for this gathering, as well as the significance of the Rio Convention in bringing together environmental and social movements over the problems in food systems. With the unification of social and environmental movements on the international stage at Rio in 1992, agroecology emerged as the paradigm under which social movements would bring an alternative vision for food systems forward (Montenegro de Wit & Iles, 2021, Pimbert, 2018).

Following the 1992 Rio Convention, a Sustainable Development Summit held in South Africa in 2002 gave rise to the IAASTD report (IAASTD, 2009). The 11-million-dollar project was commissioned in 2002, inspired by global assessments such as the IPCC (IAASTD, 2009; Labbouz & Treyer, 2010). It was co-sponsored by UN agencies[3], the World Bank, the Global Environment Facility, and individual UN countries (including Australia, Canada, the European Commission, France, Ireland, Sweden, Switzerland, and the United Kingdom). Once published, the report was approved by 58 countries, with the notable exception of three (Australia, Canada, and the United State of America). The purpose of the report was to assess the global state of knowledge on agriculture and development in light of global food systems crises. Specifically, the report was to assess the role of "agricultural knowledge, science and technology (AKST) in enhancing production, reducing hunger and poverty, improving rural livelihoods and facilitating environmentally, socially and economically sustainable development" (Feldman & Biggs, 2012).

[3] UN Agencies involved in the IAASTD report include the Food and Agriculture Organization (FAO), United Nations Environment Programme (UNEP), United Nations Educational, Scientific and Cultural Organization (UNECO), United Nations Development Programme (UNDP), World Health Organization (WHO)

Consequently, this report also was an early response to the systemic issues that have led to the present state of crises in global food and environmental systems.

The IAASTD report was the first report of its kind, in the sense that it was the product of international intellectual co-operation considering escalating environmental and social problems that created an analysis of food security and nutrition for a growing global population beyond single-minded focus on production (Feldman & Biggs, 2012; Ishii-Eiteman & Li Ching, 2008). It is relevant in the context of research, as it also contains the first mention of agroecology in a global governance text of this kind. Consequently, it is evidence for the evolution of the importance of agroecology as a significant paradigm for food systems transformations.

Over 400 authors submitted contributions to the report, coordinated by two co-chairs. Given the historic significance of this report there has been extensive scholarship on the creation and implication of this report (Feldman & Biggs, 2012; Ishii-Eiteman & Li Ching, 2008; Scoones, 2009). According to Feldman & Biggs (2012) the geo-political events that contributed to the commissioning of the IAASTD work included the development of biofuels, increased global populations, the co-occurrence of increased production and increased hunger, the rise of public-private partnerships in the agri-food sector, increased numbers of epidemics, and contestation around genetically modified (GM) crops. These topics continue to be major sources of contestation in global food systems transformation, as negotiated through agroecology, analyzed in this dissertation. To illustrate the fact that the IAASTD report was commissioned as a response to early signs of crises in global food systems, I present a quote from one of the co-chairs of the report, Hans Herren, who I interviewed for this research:

> It [the IAASTD Report] was commissioned during one of the summits held in South Africa. And actually, the decision originally was made in 2002 when there was the Sustainable Development Summit, and the fact that it was such a summit, not anything that had to do with agriculture and food, but the environment, that the governments and UN agencies called for a report on agriculture, because already back then, we had issues with the industrial agriculture model, which showed already its weaknesses, and its problematic, given that there has been a crisis, or food crisis just before and clearly, the system as it was at a time wasn't able to cope with the problems" (Hans Herren, Co-Chair of the IAASTD Report).

Consequently, the environmental impact of global food systems and industrial agricultural methods were causing global governance actors to bring together expert opinions in considering governance responses to these crises. Already at that point the idea of agroecology was a part of the discourse of possible solutions to food systems crises. The fact that the IAASTD report was the first significant instance of agroecology entering global governance discourse was also corroborated by another interviewee. Emile Frison, co-founder of the International Panel of Experts on Sustainable Food Systems (IPES-Food) and international expert on agroecology and agricultural biodiversity, reflected on the IAASTD report by stating:

> I think that [IAASTD] was probably the first international process that really put agroecology forward. Unfortunately, it did not have the consequences that we would have hoped, but that's when it became much more visible already in the international arena. (Emile Frison, IPES-Food)

The fact that agroecology was part of the global solution search space from the start is interesting, especially as it was not a well-defined paradigm at the time. According to Hans Herren, the introduction of agroecology as an alternative food system paradigm was an important and novel occurrence in the report:

> So, I think what we came up with, that line "business as usual, is not an option", I think that was a very important message. The other one was that we said at that time, that we needed to transform the food system to agroecological practices, and that was the big thing at the time. Although agroecology, we didn't invent it. It was something that came out of Latin America, Central America in particular. But we all felt that, all the scientists felt that, this is a way to deal with the major issues we're going to have to grapple with in the food system. (Hans Herren, Co-Chair of the IAASTD Report)

This quote reflects the early discussions about using the word agroecology in governance texts. It illustrates both the significance of the rural social movements in championing the paradigm, alongside the interest of scientific and policy actors is using the word in articulating positive visions of food systems in light of mounting challenges. Interestingly, as with the later CFS's work on agroecology, innovation was an important part of the IAASTD report, which establishes a deep connection between agroecology and innovation in global governance texts. Another interesting parallel between the IAASTD report and that of the CFS was the involvement in civil society and other non-state actors in the process. Given that the IAASTD report was initiated

before the reform of the CFS, the inclusion of civil society in the creation of a global report was novel. Requesting the input of civil society in scientific reports was not standard procedure. By bringing civil society and other stakeholders to the table in the development of this report, the organizers created space for a diversity of perspectives. Emile Frison, of IPES-Food, spoke to this point in answering my question of what brought the word "agroecology" into the IAASTD report as follows:

> Essentially civil society organizations and some researchers as well, but I think probably, the majority of that [the mention of agroecology in the IAASTD report] is attributable to civil society being one of the stakeholders in the IAASTD process. This was probably one of the first opportunities also, for such an international also an intergovernmental process to be inclusive of a lot of the civil society voices of farmer organizations and civil society organizations. That was really the first time. Certainly, that is a process that involves the different stakeholders, civil society, organizations, and the private sector all coming together. (Emile Frison, IPES-Food)

Consequently, the IAASTD report can be understood as the first instance of civil society advocating for agroecology as the discursive frame for food systems transformation in the global governance of food.

A few key countries did not approve the IAASTD, notably Australia, Canada, and the USA. The lack of support from these countries for the report was part of the reason the report did not gain much political traction. In addition, private sector actors that had initially been part of the process withdrew before the report was finalized (Feldman & Biggs, 2012). Feldman & Biggs (2012) argue that the IAASTD report did not find the political support needed due to its analysis steering away from the productivist paradigm as solution and instead focusing on a broader connection between food security and farmer livelihoods. The IAASTD report has been described as having an "activist analytic framework" (Labbouz & Treyer, 2010), indicative of the unconventional framing of the problems of global food systems of the time. As with the CFS process also, there were multiple compounding contentious issues at the core of the report: the focus on rural livelihoods, the role of genetically modified organisms (GMOs) and biotechnology in food systems solutions, the importance of productivist solutionism, and trade and agricultural inputs, amongst others (Feldman & Biggs, 2012; Hilbeck, 2008; Scoons, 2009). The co-chair of the IAASTD report, Hans Herren, reflected on the failure of all parties to remain

invested in the report in our interview: “What's unfortunate about the report at the very end is that the private sector called it quits […] because they couldn't agree on the criticism about the Green Revolution in particular" (Hans Herren, Co-Chair of the IAASTD Report). Consequently, disagreement on key topics, that remain contentious to date, such as the use of agricultural technologies and chemicals as well as corporate influence on policy processes, were defining in the lack of success of the IAASTD report. The report articulated the negative impacts of Green Revolution technologies and initiatives. While the actors that were invested in these technologies were not able to present a constructive alternative, they withdrew their support of the report due to the criticisms of technologies that have financial and political importance. In addition to Green Revolution technologies, there were other topics of dispute in the report. Emile Frison, in his reflection of the withdrawal of support for the IAASTD report, also highlighted the importance of trade as a divisive topic:

> Well, there were several governments that just didn't want to, although they were parts of the process, they didn't want to sign off on the final documents because they felt the report was too critical of international trade and of industrial agriculture. And the US, the UK, and a number of other governments withdrew, even the CGIAR[4] withdrew from the process. (Emile Frison, IPES-Food)

This quote illustrates the long tradition of countries, such as the USA, defending industrial agricultural food systems and free trade agreements in the search for solutions to compounding problems in food systems. The lack of agreement on the topics of trade and agricultural production methods, mentioned by Emile Frison in the above quote, also were cause for the drawn-out negotiation processes of the CFS policy recommendations on agroecology discussed in Chapter 5 of this dissertation.

The IAASTD report is important in understanding the conditions that led global governance actors to bring agroecology forward as a paradigm for food systems change. Already in the early 2000s mounting crises brought the international community together to articulate alternative development paradigms and other ways of structuring food systems. This work would later be taken up by the Committee on World Food Security and its science-policy interface, the

[4] CGIAR, Consultative Group on International Agricultural Research, is an international organization that convenes research on global food security.

High Level Panel of Experts, through the publication of policy recommendations on the topic of agroecology (HLPE, 2019; CFS, 2021). The IAASTD report has some interesting parallels with the HLPE and CFS work on agroecology, as will be discussed in detail in Chapter 4 and 5 of this dissertation. However, the IAASTD report was not able to gain the political traction that the HLPE Report on Agroecology was able to secure. The lack of political traction has been attributed both to the influence of the private sector actors on the process, and the impact that the position of the private sector on other actors, such as the World Bank (Feldmann & Biggs, 2012). For example, the opposition of CropLife, an international trade association representing the world's largest agrichemical and agricultural biotechnology companies, to the IAASTD report was seen as particularly impactful in its demise (Feldmann & Biggs, 2012).

In addition, the IAASTD report was not situated in political and institutional processes that are designed to steward engagement with and longevity of report findings. The inability of the IAASTD report to withstand the political pressure of financial interests in Green Revolution technologies shows the importance of a permanent international committee, such as the CFS, in stewarding ideas and discussions on food systems transformation. The IAASTD report was published outside of such a structure, and there were no channels through with to bring the work forward (Feldman & Biggs, 2012). The Food and Agriculture Organization also did not support the IAASTD report. Hans Herren remembers there being an active aversion to the report in the work of FAO:

> So, we came up with a couple of major statements, and that led to the fact that the World Bank became very critical, and in particular, also FAO, I mean, FAO, who was the institution of the UN who was supposed to be the biggest backer and supporter of it actually, also pulled out. And what was very saddening is that they never officially presented that report to their member countries in Rome. And I was personally actually told not to mention this IAASTD report whenever I gave talks at FAO. (Hans Herren, Co-Chair of the IAASTD Report)

This quote highlights the institutional conservatism of FAO, in the sense of being a supporter of Green Revolution approaches to hunger alleviation, and there being institutional resistance to paradigms and perspectives that stand in opposition to the Green Revolution approach. This is a well-documented fact about the work of FAO, as discussed in Chapter 3 of this dissertation. This

early opposition to different perspectives articulated through the IAASTD report makes the later uptake of agroecology in the work of FAO, see Chapter 3, even more remarkable.

Despite the official lack of support for the IAASTD report, the program evaluation documents of FAO show the repeated identification of the need to establish a formal definition of agroecology as early as 2007 (FAO, 2007). As described in the Chapter 3 of this dissertation, while the organization did not publicly endorse agroecology or associated development ideas, staff in the organization were beginning to notice agroecology as an important paradigm. In 2012 the leadership of FAO changed, and José Graziano da Silva, a Brazilian agronomist and former staff of Lula da Silva who spearheaded the Brazilian hunger alleviation campaign Fome Zero, became the Director General of FAO. The leadership of Da Silva changed the organizational focus as regards agroecology, and the work of defining agroecology and formally bringing it into the programs of FAO was begun, as detailed in Chapter 3. Tracing the history of agroecology in global governance discourse shows that the tensions present in the later work of the CFS on the topic were present from the start, as illustrated by the IAASTD report. While there were earlier attempts to bring agroecology into global governance discourse, the lack of support from key actors and the lack of formal governance structures to steward the work caused it to peter out until agroecology was formally taken up by the FAO in 2014, as discussed in Chapter 3.

Advocates

The early work on agroecology on the global stage, that pre-dated the IAASTD report, was championed primarily by social movements and academics. The importance of civil servants, FAO staff, and other political actors increased as agroecology entered more formal governance spaces as detailed in following chapters. Before FAO began working on defining agroecology, the early emergence of agroecology into global governance forums was made possible by social movements and academics. In this section I detail the significance of the work that academics and social movements invested in constructing agroecology as a paradigm, which made it possible for other advocates to use agroecology in global governance discourses at a later stage. Here I reference the scholarship that has documented the organizing of social movements around agroecology. I also introduce key scholars in early academic publications on agroecology, and how this work was foundational for later advocacy for the political vision of agroecology in global governance discourse.

Social movements, such as La Via Campesina, championed agroecology as a paradigm for food systems change on the global stage, starting with the 1992 Rio Convention (Montenegro de Wit & Iles, 2021, Pimbert, 2018), and re-affirmed with the Second Nyéléni Declaration in 2015 (Nyéléni, 2015). The history of agroecology in social movements has been told and recorded by many people (Rosset et al., 2022; Guzmán & Martinez-Alier, 2006; Rosset & Martínez-Torres, 2012; Meek, 2014). Within that literature, Rosset et al. (2022) argue that the civil society groups CLOC[5], LVC[6] and SOCLA[7] were instrumental in bringing agroecology to FAO, specifically advocating for FAO "to take seriously the politicized Latin American vision of agroecology" (Rosset et al., 2022). Consequently, it is a matter of record that there was sustained advocacy for political agroecology from civil society in global governance.

The tensions over bringing agroecology into global governance venues is deeply entangled with the history of defining agroecology. Throughout this process, social movements have been the leading actors in championing agroecology as a paradigm for food systems change. According to Peter Rosset, who is a leading scholar of agroecology and social movements based at the Ecosur Advanced Studies Institute in Mexico and a former staff of La Via Campesina, this advocacy went as far back as the 1990s through the CGIAR's NGO Committee[8] advocating for agroecology to be taken seriously as a paradigm. He discussed this history with me in the context of the interview for this research project as follows:

> The point is, we would go to annual meetings of the CGIAR system, and we would go to some special meetings on consultation about research priorities and things like that. And we sounded like a broken record, and they occasionally would give lip service, but mostly were not very interested to hear about it. It's funny because most of those institutions, now you'll find something about agroecology on their website or their program or whatever. (Peter Rosset, Ecosur Advanced Studies Institute Mexico)

This recollection from Peter Rosset, who is both an academic and was very supportive of civil society advocacy of agroecology, illustrates the persistence and sustained resistance that was part

[5] CLOC: The Latin American Coordination of Rural Organizations
[6] LVC: La Via Campesina
[7] SOCLA: The Latin American Scientific Society of Agroecology

[8] CGIAR: Consultative Group for International Agricultural Research, which coordinates funders and research on agricultural development

of the process of bringing agroecology into discursive venues outside of civil society and academia since the 1990s.

While there is substantial overlap between the two categories of civil society and academic actors, it is important to also state that academics have played an essential role in bringing agroecology into global governance venues. Wezel & Soldat (2009) locate the first academic publication on agroecology to the late 1920s, specifically to a publication by agronomist named Basil M. Bensin titled *Agroecological Characteristics Description and Classification of the Local Corn Varieties Chorotypes* (Bensin, 1928). However, it was the later work of academics in the 1970s and 1980s that established agroecology as a field of scientific enquiry. In particular, the work of Miguel Altieri and Stephen Gliessman was referenced throughout my interviews with the advocates of agroecology in global governance forums, as being particularly influential.

Altieri first published his seminal book *Agroecology: The Science of Sustainable Agriculture* in 1987, which was republished in 1995 and 2018 (Altieri, 2018). He has since published over 200 papers, books, and articles on the topic of agroecology, and is widely understood to be one of the founders of the scholarly discipline on agroecology. In 1995, Altieri published one of the first definitional structures of agroecology in his textbook on agroecology, in the form of the five principles of agroecology (Altieri, 1995). In addition to publications, Altieri engaged in important advocacy work that brought agroecology into global governance discourse. Peter Rosset locates Altieri's work as central in the rise of agroecology as a significant paradigm:

> I think one person whose role was very important in all of this is Miguel Altieri, the Latin American agroecologist, because for example, he was the convener of the NGO committee in the CGIAR system. He was the main voice arguing all the time at the level of global governance, and not being listened to all the time, but also through his publications and being one of the parents of the current agroecology boom. He still managed, to some extent, to set the terms of the debate, and as a scientist, he wasn't particularly open to the more political and social concerns of social movements. So, the fact that on the scientific side, he was a very, perhaps the most important player in all of this, because he also was key in an earlier network of Latin American NGOs prior to the

> peasant movement taking up agroecology. It was an NGO consortium that he was part of the coordination of that was actually the platform for pressuring FAO and CGIAR and these other institutions, prior to La Via Campesina coming together, and then becoming the big muscle in terms of civil society pressure. So, he's, the key figure in all of it and all the different stages of this process. (Peter Rosset, Ecosur Advanced Studies Institute Mexico)

I have reproduced this lengthy quote from interview data in full here because it illustrates how the work of advocacy for agroecology has been upheld by key individuals throughout multiple venues. What is particularly interesting from the quote is that scholars such as Altieri advocated for agroecology as scientists (specifically ecologists), thereby supporting the argument that science plays a central role in understanding the uptake of agroecology in global governance. The quote from Peter Rosset also describes the importance of the work of scientists and academics in social movement advocacy for agroecology.

Stephen Gliessman is another very important academic that has been described as one of the founders of agroecology. Gliessman has been an active academic scholar of agroecology since the 1970s. He has established research institutions in the field and published over 100 books and papers on agroecology. Of his academic contributions, the five levels of food systems change through agroecology were referenced throughout my interviews as being particularly influential amongst FAO staff in guiding their thinking about agroecology (Gliessman, 2015; Gliessman, 2016). The five levels are widely cited and were also incorporated by the HLPE in their historical and definitional understanding of agroecology (HLPE, 2019). Gliessman's five levels of food systems change are represented in the image below:

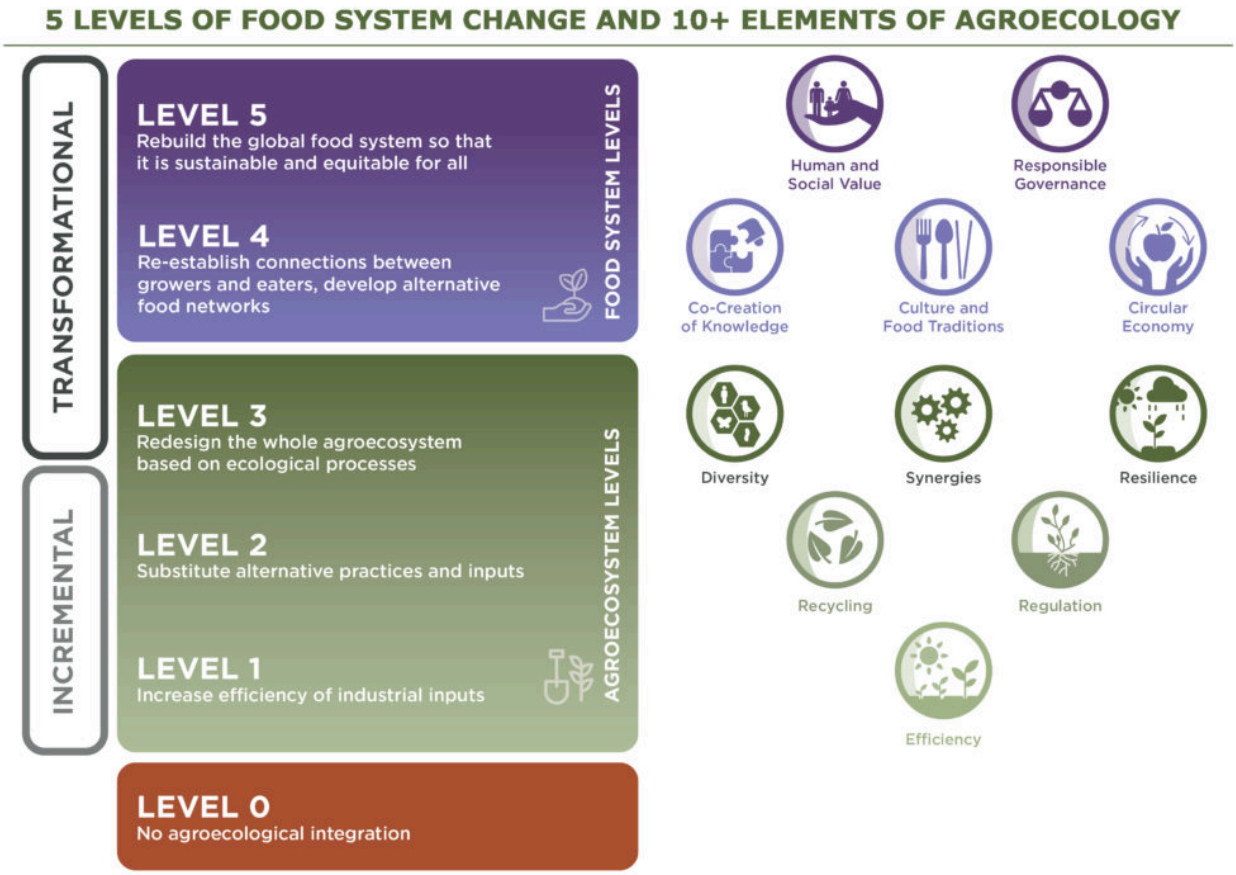


Figure 3: Five Levels of Food Systems Change & Agroecology (Biovision, 2019)

The five levels are a classification system that articulates the impacts of different agroecological interventions in the food systems in terms of their system-wide impact. The framework seeks to answer the question "what are the steps that must be taken to transform food systems toward the ultimate goal of sustainability?" (Gliessman, 2016). The model is not without criticism (Gallardo-López et al., 2018), however it is important to mention that it was greatly influential in FAO staff's work on agroecology. The impact of academic scholarship on FAO staff is articulated by FAO staff in the introduction of the 10 Elements: "The 10 Elements of Agroecology were developed through a synthesis process. They are based on the seminal scientific literature on agroecology – in particular Altieri's (1995) five principles of agroecology and Gliessman's (2015) five levels of agroecological transitions" (FAO, 2018). In addition to his academic publications, I was told in interviews that Gliessman was also instrumental as an

informal mentor to FAO staff in their work before and during the development of the 10 Elements of Agroecology.

In addition to Altieri and Gliessman there have been many influential scholars to champion agroecology both in the academy and outside (Holt-Giménez & Altieri, 2013; Gliessman et al., 2023; Rosset & Altieri, 1997; Wezel et al., 2009;). While this is not a comprehensive list of all the people that have shaped our early understanding of agroecology, the publications discussed above were particularly influential. It is important to note that social movements and academics set the groundwork for the work on agroecology in the global governance venues that are the case studies of this dissertation. Further discussions on central advocacy groups and individuals follow throughout the dissertation. Without the work and advocacy from academics and social movements agroecology would not have been available as a coherent articulation of alternative and sustainable food systems, that made its way into global governance discourse, as outlined in this dissertation.

Science

The third factor that created the conditions for agroecology to be taken up as a global governance discourse, alongside the international convening that arose out of food systems crises and the long history of advocates building agroecology as a viable alternative paradigm, was the scientific nature and discourse of agroecology. While the western sciences of ecology and agronomy were formative in constructing agroecology as a legitimate paradigm (Wezel et al., 2009), science is also used to challenge the legitimacy of agroecology. My research shows a three-fold complexity to the interaction of scientific discourse and the political function of agroecology. First, there is the epistemic authority of agroecology as a science, which is a defining factor in the uptake of agroecology in global governance venues. Second, there is the co-optation of the political vision of agroecology through the focus on the scientific aspects of agroecology to the exclusion of the political aspects. Third, there is the attempted erasure of agroecology in governance texts through claims of agroecology not being scientific.

The “epistemic authority” of scientific discourse in governance is present in agroecology, as the western sciences of ecology and agronomy are central to the paradigm (Wezel et al., 2009; Haas, 1992). The scientific discipline of ecology established agroecology as a respectable and serious term, as evidenced by agroecology being defined as a “science, movement, and practice”

(Wezel et al., 2009). The connection of agroecology with the western sciences created the legitimacy necessary for agroecology to gain entrance into governance discourse, as discussed in the definition section of this Chapter. For example, Chapter 3 of this dissertation details how the natural sciences streams of FAO were the entry points of agroecology in this institution.

At the same time, the scientific roots of agroecology also create complexities in the debate about the co-optation and political dismissal of the paradigm (Altieri & Holt-Giménez, 2016; Anderson et al., 2020). There exists an unresolved tension between the strictly scientific and the political visions of agroecology, with scientific discourse lending legitimacy that opens doors for the political vision of agroecology. While at the same time, the implementation of agroecology, if narrowly focused on the scientific aspects of agroecology, is seen as co-opting the political visions of agroecology (Anderson & Maughan, 2021; Giraldo, & Rosset, 2018).

A third complexity in the scientific aspect of agroecology is that science is also used as a vehicle to dismiss agroecology. For example, in the CFS negotiations analysed in Chapter 5 the claim that agroecology was not scientific enough was a strategy that was used to try and erase agroecology from the policy texts. My research data showed this trend clearly, as articulated by Interview 38:

> The way the people that were against agroecology were trying to undermine it was to say it's not scientific, that was their tactic. It's not scientific, which also in a way undermined the HLPE, which in turn, they're undermining the CFS itself by making that argument. (Interview 38)

The attempted delegitimization of multi-lateralism in food governance addressed in this quote is discussed in Chapter 6 of this dissertation, in the case study of the UNFSS. The statement quoted above is significant as it illustrates one of the three defining interactions of agroecology with scientific discourse. The legitimacy that comes with scientific knowledge has enabled agroecology to enter the global governance venues and has also served a protective function. However, agroecology stands in a complex relationship with scientific discourse, particularly when it comes to implementing the political visions of agroecology. The complex and important relationship between agroecology and western sciences is a theme that is present throughout the data of this research.

Definition

The history and definition of agroecology are co-constructs, separated here for analytic purposes. Agroecology is widely understood to be "a science, a movement and a practice" as articulated in the seminal work of Wezel et al. (2009) on the topic of defining agroecology. With this three-fold articulation of agroecology, Wezel et al (2009) set a foundational understanding of agroecology that continues to be used, in which agroecology is understood as a scientific discipline, a social movement, and an agricultural practice. While describing agroecology as a science, movement and practice is both accurate and widely used, the definition of agroecology in global governance discourse has been a long and nuanced process. Throughout the historic evolution of agroecology in governance discourse, the project of defining the term was an important part of the discourse. Before the publication of the IAASTD report in 2009, and before there was political will in FAO to engage with agroecology, staff of FAO identified the need to define the term (FAO, 2007). In addition, early academic texts were also focused on defining agroecology (Gliessman et al., 1998). Below I present an analysis of the definitional work on agroecology and its implications for the debate about co-optation of the term.

Definitions

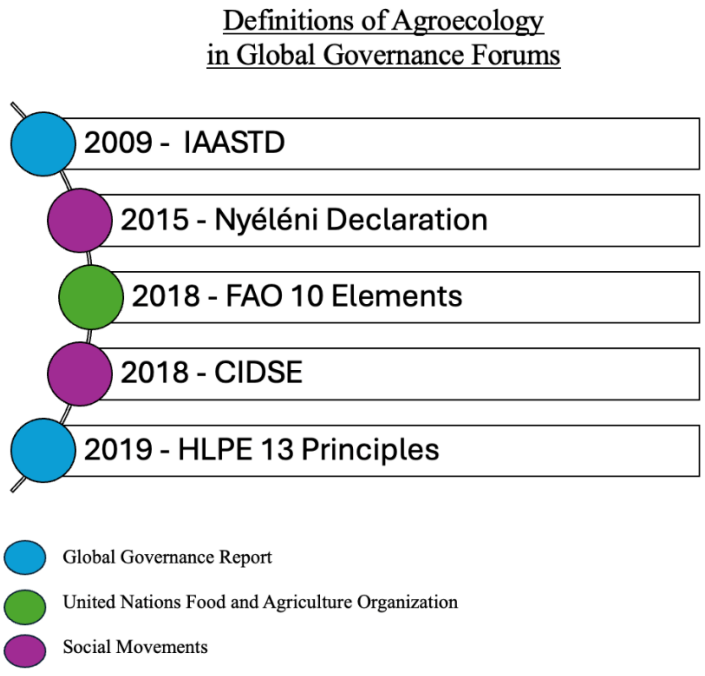


Figure 4: Definitions of Agroecology in Global Governance Forums

Turning to the contents of the definitional structures of agroecology, what are the defining features of this concept? In a global governance context, the first mention and definition of agroecology in an internationally coordinated report was that of IAASTD (2009). The IAASTD report was the first report of its kind, arising out of the developing crisis in global food systems. Over 400 authors submitted contributions to the report, coordinated by two co-chairs. The purpose of the report was to assess the global state of knowledge on agriculture and development in light of global food systems crises. In the IAASTD report, agroecology is mentioned several times, and the report mentions following definition of agroecology:

> Agroecology: The science of applying ecological concepts and principles to the design and management of sustainable agroecosystems. It includes the study of the ecological processes in farming systems and processes such as: nutrient cycling, carbon cycling/sequestration, water cycling, food chains within and between trophic groups (microbes to top predators), lifecycles, herbivore/predator/prey/host interactions, pollination, etc. Agroecological functions are generally maximized when there is high species diversity/perennial forest-like habitats. (IAASTD, 2009)

This definition of agroecology is the first to appear in a global governance text, and illustrates both the scientific roots of agroecology, and how the subsequent definitions of agroecology shaped it to be a holistic paradigm. The circumstances surrounding the IAASTD report have been discussed above, in the history section of this chapter. It is important to note that the IAASTD definition of agroecology was focused to agroecology as a production method and did not include the social movement and political dimensions of later definitions.

Following the publication of the IAASTD report, the FAO began in 2014 with the international consultation process that would lead to the 2018 publication of the 10 Elements of Agroecology. Shortly after FAO began this process, the next major international definition was put forth in the Nyéléni Declaration, published in 2015. This is arguably the moment that social movements claimed agroecology in global governance discourse. Specifically, the Nyéléni Declaration states that “Agroecology is a key element in the construction of Food Sovereignty” and vows to promote and defend it from co-optation (Nyéléni, 2015). The Nyéléni Declaration was the result of an International Forum for Agroecology held in February 2015 in Nyéléni, Mali. Delegates representing a broad array of food systems actors, referred to throughout this dissertation as “civil society” or “social movements”, included “organizations and international

movements of small-scale food producers and consumers, including peasants, Indigenous peoples, communities, hunters and gatherers, family farmers, rural workers, herders and pastoralists, fisherfolk and urban people" (Nyéléni, 2015). These are also the groups that are represented by the CSIPM in the CFS. Part of the process of protecting Agroecology from co-optation was to define it. I have summarized the essential elements of the definition that social movements published in the Nyéléni Declaration (2015) in the image below:



Figure 5: Nyéléni Pillars and Principles of Agroecology

Alongside these definitional pillars, the Nyéléni Declaration also details strategies for achieving these principles. In the strategies section of the declaration social movements articulated policies and priorities in building agroecological food systems. There is a marked difference between the IAASTD definition of agroecology, as a technical agricultural method, and the Nyéléni Pillars, which present agroecology as a holistic concept that goes far beyond production methods to include political and spiritual vision for social justice and self-determination.

Following the Nyéléni Declaration, two other definitional structures of agroecology were published, both in April 2018: FAO's 10 Elements of Agroecology, and the facets and principles published by the NGO Coopération Internationale pour le Développement et la Solidarité (CIDSE).

The 10 Elements of Agroecology published by the FAO were the result of a 4-year international consultation process (FAO, 2018b; Loconto & Fouilleux, 2019). Starting with the launch event in September 2014, the First International Symposium on Agroecology for Food Security and Nutrition (FISA), FAO staff hosted regional meetings and consultations throughout the world. This process ran concurrently to the Nyéléni process, which published it's declaration in February of 2015. The FAO consultations culminated in the launch of the 10 Elements at the 2018 Second International Symposium on Agroecology for Food Security and Nutrition (FAO, 2018b). What is particularly important about the 10 Elements, is that they were supported by the FAO Council, the Committee on Agriculture (COAG), and approved by the 197 member states of FAO (FAO, 2019). The formal approval of this definitional structure by FAO member states is the reason that the FAO 10 Elements are the dominant definition of agroecology used throughout global governance texts. It is represented by the images below:



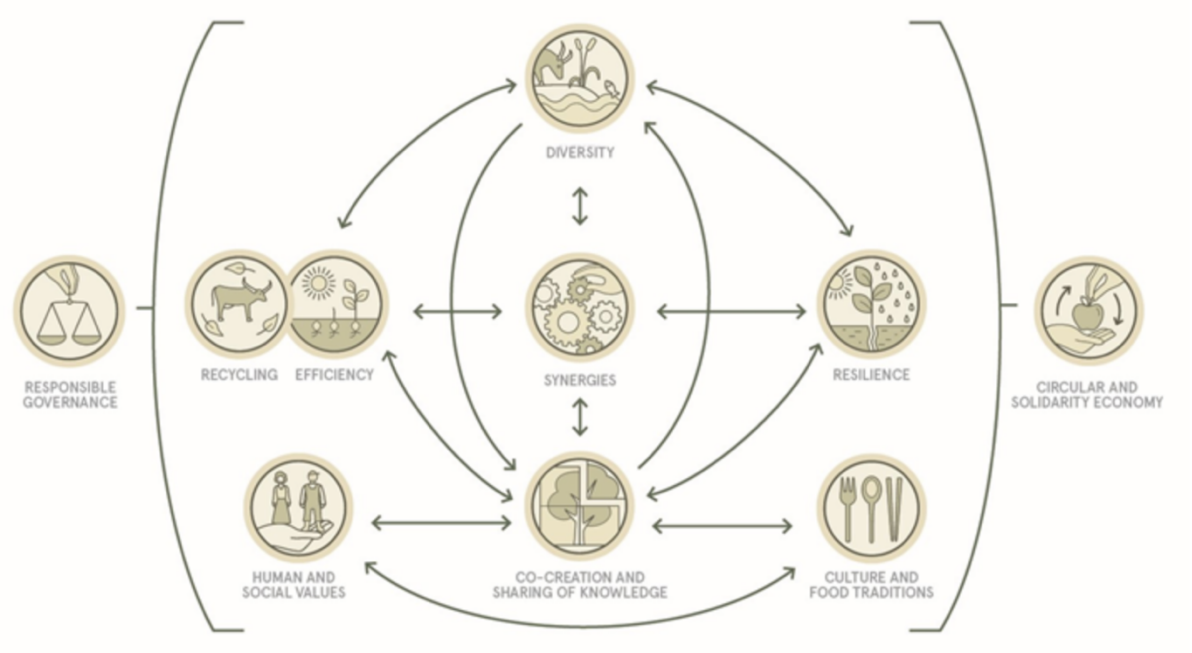


Figure 6: The 10 Elements of Agroecology (FAO, 2018)

The 10 Elements of Agroecology are a definitional structure comprised of 10 key components, that are understood to exist in dynamic relationship to each other, as represented by the images above. According to this definition: "Agroecology is fundamentally different from other approaches to sustainable development. It is based on bottom-up and territorial processes, helping to deliver contextualized solutions to local problems. Agroecological innovations are based on the co-creation of knowledge, combining science with the traditional, practical and local knowledge of producers. […] Agroecology seeks to transform food and agriculture systems, addressing the root causes of problems in an integrated way and providing holistic and long-term solutions" (FAO, 2018). Agroecology is defined as the paradigm by which food systems can be changed towards sustainable systems and by which "to achieve Zero Hunger and multiple other SDGs" (FAO, 2018). The 10 Elements that comprise this shift are: "diversity, synergies, efficiency, resilience, recycling, co-creation and sharing of knowledge, human and social values, culture and food traditions, responsible governance, and circular and solidarity economy" (FAO, 2018).

In the publication of the 10 Elements of Agroecology FAO put forth a 12-page elaboration of these elements, that go far beyond the IAASTD definition of agroecology as an agricultural practice, to describing essential political and social features that can also be found in the Nyéléni Declaration. The Nyéléni Declaration and the FAO 10 Elements of Agroecology document both serve a similar function, though in very different political forums, which is to establish a joint definition of agroecology that can be the basis of future work towards food systems transformation. Despite these similarities they are also very different types of documents, with the Nyéléni Declaration being both a definition and a call to action for strategies to implement agroecological changes through policy mechanisms and otherwise. In contrast, the 10 Elements, while also establishing a definitional common ground of agroecology, do so in the UN member state context and consequently remains a publication restricted to definition alone. Peter Rosset, in his interview for this dissertation research, brought the difference between institutional and social movement definitions of agroecology to a well-articulated point:

> I would say that when I think about how FAO thinks about agroecology, compared to social movements, I think one of the key things that people feel is absent from the institutional discourse is the subject, in the sense of the Spanish word of the word subject, the political social, and also the historical subject of agroecology being, communities, peoples, the peasantry, Indigenous people, whereas that's kind of referred to, but in FAO 10 Elements could easily be a socially responsible business or entrepreneurs or something like that. (Peter Rosset, Ecosur Advanced Studies Institute Mexico)

Rosset makes the argument that who is represented by agroecology is the defining difference in the various conceptualizations of agroecology. Consequently, an important difference in the focus of the definition of FAO and civil society is the breadth of actors responsible for agroecological work. Opening agroecology from a scientific and social movement paradigm to a political paradigm brough with it many of the complex challenges of political reform, including that of responsibility and agency in systems change.

At the time that FAO launched the 10 Elements of Agroecology, civil society actors published a further definitional structure of agroecology, titled “The Principles of Agroecology” (CIDSE, 2018). This publication was authored by CIDSE, which describes itself as “an international family of Catholic social justice organisations” (CIDSE, 2025), and other NGOs and member organisations. Though it explicitly states that the document is not a definition, it is

an attempt to establish common ground about what agroecology is, and like the 10 Elements, describes defining characteristics and features of agroecology. According to CIDSE, agroecology exists along 4 dimensions: environmental, social and cultural, economic, and political. Each of these dimensions consist of 5 to 7 elements. To illustrate, here the first dimension, as published by CIDSE:

1. **THE ENVIRONMENTAL DIMENSION OF AGROECOLOGY**

1.1	Agroecology enhances positive interaction, synergy, integration, and complementarities between the elements of agro-ecosystems (plants, animals, trees, soil, water, etc.) and food systems (water, renewable energy, and the connections of re-localised food chains).
1.2	Agroecology, builds and conserves life in the soil to provide favourable conditions for plant growth.[10]
1.3	Agroecology optimises and closes resource loops (nutrients, biomass) by recycling existing nutrients and biomass in farming and food systems.
1.4	Agroecology optimises and maintains biodiversity above and below ground (a wide range of species and varieties, genetic resources, locally-adapted varieties/breeds, etc.) over time and space (at plot, farm and landscape level).
1.5	Agroecology eliminates the use of and dependency on external synthetic inputs by enabling farmers to control pests, weeds and improve fertility through ecological management.
1.6	Agroecology supports climate adaptation and resilience while contributing to greenhouse gas emission mitigation (reduction and sequestration) through lower use of fossil fuels and higher carbon sequestration in soils.

Figure 7: The Environmental Dimensions of Agroecology (CIDSE, 2018)

The definition articulated by CIDSE, which I will not replicate in its entirety here, does not differ substantially from the vision put forward by the Nyéléni Declaration. It is important to note that the CIDSE definition was published by social movement organizations located in the Global North, primarily Europe, and therefore raise interesting questions about the subject of the definition, in terms of who the definition is for. However, the CIDSE definition was also used as a source for the development of the HLPE's 13 Principles of Agroecology, which followed thereafter (HLPE, 2019).

As part of the work that the Committee on World Food Security's High-Level Panel of Experts conducted on agroecology, the HLPE built on the FAO's 10 Elements of Agroecology and published the 13 Principles of Agroecology in 2019 (HLPE, 2019). Roughly speaking, the elements can be thought of as 10 characteristics of agroecological systems, while the principles describe fundamental aspects of agroecology (Wezel et al., 2020). These principles brought together previous academic publications on agroecology, the social movements' work, as well as that of the FAO. The purpose was "to produce a minimum, non-repetitive but comprehensive set of agroecological principles" (HLPE, 2019). In my interview with Fergus Sinclair, the Project Team Leader of the HLPE Report on Agroecology, described the relationship between the 10 Elements and the 13 Principles as follows:

> The 13 Principles didn't involve new work or new thinking. They involve consolidating what was already there […] what the HLPE process did was to come up with the smallest set of non-repeating statements that would encapsulate what was in those various sources. So, there's a principle of parsimony there. (Fergus Sinclair, Project Team Leader of HLPE Report on Agroecology)

Consequently, the development of the 13 Principles was understood as the consolidation of the various definitions that had been published to date at that point.

Whether or not the formal articulation of another definitional structure of agroecology was constructive was contentious amongst my interviewees. On the one hand, people thought the 13 Principles present a more precise articulation of the essential aspects of agroecology[9]. On the other hand, people said that publishing the 13 Principles of Agroecology muddied the waters, creating confusion when a sufficient UN-approved definition already existed[10]. Wezel et al. (2020) argue that the different purposes of the two definitions explain their existence: the FAO definition was created as a discussion- and decision-basis for member countries of the UN, while the HLPE definition serves as the basis of global policy recommendations. Specifically, the 10 Elements were created by FAO "to structure and operationalize the assistance that FAO provides to Member Countries" (Wezel et al., 2020), while the 13 Principles of Agroecology sought to bring together all major definitional structures into one "minimum, non-repetitive list" that "can be used to guide decision-making" more broadly (Wezel et al., 2020). The argument that the purposes of the definition are the meaningful distinction between them is also supported by Fergus Sinclair in our interview:

> While the principles are actionable statements (that is the statement of the principle not just it's label) the FAO elements are generic concepts that can be interpreted in different ways. FAO did not seek to articulate principles to allow for international agreement. So, while the principles are a basis for action the elements are entry points for dialogue. Depending on your purpose either may be more or less useful (Fergus Sinclair, Project Team Leader of HLPE Report on Agroecology)

[9] This perspective that the 13 Principles strengthened the definition of agroecology was articulated by Interview 20, Interview 25,

[10] This perspective that the 13 Principles did not positively contribute to the definitional landscape of agroecology was articulated by Interview 50, who was an author in the HLPE report.

According to this explanation the 10 Elements are statements open to interpretation, whereas the 13 Principles are actionable statements designed for policy dialogue. Consequently, the 13 Principles were developed in order to facilitate the CFS negotiations and are to be understood in that context. The 13 Principles of Agroecology are represented in the image below, as published in the HLPE report (2019). They present a useful comparison with the 10 Elements, highlighting that the 13 Principles put added emphasis on the principles of soil and animal health as well as participation in decision making by food systems actors.

Table 1 Consolidated set of 13 agroecological principles

Principle	FAO's ten elements	Scale application*
Improve resource efficiency		
1. Recycling. Preferentially use local renewable resources and close as far as possible resource cycles of nutrients and biomass.	Recycling	FI, FA
2. Input reduction. Reduce or eliminate dependency on purchased inputs and increase self-sufficiency	Efficiency	FA, FO
Strengthen resilience		
3. Soil health. Secure and enhance soil health and functioning for improved plant growth, particularly by managing organic matter and enhancing soil biological activity.		FI
4. Animal health. Ensure animal health and welfare.		FI, FA
5. Biodiversity. Maintain and enhance diversity of species, functional diversity and genetic resources and thereby maintain overall agroecosystem biodiversity in time and space at field, farm and landscape scales.	Part of diversity	FI, FA
6. Synergy. Enhance positive ecological interaction, synergy, integration and complementarity among the elements of agroecosystems (animals, crops, trees, soil and water).	Synergy	FI, FA
7. Economic diversification. Diversify on-farm incomes by ensuring that small-scale farmers have greater financial independence and value addition opportunities while enabling them to respond to demand from consumers.	Part of diversity	FA, FO
Secure social equity/responsibility		
8.Co-creation of knowledge. Enhance co-creation and horizontal sharing of knowledge including local and scientific innovation, especially through farmer-to-farmer exchange.	Co-creation and sharing of knowledge	FA, FO
9. Social values and diets. Build food systems based on the culture, identity, tradition, social and gender equity of local communities that provide healthy, diversified, seasonally and culturally appropriate diets.	Parts of human and social values and culture and food traditions	FA, FO
10. Fairness. Support dignified and robust livelihoods for all actors engaged in food systems, especially small-scale food producers, based on fair trade, fair employment and fair treatment of intellectual property rights.		FA, FO
11. Connectivity. Ensure proximity and confidence between producers and consumers through promotion of fair and short distribution networks and by re-embedding food systems into local economies.	Circular and solidarity economy	FA
12. Land and natural resource governance. Strengthen institutional arrangements to improve, including the recognition and support of family farmers, smallholders and peasant food producers as sustainable managers of natural and genetic resources.	Responsible governance	FA, FO
13. Participation. Encourage social organization and greater participation in decision-making by food producers and consumers to support decentralized governance and local adaptive management of agricultural and food systems.		FO

*Scale application: FI = field; FA = farm, agroecosystem; FO = food system
Source: derived from from Nicholls *et al.*, 2016; CIDSE, 2018; FAO, 2018c.

Figure 8: The 13 Principles of Agroecology (HLPE, 2019)

FAO's 10 Elements and the HLPE's 13 Principles of Agroecology are frequently cited as the canonical definitions of agroecology on the international stage (Wezel et al., 2020), with different organizations basing their work on these definitions (for example, Agroecology Europe, Agroecology Coalition, and others). These definitions are influential as they are the products of authoritative global food governance forums. However, it is important to note that social movements continually reclaimed agroecology in global governance forums by publishing definitions that emphasize the political elements of agroecology and centre the international peasant movement as the key actor.

One substantial difference between the civil society definitional structures and those of FAO, is the centering of food sovereignty. The CIDSE publication begins with the following quote: "We believe that there is no food sovereignty without agroecology. And certainly, agroecology will not last without a food sovereignty policy that backs it up" (CIDSE, 2018). While the HLPE report also emphasizes food sovereignty as a foundation of agroecology, the main difference between the principles of civil society and those of the FAO and HLPE is the emphasis on political agency. Specifically, the sovereign control of small-scale farmers, pastoralists, Indigenous peoples, and fisher folk over natural resources and land is an issue that is emphasized in social movements articulation of agroecology. The differences in the emphasis of the definitions is evident in the language surrounding governance. The HLPE uses the words "land and natural resource governance", FAO "responsible governance", and CIDSE "decentralized governance". While all three definitions entail the importance of agroecological governance structures there is a subtle difference in the emphasis of each articulation of governance.

Another topic of divergence between the HLPE, FAO, and CIDSE definitions of agroecology is the language regarding the use of synthetic agricultural inputs. The HLPE focuses on input reduction using the wording "reduce or eliminate the dependency on purchased inputs", the FAO does not specifically emphasize input reduction and treats reduction of inputs as part of resilience and recycling, and CIDSE articulates the need to "eliminate the use of and dependency on external synthetic inputs". These are subtle differences. However, it is important to note that amongst the three articulations of agroecology there are differences in the most contentious

aspects of food systems governance, such as the role of synthetic agricultural inputs in sustainable systems.

After the publication of the 13 Principles of Agroecology (HLPE, 2019), the appetite for publishing definitions of agroecology seems to have disappeared, as there have been no further significant definitional structures published by policy makers or civil society actors since. The publications presented here are not exhaustive. They are the main definitional structures that have entered global governance discourses and illustrate the definitional dialectic between social movements and other governance actors. The combination of the consultative approach that the FAO took with developing the 10 Elements through regional dialogue, the discursive authority that comes from the FAO and the HLPE as governance venues, the fact that civil society's position was represented in these processes, and the involvement of UN member states in the approval of the 10 Elements, have all contributed to the definitional structures gaining lasting authority.

In addition, the importance of academic publications in building these definitional structures is important. Each one of the reports discussed cite a long list of publications that influenced their work (see CIDSE, 2018; HLPE, 2019), all of them drawing on academic publications, civil society, and others. Of the academic publications, particularly influential are Gliessman's five levels of food systems transformation with agroecology (Gliessman, 2007; Gliessman, 2016), as well as Altieri's five principles of agroecology (Altieri, 1995). The development of the definition of agroecology in global governance discourse illustrates the process as a complex interaction of social movements, academics, government, and UN agency employees that co-created the construct in the global discourse. In addition, the process by which the definitions were arrived at, drawing widely from different interest groups, also lends legitimacy to the definitions.

The development of definitional structures of agroecology in global governance follows the theme of my dissertation as a whole, which argues that a combination of crises, advocates, and scientific legitimacy were the central building blocks of agroecology's emergence into global governance discourse. My research shows that the 10 Elements and 13 Principles present comprehensive definitional structures, that in the global governance of food, are contested in terms of the inclusion/ exclusion of the word and the framing within which it is presented. The definitional structures themselves are conceptually clear and there appears to be no disagreement

about the essential features of agroecology themselves. The multi-faceted nature of the definitional structures allows for the inclusion of multiple complex defining features. The definitions are broad enough to incorporate the key topics in food systems, while presenting a holistic vision of diversity that stands in contrast to that of productivist specialization.

Conclusion

Answering the question "what is agroecology?" entails an understanding of the history of social movements, academic publications, and political processes that created the paradigm. The project of defining agroecology has co-evolved with the history of the term. Starting with early academic publications in the 1920s, agroecology entered global governance discourse, through advocacy from civil society, in the IAASTD report in 2009. Since then, the definition of agroecology, and the debate surrounding the term, have evolved substantially. While there are many definitions in scholarship and social movements, this chapter has discussed the leading definitional structures of agroecology in global food governance: FAO's 10 Element of Agroecology, and the HLPE's 13 Principles of Agroecology and how these relate to other definitions put forward by civil society through the Nyéleni Declaration of 2015 and organizations such as CIDSE.

While there are subtle and significant differences in the definitional structures, I argue that the contestation surrounding agroecology is largely about the inclusion and exclusion of the term in global governance texts as well as the framing of agroecology in these texts. Since the publication of the 13 Principles of Agroecology by the HLPE in 2019 there has been little debate in the scholarship or global governance discourse about the defining features of agroecology, as the 10 Elements and 13 Principles are comprehensive and clear. Nevertheless, this chapter serves as an extended literature review, in the sense that it is an in-depth engagement with the defining features of and publications on agroecology. Understanding who considers what features to be constitutive of agroecology, as outlined in this chapter, creates the contextual knowledge needed to understand the significance of the debates that surround agroecology in governance venues, discussed in the case studies that follow.

Agroecology is a paradigm that is defined by many different aspects, and with these different aspects come many different histories of the term. Throughout agroecology's histories

it took many advocates to bring agroecology into governance discourse. Academics were leading advocates of the term both in scientific publications of agroecology, but also in terms of agroecology being mobilized by social movements as a unifying paradigm. Social movements, particularly those of Latin America, brought the science of agroecology to political life and, on the international stage, claimed and re-claiming the term through advocacy, declarations and definitions. Consequently, the crises that bought the global community together to assess the state of knowledge in global agriculture in the IAASTD report, in combination with sustained advocacy from diverse actors, and the credibility that scientific discourse brought to the term, are important components to understanding the definitions of agroecology.

The articulations of agroecology come with criticism, as scholars argue that agroecology has colonial roots (Pimbert, 2018), and patterns of coloniality in its authorship (Gómez et al., 2012). There are also interesting Global South to Global South relationships, with African social movements only recently gathering behind agroecology as a South American import (Monjane & Rosset, 2024). In that sense agroecology is not a static paradigm, as there is an evolving engagement with agroecology as it is critiqued and discussed in different venues. However, the sustained advocacy of civil society and social movements for the political vision articulated through agroecology, and the 2015 Nyéleni Declaration definition of agroecology, continue to make it the leading paradigm for food systems transformation in global governance discourse. This chapter has outlined how this advocacy interacted with the first global responses to mounting crises leading to the first mentions of agroecology in global governance texts. In addition, I have shown how agroecology exists in a complex relationship with scientific discourse. The purpose of this Chapter is to orient in the reader in the debates, discussions, and defining features of agroecology that preceded FAO's work on the topic. This chapter has outlined the factors and publications that created the foundation for agroecology to be brought into global governance discourse. I have detailed how the project of defining agroecology has been an essential feature of the term's history. With that, it has been my goal to orient the reader in understanding what agroecology is, how the paradigm was developed, and who influenced this development. The purpose of detailing this history is that the reader can understand the context from which agroecology entered the work of the governance venues case studies, first FAO and subsequently the CFS and UNFSS.

3. Food and Agriculture Organization of the United Nations

Introduction

With the end of the Second World War and the subsequent formation of the post-war international order, a global effort to address world hunger and malnutrition began. As part of the vision to leverage global cooperation for peace and prosperity, the Food and Agriculture Organization of the United Nations (FAO) was created with the mandate to address hunger, malnutrition, and rural poverty globally (Pernet & Forclaz, 2019; Hallam, 2015). Since the inception of the Food and Agriculture Organization at the Hot Springs Conference in 1943, and the subsequent formal creation of the FAO in Quebec City in 1945, it has become an important political actor in food systems governance.

Throughout the shifts in global geopolitical alignments from the post-war international order to the present era of polycrisis (Lawrence et al., 2024) the FAO continues to work on its mandate of "ensuring humanity's freedom from hunger" (Hofner, 2010). As part of this core mandate, FAO also works on "increasing nutritional levels and living standards; improving efficiency of production and distribution; improving the living conditions of rural communities; and contributing to the expansion of the global economy" (Hallam, 2015). Over the 80 years of the FAO's existence, it has grown into a large and complex organization with a large array of programs and avenues of work. This complexity is reflected in the organizational structure and the many offices whose work ranges from gender and youth, through emergencies and resilience, to biodiversity and climate, for example. While substantial criticism and controversy surround the organization and its work (Abbott, 1992; Conca, 2015; Jarosz, 2009; Hallam, 2015), the FAO nevertheless remains one of the key actors in the fragmented governance landscape of global food systems.

It is widely documented that from the beginning of the organization, the FAO has focused its work on increased yields and nutrition through agricultural modernization, trade, food safety standards, and similar development initiatives (Jarosz, 2009; Pernet & Forclaz, 2019). While there have always been a multitude of programs and initiatives at the FAO, sometimes with conflicting ideas and methods (Dionne, 2010), its central approach to hunger alleviation through increased agricultural yield has been described as aligned with Green Revolution methods and technologies (Gliessman, 2024; Jarosz, 2009). However, in the time between 2014 and 2018 the FAO hosted a series of regional symposia on a very different approach to

agriculture, development, and food systems: Agroecology. In his closing remarks for the FAO's First International Symposium on Agroecology for Nutrition and Food Security (FISA) in September 2014, the FAO Director General at the time, José Graziano Da Silva, famously said: "Today a window was opened in what for 50 years has been the Cathedral of the Green Revolution" (International Symposium on Agroecology, 2014). This window is the focus of my research and the topic of this chapter. It represents a moment of openness to new ideas and approaches in the work of the Food and Agriculture Organization. My research describes the factors that influence changes such as these in food systems governance and the impact these have for discourse in governance spaces.

This chapter is focused on the role of the FAO in this complex dynamic. I outline the processes and factors that lead to agroecology becoming a significant part of the FAO's work starting in 2014, and what became of this work. To use Da Silva's analogy, this chapter details how a window of opportunity for change was created in the institutional cathedral of FAO, with its entrenched interests and procedures. Following the structure of threefold analysis of this dissertation outlined in the introduction, this chapter details the complex interaction of crises, advocates, and science that shaped the FAO's work on Agroecology. I argue that the combination of crises and geopolitical affordances created an enabling environment for advocates to move agroecology into an organizational focal point through a multi-year program of work with lasting impact on the organization. Drawing on expert interviews and organizational documentation, this chapter details the dynamics of this transition.

Crises

There are two main measures used to understand the state of the global food system and its impact on human health. First, there is the measure of global commodity prices, such as FAO's Food Price Index (FPI), which tracks the price of major global food commodity markets such as dairy, cereals, meat, oil, and sugar. The trends in price indices give an indication of consumer prices and reflect the impact of geopolitical events on food systems. Commodity market prices are not a perfect reflection of consumer prices for specific food items, as market prices fluctuate more than consumer prices. However, commodity prices are extremely informative about long-term trends in food pricing (Bai et al., 2022). Second, there are the

measures of global hunger, such as FAO's annual State of Food Security and Nutrition in the World (SOFI) report. Indicators tracked through the SOFI reports are aggregated into the Prevalence of Undernourishment (PoU). Aside from hunger, other forms of malnutrition such as overnutrition and micro-nutrient deficiency are also a significant part of the global food systems impact on human health. In addition to the SOFI report there are other publications that track these global statistics on malnutrition, such as the Global Hunger Index (GHI), the Net State of Nutrition Index (NeSNI), and the Global Food Security Index (GFSI). The FPI and SOFI reports are both indices that are administered by UN agencies, specifically the FAO, WHO and UNICEF. They are robust measures used throughout academic scholarship, governments and civil society, with widespread reach and data publication. These indicators can be looked at to understand the status of crisis that the global food system had reached in the early 2000s, with the 2007/2008 food price crisis. The impact of rising food costs had devastating effects on the world's most vulnerable people (Compton et al., 2010), which lead to the rising food prices to be widely referred to as "the food price crisis of 2007/2008" in the literature.

In the introduction I argue that there are multiple indicators of food systems functions that align with the definition of crisis as "an unstable or crucial time or state of affairs in which a decisive change is impending, especially one with the distinct possibility of highly undesirable outcome. I.e. a situation that has reached a critical phase" (Merriam-Webster, n.d. a). In addition, there is extensive scholarship that also argues for, and explores the dynamics of, crises as drivers for systemic political change (Hay, 1999; Pahl-Wostl et al., 2023). Two indicators of systemic crisis are discussed in relation to FAO in this chapter. The purpose of looking at these indicators closely is to show that global food prices and the global state of nutrition were reaching critical points preceding FAO's uptake of agroecology. It is from this critical state in key measures of the core mandate of FAO, hunger eradication, that individuals within FAO began looking for new ways to address the systemic issues in food systems. My research shows that the work on agroecology in FAO occurred in part as a crisis response. Understanding the context that preceded the FAO's fist symposium on agroecology is central to understanding this argument.

Food Price Index

Looking at both types of food systems measurements, commodity prices and hunger, a clear picture emerges about the evolution of global food system price stability and its impact on

hunger over the past thirty years. Looking first at global food commodity prices, there was relative stability in price indexes from the 1990s until the 2007/2008 food price crisis. Since then, the FPI shows a clear trend of increasing food commodity prices, with price spikes beginning in Jan 2007, June 2010, and May 2020:

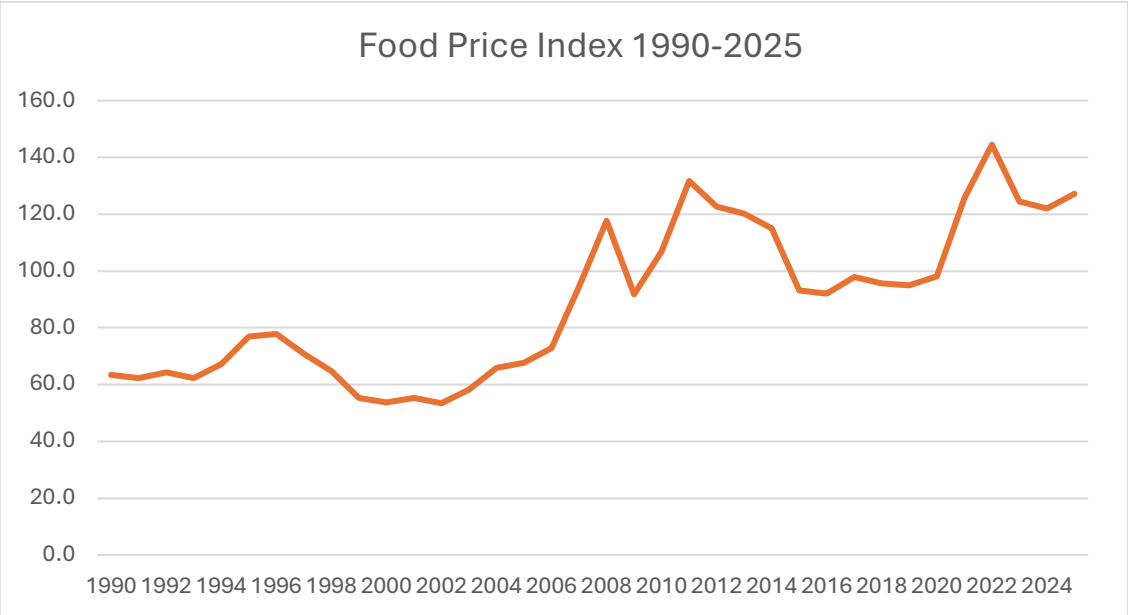


Figure 9: FAO Food Price Index (FPI) (FAO, 2025)

Considering the time-period preceding the FAO's work on agroecology, there were two major price increases: 2007/2008 and 2010/2011. The first of these is commonly referred to as the "food price crisis of 2007/2008" (Mittal, 2009; Watson, 2017). Both events, reflected in the FPI as unprecedented spikes in commodity prices, had far-reaching impacts on the world food systems and human health. Low-income individuals in all countries were negatively impacted (Brinkman et al., 2010; Compton et al., 2010). Countries with underlying vulnerabilities, such as high food import dependence, experienced significant decreases in household food security and increased malnutrition (Headey, 2013). There were even increased incidences of social unrest and food riots in some countries (Weinberg & Bakker, 2015). In response to the systemic shock of the 2007/2008 food price crisis the Committee on World Food Security (CFS) was reformed in an attempt to bring coherence to the fragmented global governance of food (McKeon, 2015; Schutter, 2014). It is evident that the impacts of the price spikes in commodity markets had deep and far-reaching impacts on the global food systems landscape. The causes of these price spikes have been studied extensively. Though some of the details are heavily contested, it is widely understood that the causes of the price spike events were a confluence of several factors:

commodity specific export restrictions (rice), weather shocks (wheat), mis-matched supply and demand, increased demand for biofuels, increased oil prices, the weakened US dollar, and speculation on agricultural commodity futures markets (Clapp, 2009; Coulibaly, 2013; Headey & Fan, 2008; Hochman et al., 2014; Rosegrant et al., 2010).

Following the price shock of 2010/2011, the FPI reflects a time where it appeared that prices were stabilizing, though with volatility, at a new high level. It is in this landscape of volatile food prices that the FAO began its work on agroecology. Though it may have appeared at the time that the worst was in the past, we now know that it was the beginning of a continued trend of increased food prices and systemic shocks. In September of 2014, when the UN FAO hosted the First International Symposium on Agroecology (FISA) in Rome, the FPI was slowly but surely sinking back to pre-2008 prices. However, the price spikes had left a lasting impact, with an awareness that instability in agricultural commodity markets have devastating effects on human health and food security. As an organization whose mandate is to "achieve food security for all" (Hofner, 2010) the FAO could not ignore these food price crises.

The State of Food Security and Nutrition in the World

The second indicator of food systems impact on human health is the Prevalence of Undernourishment (PoU) published annually by FAO in the State of Food Security and Nutrition in the World (SOFI) report (SOFI, 2024). The PoU is "an estimate of the proportion of the population whose habitual food consumption is insufficient to provide the dietary energy levels that are required to maintain a normal active and healthy life. It is expressed as a percentage" (FAO, n.d.). The PoU is also the indicator used to track progress towards achieving SDG 2, Zero Hunger (FAO, n.d.). In addition, the PoU can be understood as a measure of progress of FAO in meeting its core mandate of "achieving food security for all" (FAO, 2026). The data presented below illustrates that the world was facing repeated extreme food prices and associated decline of global nutrition in the time before FAO began working on agriculture. I understand these moments of crisis, as they are referred to in the literature, to be part of the cause for FAO to begin working on agroecology, as discussed in this chapter. I present the data of the PoU below in order to build a greater understanding of the time preceding the 2014 First International Symposium on Agroecology and to show the extent of negative impact of the food price crises on global nutrition.

The data from the PoU shows substantial progress in hunger alleviation from 1990 to 2005-2008, followed by a few years of stagnation and then continued progress until 2015, as illustrated by the following graphs.

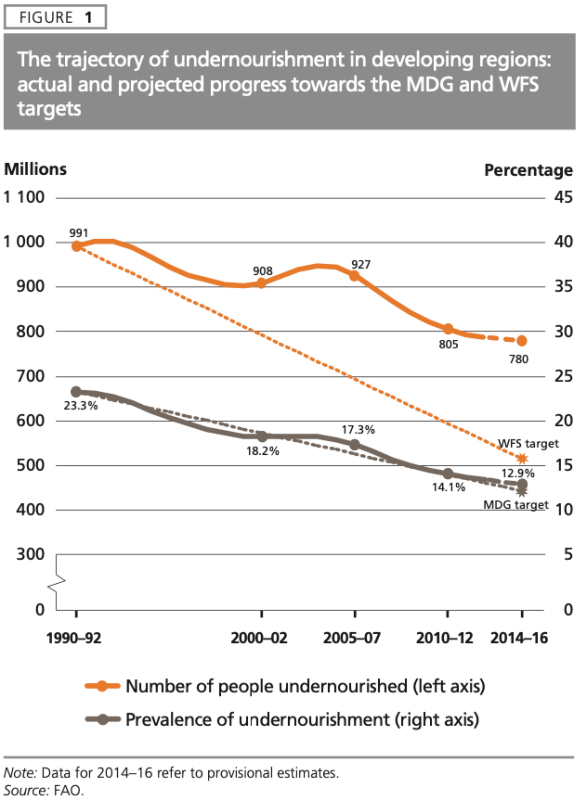


Figure 10: Undernourishment in Developing Regions (SOFI report, 2015)

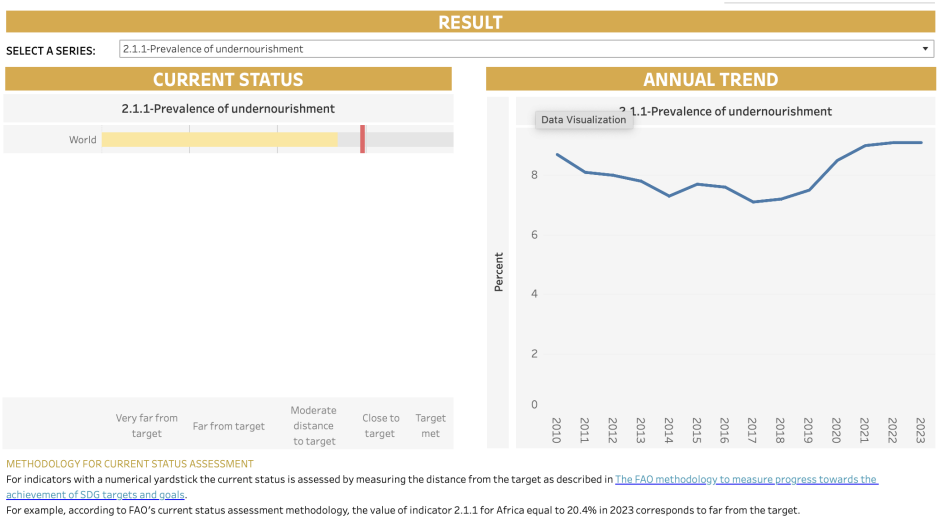


Figure 11: Prevalence of Undernourishment (FAO, 2025a)

From 2015 to the present the alleviation of global hunger has stalled, due to the increased PoU in Africa offsetting the improvements made in Latin American and the Caribbean. As the PoU is a global measure, regional differences might become invisible. For example, while Latin America and the Caribbean have been making improvements in their PoU indicators, there has been a rise of malnutrition in Africa, consequently, the global PoU reflects hunger alleviation having stalled.

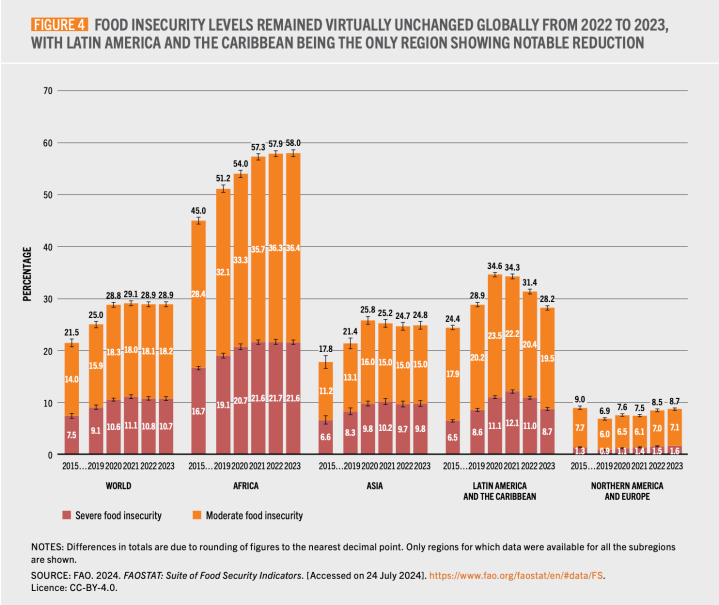


Figure 12: Food Insecurity Levels (SOFI report, 2024)

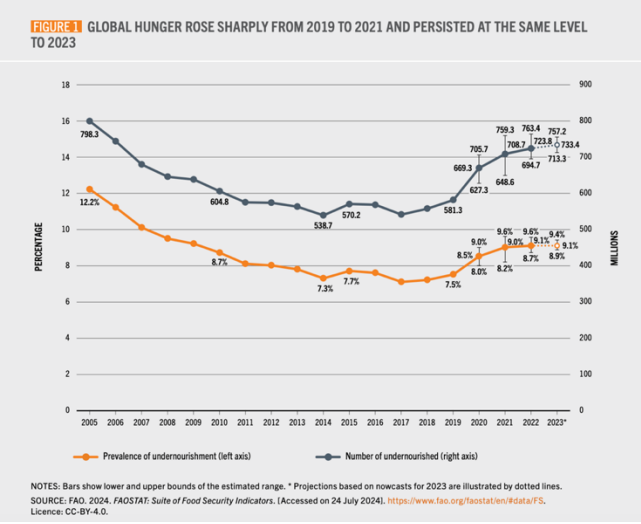


Figure 13: Global Hunger (SOFI report, 2024)

The publishers of the PoU attribute this lack of progress to a variety of crises: **"**Conflict, climate variability and extremes, economic slowdowns and downturns, lack of access to and unaffordability of healthy diets, unhealthy food environments, and high and persistent inequality continue to drive food insecurity and malnutrition all over the world.**"** (SOFI report, 2024). Consequently, the lack of progress on decreasing global hunger is negatively impacted by multiple compounding crises. The data that tracks global hunger is complex, as the indicators of global hunger are also dramatically impacted by regional differences in progress as well as exceptional circumstances, such as conflict and drought. Notwithstanding these complexities, the broad trend speaks clearly to the fact that with increased volatility in commodity food prices, the alleviation of world hunger has stopped progressing. Stalled progress on global hunger alleviation impacts the possibility of achieving SDG 2, Zero Hunger, by 2030. In addition, the compounding crises that have resulted in the current situation are an important explanatory factor in understanding the dynamics of transformative paradigms in food systems governance. If indicators of global hunger and nutrition were showing human nutrition steadily improving there might be less pressure to re-think global food systems and their governance. However, the failure of global food systems to meet the nutritional needs of humanity, alongside negatively affecting other critical systems discussed in this chapter, such as global biodiversity, show clearly the multiple warning signs indicate compounding crises in global food systems.

Food Price Index and Prevalence of Undernourishment Discussion

Considering the time-period leading up to 2014, as the FAO began formally working on agroecology, the PoU was still showing progress in global hunger alleviation. The FAO's agroecology work began in an environment of initial warning signs of major food systems problems, whilst efforts to address critical malnutrition was still progressing. There were three key aspects of this time-period that created institutional openness to new ideas: First, the preceding crises rang the first alarm bells of systemic vulnerabilities in global food systems as indicated by the FPI. Second, the appearance of stability with the PoU showed continued progress in hunger alleviation, and the FPI appeared to recover from the price shocks, creating an atmosphere of recovery and re-stabilisation. Third, the reform of the Committee on World Food Security (CFS) established a uniquely inclusive forum for food governance, which brought diverse actors and their ideas to the table (Duncan, 2015; McKeon, 2015). In early 2014 it was

not known that the FPI stabilization would be temporary followed by continued major price spikes, nor that the PoU would indicate a stagnation in the effort to reduce world hunger beginning 2015. Instead, the preceding crises created the strong impetus for change in food systems governance, while there was enough stability in the systems to create the affordance to engage with new ideas. In addition, the reformed CFS created a governance forum that included non-state actors as important voices in the policy process, though they remain non-voting members (Duncan, 2015; McKeon, 2015). The prevalence of civil society actors in this forum also had an impact on the work of the FAO. The coalescence of these factors, initial warning signs in combination with apparent stabilization as well as a reformed governance forum that elevated the voices of civil society actors in global governance, created the pre-conditions for FAO to being working on agroecology. There was increased pressure from civil society, as discussed in the advocates section of this dissertation, alongside increased systemic pressure, as indicated by measures of global food prices and nutrition. At the same time, there was a brief window of time in which there seemed to have been recovery from initial shocks, which was a relatively stable and politically liberal global environment, that created the pre-conditions for agroecology to be taken seriously in FAO. The sections of this chapter, which describe these different indicators, serve to illustrate the shaping forces of the period leading to the uptake of agroecology in FAO's program of work.

Climate and Biodiversity

In addition to the crises pertaining to food systems directly, there were other unfolding crises that had serious impact on food systems. The escalating impacts of climate change were posing serious challenges to global hunger alleviation (Kotir, 2011; Wheeler & Von Braun, 2013). In addition, the interviews I conducted revealed that the species extinction crisis, the unprecedented loss of biodiversity that has been unfolding (Barnosky et al., 2011; Pievani, 2014), played a very important role in the FAO engaging with agroecology. As agroecology offers an approach to agriculture that is aligned with ecological systems, the scientists working in the ecology divisions of the FAO were among the first advocates for agroecology in the organization. In this context, under the leadership of the new Director General José Graziano da Silva, the FAO began engaging with Agroecology as a serious option for meeting their mandate of global hunger alleviation. In the opening speech of the First International Symposium on

Agroecology for Food Security and Nutrition José Graziano da Silva said: "Agroecology continues to grow, both in science and in policies. It is an approach that will help to address the challenge of ending hunger and malnutrition in all its forms, in the context of the climate change adaptation needed" (Da Silva, 2014). The FAO turned to agroecology as a solution, an approach that could offer a new way of dealing with compounding crises. Stephen Gliessman, Professor of Agroecology at UC Santa Cruz who is known as one of the founders of agroecology due to his influential work on agroecology since the 1970s, articulated the work of FAO on agroecology in our interview as follows:

> What motivated the persistence of FAO staff was looking for ways to get out from under the control that primarily the large donor countries had placed on FAO, and the over-emphasis on high technology, high input, and export agriculture as the solution to world food problems. I also think that the data that's been gathered over the last 10 years, about how the Green Revolution really has been a failure - it has not achieved the goals that it said it was going to achieve, was important. In addition, agroecology was beginning to develop a whole series of what I call evidence-based alternatives, grounded in science, grounded in practice, grounded in communities. All of that started to come together and provided an opportunity that was taken advantage of. (Stephen Gliessman, Professor of Agroecology, UC Santa Cruz)

This quote is an articulate snapshot of the data from my research that shows that there were multiple compounding factors that lead FAO to begin working on agroecology. In addition, it raises the important point that mounting environmental and humanitarian crises created the pressure necessary to counteract the long-standing institutional influence of donor countries to FAO that had been pushing for Green Revolution technologies. Institutional change is a complex process, and the quote shows that the FAO staff that advocated for agroecology internally did so motivated by the compounding evidence of escalating crises and the failure of the Green Revolution approach to address these crises. In addition, the quote also makes the point that agroecology being constructed as a legitimate scientific approach, as discussed in the science sections of this dissertation, was also an important enabling factor for the internal advocacy of FAO staff. The quote was one of many data points that generated the three-fold framework of crises, advocates, and science in the grounded theory analysis of this dissertation.

Advocates

This section is an analysis of the pre-existing international policy landscape that created space for agroecology to be taken up by an institution such as FAO. The advocates of agroecology that are discussed below were able to leverage the affordances in the political landscape. Below I detail who these advocates were, what was unique about their position and influence, as well as the geopolitical context within which they operated. Specifically, I detail the importance of civil society actors, academics, UN member states, FAO staff, and the Director Generalship of FAO. In addition, I discuss the different financial and political interests that shape the work that happens through FAO. The purpose of this section is to outline the importance of key actors in bringing agroecology into FAO as well as describing the political circumstances that made the advocacy fruitful. The section is organized according to themes, not chronologically.

Even though civil society began advocating that FAO work on agroecology in the 1990s, this advocacy had not been successful until FAO began working on agroecology in 2014 (McKeon, 2009). The FAO began working on agroecology at a time of escalating pressure on global food systems: the effects of climate change and biodiversity loss were increasingly impacting food systems, coupled with the severe food commodity price shocks outlined above. At the same time, the Green Revolution approach that had been the primary focus of the FAO's work to date, had drawn criticism and become controversial (Glaeser, 2010; Hamblin, 2009; Oasa,1987; Patel, 2013). In this context, four important factors came together to enable long-standing advocates of agroecology to gain traction within the FAO: 1) it was an era of relative geopolitical stability; 2) existent governance frameworks gave legitimacy to agroecology; 3) there was a new Director General of the FAO; 4) there was coherent advocacy from a large variety of political actors.

Geopolitical Stability

A full analysis of the global geopolitics of the years preceding the 2014 FAO agroecology conference is well beyond the scope of this dissertation. However, I present a brief reminder for the reader of the main political events shaping the world around that time. In 2011 the end of the Iraqi War was declared by the USA, which had been a defining geopolitical conflict since it began with the 11 Sept 2001 Twin Tower attacks and the subsequent 2003 US invasion of Iraq. The then President of the United States, Barack Obama, declared the War on Terror to be over in

2013, which was the end of eight years of intense conflict. Barack Obama was in office for two terms, from 2009 to 2017, and though he was not uncontroversial, he was generally perceived to be a reliable good-faith actor working to maintain the international political order. Though there were several other regional conflicts after and concurrent to the War on Terror, the Syrian civil war (2011-2017), and the forced migration it gave rise to, were the major global geopolitical issues around 2014. The relative global geopolitical stability that was upheld through the Obama presidency, in combination with other factors discussed below, created the affordances for advocates of agroecology to find influence in FAO.

In the time before 2014, key United Nations member countries elected liberal democratic governments into office. The countries that played a particularly important role in advocating for agroecology in global forums were France, Brazil, Switzerland, and sometimes the EU. The European Union was in a state of relative stability at the time. The EU received the 2012 Nobel Peace Prize for "the advancement of peace and reconciliation" (Nobel Prize, 2012). This prize reflects the EU of the time: a political union that had maintained peaceful relationships with the member states, and with it a sense of stability and predictability in Europe despite the 2009 euro-zone debt crisis (Ray, 2024). Switzerland was unchanged in its relatively balanced political landscape, with a continuing shift to the political right gaining power over time (Church, 2016). In Brazil, Lula da Silva's Workers Party was in power from 2003-2016; first under direction of Lula da Silva, and later under the direction of Dilma Rousseff, who was impeached under corruption allegations in 2014 through a parliamentary coup (Santos & Guarnieri, 2016). In France, Nicolas Sarkozy's centre right presidency of 2007 – 2012 was replaced with the Socialist Party's leftist politics spearheaded by Francois Hollande (Cole, 2017). Throughout the interviews I conducted for this research, especially amongst staff of the FAO, it was emphasized that the political constitution of the member countries was significant in influencing the FAO's work on agroecology. The fact that some influential member countries were interested in social programs and hunger alleviation created some openness to agroecology in the organization. As articulated by a FAO staff person at the time: "We had many important countries pushing for something more social. There was a lot of stability which we don't have today. So civil society had more space than before" (Interview 7, FAO Agriculture Officer).

The period of relative geo-political stability created the affordance for countries and organizations to consider alternative approaches to dealing with the problems of the time (Herd, 2010). This speaks to the scholarship that argues that "meaningful social change is highly contingent on the social and political context within which events occur" (Nathanson, 2017). The significant pressures of the crises outlined above created the impetus for progress on hunger alleviation and food systems governance, as discussed above. At the same time, important member countries had elected liberal governments, who brought pressure for and an interest in social programs to the UN. This geopolitical climate of relative stability and prosperity was a significant part of the constellation of factors that came together to create the opportunity for a different idea like agroecology to enter the work program of the FAO.

Existing Governance Frameworks

There are important pre-existing governance frameworks that created the policy space for agroecology to enter global governance discourse. These frameworks include the Sustainable Development Goals (SDGs) and the International Year of the Family Farm (IYFF). Below, I detail the role of the SDGs and the IYFF in the uptake of agroecology in the work of FAO. At the present moment, the future importance of the SDGs is uncertain. The research for this dissertation was conducted and written before the second U.S. presidency of Donald Trump. Even within the first year of the presidency, 2025, we have witnessed an unprecedented disintegration of international cooperation, alongside the decline of the USA as a free democracy and a predictable international actor (Kellner, 2025). The impacts of the Trump presidency on international cooperation are currently being negotiated. The uncertainty of the shifting international order has fundamentally changed the landscape of global governance frameworks (Eiran et al., 2025; Matin & Yawar, 2025; Klingebiel & Sumner, 2025). The research and analysis presented below was conducted at a time of more predictability in global politics. How shifting global cooperation will impact the work of agroecology is yet to be seen. The discussion about the pre-existing governance frameworks illustrates the importance of reliable and rules-based global cooperation for politically progressive ideas to come to light.

The Sustainable Development Goals (SDGs) contributed to the legitimacy of agroecology as a policy framework. This insight was brought to my attention through an interview with an Agricultural Advisor at FAO, who said:

> What made it a good moment [for agroecology at FAO]? The SDGs. The growing investment of FAO and other UN agencies in the SDG agenda, adopted in 2015, was a determining factor. The SDGs represent a universal, ambitious and transformative vision of development. When carefully examined, agroecology embodies a similar spirit and directly contributes to multiple SDGs. Promoting agroecology therefore also meant advancing the implementation of the United Nations development agenda itself. (Rémi Cluset, Agroecology Advisor at FAO)

Consequently, the SDGs, as an existing governance framework that had been officially approved by UN member countries, created legitimacy for the work FAO staff was seeking to achieve through agroecology. By framing agroecology as a vehicle to achieve the already agreed upon goal of Zero Hunger (SDG 2), for example, advocates were able to leverage the SDGs to bring legitimacy to their work on agroecology.

The 17 Sustainable Development Goals with their associated 169 targets were adopted as the new global development agenda by 193 countries in January 2016 (United Nations, n.d.). The SDGs were launched part-way through Da Silva's leadership of the FAO, which ran for two consecutive four-year terms from 2012 to 2019. Though the SDGs were not present as a governance structure at the outset of the FAO's work on agroecology, they quickly became an important normative framework that enabled this work to gain traction. The SDGs have become the focal point of both national and international development initiatives. The SDGs present a global governance framework "more about legitimacy, accountability, the mobilization of technical capabilities, and popular support than it is about traditional modes of state command and control" (Dalby et al., 2019). Consequently, their primary function is in agenda setting and legitimizing the significance of development work aimed at attaining the goals. Whether or not it is possible to attain the targets by 2030, as was planned when the SDGs were launched in 2016, is questionable, as progress has been slow and even reversed with rising crises such as the Covid-19 pandemic and armed conflicts (Arora & Mishra, 2022; Kroll et al., 2019; Sporchia et al., 2024).

The literature emphasizes that the SDGs are a unique instance of global governance cooperation for a better future. Authors highlight two characteristics of the SDGs that set them apart from previous global development goals (such as the Millennium Development Goals): 1)

the process of development of the SDGs and 2) the fact that they are applicable to all countries regardless of development status (Fukuda-Parr & McNeill, 2019). The process by which the SDGs were created is considered unique, as the SDGs are not a top-down United Nations mandate imposed upon member states. Instead, member states engaged in an extensive collaborative bottom-up process to develop the goals as they stand (Fukuda-Parr & McNeill, 2019). Furthermore, the SDGs are a departure from previous global goals, as they apply equally to all member nations, regardless of wealth or development status of the country, instead of being focused only on "developing" countries (Fukuda-Parr & McNeill, 2019). Consequently, there are numerous reasons why scholars emphasize the importance of the SDGs and see in them a promising development in the global governance landscape. The SDGs present a unified discursive framework by which global development efforts can orient themselves (Biermann et al., 2017).

Dalby et al. (2019) also point to the significance of unifying aspirational goals in building global cooperation. Kanie & Biermann (2017) refer to governance through goal setting as a unique and novel way of engaging in international politics, that is significant as there is the potential that the aspirational goals will become enshrined in formal institutions over time. According to Rémi Cluset (Agroecology Advisor at FAO), this has happened with the SDGs within UN agencies, as the member states have formally approved the SDGs thereby bringing the aspirations of the governance framework into the workflow of FAO, in the sense that the employees of the agency understand the SDGs as part of their core mandate.

Furthermore, the SDGs are a mechanism through which to overcome the barriers of issue-based political silos: "The purpose of the SDGs is to capture the interconnection between issues; that is, they encourage integrative and systematic approaches to global problems" (Kanie & Biermann, 2017). This is particularly relevant for food systems governance because of the siloed approach to food systems governance and its significant negative impact on food systems reform (De Schutter et al., 2020).

Finally, the Sustainable Development Goal number 2 "Zero Hunger" is frequently cited in the food studies literature as an avenue to introduce food systems reform into the SDG agenda (Blay-Palmer & Young, 2019). The argument that agroecology is a significant pathway to achieving the SDGs, and the Zero Hunger goal specifically, has been made repeatedly (Altieri & Nicholls, 2020b; Blum, 2024; Gliessman, 2020; Thakur et al., 2020). Consequently, FAO staff

were able to use the weight of the SDGs as a global governance framework to lend legitimacy to their work on agroecology, especially after the publication of the 10 Elements of Agroecology in 2019.

In addition to the SDGs, the fact that 2014 was the International Year of the Family Farm (IYFF), also contributed to a pre-existing international policy landscape that created space for agroecological approaches. The United Nations declared 2014 the year of the family farm after a long process of advocacy and negotiation, beginning in 2008 with a proposal from the World Rural Forum and 350 civil society organizations (IFAD, 2014). FAO was then invited by the UN General assembly to coordinate the implementation of the IYFF (IFAD, 2014). The main goals of the IYFF were to promote and support "sustainable family farming" through policy and raising public awareness of the "vital role that family farmers play in agricultural and development sectors" (IFAD, 2014). Given that the same civil society actors that advocated for the IYFF also brought agroecology to FAO, there was a substantial overlap in the two areas of work. Agroecology presented a unique opportunity for the FAO leadership to fulfill the mandate of implementing the IYFF (Gliessman, 2014). As stated in FAO's announcement of the IYFF: "At national level, there are a number of factors that are key for a successful development of family farming, such as: agro-ecological conditions and territorial characteristics; policy environment; […]" (FAO, 2014). Consequently, agroecology was seen as a paradigm through which FAO could achieve its mandate as regards the SDGs as well as the IYFF.

Director General

The work of the Director General of FAO was an essential factor that brought agroecology into a prominent position in the organization. Throughout the expert interviews conducted for this research including FAO staff, politicians, civil society members, and academics alike emphasized the pivotal role that the Director General played in the process. Alongside the constellation of factors that created an enabling geopolitical environment, as outlined above, the appointment of the new FAO Director General in 2012, José Graziano da Silva, led to an organizational shift that put agroecology into the focal point of the FAO's work for several years.

The Director General is one part of the three-fold governance structure of FAO, alongside the conference and the council. The conference meets every two years, is governed by the votes of each member country, and makes decisions about FAO's policy and budget (Hofner, 2010). The

council is a subset of the conference, which meets more frequently, and makes governance decisions with the support of FAO's committees (Hofner, 2010). The conference appoints the director general, who in turn oversees the organization's work. In addition, it is important to know that FAO is funded both by member country contributions, as well as by donations from the private sector, industry, and foundations (Hallam, 2015). All these funders have influence over the work that the organization does. The director general has substantial power over the structure and focus of the organization as well as allocation of resources, as outlined in FAO constitution: "Subject to the general supervision of the Conference and the Council, the Director-General shall have full power and authority to direct the work of the Organization." FAO Constitution - Article VII (FAO, 1945). The output and impact of the work of FAO is an interplay of the member countries that constitute FAO conference, the governing bodies, the director general and FAO staff (Hallam, 2015).

When Graziano da Silva was appointed Director General of FAO he took over the directorship of the Organization from Jacques Diouf, who had held the longest-running Director Generalship in FAO's history from 1994 to 2011. Diouf's leadership of FAO, though it began as supportive of a rights-based approach to food security, was marked with controversies (Anthes & De Schutter, 2018). On the one hand, there was substantial criticism of Diouf because of his and FAO's position in support of biotechnology and genetically modified crops (Diouf, 2003; Paarlberg, 2005; Müller, 2011). In addition, the structure of FAO under the leadership of Diouf has been described as "disjunctured" in that it was complex, compartmentalized, decentralized, and the work culture of the organization was shaped by hierarchy and formality (Dionne, 2010).

An independent external evaluation of the organization, published in 2007, highlighted a significant lack of trust between most actors within the organization with associated dissatisfaction and operational challenges (Hallam, 2015). Over time, there was an increasing criticism of Diouf's leadership, as well as the work and efficacy of the FAO as a whole. The state of dissatisfaction with the organization led to member-states withholding payments and ultimately to a long process of organizational reform under Diouf in 2006 (Dionne, 2010).

The organizational reform continued for 10 years, until the end of Diouf's term as director general, and then took on a new life with the appointment of Da Silva (Hallam, 2015). The central issues of insufficient funding and the need to show cost effective results were also at the

heart of Da Silva's program of FAO reform. Da Silva's stated focus was to make FAO more cost effective by reducing bureaucracy and administrative costs whilst establishing the FAO as a "knowledge organization" based on technical expertise and fieldwork (Da Silva, 2019).

Looking at the years preceding Da Silva in FAO's governance, it is evident that the organization was fraught with substantial challenges alongside a very ambitious mandate. Da Silva took on the leadership of an organization that, from a governance perspective, was struggling to function optimally and to the satisfaction of its stakeholders. From an organizational mandate perspective, FAO under Diouf showed a commitment to Green Revolution approaches to addressing hunger, with an entrenched set of values and priorities. Entering the organization with the mandate for substantial reform was part of what made it possible for Da Silva to take an experimental approach with new ideas in the organization.

Throughout the interviews I conducted for this dissertation, my sources told me that Da Silva had a unique background that enabled him to see the value of agroecology, and to bring it into the organization despite the organizational legacy of adherence to Green Revolution technologies and approaches[11]. Interviewees emphasized that his openness to agroecology could be attributed to Da Silva's unique background in the Brazilian context, as well as strong advocacy from civil society. Barbara Gemmill-Herren, who worked under Da Silva's leadership as Global Pollination Project Coordinator, articulated Da Silva's perspective as unique due to his work experience in the Brazilian political landscape and anti-hunger campaigns, which she described as "understanding agroecology as a Brazilian" (Barbara Gemmill-Herren, Former Global Pollination Project Coordinator, FAO). This quote reflects the unique political and cultural background of Da Silva, who's understanding of agroecology was shaped by the perspective of Latin American social movements.

Interestingly, there is a long history of civil society advocating that FAO work on agroecology starting as early as 1996. This history is thoroughly and interestingly documented in Nora McKeon's 2009 book *The United Nations and Civil Society: Legitimating Global Governance–Whose Voices?* (McKeon, 2009). What changed with Da Silva taking on the leadership of FAO was that this advocacy no longer fell on deaf ears. Hans Herren, chair of the

[11] This position was represented by Interview 7, Interview 9, Interview 36, Interview 37, and Interview 50.

IAASTD report, international development expert, and president of Biovision Foundation and Millenium Institute, described Da Silva's transition into the FAO director generalship as follows:

> A different Director General - Jacque Diouf left. Then we had Da Silva, who came in from Brazil and he was very much involved in Brazil itself. You know, with agroecological practices taught to small-scale farmers, and with all kinds of programs at a time. But then he came to FAO and in the beginning, he felt the pressure from the usual suspects, as we call them, and it took a while, and it also took a great effort from the NGOs who kept meeting with him. I met with Da Silva and a few people several times also to discuss this, and he then sort of cracked open the door to look at agroecological practices also. Then he built up a team which was very active in developing the 10 Elements of Agroecology. (Hans Herren, Co-Chair of the IAASTD Report)

This quote reflects the importance of the sustained advocacy from civil society for agroecology, and that it was the Director General that finally began enabling the work on agroecology in FAO. In addition, this quote also emphasises that while civil society was advocating for agroecology, there were constant and sustained pressures for FAO to continue focusing exclusively on Green Revolution approaches.

The significance of Da Silva "understanding agroecology as a Brazilian" is his openness to the social movement dimensions of agroecology. An expert on agroecology and experienced food systems scholar who has worked with multiple global food governance venues including the HLPE and the CFS, provided the following insight in our interview:

> I think civil society has been an engine, a catalyst for this coming (of agroecology), even if Graziano supported agroecology when he came to power. Even if it wasn't huge support, but it was okay. It was better than nothing. But why does he do that? Because he's Brazilian and the movements in Brazil have demanded agroecology. So, in the end, we can say that this is something coming from civil society and social movements in alliance with some researchers, because researchers have always been in this process. (Interview 9)

This quote is an important data point in my argument about the central importance of civil society and academics as advocates for agroecology. In addition, Interview 9 also establishes the fact that the Director General was able to create institutional openness for agroecology in FAO

because of his experience working with farmers in Brazil, who championed the international agroecology civil society movement (McKeon, 2009).

There are several factors that make the Brazilian perspective unique, and that shaped Graziano Da Silva's understanding of agroecology. Da Silva worked in the Brazilian government under Lula Da Silva on the famous anti-hunger campaign Fome Zero (zero hunger). In that context, the structure of the agricultural departments in Brazil, and the deep social movement connections to agroecology in Brazil, are significant. With his previous experience in these contexts Graziano Da Silva was open to the advocacy of civil society actors in shaping his leadership of FAO. To understand the significance of the Brazilian context, the Fome Zero (Zero Hunger) campaign under Lula Da Silva is important. Lula Da Silva was the president of Brazil in the period 2003 – 2011. In that time, Brazilians saw remarkable social welfare gains. There was a 15% decrease in poverty (from 35% to 20%), the Gini coefficient fell by 6.6 percent (from 58.1 to 51.5) indicating a decrease in social inequality, and there was a 10% decrease in infant and child mortality rates, amongst other improvements (DelGrossi et al., 2019). These societal improvements have been studied extensively and are attributed largely to the Fome Zero (zero hunger) campaign that was launched as a far reaching and holistic hunger eradication program by Lula da Silva (Jannuzzi & Sátyro, 2023; DelGrossi et al., 2019; Fraundorfer, 2013).

Graziano da Silva oversaw the Fome Zero program within Lula's government. A detailed analysis of the program is beyond the scope of this chapter. What is relevant for this research is that the Fome Zero program included extensive agrarian reforms. The reforms that were put in place in Brazil through Fome Zero are far-reaching and unique. They enacted several principles that food systems scholars argue are central to sustainable food systems, such as taking a rights-based approach to food security. In addition to centering the right to food, there were other important defining features of the Fome Zero agrarian reforms: they centred the family farm and small-scale agriculture, included water as an aspect of food security, promoted regional and territorial markets, created a national school nutrition program that sourced from regional family farms, set up market mechanisms to enable small farmers to achieve fair prices and not be out-competed by large companies, settled landless families on agricultural productive lands, and many other initiatives (DelGrossi et al., 2019). Brazil achieved its successes in the zero-hunger campaign by using strategies that are aligned with agroecological principles, and that are not

supported by the Green Revolution ethos. Having seen the successes of a rights-based approach to fighting hunger, Graziano da Silva was uniquely positioned to bring this approach into FAO.

Understanding the unique structure of Brazil's agriculture departments also provides important context. The Brazilian government contains two departments of agriculture: the Ministry of Agriculture and Livestock (MAPA) which is "responsible for managing public policies to encourage agriculture, promoting agribusiness and regulating and standardizing services linked to the sector" (Government of Brazil, n.d.), and the Ministry of Agrarian Development and Family Agriculture (MDA). The co-existence of industrial agriculture and family farming in two separate departments of the federal government has enabled the advancement of progressive programs within this government. Barbara Gemmill-Herren mentioned in our interview that Graziano da Silva was able to bring the perspective of the co-existence of two systems as an approach into FAO, which made it possible to begin the work on agroecology:

> He [Graziano da Silva] recognized the importance of large-scale industrial agriculture in Brazil and agroecology as two perhaps competing approaches. He believed that both could probably coexist or find a way to coexist with each other. I'm not sure I completely agree with that. But I can understand, from a political standpoint, that made it possible to go forward. (Barbara Gemmill-Herren, former Global Pollination Project Coordinator at FAO)

The strategy of allowing for the co-existence of competing agricultural paradigms within one government or organization is an interesting insight. Creating space in FAO for agroecology did not necessitate Da Silva to actively de-invest from Green Revolution approaches. While this enabled the paradigm to enter FAO, it also made it easy for the following Director General, Qu Dongyu, to scale-back the importance of agroecology in the organization again, as discussed later.

Finally, Graziano da Silva was also influenced by the deep interconnection between agroecology and social movements in Brazil. As detailed in the previous chapter on the history of agroecology, Latin American countries and Brazil in particular, claimed and defined agroecology as a flagship concept for social movement and rights-based food systems transformation. This understanding of agroecology as the paradigm for transformative change in food systems is reflected in many quotes from da Silva, such as:

> We need to promote a transformative change in the way that we produce and consume food. We need to put forward sustainable food systems that offer healthy and nutritious food, and also preserve the environment. Agroecology can offer several contributions to this process. (Graziano da Silva quoted in FAO, 2018, April 3)

The fact that Graziano da Silva conception of agroecology was shaped by social movements created a perspective by which agroecology was understood by Da Silva as a vehicle for "transformative change", rather than the more scientific agricultural technique-based definitions. This was also important to the work that he enabled at FAO on agroecology.

With the unique Brazilian background Graziano da Silva took on the leadership of FAO and, after substantial pressure from social movements, created an opening in FAO for agroecology. Concretely, what did openness to agroecology mean? According to my interviewees, there were three substantial changes that took place that enabled agroecology to enter the work of FAO: a shift in the work-place culture around agroecology within FAO, the launch of the work on agroecology through the first agroecology symposium, and staffing.

FAO staff were now encouraged to openly talk about agroecology. As Barbara Gemmill-Herren recollected:

> He [Da Silva] encouraged us to start talking about agroecology at FAO. Up until that time, we weren't really allowed to. It was something that, if you put it into a document, it would get struck out by your supervisors. And, they obviously had directions from higher up not to even recognize agroecology. So, this was a real sea-change, that we were able to do this. (Barbara Gemmill-Herren, former Global Pollination Project Coordinator at FAO)[12]

The institutional change towards a culture of open dialogue and focus on agroecology was formative in shaping the work of FAO staff on agroecology.

It is a matter of record (McKeon, 2009) that there were individual staff working on projects within FAO that could be said to be agroecology projects long before Da Silva took on the Director General position. However, the work never coalesced under this concept, nor was

[12] The lack of engagement with agroecology in the FAO of the word agroecology is also discussed in Chapter 2 of this dissertation in the context of the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) report that was published in 2008.

there a coordinated effort to create a program of work on agroecology specifically. With staff being able to actively work and collaborate on agroecology it was possible to organize under that term.

Secondly, Da Silva gave the direction to organize the first agroecology symposium in 2014. Interview 9 articulated the leadership of Da Silva in the agroecology symposium as follows:

> It was really the fact that the Director General was Brazilian. He was elected at the end of 2011. So, we started in 2012. He was willing to support agroecology, to a certain extent. And one of the first concrete things that he did was to say: we're going to organize an international symposium. So, it was really him. (Interview 9)

Consequently, the Director General gave the direction to organize the FAO symposium on agroecology. In addition to the directive from FAO leadership, there was also a lot of staff work that went into the event, as mentioned by Barbara Gemmill-Herren:

> We started thinking how we can best address this (agroecology in FAO). And of course, within FAO, it's addressed in a certain way. It's almost always through conferences or a symposium through which you bring in a topical area; governments and others are then free to engage or disagree. So, I believe in 2013, we began planning for this, and we had the First International Symposium on Agroecology. We found funding for that. It wasn't something that FAO was necessarily giving us funding for, but I could work it into various projects. (Barbara Gemmill-Herren, former Global Pollination Project Coordinator at FAO)

This quote illustrates that the coordinated efforts of FAO staff, both in leadership positions and otherwise, was instrumental in creating FAO's work on agroecology.

Finally, the Director General made significant staffing choices. When Graziano da Silva took over the leadership of FAO he hired many staff from the Brazilian government, specifically from the Ministry of Agrarian Development and Family Agriculture (MDA). Peter Rosset, former FAO consultant and academic specializing in the social movements of agroecology, drew my attention to the importance of Da Silva's staffing choices at FAO:

> "There was definitely a direct line from Brazil to the FAO. Brazil is part of Latin America, and Brazil was one of the countries in Latin America where social movements, NGOs, and

> academics picked up very early on agroecology. The early PT or Workers Party governments had won some public policies to support agroecology. All that came together with Graziano, a Brazilian, being named the director general of FAO, and basically moving one or two hundred Brazilian government staff to Rome to become FAO staff. Most of them came from the ministry MDA, is the Ministry of Agrarian Development, which was where most of those social movement gains had been made. Over and over, winning agroecological policy, and then they became the source of that same social voice; they were pushing the same topic when they were Brazilian government functionaries, and now they were FAO functionaries. And people knew each other on a first-name basis and everything already. And so, there was like a bridge from Brazil to FAO because of that" (Peter Rosset, Professor at Ecosur Advanced Studies Institute Mexico).

The quote from Peter Rosset illustrates clearly that the importance of Da Silva's work experience in the Brazilian government both influenced his understanding of agroecology as a transformative paradigm, and also that the Brazilian government connections enabled onboarding staff into FAO that were also used to working with agroecology as understood by social movements in Brazil.

As discussed earlier, the outcome of FAO work is an interplay of the FAO leadership, the member countries, and FAO staff. Bringing staff into the organization that were strong supporters of agroecology was another important factor that made the work on agroecology within the organization possible. New staff positions within FAO were created that were specifically mandated to work on agroecology, such as the establishment of the Agroecology and Ecosystems Management Team and individual Agroecology Officer positions.

The unique positionality of Graziano da Silva as Director General opened doors to agroecology in FAO that would not have been possible otherwise. By calling for a symposium on agroecology and beginning a new program of work on agroecology within the organization, which included dedicated staff and new staff positions, Da Silva set the stage for agroecology as a focal point of the work within FAO.

Diverse Advocates

The fact that there were many different advocates that pushed the FAO to work on agroecology also contributed to the success of the effort to bring agroecology into FAO. This was a large topic within my research, with many interviewees detailing a truly complex interplay of personal and professional motivations of varied actors. Particularly important advocate groups were civil society actors and FAO staff, alongside academics and political actors representing UN member states.

Civil Society

There is a long history of civil society actors bringing agroecology forward as an important topic to FAO. Nora McKeon, whom I also interviewed for this research, wrote a detailed account of this history in her book *The United Nations and Civil Society* (2009). According to this account, there were two meetings between the International Planning Committee for Food Sovereignty (IPC)[13] and FAO in 1996 and again in 2002, in which the IPC requested that FAO work on agroecology (McKeon, 2009). Neither of these formal requests, nor the ongoing work between the formal requests, led to a successful outcome. McKeon attributes the failed uptake of agroecology at that point to lack of leadership in FAO, as well as shifting focus of key civil society actors: "The IPC and some FAO staff began the process of setting up a formal agroecology program of work at the FAO in 2002. However, the process petered out with a lack of leadership support within the FAO and also the person spearheading the initiative within the IPC focusing his work on regional initiatives in Brazil. In 2004 the FAO published its controversial biotechnology report, and IPC and FAO relationships became less collaborative" (McKeon, 2009). Ten years later, with the 2012 change in leadership of the FAO and a major food price crisis adding pressure, these circumstances changed, and the advocacy of civil society actors now fell on fertile ground. What is particularly important in this context is that civil society engaged the FAO to work on agroecology as a political concept, not limited to defining

[13] The IPC is "an autonomous and self-organised global platform of small-scale food producers and rural workers organizations and grass root/community based social movements" (IPC, 2026). The IPC is comprised of 300 million small-scale producers and six thousand organizations. The purpose of the IPC is the advancement of Food Sovereignty through facilitating dialogue and debate amongst food systems actors (IPC, 2026).

agroecology to a technical set of tools (McKeon, 2009). When FAO organized the First International Symposium on Agroecology it was important that FAO not only began working on agroecology, but that the FAO took the civil society understanding of agroecology as a political vision seriously and used this as their starting point. The competing visions and definitions of agroecology, along with the debate and fears about co-optation, are a significant part of understanding the political function of agroecology, which was addressed in the preceding chapter.

FAO staff

The work and advocacy of civil society actors would not have been possible without receptive staff within FAO. Stephen Gliessman, prominent academic advocate of agroecology, who acted as an informal mentor and advisor to FAO staff in their work on agroecology, emphasized the importance of FAO staff advocacy in our interview:

> There was actually a movement of very motivated people within FAO who laid the groundwork [for social movement engagement with FAO on agroecology], who laid the foundation for that movement to occur, and still have an infrastructure within FAO to keep doing that. At first, the social movements were totally against FAO becoming involved because of the fact that, you know, for so long FAO has not represented the smallholder traditional Indigenous side of agriculture. And so, they were very skeptical that an organization like FAO could or should be using the word agroecology. But I think the series of meetings that we had starting in 2014, ending in 2018, and the subsequent platform and people (five or six specialists in different parts of the world that represent agroecology), they've really delayed the fears that a lot of social movements had. Now maybe they have joined the movement, and that is putting more pressure on other parts of FAO. I mean, FAO is an incredibly complex organization, and how it operates, supposedly represents every country in the world, when the funding comes from the more powerful countries of the world. It sets up a lot of imbalances in how things are done and what's supported and all that. But the voice of civil society, the voice of the social movement, organization, has become very, very important and continues to be so, because of agroecology. (Stephen Gliessman, Professor of Agroecology, UC Santa Cruz)

This quote reflects the complicated relationship that exists between the civil society actors that advocate for political and social progressive work within the FAO and the hugely varied staff and priorities that work within the organization. It also highlights the importance of the individuals within the FAO that were willing to champion the social movement's vision of agroecology within the organization. That championing became possible with the new director general, as discussed above. Examples of staff dedication include finding outside funding to make the FISA and the regional meetings possible[14], and working to defend and advocate for a holistic understanding of agroecology in the organization. In addition, staff find multiple entry-points and synergies in their work to collaborate on agroecology. For example, Rémi Cluset who is a senior advisor to FAO, described the importance of agroecology in the daily work in our interview:

> We have many projects in FAO, like farmer-field school, where agroecology is seen as an innovative solution. So, when we have projects in the field, we try see how agroecology can contribute to the objectives of the project. We have different angles - data is one. But my colleagues are working on many other things, you know, on markets, territorial markets, on nutrition. Even though agroecology isn't one team, we have focal points, but that doesn't mean that we have only the one person working on agroecology, they are just the entry point. Many people are currently working on projects in agroecology - that's why we wanted to have agroecology mainstream in FAO. So, it's spreading inside the FAO quite well. (Rémi Cluset, Agroecology Advisor at FAO)

The statement reflects a strong motivation amongst some FAO staff to collaborate on agroecological projects and to bring agroecology into their work in multiple workstreams. At the same time, it shows that staff can have an impact inside the organization.

A further important role that FAO staff played in bringing the politically transformative vision of agroecology to the organization was building bridges between social movements around the world. FAO staff organized regional meetings from 2014 to 2018, which acted as consultations and consensus building on agroecology. The work involved was described to me by Caterina Batello, former FAO Team Leader:

[14] See quote by Barbara Gemmill-Herren in previous discussion on the Director Generalship and the organization of the First International Symposium on Agroecology

> We organized the conferences, and things like that. So, we had to involve the different countries. So, we had to recognize the differences among the different countries. For example, we were talking with the social movements of Latin America, which was absolutely not a topic for Europe. For example, you know, the way you talk about food sovereignty in Africa is not how you speak about it in Asia. So, we really had to build alliances, regional alliances, and national alliances in order to come back together. And the reason why we came back is that we have reported common areas of work and differences to be highlighted so that everyone could find the space in agroecology, and it was fully respecting the multidisciplinary and multi-face aspects of agroecology. So those meetings in between were building the credibility of agroecology in FAO. (Caterina Batello, former Team Leader of Agroecology and Ecosystems Management at FAO)

This quote is an example of the type of work that was conducted by dedicates FAO staff in building credibility for agroecology within the organization. It involved many years of coordination and consensus building to construct the 10 Elements of Agroecology framework of FAO. In addition to finding the funding to make the FISA possible, there was a small set of FAO staff that worked tirelessly and passionately to use the opportunity that the new Director General brought to the organization to make agroecology a serious part of the work of the FAO. These included the staff that were brought in from the Brazilian Ministry of Agrarian Development and Family Agriculture, and others. I interviewed five current and former FAO staff members that were involved in the agroecology work in FAO. The data from these interviews highlight the significant role that advocates of agroecology that were internal to the organization played in advocating for, organizing events for, and stewarding the political vision of agroecology in the organization.

Academics

As outlined in the history section of this dissertation, academics have been a very important actor group in the evolution of agroecology into a significant governance framework. This is not unique to agroecology, as there is extensive global governance scholarship on the importance of experts in shaping governance discourse (Adler & Bernstein, 2004; Quack, 2016). In the work of FAO staff there was substantial reliance on the work and mentorship of academics to advance the presence of agroecology in the organization. Stephen Gliessman was frequently

mentioned in the interviews as an inspiration and mentor. A FAO staff member who was heavily involved in organizing the FISA, said the following in our interview:

> We had at that moment a close relationship with Steve Gliessman. Steve Gliessman was also guiding us behind the scenes during this whole process - he cannot be there, but he would always help. Every time I had doubts or my colleagues - we were calling Steve and saying, help us here please. (Interview 7, FAO Agriculture Officer)

Interview 7 described how Dr. Gliessman was able to help FAO staff navigate the difficulties of finding compromises between the different visions of agroecology and guiding the process of finding definitional principles that different actors would accept.

In addition to inspiration and mentorships, academics have lent agroecology scientific and social credibility. Dr. Miguel Altieri is another scholar that was mentioned throughout interviews as an important influence. Here in the words of Barbara Gemmill-Herren:

> I knew of agroecology well before I went to FAO. I had Miguel Altieri's book, I went there with that book, and it was well thumbed. So, I had been reading and understanding about agroecology before I went to FAO. But then, I was hired at FAO to be the coordinator for the international pollinator initiative and to coordinate a global project, the global environmental facility project on pollination. (Barbara Gemmill-Herren, former Global Pollination Project Coordinator at FAO)

Through reading the publications of the early agroecology scholars discussed in the History section of Chapter 2 of this dissertation, some of the FAO staff that would later end up working on agroecology projects within the organization were aware of agroecological principles and aspirations long before the FAO formally began working on it. Early scholars to champion agroecology include Holt-Giménez & Altieri (2013), Gliessman (2018); Rosset & Altieri, (1997), and Wezel et al. (2009). Consequently, the scholarly work of early academics had an impact on the work of FAO staff in the sense of shaping their ideas and thoughts on the topic. This shaping of the conceptual framework of FAO staff can be understood as an example as the epistemic authority of the academics and scientists that have shaped agroecology.

Countries – UN Member States

Of the 193 UN member states three countries were mentioned throughout the interviews as having a significant impact on how and whether agroecology was discussed in global

governance venues such as the FAO: the United States of America, France, and Brazil. The USA consistently played an oppositional role as regards agroecology, which is significant in that the USA was also the FAO's single largest donor at the time and consequently had disproportionate influence. Interestingly, France and Brazil both strongly advocated for agroecology. In the next chapter I present an analysis of the Committee on World Food Security (CFS) negotiations on agroecology, at which point the position of many member countries will be explored in more detail. In the meantime, it is worth noting that in spaces outside of the CFS, UN member countries advocated for agroecology. Peter Rosset described the role of Brazil and France as advocates for agroecology as follows:

> Brazil and France were two of the countries that pushed very hard on FAO to take up an agroecology agenda. Brazil had an advantage because Graziano was a former minister in the Brazilian government. And so, it all came together in that way. I would say that both Brazil (and the Brazilian government) and the French government, in their pushes for agroecology, had significant differences with their own social movements over agroecology. But they still were the ones to push it. France was definitely a green capitalist model, and Brazil, it's a little bit complicated, but the PT governments gave a lot of lip service to being friends and allies with the peasant movement. (Peter Rosset, Professor at Ecosur Advanced Studies Institute Mexico)

While countries each have their own unique internal political dynamics, Brazil and France were country-level advocates of agroecology in the work of FAO. Whereas the Brazilian advocacy for agroecology appeared to be an official government position, France's support of agroecology was partially due to the personality of the minister working on the file. In my interviews, Rémi Cluset, who is a FAO senior advisor, remembered the negotiation position of France as follows:

> Two reasons (why France advocated for agroecology): first, it was a progressive government, the socialists, as we say in France, with a progressive idea of agriculture. Secondly, the minister that was in charge of that, Stephane Le Foll, was a political person who was really involved and convinced to push this topic forward, also in the European Parliament. So, it was also a personal thing and with his charisma he managed to be convincing. (Rémi Cluset, Agroecology Advisor at FAO)

The fact that the French minister of the time was a supporter of agroecology and advocated for it in the UN sphere, despite agroecology not being really developed in the country, was also mentioned in my interview with Barbara Gemmill-Herren:

> The minister from France was a very staunch supporter of agroecology. Again, kind of a political animal like Graziano, and really supporting agroecology in France, but also recognizing that there's other forms of agriculture in that country. (Barbara Gemmill-Herren, former Global Pollination Project Coordinator at FAO)

When it comes to UN member country advocacy towards the FAO, the personal interests of key actors (e.g. the minister from France), the entrenched national positions (e.g. that of the USA), and the amount of funding that the country provided, shaped the pressure that they exert on the organization. In addition, as outlined above, many of the member state countries had elected socially progressive governments that created favourable political environment for agroecology. Consequently, the interview data of this research project illustrates the complex interplay of national politics on global governance negotiations. In the complex dynamics of the governance discourse on agroecology shows that individual actors and advocates can also shape the negotiation position of individual countries in the UN context.

Interests

An important additional consideration in the support for agroecology in the work of the FAO is the role of political and financial interests that stood in opposition to the idea. Scholars argue that interests, alongside ideas and institutions, are key drivers of policy change (Cox & McCubbins, 2000; Clapp, 2012; Cox, 2016). While there were strong and continued advocacy efforts that allowed agroecology to gain traction in the organization, these efforts met with strong opposition from key actors. In the following chapter, that details the CFS negotiations on agroecology, these dynamics are addressed in more detail. However, within the context of FAO's work on agroecology it must be noted that, alongside the institutional inertia that favoured a productivist approach to food systems as described above, there were also financial and political interests that steered the work of the organization in that direction. Understanding these interests sheds light on the context within which the advocates of agroecology discussed in this section were operating.

The role of powerful member states, notably the USA, in upholding a long-standing opposition to whole-systems, rights-based, and nutrition-oriented initiatives at the FAO is important here (Anthes & De Schutter, 2018; Emadi & Rahmanian, 2020; McKeon, 2015). In their historical analysis of the FAO's work on food systems, Emadi & Rahmanian (2020) describe how the political interests of member states can be understood by their positions as commodity exporting vs commodity importing countries. Countries whose economies depend on agricultural exports favour free market policies, which in turn shapes the country's position of work priorities and policies of FAO. In addition, the history of political and financial interests details the role of member states, such as the USA, as obstructionist due to their privileged position within the organization as major donors, as well as their entanglement with corporate financial interests in the agri-food sector. For example, Anthes & De Schutter (2018) argue that there is a "long-standing denial by the USA, FAO's largest financial contributor, that rights such as the right to food are truly human rights" (Anthes & De Schutter, 2018). The entrenched interests and disproportionate influence of some actors due to funding contributed to the organization's lack of progress on reforms. The dynamic of negotiation based on interests rather than the subject at hand is explored in more detail in the chapter on the CFS negotiations later in this dissertation. The analysis shows that the negotiation positions of some of the member states on the CFS's policy recommendations on agroecology reflect this dynamic. A comprehensive understanding of the work of advocating for a new paradigm to enter entrenched governance space includes understanding the interests that have maintained the existing paradigm and that resist changes. In the context of agroecology in global food governance discourse, this includes understanding the financial and political interests of actors that favour productionist systems and resist the political vision of agroecology.

Science

Alongside crises and advocacy, the third strong influence that enabled the uptake of agroecology into the UN Food and Agriculture Organization was the scientific aspect of agroecology. The fact that agroecology is defined and operationalized as a scientific approach to agricultural problems and practices made it possible to get the foot in the door of the organization. Agroecology as a political concept, with associated social and economic ideas, was the long tail that followed behind. As discussed above, individual staff within the FAO worked

on agroecological projects, without there being institution-wide coordination on agroecology, before the 2014 FISA and the official uptake of agroecology in FAOs program of work. These projects took place within the technical and scientific departments of the organization. Nora McKeon documented the history of agroecology at FAO in her 2009 book where she writes: "The FAO had long- standing relations with CSOs in specific programme areas related to agroecology, such as biodiversity, natural pest control and organic agriculture, much more so than was the case for the right to food" (McKeon, 2009). Consequently it is a matter of record that early engagement of FAO staff with agroecology was through the scientific divisions of the organization.

The importance of the scientific aspects of agroecology in the work of FAO staff was also confirmed to me by a long-time staff member of the FAO, Barbara Gemmill-Herren, who successfully coordinated an international agro-biodiversity project through the FAO, supported by the Convention on Biodiversity:

> At the end of the day I think that myself and the partners all recognize that farmers don't manage pollinators by themselves. It's the whole farming system that has the impact on whether we're developing a sustainable regenerative system or not. And together with both my partners on the pollination project, and with colleagues at FAO, we felt that we need to stop treating things in a patchwork way […] And so, I was responsible for bringing in more ecological approaches to agriculture. It would be very hard to ignore agroecology as the main umbrella. I don't know what year we had a change of a Director General, but we were talking about agroecology within my working group. (Barbara Gemmill-Herren, former Global Pollination Project Coordinator at FAO)

Barbara Gemmill-Herren then continued to describe how, with the change of leadership in the FAO, this level of coordination, at the working group level in FAO, was able to percolate through to the higher levels of organization. Other interviewees described similar work experiences at the FAO through insect ecology, integrated pest management, and other scientific divisions. For example, Caterina Batello, who worked in Agroecology and Ecosystems Management at FAO, remembered as follows:

> At that moment I was in a very technical, the most technical division of FAO on agriculture. It was the crop and pasture division. I made sense of all the technical expertise that was in my team. And we had to brainstorm for three, or four days to find a

> new sense for our team, and slowly introduced it, so it was very bottom-up from the technical point of view upward, which was not easy because normally, agroecology comes from a policy entry point, not from a technical viewpoint. It really came and people from very specialized areas of crop production got together, and they agreed on agroecology. So that's how we introduce it. (Caterina Batello, former Team Leader of Agroecology and Ecosystems Management at FAO)

On the one hand, agroecology provided the scientific divisions of the FAO an attractive organizing principle, an umbrella term, to coordinate the ecological restoration and preservation projects that were ongoing on farms. The research data quoted above illustrates that the early scientific work on agroecology in FAO was motivated largely by the interaction of ecological systems with agricultural systems, such as pollination and crops and pasture. On the other hand, the scientists that were using the term agroecology in their work gave the social movements more credibility when they advocated for the FAO working on agroecology. Rémi Cluset formulated the relationship as follows:

> And so, I think that the scientific community helps us a lot to have credibility […] For the first-week seminar we did on agroecology, for instance, there was an open letter of a hundred or so scientists. They were asking the DG: we need to grow agroecology into a solution. It was 100 scientists out of millions, but still, the scientists think, you know, there is credibility when you say "scientists", people listen. So, that's the thing that helped a lot with agroecology - the scientific approach. I see many really good scientists now holding up agroecology. So, I think that this was an important part of the scientific approach, and that's why we saw the first seminar on agroecology in 2014 was about science, because of the credibility, and also because FAO accepted to have a seminar on agroecology as a movement […] So, I think, yes, the strength of agroecology is supported by science, science questions, science problems, and the scientists involved. (Rémi Cluset, Agroecology Advisor at FAO)

This quote reflects clearly how the legitimating authority of western science influenced the entry and growth of agroecology in FAO. Agroecology gave the scientists of the FAO an umbrella term to coordinate a more holistic approach to solving the environmental problems that they were working on. The scientists that advocated for agroecology gave credibility to the social movements that were organizing behind agroecology to bring coordinated attention to the human

rights and social justice problems in modern food systems. A third and important part of the picture is that science was continuously used as a narrative to discredit agroecology. The actors that pushed against agroecology did so by arguing that agroecology is not scientific, not concrete and measurable, such as other methods and technologies. The discreditation of the knowledge systems that constitute agroecology is one of the many tools used by entrenched political interests, such as the USA. Particularly actors with political and financial interests in Green Revolution technologies used this argument to try and discredit agroecology as a viable approach to address food systems problems. The contestation around what knowledge, data, and system of analysis are valid is a complex and ongoing site of debate as regards agroecology (Global Alliance for the Future of Food, 2021). Agroecology exists in a complicated relationship with science and science's authority and claim to truth. This will be further discussed in the next chapter, in which I explore the CFS negotiations on agroecology.

The Evolution of Agroecology in FAO

In this chapter I have described how the confluence of crises, advocates and science, occurring in a geopolitically favourable time, brought about an opportunity for agroecology to be taken seriously by the FAO leadership. Below, I provide an analysis of the impact and evolution of FAO taking up agroecology as a program of work. I present key events and reflections of Interviewees about the significance and impact of FAO's work on agroecology. This section serves to answer the questions: So what? Why and how was it important that FAO worked on agroecology? What have been the lasting impacts of this work? I present interviewee reflections on these questions and argue that there was a brief moment of institutional openness that enabled the work of FAO on agroecology, which in turn set the stage for other global governance venues to work on agroecology. This section builds a bridge between the case study data of FAO and that of CFS in this dissertation.

What made it possible that agroecology be taken up by the FAO as a serious program of work? On the one hand, there were systemic pressures of environmental crises, and a dysfunctional food system as evidenced by volatile food prices and the food price crises of 2007/2008 and by stagnating hunger alleviation measures, such as seen in the SOFI report. On the other hand, there was a moment of opportunity in which the food prices appeared to be re-stabilizing, and several liberal governments in power in the UN member countries that were

pushing for social and environmental projects. These favourable conditions in conjunction with sustained advocacy from outside the organization (civil society) and strong support within the organization (scientific divisions) under the leadership of the new Director General Graziano da Silva enabled the opening of the proverbial window in the cathedral of the Green Revolution. The central importance of supportive political insiders in bringing change to food systems governance has been observed in other governance venues also (Moseley, 2024). This analysis shows that many factors that need to come together for global governance institutions such as the FAO to engage with new ideas and approaches. While crises present opportunities, they can also be paralysing, if they consume large amounts of attention and resources (Smith & Wiest, 2012). In that sense, 2014 was a unique moment in global geopolitics that the advocates of agroecology were able to take advantage of, given the new FAO leadership.

What did the FAO do with the opportunity for reform that was created through the introduction of agroecology as a credible program of work? The FAO's work on agroecology began with the First International Symposium on Agroecology (FISA), titled International Symposium on Agroecology for Food and Nutritional Security, on the 18th & 19th September 2014 in Rome. The Symposium was relatively well received by most attendants, according to my interviews and other sources (Mendonca & Felix, 2014). However, from the outset of the FAO working on agroecology, there were concerns of co-optation from civil society (La Via Campesina, 2014). According to my interviews, the co-optation that civil society actors were concerned about was that the politically progressive idea of agroecology, the one that grew out of the food sovereignty movement is grounded in a rights-based approach to food systems, would be replaced with a technical understanding of agroecology, in which agroecology becomes synonymous with specific agricultural techniques devoid of the political visions of agroecology. However, key individuals (academics and FAO staff) that were present at the 2014 FISA set the tone for the introductory symposium to contain a broad vision of agroecology. Staff working on agroecology in the FAO also reported to me that there were countries that strongly opposed all work on agroecology in the organization. These countries were Canada, United States, New Zealand, Argentina, and Australia. Staff would receive visits from representatives of these countries that were strange, potentially intimidating, and presumably meant to prevent the work from going forward.

After the FISA, which can be understood to be FAO's launch event into agroecology, the organization started convening people around the world in regional meetings on agroecology. The purpose of these meetings was to establish a working definition of agroecology, as well as to find opportunities to "scale up and scale out" agroecological initiatives. To bring together the findings of these regional meetings the FAO hosted a Second International Symposium on Agroecology (SISA) in April 2018 with the title *International Symposium on Agroecology: Scaling Up Agroecology to Achieve the Sustainable Development Goals (SDGs)*. At the 2018 symposium the 10 Elements of Agroecology were launched and with that the regional meetings and agroecology symposia were concluded. An analysis of the 10 Elements can be found in the preceding chapter, in which I discuss the definitional structures of agroecology.

The 10 Elements made agroecology measurable to the FAO, which is a desirable feature for organizations to be able to measure impact and outcomes of programs. After the launch of the 10 Elements, the FAO developed the Tool for Agroecology Performance Evaluation (TAPE), which is used by academics, funders, and organizations to assess agroecological projects. Specifically, TAPE is designed to be a holistic evaluation tool that highlights the multifaceted benefits of agroecological initiatives, as described by Barabara Gemmill-Herren:

> I think it's just so important to really get beyond the productivity paradigm, and to show the many different ways that agriculture does benefit people and communities, not solely in terms of productivity. (Barbara Gemmill-Herren, former Global Pollination Project Coordinator at FAO)

This quote shows that measuring agroecology through tools such as TAPE allows scholars and policy makers to measure impact and value in agricultural systems beyond the crop harvested and sold at market. This is an important feature of future advocacy for agroecology, according to this interviewee. In addition to a new measurement tool, FAO also launched the Agroecology Knowledge Hub, which is a database of all agroecology relevant research and initiatives that the FAO is engaged with. The other major outcome of the FAO's work on agroecology was the establishment of Agroecology Officer staff positions.

In 2019 the Director Generalship of FAO changed from Graziano da Silva to Qu Dongyu. The change in leadership coincided with the end of FAO's high-profile work on agroecology. Though there continue to be staff employed as Agroecology Officers at the FAO, working out of regional offices, the main institutional focus on agroecology has waned. This ark of importance

of agroecology in FAO is described here by a staff member who worked on FAO's Scaling up Agroecology Initiative:

> So, I would be careful in saying that agroecology has gained importance. I think we got some recognition, but not so much. I think we have a lot of work to do to see this transformation really happen. But I would not say FAO is more committed to agroecology today than it was four years ago. I'm not sure about that. We are working in different departments, different divisions. We have got some space internally, but I will not say that of FAO. Today's speech of the DG, if he recognizes agroecology as one way forward to achieve the SDGs, for instance. I'm not sure he would do that. So, I think we are still in this debate internally. And politically, it's not assured that agroecology is recognized. I mean, it is formally, but not in practice. So, I'm giving you the example of FAO, but I could say the same for UNDP, World Food Program, UNEP. I'm not sure that agroecology is recognized by the UN in their projects. So, I think we won some battles, but we did not win the war. (Interview 20, FAO Agricultural Officer)

This reflection of a FAO staff member illustrates that while it is significant that FAO took up agroecology in it's work under the leadership of Da Silva, this did not fundamentally and lastingly change the direction that FAO took to food systems governance. Instead, agroecology has been considered as one approach and sidelined again in relation to other approaches.

The geopolitical context of global food systems shifted significantly after Da Silva's director generalship ended in 2019 with the outbreak of the 2020 COVID-19 pandemic, as well as the Russian invasion of Ukraine. Both geo-political events had massive impacts on global food systems (Clapp & Moseley, 2020; Ben Hassen & El Bilali, 2022). The destabilization of global systems had a lasting impact on global hunger alleviation efforts, which also impacted the FAO leadership's priorities in terms of organizational focus. The fact that agroecology is not a significant part of the current FAO's leadership vision for food systems governance was also reflected on in one interview:

> But I can certainly see that for this Director General agroecology is not a priority. And for the member states, there are a couple of member states for whom it is. They would keep bringing it up and keep saying that it's an issue, but maybe not too loudly. I mean, once in a while France or Switzerland might say something, but the attention is kind of waning. I feel like the attention on agroecology is waning. On the other hand, I think

> what all of this discussion in FAO has done, is allowed, even if it's just a few years, allowed focus on agroecology and the highlighting of agroecology both in civil society spaces, but also in academia and researchers. So, I think that that has been an achievement of this process, of this phase, of bringing agroecology to FAO. (Interview 9)

While the institutional focus of FAO has once again shifted away from agroecology, bringing the paradigm into this venue for a period of time is still seen as a valuable achievement. Since the work that happened on agroecology in FAO lay the groundwork for the following work of the CFS on agroecology, as discussed in the following section, I would agree with this statement.

While the FAO no longer has a strong institutional focus on agroecology, there were a few important outcomes from the 4 years, between 2014 and 2018, that the FAO worked on agroecology. First, it created the 10 Elements of Agroecology and contributed to the existence of a widely understood and agreed-upon definitional structure to agroecology. Second, the work of the FAO raised the profile of agroecology, with more well-resourced institutions taking on the support of agroecology:

> I think that's also an outcome of FAOs work on agroecology that IFAD is now a bit more interested. And IFAD has money, it's a fund, whereas FAO doesn't. So, I think it has led to this kind of little things happening here and there. But it's now not the strongest point for doing normative work on agroecology. (Interview 9)

With the statement on the normative work this interviewee is referring to the favourable circumstances of 2014, outlined above, having significantly changed. The new Director General is not a strong supporter of agroecology, and the global political environment has changed to one of polycrises, with significant world challenges taking up the attentional and financial resources that are needed for new ways of approaching problems.

A third outcome of FAO's work on agroecology were some ongoing staff positions and tools. Staff continue to work on agroecology through TAPE and other means, as articulated by Barbara Gemmill-Herren:

> Right now, the Director General is from China. He seems to be very sympathetic to the private sector. So, I don't think that he's giving so much guidance on embracing (agroecology). I'm really impressed though that the staff have continued; that they're really doing a very nice job and generating good information and having supporting

> projects in different places. So, it has a strong life of its own. (Barbara Gemmill-Herren, former Global Pollination Project Coordinator at FAO)

The creation of staff positions that focus on agroecology has created lasting work on agroecology in the FAO, even beyond the change of the Director General. Interview 9 also emphasized the importance of ongoing staff positions at FAO dedicated to agroecology.

Finally, another important outcome of the FAO's work on agroecology is that it laid the foundations for other global governance venues to take up agroecology as a legitimate and coherent paradigm to focus their program of work on. The uptake of agroecology in other global governance venues happened partially as a consequence of agroecology being a well-defined concept that received a lot of international attention under FAO. For example, the Committee on World Food Security (CFS) asked its advisory panel, the High Level Panel of Experts on Food Security and Nutrition (HLPE), to write a report on agroecology in 2017, which was published in 2019. Several of the agroecology advocates that I interviewed for this research emphasized the importance of agroecology being taken up in multiple global governance venues. The work that the FAO did on agroecology, in terms of its normative function, facilitated the continued and sustained advocacy in other governance venues.

Throughout my interviews there was consensus that the "golden days of agroecology at the FAO" are passed. These golden days were the four years between 2014 and 2018 in which the Director General Graziano da Silva enabled an institutional focus on agroecology. The circumstances that led to this work being possible were complex and far reaching, ranging from global crises of world hunger to technical scientific details of crop pollination, with strong support from important advocates throughout the way. The fact that the FAO, as a powerful normative instrument in the global governance of food, took up this work had far-reaching impacts on the position of agroecology in global governance discourse. Though agroecology is far from being a widely accepted and substantial approach to food governance, it has nevertheless gained wide recognition. In the world of food governance, this recognition has been hard fought for, and the product of many years of advocacy and dedicated work from people all over the political landscape. Above all, the fact that a holistic vision of agroecology has been upheld, one that includes a human-rights centred approach and doesn't minimize agroecology into a technical "basket of tools", was a significant outcome of the FAO's work on agroecology.

With this, it became imaginable to seriously discuss policy mechanisms through which global food systems be governed outside of the paradigm of Green Revolution technologies.

Conclusion

Why did FAO begin working on agroecology? In this Chapter I have detailed the geopolitical circumstances that led to the traditionally productivist institutional focus of FAO shifting to agroecology from 2014 to 2018. With the FAO launching its program of work on agroecology through the First International Symposium on Agroecology in 2014, the paradigm became established in global food governance discourse. I have argued that the combination of crises and geopolitical affordances created an enabling environment for advocates to move agroecology into an organizational focal point through a multi-year program of work with lasting impact on the organization.

The crises that created the pressure for institutional actors to seek out non-traditional solutions include the failure of global food systems to provide adequate nutrition and stable pricing equitably. By discussing the data on world hunger and food pricing I have shown how global food systems have become more destabilized with time, and how this is conceptualized as a status of crisis in global food systems. The fluctuation of food prices, alongside geopolitical instability, have created a situation in which global hunger is increasing, and reaching the target of zero hunger by 2030, formally established through the SDGs, appears to be increasingly unlikely. The crises in global food systems are compounded by those of biodiversity loss and climate change, leading to a state of polycrises. As argued in this Chapter, the pressures of these mounting crises caused key actors, both within FAO and external to FAO, to bring agroecology into the work plan of the organization.

The advocates that brough agroecology as a paradigm with political transformation into FAO were many. In this Chapter I have described the geopolitical context and the advocates that made the work on agroecology in FAO possible. I have described the unique context of geopolitical stability around the year 2014 in combination with existing governance frameworks, and early warning signs of crises, such as the 2007/2008 food price crises. I have argued that the interaction of these factors enabled advocates to bring the politically transformative vision of agroecology into FAO. The advocates that were instrumental in this process include the Director

General of FAO, civil society, FAO staff, UN member states. They did so despite existing and well-entrenched interests that stood in opposition to agroecology entering FAO's workplan.

My research shows that the scientific aspect of agroecology was instrumental in bringing agroecology into FAO. The fact that agroecology was defined, in part, by western scientists, created a paradigm with technical scientific aspects. These technical aspects gave agroecology the epistemic authority to enter the scientific departments of FAO, and there for the work of the organization as a whole.

The work that happened through FAO on agroecology set the stage for how governance actors would engage with the paradigm in other venues, as discussed in the following case studies of the Committee on World Food Security and it's scientific advisory board, the High Level Panel of Experts.

4. The High Level Panel of Experts on Food Security and Nutrition to the Committee on World Food Security

Introduction

The 2009 reform of the Committee on World Food Security (CFS), that followed in the wake of the 2007-2008 food price crisis, was a momentous event in the world of food systems governance. The reformed CFS became a model of inclusive and participatory governance (De Schutter, 2014; Duncan, 2015; McKeon, 2021). By bringing different non-state actors (civil society, the private sector, and foundations) into the formal intergovernmental process, the reformed CFS created a uniquely inclusive and participatory governance venue (McKeon, 2021). The then Special Rapporteur on the Right to Food Olivier de Schutter, at the end of his appointment in that role (2008-2014), published an analysis of the reform of the CFS in which he concluded: "A new breed of international governance is emerging, in which civil society, the private sector, international agencies, are co-authors with governments of international law" (De Schutter, 2014). The perspective that the structure of the CFS is unique and important is shared by many food systems scholars that see the reformed CFS as a model of how participatory global governance is possible (Duncan, 2015; McKeon, 2021).

An integral part of the reformed CFS, alongside the formal participation of a diversity of food systems actors, is its High Level Panel of Experts on Food Security and Nutrition (HLPE-FSN[15]). The HLPE is the science-policy interface (SPI) of the CFS. The HLPE was established as a mechanism for "double loop learning" within the CFS to safeguard against knowledge disagreements and associated governance failures evidenced in the 2007/2008 food price crisis (De Schutter, 2014). The HLPE is comprised of a rotating selection of the world's foremost experts in food systems scholarship and "provides independent, comprehensive and evidence-based analysis" (FAO, 2024) to the CFS.

The CFS requests the HLPE to write reports on pressing issues in food systems governance, and in turn uses these documents as the foundation for the deliberations towards policy recommendations. The science-policy-interface (SPI) was established to ensure that all

[15] Throughout the dissertation I refer to the High Level Panel of Experts on Food Security and Nutrition with the acronym "HLPE" instead of the full "HLPE-FSN" for the sake of brevity and legibility.

CFS members base their negotiations on the same state of knowledge on a given topic, in order to both facilitate effective negotiations and in order to uphold the legitimacy of the CFS (European Commission, 2022; Singh et al., 2021). The following analysis of the CFS negotiations on agroecology illustrate that despite the presence of SPI mechanism, the negotiating positions of different member states and actor groups do not always converge on the HLPE report.

Each HLPE report has a workstream that is comprised of a project team of experts on the topic, which is independent of the HLPE's governing structure, the HLPE steering committee. As part of the establishment of the United Nations Food Systems Summit (UNFSS), discussed in the final chapter of this dissertation, there has been a call to establish a further SPI for food, specifically an IPCC for food (Caro et al., 2023). This suggestion has been met with some criticism and does not seem to be gaining traction (Dury et al., 2023; Turnhout et al., 2021). Consequently, there have been several suggestions on mechanisms and structures for strengthening the existing SPI of food systems governance (Caro et al., 2023; Clapp et al., 2023; Welch et al., 2024). While the HLPE and CFS process are far from flawless, one strength of the HLPE reports is that they clearly engage with points of contention in the knowledge landscape of any given issue and provide a credible basis for CFS negotiations (Turnhout et al., 2021).

In October 2017, the Committee on World Food Security tasked the HLPE with the publication of a report titled *Agroecological Approaches and other Innovations for Sustainable Agriculture and Food Systems that Enhance Food Security and Nutrition* (CFS, 2017). The fact that the CFS requested a report on agroecology was the result of both the long-standing advocacy from civil society, and the profile-raising work of the FAO and other political actors. However, the fact that the report was to be on "Agroecologi*cal* Approaches" (instead of agroecology) as well as on "other Innovations" was a major point of contention for many people involved in the process. Following the publication of the HLPE report, the CFS engaged in its most drawn-out and contentious negotiations to date. In 2021, the CFS published it's policy recommendations with the same title as the HLPE report.

In this and the following chapter, I present a comparative analysis of the HLPE and the CFS policy recommendations and detail the political process that led from the HLPE report to the CFS policy recommendations. I trace the evolution of the work on agroecology through these

foremost global governance venues. In this chapter, I answer the question of how agroecology entered the global governance venue of the CFS/HLPE and place this work in context of previous occurrences of agroecology in global governance discourse. I argue that the threefold pressures of crises, advocacy and science brought agroecology into the Multi-Year Program of Work (MYPoW) of the CFS. In this instance, the crises are evidenced by the previous international gatherings and reports that were organized in response to the unfolding hunger and food systems crises detailed in previous chapters. Advocacy for agroecology to be taken up by the CFS stemmed primarily from the Civil Society and Indigenous People's Mechanism (CSIPM), the formal representation of civil society at the CFS, supported by individual countries and political figures. The scientific contributions of academic publications and the work of the HLPE made the advocacy work possible. In the CFS, as was the case for FAO, a complex web of advocacy, crises, and scientific work have gone into bringing agroecology into global governance discourse.

In the following chapter on the CFS, I present a comparative analysis of the HLPE and the CFS policy recommendations, as well as outlining the negotiations that led to the final CFS document. Particular attention is paid to the mechanisms by which policy recommendations are influenced. The case study of these agroecology negotiations reveals the core points of conflict in food systems governance and associated challenges in achieving the positive visions of food systems transformation put forward by the foremost experts on food systems. In order to lay the foundations for this analysis, I present a brief overview of the purpose and structure of the HLPE policy recommendations in this chapter.

Before the High-Level Panel of Experts Report on Agroecology

Why did the CFS request a report on agroecology? A large part of the answer to this question, according to my interviewees, was advocacy from civil society, particularly from Latin America. In addition, there were a few countries that advocated for agroecology in the CFS, including France, which played an important role. Many people I spoke with said that the CFS took up agroecology in their MYPoW because of long-standing advocacy from civil society through the Civil Society and Indigenous Peoples Mechanism (CSIPM) of the CFS. In the words of Interview 1:

> The title "agroecology and other innovative approaches" was one of the warning signs that the CFS was becoming a space in which it's difficult for the CSIPM to obtain the kinds of policy outcomes that it desires. Because as I'm sure you know, it was the CSIPM that put agroecology on the agenda, one of our triumphs was to have gotten this into the MyPoW. And even with a watered-down title that was itself the process of quite a bit of controversy. But nonetheless, more was expected than actually came out of the negotiations to the point that the CSIPM did not endorse policy outcome. (Interview 1)

This interview reflects the fact that it was civil society actors that brought agroecology to the CFS through sustained advocacy. Though the negotiations did not yield the results that the CSIPM had hoped for, the fact that agroecology was taken up in the MyPoW was a great success. With civil society gaining an important voice in the reformed CFS, the long-standing advocacy of the CSIPM to elevate agroecology to the workplan of the CFS became more powerful.

In addition to the advocacy from stakeholders, the political influence of Olivier De Schutter, Professor of International Human Rights Law at University of Louvain and United Nations Special Rapporteur on the Right to Food from 2008 to 2014, also played a significant role in motivating the CFS to work on agroecology, as stated in the formal letter which commissioned the HLPE to work on the report: "The former UN Special Rapporteur on the Right to Food has contributed to put agroecology on the map of the international community and policy-makers (De Schutter, 2011)" (CFS, 2017). The advocacy of politically influential individuals has been an important part of agroecology's emergence into global governance discourse. In this case, the publication of a widely read report advocating for agroecology made an impact.

In addition to the sustained advocacy, there are several other interesting factors that played into the CFS agenda on agroecology. First, there were a series of reports that were published that raised the profile of agroecology. The CFS mentioned the following reports as influencing its decision to request the agroecology report: The International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) report (IAASTD, 2009), the European Union's Standing Committee on Agricultural Research (SCAR) (EU SCAR, 2012), HLPE report on Livestock titled *Sustainable agricultural development for food security and nutrition: what roles for livestock?* (HLPE, 2016), and the International Panel of Experts on

Sustainable Food Systems (IPES-Food) Report *From Uniformity to Diversity: A Paradigm Shift from Industrial Agriculture to Diversified Agroecological Systems* (IPES-Food, 2016) (CFS, 2017).

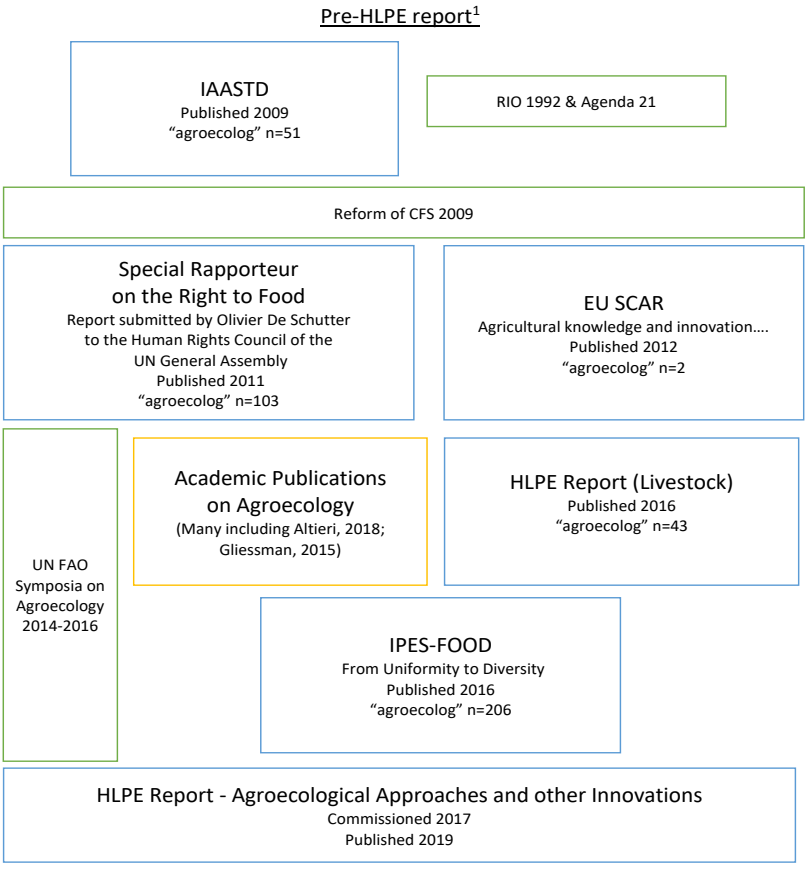
I conducted a document analysis of the reports listed above, counting how many times they mention the word agroecology / agroecological through searching for "agroecolog". The results are represented in the image below. Looking at the number of references to agroecology in these documents reveals that agroecology, though not the focus of any of these reports, was a topic of interest in global governance discourse already in the early 2000s. The significance of some of these early reports, especially the IAASTD report, is discussed in more detail in Chapter 2 of this dissertation. The analysis shows that agroecology was mentioned throughout important global governance reports on food systems that were all seeking to address the multiple crises emerging in food systems as early as 2000. The CFS recognized the significance of this trend and brought agroecology into the focal point of its work.

In addition to influential publications there were international gatherings that made the work of the CFS on agroecology possible. The significance of the 1992 Rio Earth Summit, the first UN Conference on Environment and Sustainable Development, was emphasized throughout interviews as laying the foundation of the work on agroecology in the CFS. The meeting in Rio in 1992 has been widely described as shaping the modern development agenda. A publication by Monteduro et al. (2015) articulated the significance of the Rio Earth Summit as follows:

> At the political level, the Rio UN Conference of 1992 on "Sustainable Development" yielded the most important international document or platform for decision-making processes at institutional level (Agenda 21), where many chapters—7, 8, 10, 14, 15, 16, 28, 31, 32—have been devoted to directly or indirectly promoting sustainable development in agriculture in accordance with agroecological principle. (Monteduro et al., 2015)

The Rio meeting was described to me in interviews as a significant international coming together of social and environmental movements, with far reaching impact on the vision for what global development work should and could be. Ten years after the 1992 Rio Conference, a Sustainable Development Summit held in South African in 2002 gave rise to the IAASTD report (IAASTD, 2009). In addition, the international gatherings that the FAO organized on agroecology were also very important, as discussed in the previous chapter.

In addition to policy negotiations, the forums of international gatherings, reports, and research papers are the most important discourse forums for global governance. The evolution and impact of these early exchanges on the topic of agroecology are discussed in Chapter 2 of this dissertation. Nevertheless, it is important to outline the work that preceded the CFS's work on agroecology, as it provides some insight into how agroecology entered this important governance forum. The image below illustrates the reports, publications, gatherings, and political events that led to the CFS working on agroecology. It also illustrates the guiding thread of this dissertation, the fact that a complex web of advocacy, crises, and scientific work have gone into bringing agroecology into global governance discourse.



[1] Information gathered from CFS 44 session 2017 & interviews

Figure 14: Pre-HLPE Report

The High-Level Panel of Experts Report on Agroecology

Process

The publication of HLPE reports occurs through two groups (as outlined in the image below): the Steering Committee (StC), which is comprised of 15 people that oversee the administrative aspects of the reports, and the Project Team (PT), which is assembled for each report and is comprised of leading experts on the topic (Gitz & Meybeck, 2011). In publishing their reports, the HLPE follows a set project cycle (image below).

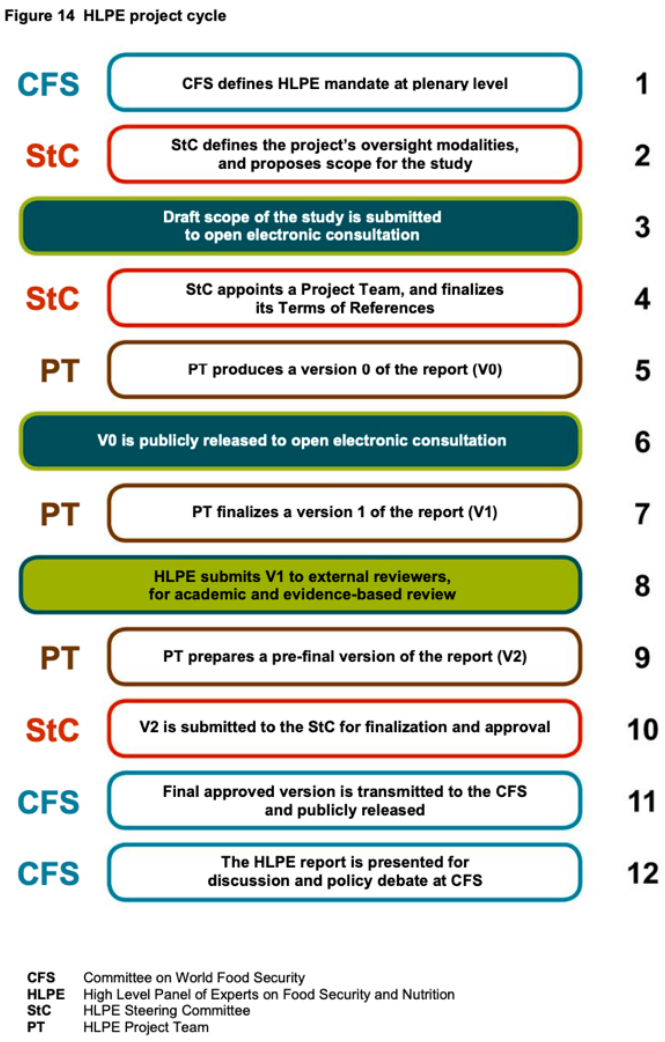


Figure 15: HLPE Project Cycle (HLPE, 2019)

The project cycle guides the Project Team through a rigorous and consistent peer-reviewed process, despite frequent tensions between the StC and the PT. Once the StC has signed off on the report, the report is submitted to all member states, who then vote whether to

formally accept it or not. The CFS is open to all UN members and is comprised of 139 member countries (HLPE, 2025), consequently there are many actors involved in the HLPE process and the final approval of the report.

In the case of the HLPE Report on Agroecology, the formal project cycle also guided the work of the PT and the StC through a difficult process. As articulated by the HLPE steering committee chairperson, Patrick Caron, in his foreword to the report: "As it brings together very different and contentious visions for the future of humanity, this report was certainly one of the most complex to prepare since the birth of the HLPE in 2010" (HLPE, 2019). Consequently, the report exceeded the allotted timeframe of two years (Oct 2017 – July 2019) by several months, as reports typically appear in May or June. The delayed publication caused complications for adhering to due process, as there were challenges with translations of the report prior to the fall meeting of the CFS. Though the members of the project team for this HLPE report were mostly advocates of the political vision of agroecology, there were several difficulties that were encountered: there were differences in opinion about how to navigate the innovation frame in the commissioned report that needed to be worked through; the PT tried to ensure continuity throughout all the preceding HLPE reports and the one being written, which required extensive consultation and editing; the PT was aware of needing to publish a report that would gain enough political traction for the CFS to accept it as it's basis for negotiations; and there was an overwhelming amount of input received in the open consultation. Some of the submissions received for the open consultation were longer than the Version 0 draft itself, so the team had a lot to of content to work through. Fergus Sinclair, Emeritus Professor at Bangor University and the Project Team Leader of the HLPE Report on Agroecology, reflected on the process that led to the publication of the report as follows:

> Then there's another version of the report, which goes out then to peer review, and I think we had 13 peer reviewers who commented on that. And then once you've taken all that on board, you then have the steering committee, which is another 15 strong-minded people who have to agree on the final text of the report. (Fergus Sinclair, Project Team Leader of HLPE Report on Agroecology)

The image above, taken from the HLPE report (HLPE, 2019), describes the process that the HLPE working groups follow. The fact that there are rigorous formal processes that working

groups must follow in the CFS and HLPE is one of the reasons that they are such important governance spaces. The HLPE's formal procedures create a forum for exchange that allow experts to negotiate policy recommendations on contentious topics in a democratic fashion. The formal structures allow for equal participation of different stakeholders and are consequently somewhat protective of power imbalances in negotiating positions. The absence of such structures, as witnessed in the UNFSS and discussed in the following chapter, facilitates undemocratic forums and allows for political discourse capture by powerful interest groups (Canfield, Anderson & McMichael, 2021).

There were objections from different interest groups throughout the process of developing the HLPE Report on Agroecology. The formal procedures of the workflow allowed the report to be published despite deep-set differences: the USA objected to some of the statements about genetic modification; the CSIPM objected to the title and framing of the report; the steering committee objected to the presence of an independent chapter on agroecology. Nevertheless, despite these objections the project team was able to publish a report that gained widespread political traction.

Contents & Structure

The HLPE report #14, *Agroecological and Other Innovative Approaches for Sustainable Agriculture and Food Systems that Enhance Food Security and Nutrition,* is a 120-page document that is the product of two years of dedicated work by the 10-member project team, with extensive input from public consultations, and a rigorous peer review process. An in-depth analysis of the entire report is beyond the scope of this research. The focus of the analysis presented in this part of the dissertation is the policy recommendations issued as part of the HLPE report. The policy recommendations are an actionable summary of the 120-page report for decision makers in governments, NGOs and the private sector, which summarizes the most important findings and recommendations.

The HLPE policy recommendations follow the format of an introductory preamble and recommendations. The preamble is titled "Summary and Recommendations" and composed of four sections, one on agroecology, one on innovations, one on divergent perspectives that addresses the topics of conflict in food systems transformation, and a section on governance titled "Institutional Environments". The preamble is followed by five recommendations, each

with three to ten sub-points or sub-recommendations. The focus of the analysis presented in this and the following chapter of the dissertation is the evolution of the HLPE policy recommendations, through the CFS negotiations, to the final CFS policy recommendations that were published in 2021. By presenting an in-depth analysis of the wording of the policy recommendations, and how they changed throughout the process, I present an insight into the details of policy negotiations and on the science-policy interface of the CFS. For context, I present the HLPE's problem definition, theory of change, and positive vision for food systems below. In the following analysis it is worth remembering that the HLPE, as an independent body, summarizes the state of scientific knowledge on a topic, and adheres to strict guidelines and processes in doing so (Gitz & Meybeck, 2011).

Throughout the HLPE report #14 the authors outline the need for "profound transformation" of the food system. As the role of the HLPE is to summarize the state of scientific knowledge, this is a consensus position amongst scientists (Gitz & Meybeck, 2011). The HLPE's problem definition, with which the policy recommendations are introduced, references an international governance framework, Food Security and Nutrition (FSN), and several of the food systems crises addressed in earlier chapters of this dissertation:

> Food systems are at a crossroads. Profound transformation is needed to address Agenda 2030 and to achieve food security and nutrition (FSN) in its four dimensions of availability, access, utilization and stability, and to face multidimensional and complex challenges, including a growing world population, urbanization and climate change, which drive increased pressure on natural resources, impacting land, water and biodiversity. (HLPE, 2019)

Throughout the document it is stated that there is consensus on the need for food systems transformation, however that there are divergent perspectives on what food systems transformations entail. The report presents the opportunities for food systems transformation that "agroecological and other innovative approaches" present in achieving food systems transformation, as well as detailing the lock-ins and points of contention that stand in the way of transformation.

The vision for sustainable food systems presented by the HLPE relies on the international governance framework of Agenda 2030, as well as the concept of Food Security and Nutrition (FSN), and Sustainable Food Systems (SFS). Agenda 2030 refers to the Sustainable Development Goals (SDGs) that have been the UN international development framework since 2015. The SDGs have been discussed in detail in previous chapters. It is significant that the HLPE references this development agenda, as it is a framework that is agreed upon by UN member states and includes several food systems relevant targets. Though the SDGs are themselves flawed in several regards (Fukuda-Parr & McNeill, 2019), they are considered to be a progressive and ambitious development agenda (Blay-Palmer & Young, 2019). SDG 2, Zero hunger, represents the ambitious international development goal of complete eradication of hunger and malnutrition.

In addition to the SDGs, the HLPE report references Food Security and Nutrition (FSN) as the desired outcome of food systems transformation. The phrase "transitions towards SFSs for FSN" appears throughout the document. As noted above, the HLPE's full title is the HLPE-FSN, i.e. The High Level Panel of Experts on Food Security and Nutrition. Consequently, it is not entirely surprising that FSN would be a major focus of the work. The HLPE report #15, the report following the one on agroecology, is titled *Food Security and Nutrition: Building a Global Narrative Towards 2030* (HLPE, 2020). The focus of the HLPE report #15 on FSN is consolidating the work of the previous 14 reports to summarize and synthesize the HLPE's vision for sustainable food systems.

FSN is an evolving concept. To begin with, the concept of FSN was comprised of four dimensions: availability, access, utilization and stability (HLPE, 2019; FAO, 2008) i.e. that a person or community could be said to be food secure if nutritious food is consistently and reliably available, physically and economically accessible, and usable in the sense of meeting diverse nutritious needs for human health (FAO, 2008). In other words: "Food security 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" (SOFI, 2024). Alongside the defining features of FSN, there has been an expansion of the concept to include "agency" as an important definitional component. The inclusion of agency in FSN is present in the HLPE #14 report, where the four dimensions of availability, access, utilization, and stability is expanded to include the dimension of agency (HLPE, 2019). Agency

in this context refers to "all people being able to exercise choice about what they eat and how it is produced, processed, transported and sold" (HLPE, 2019). Looking at the HLPE #15 report there is a sixth dimension, that of sustainability, that is added to the definition of FSN. The addition of sustainability as an essential feature of food security could be interpreted as an outcome of the HLPE report #14 on agroecology with its emphasis on environmental sustainability in food systems.

The positive vision that the HLPE is working towards by referencing Agenda 2030 and FSN, is a world where there is no hunger, and everyone has reliable access to nutritious food that is produced sustainably, while being able to make choices about the food they eat. The brief overview presented here is an oversimplification, as the SDGs and FSN are complex structures with important nuances that I have not been able to reflect adequately here. Nevertheless, it is important to understand that the language used in the HLPE report is not incidental, and that the purpose of the report is to provide an overview of the state of scientific knowledge on food security and nutrition.

The third aspect of the positive vision of food systems as articulated by the phrase "transitions towards SFSs for FSN" used throughout the HLPE #14 report, is Sustainable Food Systems (SFS). In the HLPE report #8 (HLPE, 2014) the HLPE defines SFS as "a food system that ensures food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition of future generations are not compromised" (HLPE, 2014). Arguably, agroecology is the articulation of the positive vision of sustainable food systems in the HLPE text. As articulated in the HLPE report #14 agroecology is seen as a paradigm that addresses multiple components of sustainable food systems, including environmental and social sustainability:

> Agroecology is a dynamic concept that has gained prominence in scientific, agricultural and political discourse in recent years. It is increasingly promoted as being able to contribute to transforming food systems by applying ecological principles to agriculture and ensuring a regenerative use of natural resources and ecosystem services while also addressing the need for socially equitable food systems within which people can exercise choice over what they eat and how and where it is produced. (HLPE, 2019)

Consequently, the "regenerative use of natural resources" in combination with the "socially equitable food systems" articulated through agroecology fulfills the criteria of Sustainable Food Systems of sustaining the "social, and environmental bases" of food security.

The pathway to the vision of "SFS for FSN", according to the HLPE, and with it the implicit theory of change, is based in two foundational concepts: PANTHER and transition pathways. The acronym PANTHER is used to articulate the human-rights based approach to food systems transformation, as described in the introduction of the report: "This report starts from the recognition of human rights as the basis for ensuring sustainable food systems. It considers that the seven PANTHER principles of Participation, Accountability, Non-discrimination, Transparency, Human dignity, Empowerment and the Rule of Law should guide individual and collective actions to address the four dimensions of FSN at different scales.[16]" (HLPE, 2019). PANTHER is a human rights framework used widely in international law. Gomez (2014) published an extensive analysis of the application of PANTHER to food systems transformation. The reason why a human rights-based framework is a significant feature of the theory of change in the HLPE is that it necessarily implies specific features of a food system. For one, a human rights centered approach broadens the discussion of hunger alleviation from food availability to include many of the other elements of FSN such as accessibility and agency (DeSchutter, 2010). Thus, starting from the PANTHER principles in approaching food systems transformation necessitates a transformation approach that is fundamentally different than the productivism of Green Revolution approaches.

Another aspect of the theory of change that is integral to the HLPE's analysis of agroecology is articulated in terms of "transition pathways". Transition pathways is a concept that is also present in the academic literature. It represents the idea that food systems transformation must occur incrementally, on many different scales simultaneously, while guided by three operational principles: improved resource efficiency, strengthened resilience, and social equity/ responsibility (HLPE, 2019). As stated in the introduction to the HLPE #14 policy recommendations:

> The HLPE adopts a dynamic, multiscale perspective, focusing on the concepts of transition and transformation. Many transitions need to occur in particular production

[16] More information on the use of PANTHER in FAO, alongside a full definition of each principle, can be found in FAO publications such as FAO (2012).

> systems and across the food value chain to achieve major transformation of whole food systems. Both incremental transitions at small scales and structural changes to institutions and norms at larger scales need to take place in a coordinated and integrated way in order to achieve the desired transformation of the global food system. […] Transitions are actually required to shape the profound transformation of food systems, to adapt the economic, environmental, political and technological paradigm, rules, institutions and practices that have become increasingly incompatible with present and future expectations, to move beyond "lock-ins" and the *status quo*. […] Hence, actors in food systems will have to design context-specific transition pathways towards sustainable food systems (SFSs). (HLPE, 2019)

It is significant that the HLPE report provides a clear and detailed analysis of the necessity for fundamental transformation of global food systems, as well as scalar considerations in achieving this outcome. The above text excerpt clearly illustrates that the HLPE recommends for the CFS to engage in fundamental changes to food systems through measured and incremental transition pathways. In addition, the context specific nature of these transition pathways is significant. The central importance of context-specific approaches in agroecological transformations was also articulated by Interview 1:

> I think you need to keep very strongly in account the fact that agroecology is something that is grounded in practice in people's practice at the local level. And that takes one form in Latin America […] and it takes another form in Africa […] In other words, I think you need to contextualize it; you need to see why it is that agroecology is not just an idea of floating up at the global level but something that is really grounded in practices and values that people care about. (Interview 1)

Consequently, there is also a significant overlap in the vision of food systems transformation articulated through the HLPE report and through agroecology by social movements, in this case by foregrounding the centrality of context-specific transformations.

The preamble of the HLPE policy recommendations articulates clearly the positive vision that is the objective of the HLPE's work and the "profound transformation" needed to achieve this vision. Based on principles of human rights, the panel of experts outline context specific transition pathways, as well as structural food systems interventions, that would lead to food security and nutrition through sustainable food systems in keeping with Agenda 2030.

Policy Recommendations from the High-Level Panel of Experts

To achieve the positive vision of food systems transformation outlined in the preamble, the HLPE put forward a set of policy recommendations. These consist of five overarching recommendations:

Theme	Recommendation
Purpose and focus	1. Agroecological and other innovative approaches in an integrated way to foster transformation of food systems
Transition	2. Support transitions to diversified and resilient food systems
Research	3. Strengthen support for research and reconfigure knowledge generation and sharing to foster co-learning
Power	4. Strengthen agency and stakeholder engagement, empower vulnerable and marginalized groups and address power inequalities in food systems
Monitoring and evaluation	5. Establish and use comprehensive performance measurement and monitoring frameworks for food systems

Following the five headings, the HLPE policy recommendations list the intended audience of the recommendation. Specific recommendations are directed at different actors in the food system, such as: All stakeholders involved in food systems (including: States, local authorities, intergovernmental organizations (IGOs), civil society and the private sector, research and academic institutions), or the CFS only, or FAO, or States and IGOs. Thus, the HLPE details specifically which food systems actors they are directing the policy recommendation towards.

The sub-points of the policy recommendations then cover in detail a large array of food systems topics. These topics include: “integration of transdisciplinary science and local (including Indigenous knowledge)”; adding the concept of agency to the definition of FSN; “redirecting subsidies and incentives that at present benefit unsustainable practices, to support transitions towards SFSs”; supporting farmer’s access to diverse and traditional genetic resources; “addressing power imbalances and conflicts of interest in relation to the generation, validation and communication of knowledge about food production”; and changing trade

agreements. The policy recommendations are both broad and specific in that they cover a large range of topics with specific recommendations and interventions. However, they stop short of presenting examples or specific levers of change that could be used to create outcomes such as changing trade agreements, for example.

13 Principles of Agroecology

The second substantive component of the HLPE report, aside from the policy recommendations discussed above, was the development of the 13 Principles of Agroecology. The endeavor to create a definitional structure in addition to FAO's 10 Elements of Agroecology was contentious amongst the people I interviewed. As discussed in Chapter 2 of this dissertation some people believed the 13 Principles of the HLPE did not contribute positively to the definitional clarity of agroecology, while others saw value in it. The 10 Elements of Agroecology that the FAO had previously published were expanded upon to develop the 13 Principles. According to Fergus Sinclair, the Project Team Leader of the HLPE report, the purpose of these 13 Principles was to bring specificity to some of the vaguer elements of the FAO:

> You've got another principle on economic diversification, which is about trying to have more resilient production systems because you're producing multiple things and are not reliant on a single element. There's nothing about soil health in the elements, whereas there is an explicit principle of ensuring soil health. The same with animals - there's a principle on ensuring animal health and welfare. The principles are normative and causative statements that can guide thought and action. For principles to be useful, the principle has to be actionable, otherwise, you know, it doesn't go anywhere. (Fergus Sinclair, Project Team Leader of HLPE Report on Agroecology)

This quote describes the guiding purpose that went into establishing the 13 Principles. They are understood to fill some gaps missing in the 10 Elements, such as soil health and animal welfare, and to articulate the defining features of agroecology in an actionable manner.

Those that were not supportive of the development of the 13 Principles argued that having a second set of ideas in the definitional constellation of agroecology is confusing and not constructive. In the policy negotiations for example, the fact that the 13 Principles existed created an opening for some countries to try and stall the CFS policy negotiations. Alberta Guerra, who participated in the CFS policy negotiations on behalf of civil society in her role as

Policy Analyst at ActionAid USA, articulated the problematic of the 13 Principles as follows in our interview:

> One of the first strategies adopted by some governments was to create some confusion and time delays by reopening issues where some consensus was already achieved in other spaces. So, they started asking what agroecology is. What do we mean by agroecology? Fortunately, the strategy didn't pay off at all, because we had the 10 Elements of FAO. And so even if many governments didn't want to acknowledge or didn't want to recognize fully the 13 Principles of the HLPE because they were coming from science (they were not negotiated, they were not adopted, and they were not politically agreed). At least we had the 10 Elements that were agreed. So, at some point, we were able to really push back on any attempt by reminding them that they had adopted full ten elements so they couldn't go around that. Therefore, we managed to push back on all these attempts to make the negotiations stall because of the confusion around the content and terminology. (Alberta Guerra, Senior Policy Analyst, ActionAid USA)

This quote describes how negotiators used the two definitions of agroecology to try and discredit the whole paradigm in the negotiations. The interviewee argues strongly that the fact that the 10 Elements had been formally approved within the UN system allowed negotiators to uphold the integrity of the paradigm in the negotiation context. This speaks to the theme that runs throughout this dissertation, that agroecology is well-defined and the definitional structures of agroecology, especially the 10 Elements, have protected the term from being disregarded in governance venues such as the CFS. The details of the definitional structures of agroecology are discussed thoroughly in Chapter 2 of this dissertation. It is important for the complete understanding of the HLPE report however, that the 13 Principles of Agroecology were also published as part of this report, which is why it is mentioned briefly here.

High-Level Panel of Experts Report Title

From the very outset of the Committee on World Food Security's work on the topic of agroecology the process was marked by compromises. Though compromises are an integral part of a healthy political process, some of the advocates of agroecology that I interviewed for this research believed that compromise caused the HLPE/CFS work on agroecology to lead to weak outcomes. This position argues that, from the outset, too much ground was given to the voices

that opposed the political visions of agroecology. While the advocates of agroecology wanted to see a report on agroecology, the CFS in it's 44th Plenary Session in October of 2017 issued the directive to the HLPE to publish a report titled *Agroecological Approaches and other Innovations for Sustainable Agriculture and Food Systems that Enhance Food Security and Nutrition* (CFS, 2017). The fact that the title reads "agroecologi*cal* approaches" instead of "agroecology" and includes "other innovations" substantially broadened the mandate of the report from a singular focus on agroecology to include other forms of agricultural practices, such as biotechnology, biofortification, and digital technologies. Advocates of agroecology saw an attempt to water down the political vision of agroecology in this broader scope by making agroecology a "tool in the box of innovation" as opposed to the holistic and self-containing vision that can not necessarily be described as an innovation.

Anderson & Maughan (2021) conducted an analysis of the impact of the inclusion of "other innovations" in the HLPE #14 report, which they refer to as the "innovation frame". By conducting a discourse analysis on the online consultations that were part of the process of the development of the HLPE report (point 6 in the HLPE workflow image presented above), they reveal "how the innovation frame routinely overlooks and diminishes the social agency of individuals and communities" (Anderson & Maughan 2021). Anderson & Maughan (2021) argue that this innovation frame is a means to maintain the political status quo, and thereby undermine a transformative vision of agroecology, by "reinforcing a dominant conception of agency" in which agency is enacted through the market as opposed to the "collective agency" that agroecology presents. The analysis of the innovation frame in the development of the HLPE report is theoretically valuable, as it illustrates an important feature of the discursive arena of innovation and its impact on the definitional structure of agroecology.

According to many of my interviewees, the CFS did not request a report purely on agroecology due to pressure from the USA, which is a staunch opposer of the political vision of agroecology in all global governance venues. The longer title was a compromise that enabled this work to go ahead at all, as the USA would not support work on agroecology only. One interviewee summarized the process as follows in our interview:

> And so what happened then was that I think the only, or maybe the principal country, which was opposed to agroecology being put on the agenda was the US and so, there was a bit of a struggle to sort of isolate the US and put pressure on them with the argument

> that, you know, you can't have veto rights in the CFS. If everybody wants something and you can't […] and so that kind of pressure was put on the US and eventually, the US came with a sort of compromise. Saying, okay, we can agree to this as long as you reframe the issue, and they reframed it as innovation, and that's where we get… CSIPM had not proposed "agroecological and other innovative approaches", they proposed agroecology […] and I think that once they accepted, the title changed, and they'd already lost, in a sense. (Interview 9)

Consequently, the framing of agroecology in the context of innovations was a compromise towards the resistance of the USA, that was satisfactory enough to the USA that they stopped stalling the consensus, and that enabled the work on agroecology in the CFS to proceed. The reason that the inclusion of the innovation paradigm was an acceptable compromise to the USA was that it created a re-framing of the solution search space that enabled the delegitimization of agroecology. As articulated by Interview 38:

> I would say the opportunity was quite significant to create a policy instrument that would advance the legitimization of agroecology. I didn't see in the negotiation an attempt to appropriate or dilute agroecology as such. Rather, they wanted to water it down by using this language of "other innovative approaches" and attack it and weaken it from outside not through appropriation, but either by direct attack of credibility or by marginalizing it and sort of using this vague empty language of other innovative approaches, which is a way of making everything become meaningless. (Interview 38)

This was the perspective that was offered by a neutral actor in the negotiations, who was not part of the CSIPM or the PSM. It is interesting to me that negotiators that were not part of the CSIPM also perceived the framing of agroecology in terms of the innovation paradigm as a clear attempt at discreditation.

The people that I interviewed that were part of the CSIPM, or strong supporters of civil society, also saw the innovation frame as an intentional threat to the political vision of agroecology, as by Interview 1:

> The agroecology and other innovative approaches were one of the warning signs that the CFS was becoming a space in which it's difficult for the CSIPM to obtain the kinds of policy outcomes that it desires […] and this coming on top of the Food Systems and Nutrition negotiations was really the double blow that made us take a step back. We

> needed to deeply reflect on global food governance, global governance, the crisis of multilateralism, multistakeholderism, and how best to move to defend the CFS as nonetheless the most inclusive policy space existing at the global level and to find other ways of using the space. (Interview 1)

From the civil society perspective, the fact that the CFS gave into the pressures from the USA and engaged the compromise of innovation, was cause to re-consider the governance venue as a whole. The Food Systems and Nutrition negotiations referenced in this quote, were also highly contentious and took many years (see Appendix B), and ultimately included a walk out from the CSIPM. Consequently, the interview data from my research shows that the title of the work of the HLPE and CFS are deeply significant, and that the innovation frame weakens the political vision of agroecology.

In addition to the phrase "and other innovations", the fact that the report was titled "agroecological approaches", instead of "agroecology", was also a compromise that not everyone was happy with. Several people I interviewed said that the use of "agroecological" instead of "agroecology" set the tone for the CFS negotiations in which every mention of the word "agroecology" was contentious and contested:

> Well, simply the mention of agroecology you know, like the word, even mentioning the word was difficult because the framing of the title of the report said agroecological approaches, agroecological and other innovative approaches, and there's already a bit of a gap between agroecology and agroecological because when you're speaking of agroecology when it's a noun, you know, of course, not everyone agrees on the definition but it's a noun it's a concept, it's a paradigm and you can put all sorts of issues social justice, etc., under it. Agroecological as an adjective. it's like, okay, you know that sounds a bit more like okay, use a few less pesticides, it's different. And so that's one thing that was compromised. (Interview 9)

The significance of agroecology being represented in its entirety is a central theme that runs throughout the data. The contestation around agroecology as a paradigm and not a technique is central to understanding the discursive contestation surrounding agroecology, as reflected in the above quote, where the difference between "agroecology" and "agroecological" is deeply significant.

The other position that people I interviewed had about the compromise that was made as regards the title and focus of the HLPE report, was that the compromise allowed the work to go ahead and consequently was a compromise worth making. From this perspective, it would not have been possible to bring agroecology into the multi-year program of work at the CFS without this compromise, and having policy recommendations on the topic was worth compromising for. The experts I interviewed that were of this opinion argued that the authors of the HLPE report managed to publish a strong report that did not diminish the political vision of agroecology and consequently the inclusion of the "innovation frame" was not damaging. Emile Frison, a world expert on agroecology and co-founding member of IPES-Food as well as senior advisor of the Agroecology Coalition, remembered the compromise as follows:

> Civil society pushed very hard within the CFS to have a report on agroecology, that was fought quite vigorously by a few countries that didn't want to hear about agroecology. And finally on the insistence of civil society, but also a number of countries, they finally accepted on the condition that it would not just be on agroecology, but on agroecological and other innovative approaches. And that was a bit of poison that was instilled into the process. Because of course, it became a bit meaningless because you can put anything behind other innovative approaches, and I think the HLPE report did a pretty good job. They were forced, of course, to accept the mandate to talk about agroecology and other innovative approaches, but they quite cleverly separated out agroecology and showed that very clearly in my view, what were the strengths of agroecology compared to the other approaches. Although they always had to use the terminology "agroecological and other approaches" they managed to separate agroecology from some of these other innovative approaches and show how agroecology is the only concept that really looks at all the multiple dimensions to address economic, environmental, climate, nutrition, health, and social objectives at the same time, which none of the other nominations covers. (Emile Frison, IPES-Food)

In this perspective the introduction of the innovation frame was "a bit of poison" referencing the meaningless that comes with innovation mentioned in the earlier quote by Interview 38. However, Emile Frison argues that the HLPE authors did a good job at representing agroecology in relation to other innovations and consequently was able to resist the threat of that poison well. The quotes presented in this section serve to illustrate how deeply significant the words used in

the work of the HLPE and CFS are. The framing of and word choices surrounding the problems and possible solutions to global food systems challenges are heavily contested, as illustrated throughout this dissertation.

Reception of the High-Level Panel of Experts Report

The HLPE report itself had gained widespread support and political traction, as the authors had engaged several strategies to deliberately emphasize the political vision of agroecology in the report. However, looking at the whole process from the commissioning of the HLPE report, through the CFS deliberations, to the final CFS policy recommendations, the widespread support was lost and many parties, including the CSIPM, did not endorse the final recommendations, as will be discussed in Chapter 5. At the time the HLPE report was written, the authors made a concerted effort to publish a politically progressive document that would set the foundation for policies that set in motion whole food systems reform. The analysis below illustrates the evolution of policy recommendations on agroecology from the strong HLPE recommendations to the weak CFS recommendations. Whether or not it was unavoidable for the framing of agroecology within the innovation paradigm to lead to outcomes that some, particularly the CSIPM, would consider a failure is unknowable. There is an argument to be made for the position that if the negotiations had gone differently the title of the HLPE report would have been insignificant. The analysis below traces the process from the HLPE report to CFS policy recommendations, detailing how the final policy recommendations were developed.

The HLPE report was a strong document that gave the CFS a politically progressive starting point for their policy deliberations. Looking at the list of authors that coordinated the HLPE report and their publications, one sees a group of academics supportive of the political vision of agroecology. They engaged in several concrete measures to elevate the political vision of agroecology in the report. I was told by one interviewee (quoted below) that the mechanism by which the authors of the HLPE report worked around the innovation frame was to broaden the framing from technological innovation to social innovation. By expanding the understanding of innovation, the authors of the HLPE report took the focus of "other innovative approaches" away from only technological approaches to include social innovations. By including the social and political realm in the concept of innovative approaches, the HLPE authors were able to avoid the

constraint of agroecology's political aspects by a techno-innovation framing. Barbara Gemmill-Herren, former FAO staff as Global Pollination Project Coordinator and Project Team member to the HLPE report #14, reflected on the framing of agroecology in the context of innovations as follows:

> We were told by the Secretariat to the CFS that the title was "agroecological and other innovative approaches" and what is the contribution to food security and nutrition. And the Secretariat said: when you have two nouns in the title, you have trouble. You know, there's obviously two different ways of thinking about this within the organization and you're going to have to come up with a way of addressing that. I was very pleased with the way that we did come up with addressing it - and saying that, many people understand "other innovations" as meaning technology. But we really articulated, I think very strongly, in the report that innovations are not just technology, innovations are also social innovations, and they need to be ones which genuinely address issues of food sovereignty and people's choices. (Barbara Gemmill-Herren, former Global Pollination Project Coordinator at FAO)

By understanding the framing of innovation in terms of social innovation, and not purely technological innovation, the authors of the HLPE report published a more comprehensive analysis of the state of knowledge on the topic of innovative approaches to the problems and possible governance responses of global food systems. Social innovations include measures such as education and knowledge transfer, supply chain innovations, community seed banks, cooperatives, rotating solidarity funds, amongst others (HLPE, 2019). A textual analysis of the HLPE report corroborates the statement quoted above, as the HLPE report states:

> Agroecological approaches are becoming increasingly prominent in debates around FSN because they are framed in terms of both their environmental sustainability and social innovation connecting food production and consumption, with strong support for locally adapted solutions based upon participation of local people and their knowledge. (HLPE, 2019)

Consequently, there are many references in the HLPE report to social innovations, both in framing the issue, as quote above, as well as in examples of agroecological projects. For example, there is a text box on "agroecological territory transition in Brazil" in the HLPE report that focuses on social innovations within that context (HLPE, 2019).

In addition to broadening the innovation frame the authors of the HLPE report did a few other things to resist the innovation frame from reducing agroecology to a technical set of practices: they wrote the first substantive chapter on agroecology thereby making it the focus of the report; they based the analysis on a human rights framework which has far-reaching implications for food systems reform; they wrote a chapter on the different opinions on food systems transformation without setting other innovations on equal footing to agroecology; and they took a food systems transformation approach which looked at transition pathways to change the system as a whole and were not limited to applying different innovations within the existing systems.

The Private Sector Mechanism (PSM) to the CFS issued a formal response to the HLPE report highlighting issues and concerns about the report to be addressed in the CFS negotiations. Topics of particular concern were to emphasise the PSM position that "agroecology is one approach, among others, to contribute to feeding sustainably a growing population" (PSM, 2019). Specifically, the statement reads:

> While the importance of innovations in governance and information networking and sharing are recognized there is insufficient focus on new technologies and approaches, and it is disappointing that the HLPE Report has considered several innovative approaches as both "controversial" and "possible blockages". These include: the deployment of modern biotechnologies; the deployment of digital technologies; the use of synthetic fertilizers; biofortification; and biodiversity conservation strategies. (PSM, 2019)

This except from a longer formal response document of the PSM to the HLPE report illustrates the fundamental differences in approaches that different negotiation parties took to the CFS policy deliberations as a result of the HLPE report. The statement also highlights a few of the key topics of contestation, aside from the holistic vs tools-oriented approach to food systems reform discussed throughout this dissertation. The formal response of the PSM entailed thorough elaboration on the topics of concern, which included agroecology not being well-defined, agroecology increasing production costs, the environmental impact of agroecological agriculture, the exclusion of other technologies, the concern that elimination of synthetic inputs would produce more hunger, amongst others (HLPE, 2019). Despite these concerns, the PSM also endorsed the HLPE report on agroecology. Reading the responses of the PSM and the CSIPM to

the HLPE report side by side, it is clear that the CFS and the HLPE speak to audiences with very different ideas about how food systems function and what is valuable in them.

A major success of the HLPE report #14 was that it was formally recognized by all member states and consequently was able to gain political traction. It was not a given that the report would be recognized by all member states, and Fergus Sinclair, Project Team Leader of the report, remembered there being some uncertainty about how member states would respond to the report:

> I remember that meeting at that launch. It was touch and go. The HLPE report was unusual, and a lot of people commented on this […] All the time, some countries were trying to dilute the whole remit of the report. So, it was, as you know, it was called agroecological and other innovative approaches. But that doesn't really matter because if you endorse agroecology, even if you're endorsing other things as well, you're still saying look, this has got a contribution to make. So, the acceptance and the fact that none of the countries in CFS rejected or objected to the report was a critical point. (Fergus Sinclair, Project Team Leader of HLPE Report on Agroecology)

The acceptance of the HLPE report by the CFS allowed the work on agroecology to proceed through the policy negotiations that are the subject of the next chapter. Consequently, the HLPE report on Agroecological and Other Innovative Approaches is a scientific assessment of the state of knowledge on agroecology and innovative responses to contemporary challenges. The fact that the final HLPE report was recognized by all member states is significant, as it allowed the document to gain importance in a way that the IAASTD report for example was not. In the creation of the HLPE report compromises were made on all sides: the countries that oppose agroecology in global governance discourse compromised in giving space to agroecology in the CFS at all; the supporters of the political vision of agroecology compromised on the framing of agroecology in the context of innovations; and throughout the long and difficult process of writing the HLPE report on agroecology the authors found ways to write about the major challenges of global food systems in a way that allowed the report to be formally recognized by all member countries.

Conclusion

Agroecology was brought into the foremost global governance of food systems, the CFS and its HLPE, through a complex web of circumstances that included both extensive advocacy and compromise. The contentious nature of the HLPE report's title, and the mandate the CFS gave the HLPE through this title, set the stage for a contentious and drawn-out science-policy process. The writing of the HLPE report was complex and contentious, and the CFS process that followed the report was the most drawn out CFS negotiation to date. Nevertheless, the HLPE was able to put forth a document that set a strong foundation for the CFS negotiations.

While overall the HLPE report was well received, there were some criticisms about the report from different parties, particularly the PSM. As mentioned above, the USA objected to report content pertaining to genetic modification, and the CSIPM objected to the framing of the report, while the Steering Committee objected to the presence of an independent chapter on agroecology. Nevertheless, in the end, the HLPE report was reviewed and accepted by the HLPE Steering Committee and brought forward as the foundation of the CFS's deliberations with the same title: *Agroecological and Other Innovative Approaches for Sustainable Agriculture and Food Systems that Enhance Food Security and Nutrition.*

The CSIPM accepted the HLPE report with the following statement at the beginning of the CFS negotiations: "We also warmly welcome the HLPE report on "Agroecology and other innovative approaches" as a good first step of this discussion. The HLPE report presents us with evidence of the different production models' impacts and gives us a basis to assess what steps are needed towards the real transformation of food systems so desperately needed. Therefore, we believe that the report has presented Agroecology quite strongly and accurately, reaffirming that it has the power and potential for this transformation of our food systems" (CSIPM, 2019).

While the CSIPM welcomed the HLPE report, it did so with criticism and specific suggestions on how the document could have been stronger. The position of the CSIPM is somewhat reflective of the HLPE's report throughout many different venues: no-one was completely happy with the HLPE report, but it was considered good enough by everyone. The rigorous process that the HLPE followed to develop the report, including the public consultations and the peer review, were an important part of the integrity and positive outcomes of this process. The following chapter details the translation of the HLPE report into policy recommendations. I outline how the CFS received and processed the positive vision for food

systems and the theory of change put forward by the HLPE and compare the resulting CFS policy recommendations.

The HLPE follows a rigorous formal process to articulate the scientific state of knowledge on key food systems governance topics, as tasked by the CFS. The purpose of the HLPE report is to enable all participants in the CFS negotiations to engage in the negotiations on the same foundation of knowledge. The HLPE reports exist in order to help the consensus building process by clearly defining a given issue, presenting the state of knowledge on the subject, and outlining the debates perspectives on the topic. This Science Policy Interface (SPI) serves to build democratic consensus building based on scientific knowledge in order to protect against intrenched interests, and to enable policy makers to articulate policy recommendations based on the facts as best we understand them.

The SPI of the CFS is not a perfect system, but has clear strengths, weaknesses, and potentials for improvement that have been addressed in this chapter, and analyzed extensively in academic scholarship (Caro et al., 2023; Clapp et al., 2023; Gitz & Meybeck, 2011; Welch et al., 2024). The HLPE Report on Agroecology tested the boundaries of the SPI system, as it was a contentious and drawn-out process from the commissioning of the report to the final approval by the StC and formal recognition of the member states (Duncan & Claeys, 2018). The case study of agroecology illustrates the importance of formal processes to steward contentious topics through governance venues. Specifically, the articulation of the scientific state of knowledge on agroecology in the context of innovations in food systems was well-received and formed a solid foundation for the ensuing CFS negotiations.

The purpose of HLPE reports more generally is to act as a synthesis of the state of scientific knowledge on a given topic, to allow all participants in the CFS negotiations to enter the negotiations with the same state of knowledge It set the stage for the CFS negotiations to be based on an analysis of food systems advising fundamental transformation based on agroecological principles. Unfortunately, the CFS negotiations did not play out that way, as described in the following chapter. This details the challenges of the science-policy interface of the CFS, as the political negotiations that mediate the science-policy interface do shape the outcomes.

5. The Committee on World Food Security

Introduction

The Committee on World Food Security (CFS) negotiations on *Agroecological and Other Innovative Approaches for Sustainable Agriculture and Food Systems that Enhance Food Security and Nutrition* began in November 2019 (after the July 2019 publication of the HLPE report), and concluded in May 2021, with the publication of the CFS policy recommendations. This round of negotiations stands out in the history of the reformed CFS as the longest and most contentious to date. Usually, the CFS policy recommendation follows the HLPE report in the same year (May HLPE report, October CFS policy recommendation)[17]. In this chapter I present a comparative analysis of the HLPE and the CFS policy recommendations. I also analyze the negotiations that led to the final CFS document. The case study of these agroecology negotiations reveals the core points of conflict in food systems governance, and associated challenges in achieving the positive visions of food systems transformation put forward by the HLPE, the foremost experts on food systems. I argue that while the HLPE / CFS is an extremely important governance forum, the translation of the scientific recommendations to the policy recommendations is a fragile process subject to political influence. I present a systematic analysis of the process by which the CFS policy recommendations on "Agroecological and Other Innovative Approaches" were adopted. The analysis of the CFS process draws on interviews, document analysis of draft versions and the formal input that these draft versions received, analysis of the final policy recommendations, and recordings of the CFS negotiations publicly available online.

The process of developing CFS policy recommendations begins with the commissioning and publication of the HLPE report on the topic, as discussed in Chapter 4. CFS policy recommendations do not mirror the HLPE recommendations perfectly, as the negotiations are a political process of articulating priorities in the global geopolitical context (Duncan et al., 2021). However, the following analysis shows that the agroecology negotiations were exceptional and that the resulting policy recommendations diverged significantly from the HLPE

[17] Looking at the output of the CFS and HLPE, there is a consistent rhythm of one publication a year from the HLPE followed by CFS policy recommendations on the same topic. This rhythm was interrupted with the agroecology negotiations, as well as the negotiations on the *Voluntary Guidelines on Food Systems and Nutrition (VGFSyN)*. See Appendix B for detailed schedule of publications.

recommendations. One sign of the difficulties of the negotiation process was that in the CFS policy negotiations on agroecology the typical CFS model of consensus-based agreement fell apart, as detailed below. To understand what made these negotiations particularly fraught, there are several factors to consider: these negotiations were the first CFS negotiations to occur entirely virtually due to the COVID-19 pandemic with far-reaching procedural implications; the content itself was contentious and different negotiation parties could not agree on common language; there were concerns about whether all negotiating parties were acting in good faith and using the HLPE report as the knowledge basis of the negotiations is intended. An analysis of these negotiations is presented below in three sections: the process of the negotiations, the content of the negotiations, and the actors involved.

Looking at the HLPE and the CFS policy recommendations side by side there are clear trends in the differences: the CFS recommendations are characterized by weaker language, the avoidance of specific topics, and the presence of numerous recommendations (some of which reflect conflicting viewpoints). In addition, the recommendations of the HLPE that focus on changing food systems on a structural level of policy, regulation, and subsidies are not reflected in the CFS recommendations. The HLPE argued that "both incremental transitions at small scales and structural changes to institutions and norms at larger scales need to take place in a coordinated and integrated way in order to achieve the desired transformation of the global food system" HLPE (2019). The CFS policy recommendations do not reflect the same analysis. Instead, the focus on structural changes is replaced with a focus on establishing policies to address the negative outcomes of food systems and those most impacted by them. The central difference here is that the policies of the CFS address aspects of the negative food systems outcomes but do not seek to change the systems themselves. The significance in this fundamental difference in analysis and recommendation is the focus away from the structural, systematic, and institutional reform needed to make significant changes to existing food systems. Instead of the systems-based approach of the HLPE, the CFS policy recommendations are more issue specific. For example, while the HLPE uses the phrasing "sustainable food systems for food security and nutrition" (SFS for FSN), the CFS uses the phrase "sustainable agriculture and food systems that enhance FSN". This difference might seem subtle, but the analysis below shows that the shifts in language used between the two documents is significant and shows that the CFS policy recommendations fall short of the whole food systems approach to transformation that was put

forth in the HLPE policy recommendations. Consequently, the holistic vision of food systems transformation articulated through the political vision of agroecology is replaced with a focus on treating the negative symptoms of a broken system.

This chapter is organized in two sections. The first presents an analysis of the policy negotiation process and details the actors and mechanisms by which the policy recommendations are articulated. I argue that the CFS negotiations on agroecology were uniquely challenging and consequently unusually prolonged. Methods used to bridge the differences of the negotiation positions to arrive at a policy document circumvented the consensus building processes. I present an analysis of the different negotiation positions and how they shaped the policy development process. The second section is an in-depth side-by-side analysis of the HLPE and CFS policy recommendations on *Agroecological and Other Innovative Approaches for Sustainable Agriculture and Food Systems*. Key findings demonstrate the differences of engagement with food systems transformation in each document as articulated through differences in wording and style, articulations of transition pathways, actors, and strength of recommendation, alongside the presence of contradictory statements. The Chapter concludes with an analysis section, which argues that systematic opposition to agroecology in the policy recommendation development process led to a weak final policy document.

Committee on World Food Security Agroecology Negotiations

As noted, the CFS negotiations on *Agroecological and Other Innovative Approaches* stand out in the history of CFS negotiations for being exceptionally long and contentious. Emile Frison, founder of the International Panel of Experts on Sustainable Food Systems (IPES-Food) and international expert on agroecology and agricultural biodiversity, also noted the divergence from the usual CFS project timeline in our interview:

> I followed the process, which is quite unique, because the policy recommendations normally follow the publication of the report by three to four months. The report usually comes out in June and the policy recommendations are usually adopted in October following that. In this case, it took two years to have an agreement on the policy recommendations, which shows the tremendous tensions that have continued to exist within the CFS. (Emile Frison, IPES-Food)

To corroborate the statement by Emile Frison I have compiled the publication schedule of the HLPE and CFS, in Appendix B of this dissertation. It illustrates clearly that the usual publication scheduled mentioned by Emile Frison is adhered to until the CFS began working on both Nutrition and Food Systems (HLPE report published in 2017, CFS policy recommendation in 2021) and Agroecology (HLPE report published in 2019, CFS policy recommendations in 2021). The work on Nutrition and Food Systems was a particularly fraught process, with the CSIPM walking out of negotiations, as will be discussed later in this chapter. While the Agroecology negotiations did not derail in the same way that those on Nutrition and Food Systems did, it still took two years of active negotiation to arrive at the policy recommendations on agroecology, instead of the typical period of 4 to 5 months.

The CFS policy negotiations on agroecology involved four open meetings, five informal discussions, three rounds of negotiations, many rounds of formal written input from CFS members, many rapporteur statements and 13 iterations of draft one of the policy recommendations. In additions to all of these meetings, there was also a change of the rapporteur overseeing the negotiations mid-way through the process. I created a visual summary of the process for clarity, see image below.

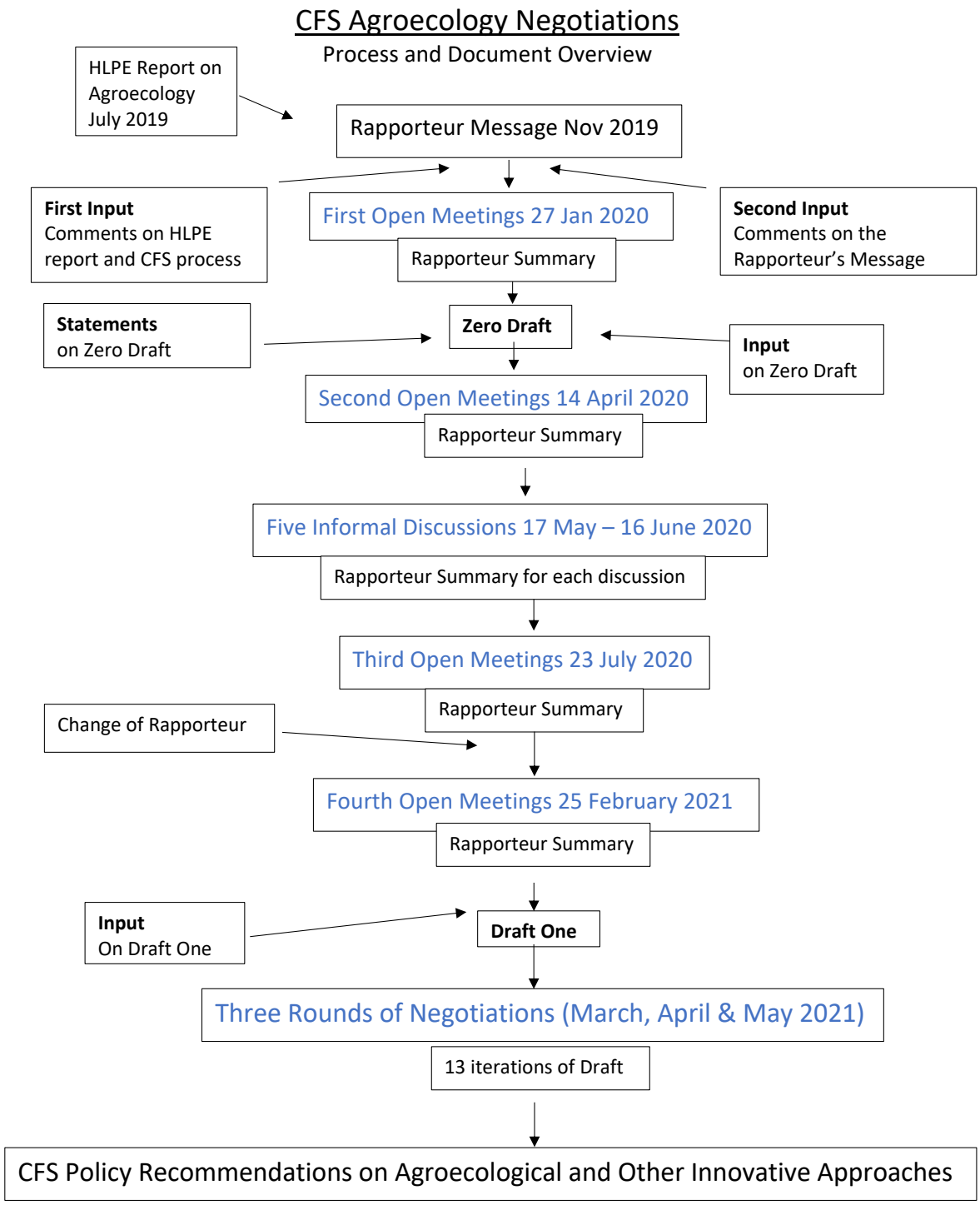


Figure 16: CFS Agroecology Negotiations – Process and Document Overview

Negotiations Process

The CFS negotiations on agroecology stand out as a particularly fraught policy convention process in the history of the CFS. The agroecology negotiations had several significant deviations from the norm in terms of processes and procedures, which significantly impacted the outcomes of the negotiations (CSIPM, 2021). In addition to the change of rapporteur and virtual meeting discussed previously, there was less consensus about the state of knowledge on central contentious topics than there should have been given the HLPE report. Consequently, several informal meetings were held to find common ground between divergent positions. While the Zero draft of the CFS policy recommendations was based closely on the HLPE policy recommendations, the negotiations that followed veered away from the consensus state of knowledge articulated by the HLPE, according to my interviewees. The procedural details, though they may seem trivial, are extremely important for how power is exercised in the negotiations. The procedural details determine the democratic integrity of CFS negotiations and shape the outcomes, because they mediate access to shape the policy document.

With the reform of the CFS, there were several structural and procedural mechanisms introduced into the negotiations that serve to guide the procedures in an equitable manner, elevating some voices and moving away from the idea of a "level playing field" (Duncan et al., 2021). One tool by which this occurs is the formal integration of non-state actors in the negotiation process through the advisory groups that create mechanisms for participation in negotiation for interest groups such as the Private Sector Mechanism (PSM), civil society (CSIPM), UN agencies, research centres, financial institutions, and the philanthropic sector through the Philanthropic Foundations Mechanism (PFM) (CFS, 2024; FAO, 2022)[18]. The PSM

[18] In the 50 interviews I conducted for this research, and that form the analytic basis of this research, I was able to speak to people within each one of the interest groups, with the exception of financial institutions, and with the addition of academics and government employees. However, people who fit into the categories of civil society, UN agencies, and research centres make up the vast majority of my interviews. I conducted snowball sampling, which meant that talking to civil society actors frequently led me to interview people that were within the same category. Nevertheless, I was able to interview three representatives of the PSM, who asked to remain anonymous in my dissertation, and several people who work in the philanthropic sector. More details on my research data can be found in the methods section in Chapter 1 of this dissertation.

and the CSIPM are important features of the CFS since the 2009 reform of the CFS and have issued formal statements on the agroecology negotiations discussed throughout this dissertation. The PFM in turn is a recent addition, established in 2022, and has not issued a formal statement on the agroecology work of the CFS. In addition, the principle of the "most-affected" was adopted in order to "give priority voice in the policy-making process to the most affected by hunger and food insecurity" (Duncan & Claeys, 2018). In addition, there were other informal procedures adopted to elevate the voices of the CSIPM in the negotiations. In their analysis of the reform of the CFS Duncan et al. (2021) make the following observation: "The CFS commitment to prioritizing the voices of the most affected is further expressed through a number of informal, but widely used, practices such as: the allocation of speaking time to CSM participating organizations in Plenary, the choice of keynote speakers from the CSM, and the selection and training of Technical Task Team coordinators coming from the CSM" (Duncan et al., 2021). Procedurally, this commitment by the CFS translates into a consensus-based model, with member states making use of the formal voting rules of the CFS (which intentionally and consensually excludes all parties other than member states) only when consensus is not reached (Duncan et al., 2021). This model of consensus-based agreement fell apart in the CFS agroecology negotiations, as the different negotiation positions struggled to find common ground in the language of the text. Consequently, in moments of failure to achieve consensus in the policy negotiations, the CFS resorted to formal voting procedures.

Across all negotiation positions, from private sector to civil society and individual country representatives, everyone I spoke with said that it was a very challenging set of negotiations to be involved in because of the vast differences of opinion. The virtual platform for the negotiations seemed to have made finding common ground additionally challenging. From language barriers, through unreliable internet access, to very challenging working hours, many parties said that they were not able to dedicate the usual quality of human resources to the process due to the online forum of the negotiations. There was an asymmetry in resources to dedicate to this difficult process that impacted the negotiation outcomes. For example, Interview 20, a FAO staff member, articulated the challenges of the negotiations as follows:

> Yes, and it was during the pandemic. So, this was a really complicated thing because we have to have these virtual meetings. It was so difficult to negotiate in virtual meetings

> because you have a lot of people on the screen, and you cannot really talk to each other. You cannot explain as you have three minutes to make your statement. It was difficult to negotiate. But it was really, really a complicated negotiation. (Interview 20)

The online platform was a major challenge for many negotiators, as articulated by this quote. In addition, trying to find consensus between the different negotiations was extremely difficult, as articulated by Interview 47, an employee of IFAD, who was also involved in the negotiations:

> It was also amazing exercise for the experts to put together something like that - in order to satisfy everybody's view. We saw it in the convergence process and the whole policy discussions. It was very, very hectic, and very difficult to get to agreements - with countries having so different views around what are the good practices around food systems that could benefit everybody. Each country has its own interest. And even the CFS chairs, the co-chairs, the committee, they said that it was one of the longest discussions that they ever had. (Interview 47)

The challenges of the negotiations included the difficulty of consensus building, as articulated in this quote.

Looking at the timeline in the Figure of the CFS negotiations above you will see that the first open meeting of the CFS on *Agroecological and Other Innovative Approaches* was held in January of 2020. Depending on where you were in the world sometime between January and March of 2020 far-reaching lockdown measures, travel restrictions, and return to your home-country orders were issued by most governments of the world due to the unfolding COVID-19 pandemic. Consequently, for the first time in the CFS's history, the negotiations and all meetings were held virtually via conferencing software. Practically, what this meant for participants in these meetings is that most people were in different time-zones. Depending on people's location, negotiators attend the three hour long open meetings at very different, and sometimes extremely strenuous times. If a meeting was held 10am-1pm in Central Europe, that was 6-9am in Chile, and 11pm-2am in the Philippines. The meetings themselves are extremely difficult to engage with (Interview 50 described it like watching paint dry), as they are wordy, slow paced, and very formal. Consequently, it is understandable that the negotiators were not always able to attend with equal attention. In reviewing the meetings online, I saw several instances of negotiators being asleep on the call. The result of these time-zone difference was that different constituents had unequal negotiation representation at the meetings, depending on people's ability to work at

unusual hours and also to be fully engaged in the process. The lack of quality engagement and felt lack of equal representation was articulated to me by interviewees from both the PSM and CSIPM and were felt by participants regardless of negotiation position.

In addition to the challenges of wakefulness and attention to the meetings, there was also the challenge of language and translation. Everyone that did not speak fluent English was reliant on the translation services provided, which pose another barrier to participation as services were not always available or reliable. Alberta Guerra, Senior Policy Analyst at Action Aid USA, who was deeply involved in the CFS negotiations on agroecology for the CSIPM, remembered the virtual participation as follows:

> We had to work virtually. I think it was probably the first or second process in the CFS happening only virtually due to COVID, so it was really heavy and tough to negotiate on the screen. Many sessions didn't have interpretation and, in the agroecology working group we had a lot of people speaking French and Spanish and so we had to arrange ourselves, and it was very tough sometimes. During official session, when we went over time, we had to work without interpretation. And so, we lost the capacity of our colleagues coming from other continents. (Alberta Guerra, Senior Policy Analyst, ActionAid USA)

A third challenge mentioned in interviews as a substantial challenge was the remote convening. Not being physically present in the same room with other negotiators meant that it was not possible to quickly and informally get clarification (in terms of language or content) from a fellow negotiator during the meetings. The online meeting environment, which was new to many people at that point, has its own unique challenges. One of these challenges is the lack of informal communication that is part of in-person events. Negotiators felt that it impacted their ability to participate fully.

A fourth challenge of the online format that created unequal access to the negotiations was internet access. There was varying ability to access fast and reliable internet connections, which created frustrations for some people in trying to attend the meetings. Consequently, internet access was a major hurdle in participation for some negotiators. Access to the negotiations is a major equity issue that is not entirely absent from in-person meetings either

(e.g. access to visas and travel funding). However, in-person meetings allow equal participation in a more predictable manner than the problems of internet access create.

Finally, I was told by several attendees that it was particularly the challenging moments in the negotiations that were very difficult to engage with in the virtual format. When there were tense moments, in the sense of widely disparate viewpoints on a particular topic, the online format prevented people from engaging in the negotiations as they would have in-person. For example, negotiators described that the flow of the online meetings did not allow for as much interaction as an in-person meeting would. This phenomenon has now been studied scientifically, with academics arguing that "coercive approaches" are replacing "persuasive approaches" in online policy processes (Bjola, & Coplen, 2022). In addition, the absence of informal social interaction during online negotiations changes the nature and outcomes of meetings (Naylor, 2020). Consequently, some negotiators felt that the meetings were not as productive, as people did not come to speak as they would have in person. Often contentious topics were passed over in order to maintain progress, and the meeting moved on.

In addition to the challenges of the online format, the CFS negotiations on agroecology suffered from other procedural challenges. A major issue mentioned by interviewees was the lack of adherence to the customary starting point of negotiations. The HLPE report is customarily taken as the starting point of the CFS negotiations. The reason the CFS requests the HLPE to write reports is that negotiators can read these reports, and all parties enter the negotiation with the same starting position. The HLPE Project Teams invest substantial effort to maintain coherence between reports so that negotiators are operating on a peer-reviewed basis of information for negotiations. However, in these negotiations, the two foundations on which negotiations are usually based: the HLPE report and the outcomes of previous CFS negotiations, were not adhered to as common ground. Countries argued points that were put forth in the HLPE report, put into question established knowledge, and tried to re-open debate on topics agreed on in previous CFS policy recommendations. This led a few people I interviewed to say that they do not believe that the negotiations were conducted in good faith. For example, one interviewee reflected on the negotiations as follows:

> And it was a very difficult process because there was a lot of pressure from the from the CFS secretariat and lots of countries to dilute agroecology and not even mention it, like every time the word appeared, they would attack it. On the other hand, the CSIPM had

> fought for this for years - it was the result of several years of sustained pressure. They [the CSIPM] were shocked because they thought the HLPE refocusing the issue on agroecology was a step forward, and that was accepted as the starting point for the negotiations. But what we found at that point, was that the starting point was not accepted by a number of very outspoken countries. So, for us, we had to somehow, we could not start exactly from the HLPE report recommendation. For CSIPM this was a huge setback, and we were trying to see what balance we could achieve that could in the end be adopted by everybody. (Interview 9)

This interviewee describes how the science-policy interface of the CFS was challenged by negotiators not using the HLPE report as the common ground and starting point from which negotiations occurred. The fact that statements that had previously been established through CFS negotiations, or had been put forward by the HLPE, were re-opened for debate significantly impacted the length of the negotiations. Traditionally, the CFS negotiations are based on so called "decision boxes" in the HLPE report as the starting point of negotiations (Duncan et al., 2021). This procedural norm of basing CFS negotiations on HLPE reports felt tenuous to some negotiators. Madeleine Kaufmann, Senior Policy Advisor to the Swiss Federal Office for Agriculture, stated that:

> In the Zero Draft there was no differentiation between agroecological approaches and other innovative approaches. True Cost Accounting, for example, which was highlighted in the HLPE report, was not adequately acknowledged. In addition, references to human rights were, in our view, not sufficiently strong. We regretted this omission. We observe a trend within the CFS context: a growing number of delegations no longer accept the HLPE's work as a foundational basis for CFS policy products. (Madeleine Kaufmann, Senior Policy Advisor Swiss Federal Office for Agriculture)

The issue of content put forward by the HLPE not being taken up by the CFS articulated by this interviewee is also reflected in the final policy recommendations, as analysed later in this Chapter. The lost opportunities of not following through on recommendations from the HLPE, such as True Cost Accounting and the centrality of a rights centred approach, for example, are immense. The statement quoted above illustrates that these lost opportunities erode trust in the CFS as a governance platform.

The interviewees that represented the PSM in the negotiations were critical of the CFS negotiations for engaging with the political aspects of agroecology, and for not being focused enough on agricultural practices. For example, Interview 44, who participated in these CFS negotiations on behalf of the PSM, said that a lot of time was spent on ideological debate, where there should be more focus on implementation of recommendations. According to this interviewee, the negotiations were dragged out because some negotiators were too persistent about advocating for the inclusion of the word agroecology in text passages:

> I think it goes back to a broader discussion of how some parties see agroecology, that it is more than an approach to sustainable agriculture. It is a political movement. And some people see it as a political movement rather than an agricultural practice. And I think that to some extent that was reflected in the HLPE report. Others want to look at ways that help farmers on the ground at a given time and not necessarily look at the political aspects. (Interview 44)

This statement reflects the opinion that the discussions on agroecology, which are understood as political discussions, stand in the way of "helping farmers on the ground". This reflects the tension of which farmers are represented by which advocacy group – the PSM represents farmers that engage in different agricultural practices than those that are represented by the CSIPM. The CSIPM advocates that political discussions are a means to help farmers on the ground by changing the systems within which they operate. These differences in negotiating positions, and the different conceptions of the purpose of the CFS policy recommendations, were part of the reason that negotiators struggled to find consensus in the wording of the policy recommendations. Interestingly, people who participated in the CFS negotiations on behalf of the CSIPM were also frustrated with vagueness in the CFS texts, as articulated by Interview 19:

> Unfortunately, therefore, also as civil society and civil society mechanism, we were trapped into a context in which we constantly had to speak about everything else. There was a negotiating practice that tried to avoid a single focus on agroecology. So, you always were discussing general terms and general approaches that need to apply to agroecology and its opposite. And you can understand that this was a very, very smart negotiating tactic in many ways. On the side of some member states, but it also doesn't allow any capacity to explain why this is different from the other one if you always need to speak in general terms. (Interview 19)

Consequently, while the PSM negotiation position wanted to stay away from agroecology and generate text that was potentially applicable to all farmers, the CSIPM negotiation position was advocating for strong representation of agroecology in the text. Interview 21 articulated the belief that the shifting of negotiation focus was a deliberate negotiation tactic on behalf of some actors, to drag out the process as long as possible, and to have their position prevail by virtue of outlasting the attention of others. Whether this was the case is impossible to verify. Nevertheless, the differences in opinions on and approaches to the negotiations created an environment that struggled to bridge differences.

The CFS negotiations on agroecology occurred in the context of previous CFS negotiations. The fact that the previous CFS negotiations on the topic of food systems and nutrition had been a very fraught process[19] helped keep all parties at the negotiations table. Alberta Guerra, participated in the negotiations on behalf of the CSIPM, described the situation as follows:

> The agroecology process came right after the negotiation on the guidelines on food system and nutrition that was a disaster in terms of result outcomes and the reaction of civil society. Civil society was completely disappointed with the process. They walked out of the room and didn't endorse the final outcome. So, when we started the agroecology process, we also have this burden with us. And it was really hard to embark on this agroecology negotiation with all that happening in the previous one. And again, the chair we had was much better. The general environment was much better, governments were much more aware of the relevance of civil society, and they were really impressed by the seriousness of CSIPM walking out from the food system and nutrition negotiation. So, they didn't want to replicate the same situation. So, they were much more open to us. But the time pressure was there and so many times, at the expense of different outcomes, it was decided just to move ahead, and this was really not good for us. (Alberta Guerra, Senior Policy Analyst, ActionAid USA)

The fact that the walking-out of the CSIPM in the nutrition and food systems work, as described by Alberta Guerra here, had a big impact on the negotiation process was also mentioned by

[19] The HLPE published report #12 *Nutrition and Food Systems* in 2017, which lead to the publication of the *Voluntary Guidelines on Food Systems and Nutrition (VGFSyN)* in 2021. See Appendix B

Madeleine Kaufmann, who participated in the negotiations on behalf of Switzerland: "Another particularly challenging moment for us was the decision of the CSIPM to withdraw and, after careful reflection, to conclude that they were not in a position to endorse the policy recommendations" (Madeleine Kaufmann, Senior Policy Advisor Swiss Federal Office for Agriculture). Consequently, there was a heightened awareness of the potential of negotiations failing. Negotiators were invested in there being a positive outcome, in the sense of a policy document, in the agroecology negotiations.

The fact that the procedural formality of not re-negotiating previously agreed upon topics was not adhered to was a challenge in moving the negotiations forward. Consequently, the different negotiation positions struggled to find common ground from which to draft the policy recommendations. The Steering Committee overseeing the negotiations decided to host informal discussions in order to bridge the differences in negotiation positions. Interview 9 explained this decision in our interview:

> And we identified a number of points of divergence of views on the zero-draft text. And we hosted a number of informal discussions to see if we could, in this informal setting, find a way out, or find a solution to these to these controversial issues. (Interview 9)

There is no recording of the informal meetings, so it is not possible to analyze what occurred during these meetings. The informal meetings seemed to have been an effective tool in bridging differences, in the sense that they led to agreement on language that allowed the process to move forward. However, to what extent they contributed to the weakening of the final policy recommendations is an open question. As argued by Duncan et al. (2021), the "shift from plenary negotiations to intersessional negotiations" has been flagged in the scholarship as a procedural mechanism by which the elevation of the voices of the most affected, which was central to the CFS reform, is being undermined (Duncan et al., 2021).

Finally, it is important to note that the rapporteur overseeing the process changed while the negotiations were ongoing. The negotiations began in 2019 under the guidance of Mohammad Hossein Emadi, Ambassador, Permanent Representative of the Islamic Republic of Iran to FAO/UN RBAs and Chair of COAG, and switched in February 2021 to H.E. Yaya Olaitan Olaniran, Minister and Permanent Representative of Nigeria to FAO. All parties I

interviewed said that the change of the rapporteur did not impact the process or outcome of the negotiations, and that both rapporteurs stewarded the process professionally and competently.

How the negotiations are conducted is extremely important in terms of equal access to the negotiations for all parties. There is recognition of the importance of negotiation procedures in the formal procedures that were established in the reform of the CFS. For example, the establishment of the "most-affected" principle of the CFS, which gives priority in the policy process to those that are most affected by hunger and food insecurity (Duncan et al., 2021). However, the most affected principle has also faced opposition in the CFS, through discourses on objectivity (Duncan & Claeys, 2018). The agroecology negotiations were particularly drawn out due to the contentious nature of the negotiations, but also due to procedural details. The fact that the CSIPM withdrew from the previous round of negotiations on the *Voluntary Guidelines on Food Systems and Nutrition* (VGFSyN), as discussed previously, created pressure for all parties to find a way forward and to stay at the negotiation table this time around (Aredes, 2023). Nevertheless, the online format complicated the process further. In their statement on the VGFSyN, the CSIPM states:

> This evaluation has also been deeply marked by the way we have experienced the negotiation process since May 2020: careless methodologies, accelerated timings, hostile atmosphere and strong power plays have exacerbated and brought under the spotlight the cracks developing in the CFS. (CSIPM, 2021)

Consequently, the deviation from procedural norms pre-pandemic and pre-online convening affected the quality and values of the convergence process of the CFS, as witnessed in both the VGFSyN and agroecology negotiation processes. The importance of the procedural details that allow equal access to negotiations, such as reliable interpretation, cannot be overstated. With the CFS deviating from procedural norms in the agroecology negotiations, questions of legitimacy of the governance venue are raised. Particularly in light of the emerging UNFSS, the calls to re-orient the CFS to its values and processes post-reform and pre-pandemic, and to uphold the CFS as a venue of multilateralism, abound (Canfield et al., 2021; Guttal, 2021).

Negotiations Contents

To fully understand the breadth and depth of disagreement with which the different parties in the negotiation encountered each other, it is helpful to refer to the documentation of the CFS process. In the time between the first open meeting in Jan 2020 and the second open meeting in April 2020, the CFS developed a Zero Draft and gathered input on this Zero Draft. The secretariat summarized the major topics of disagreement from the feedback on the Zero Draft in a document under 12 main topics, which I have summarized in table format below (CFS, 2020):

Topic	Notes
1. Situation analysis	"While some stakeholders called for a full reorientation of food systems to make them sustainable, others rejected the call to transform food systems or to embark on transition pathways"
2. Agroecological and Other Innovative Approaches	"Some stakeholders raised concerns that the Zero Draft […] did not focus sufficiently on agroecological approaches. On the other hand, others maintained that agroecology should not be given any priority over other innovative approaches"
3. Digitalization	"Some stakeholders underlined the need for access to digital technologies by family farmers, the need for capacity building and, in particular, the need for a strong regulatory framework"
4. Assessments	There was disagreement about whether to use the assessment criteria proposed by the HLPE report: "resilience, ecological footprint, resource efficiency, and social equity / responsibility, and agency"
5. Stakeholders	Differences in opinion about who is being addressed by the policy recommendations. Ie.

	Who are the stakeholders. States, private sector, farmers at all scales, social movements?
6. Markets	Disagreement about whether to "emphasize" global markets in addition to local, national, and regional markets
7. Right to food	"Some proposed to limit the references to the right to food while others sought to strengthen the integration of the right to food in the Zero Draft"
8. Healthy diets	"Some stakeholders rejected the use of the term "sustainable healthy diets" as it is not agreed UN language, while some affirmed its inclusion and even strengthening by adding "food systems" and the social justice dimension."
9. Incentives	"Views ranged from a call to reject all subsidies to a call to recognize that public incentives were essential for a number of countries"
10. Agrochemicals	"Views on the use of agrochemicals ranged from recommending support for a sustainable and efficient use of agrochemical inputs […] to recommending replacing chemical pesticide use with comprehensive agroecological approaches for pest management […]"
11. Gender	Disagreement about the inclusion about references to women's issues and to "gender transformative policies". Disagreement about recognizing the "centrality of women's rights and the role of women in knowledge accumulation". Disagreement about "strengthening gender equality"

12. Agency	"Some stakeholders called for references to agency to be removed, while others supported its inclusion"

At the start of the negotiations the different positions were far apart on almost every major point that constitute the defining characteristics of agroecological approaches. Different interviewees highlighted different aspects of these contentious topics as particularly relevant. For example, the rights-based approach that is central to the HLPE report, was a topic of contention, as described by Alberta Guerra who participated in the negotiations on behalf of the CSIPM:

> The negotiation happened right after the adoption of the UN Declaration on the Rights of Peasants and other rural workers that was adopted in Geneva, but the US didn't want to recognize this in the final recommendations. So again, human rights were not fully recognized, and this was a big problem for us. (Alberta Guerra, Senior Policy Analyst, ActionAid USA)

The United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP) was adopted by the United Nations Human Rights Council in September 2018 at the 39th session in Geneva (UN Human Rights Council, 2018). The quote by Alberta Guerra confirms the challenges posed by existing frameworks not being recognized (also mentioned by other interviewees, such as Interview 40), or given their appropriate position in the negotiations, was discussed in the previous section.

In addition, many interviewees spoke of the contentious nature of the topic of chemical agricultural inputs[20]. It was mentioned that some negotiators were adamantly opposed to all language pointing towards reducing the use of chemical fertilizers due to financial interests, as well as fear over loss of production. This argument was articulated by Interview 2, an academic that followed the negotiations closely:

> Well, it was no secret that the US was really resistant to agroecology, the report, from the start. The UN representative from the United States gave a very strongly worded speech and so it was very clear that they had a lot of problems with the term [agroecology] and the approach. Their way of framing agroecology was that it was kind of going back to

[20] The topic of fertilizers and pesticides was addressed in 17 of the interviews, which reflects the central importance of this topic in the debates surrounding food systems governance

> traditional agriculture and that it was anti-technology, and that it was going to create tremendous food insecurity and it was really kind of backward thinking. So that was the way that they were framing it. They saw it as a threat to the fertilizer industry, and related industries, in terms of agricultural inputs. I think that's one of the reasons why they were so strongly opposed to it. (Interview 2)

This quote reflects clearly the understanding that the debate about agricultural inputs, such as fertilizers, is about the financial interests invested in these agricultural products and methods and the influence they have on negotiating positions, such as that of the USA. The compromise that was reached as regards agricultural inputs in the agroecology negotiations was not welcomed by civil society. Alberta Guerra described how the compromise that was reached was ambiguous language that was problematic:

> The fact that again, there was not clear language around fertilizers and pesticides, and they use a language that somehow kept open, so not phasing out, but minimizing, optimizing, and for us again, this was a big problem because, in particular on the pesticides, we also had other UN instruments saying that the use of pesticides must be phased out because they are very dangerous for the health of human people in nature. But there was really a strong push from governments and the private sector and so if I remember well, the language that was used was around the optimization that for us was completely unacceptable. (Alberta Guerra, Senior Policy Analyst, ActionAid USA)

Avoiding contentious issues with vague language was a central strategy for finding compromises that allowed for a policy document to be published. This is reflected in the data on the topic of agricultural inputs, as illustrated by the above quote and the following text analysis later in this chapter.

The topic of trade was also mentioned as a major sticking point throughout the negotiations. In the 12 points above this is alluded to in the topic of markets, and the question of what scale of markets to support. Emile Frison, co-founder of IPES-Food, described the reaction of different actors to the language on trade in the negotiations:

> In the [HLPE] report, there was some criticisms about the impact of trade, or liberalized trade, or free trade agreements and the impact that those have on sustainable food systems. Those are really blocking points for the US, you know, trade is sacrosanct. You don't put any obstacle to trade, free trade is part of their religion. So that was one of the

topics that was trying to be avoided in the policy recommendations. (Emile Frison, IPES-Food)

This quote reflects the fact that the topic of trade, which is so fundamental to global food systems, was not adequately addressed in the CFS work on agroecology. The position that the agroecology negotiations did not address trade relationships was reflected in Interview 12, and Interview 38, both with experts in the field of global food systems and how they relate to trade. While this omission could be partially explained by the paradigm agroecology not clearly articulating a vision for global trade, as discussed in Chapter 2 of this dissertation. However, the fact that the HLPE report address trade and the CFS recommendations did not, is significant.

In addition, there were more topics that were highly contentious, some of them so much so that they did not make it into the agroecology discussion at all. For example, Interview 9 reflected on the topic of seed sovereignty and the use of GM seeds in our interview as follows:

> The IPC [International Planning Committee for Food Sovereignty] tried to bring the issue of seeds to the CFS and that was totally impossible […] The question of genetic resources and access to genetic resources is so politicized on the one hand, and on the other hand, there are already intergovernmental spaces that supposedly deal with those things, including the International Treaty of Plant Genetic Resources, and the Convention on Biological Diversity (CBD). So, the CFS immediately said we're not dealing with any of those issues. And so one of the discussions in the IPC at that time was okay, if we, maybe we'll never get the issue of genetic resources on the agenda of CFS, but if we kind of broaden the frame to include to make it agroecology which will include genetic diversity in it, then this can also be a way you know, in agroecology we're talking about also seeds. (Interview 9)

Consequently, some advocates of agroecology saw it as the paradigm through which to begin addressing some of the more contentious topics in food systems governance, such as genetic resources and seeds, which the CFS has not engaged with specifically to date.

From the interviews it is evident that the agroecology negotiations played out as they did because agroecology presents an alternative vision of food systems. The reason that these agroecology negotiations were so contentious, and why there were so many points of disagreement between different negotiation positions, is that agroecology presents a coherent

system of a different way to structure the central components of food systems. The elements that comprise this vision of different food systems, and the transition pathways to achieve this vision, are fundamentally challenging to the political and financial interest that maintain the food system as is. Entrenched interests took every opportunity in the negotiations to weaken the language of the policy recommendations in order to prevent the CFS policy recommendations from indicating any obligation or impetus to challenge or change existing systems and structures.

Considering the response of the PSM to the contentious topics of the CFS negotiations, the major points of criticism from the PSM were that agroecology presents a too political and ideological perspective, as articulated in the official statement *PSM Perspectives on the Policy Convergence for Agroecological and other Innovative Approaches* (PSM, 2020):

> There is a concern that framing these strategies and approaches from only a societal and political standpoint and not from the perspective of the farmer provides false dichotomies which can get interpreted as the environment vs large corporate interests; social issues vs. big business. It therefore gets harder to focus on the tools and management practices that individual farms need to use to sustainably develop their farming operations. (PSM, 2020)

The above framing of the agroecological paradigm as political and lacking in terms of farming tools is interesting, as it opens the question of which farmers are represented by which formal mechanism to the CFS. Consequently, the principle of upholding the voices of the most affected by hunger and malnutrition, that is central to the reformed CFS, is critical, since the category of "farmer" contains great diversity and contradiction. In addition, the framing of agroecology as only an ideology is problematic, as agroecology upholds specific and concrete agricultural practices from the early roots of agroecology as an ecological science. The agroecology paradigm does however exclude specific agricultural practices, such as widespread use of synthetic fertilizers, that are a central concern for the members of the PSM. In reviewing the official responses of the PSM and the CSIPM (only two of many different stakeholder groups in the convergence process of the CFS) to the agroecology negotiations, it is evident how deeply contradictory the priorities of the different negotiation positions are.

In response to the zero-draft gathering such divergent feedback, the rapporteur hosted weekly informal discussions via zoom, which included additional "friends of the rapporteur" sessions. As mentioned above, the point of these informal meetings was to bring the negotiation

positions closer together and allow the secretariat to articulate a first draft, which it was able to do after these informal meetings (CFS, 2020a).

How the recommendations were weakened

The zero draft, which was based on the HLPE policy recommendations, gathered widely conflicting feedback articulating disparate visions of the CFS policy recommendations. There followed a lengthy process of negotiation over the wording of the recommendations. In the process of the CFS negotiations there were specific tactics used to water down the zero draft to arrive at the final CFS policy recommendations. These tactics included: avoiding language that might imply obligation, such as the word "ensure"; erasure of the word "agroecology" or "agroecological approaches" wherever possible; removal of unwanted concepts, such as "equity" and "food systems transformation"; shifting the focus of the recommendation to innovation and "innovative approaches"; deletion of reference to the HLPE report; inclusion of words to increase vagueness of recommendations, such as adding "sustainable agriculture" in front of "food systems"; expanding stakeholder groups addressed by the policy recommendations to diffuse the responsibility of implementation; and others. Below I present some examples from the negotiation texts that illustrate these tactics. The bolded text shows the changes (additions and deletions) made by the negotiator indicated in the right-hand column.

Example 1 - Comments on Draft One

Point	Text	
6	The challenges **~~faced by~~** food systems **face** are highly complex, context-specific and **often** unpredictable. (…) **While there is no consensus definition of the term "agroecology", ecologists and agronomists have long understood the importance of integrated, holistic approaches to sustainable agriculture and food systems. ~~Agroecological approaches21 were highlighted in the CFS request to the HLPE, and are increasingly prominent in debates around sustainable agriculture and food systems~~**	USA

	~~**because of their holistic approach and emphasis on equity.**~~ As the impact of the Covid-19 pandemic on agriculture and food systems points to the critical importance of resilience, interest in innovative approaches that strengthen resilience is growing, ~~**particularly in agroecological approaches.**~~	

The bolded texts show the inclusions and deletions made by the USA on point 6. From this one comment, several of the described tactics are discernible. By adding the statement that "there is no consensus definition for the term "agroecology"", the comment undermines the work of the HLPE on the 13 Principles as well as the FAO's 10 Elements, thereby attempting to discredit the conceptual integrity of agroecology. This statement is then followed by erasing mentions of "agroecological approaches", an example of the erasure of the word "agroecology" or "agroecological approaches" wherever possible. Instead, the changes shifts the attention from agroecology to "innovative approaches".

Example 2 - Comments on Draft One

Point	Text	
6	(…) Agroecological approaches were **included** ~~**highlighted**~~ **together with other innovative approaches** in the CFS request to the HLPE, and are **all** increasingly prominent in debates around sustainable agriculture and food systems ~~**because of their holistic approach and emphasis on equity**~~. As the impact of the Covid-19 pandemic on agriculture and food systems points to the critical importance of resilience, interest in innovative approaches that strengthen resilience is growing, ~~**particularly in agroecological approaches**~~.	PSM

This example is the feedback that the Private Sector Mechanism (PSM) provided on the same point of draft one as discussed in example one above. The bolded text shows additions and

deletions of the PSM on the proposed text. By replacing "agroecological approaches were highlighted" with "agroecological approaches were included together with other innovative approaches", the texts sets agroecology equal with other innovations, a tactic widely discussed in this chapter. The deletion of the phrase "particularly in agroecological approaches" also provides an example of deletion of agroecology wherever possible. Interestingly, reference to a holistic approach and equity is also deleted both by the PSM and the USA. This deletion indicates a difference in priority from different positions in the negotiations, in which the USA and PSM are not representing "holistic" and "equitable" as desirable features of food systems.

Example 3 - Comments on Draft One

Point	Text	
10	Innovative approaches look beyond single technological innovations to a well-articulated overall set of principles, practices and methods ~~**set within an overarching philosophy. An innovative approach gives rise to myriad technologies and practices.**~~ The HLPE report identified **main directions of agroecological and other innovative approaches for sustainable agriculture and food systems** and analyzed the following ~~**agroecological and other innovative**~~ approaches ~~**for sustainable agriculture and food systems:**~~ agroecology, organic agriculture, agroforestry, permaculture, ~~**food sovereignty,**~~ sustainable intensification, climate-**sensitive** smart **and -resilient** agriculture, nutrition sensitive agriculture, and sustainable **food** value chains. The~~**se analyzed**~~ innovative approaches **range** ~~**are considered to lie along a continuum**~~ – from those that place more emphasis on holistic solutions, to rights-based approaches and to those that focus on a single	EU

	outcome, measured quantitatively, often productivity per unit of resource (e.g. land, water)." COMMENT: We should suggest that the cited list of approaches remain consistent here with the HLPE report (Table 4 or Appendix A1).	
10	~~**Innovative approaches look beyond single technological innovations to a well-articulated overall set of principles, practices and methods set within an overarching philosophy.**~~ **An innovative approach gives rise to myriad technologies and practices. Innovative approaches are a set of practices, technologies, and/or methods set intended to foster transitions towards more sustainable food systems that enhance food security and nutrition by meeting the demands of food system actors while achieving desirable environmental, economic, and social outcomes. Innovative approaches are non-exclusive and may overlap in methods, concepts, practices, and techniques.** ~~**The HLPE report identified and analyzed the following agroecological and other innovative approaches for sustainable agriculture and food systems and analyzed the following agroecological and other innovative approaches for sustainable agriculture and food systems: agroecology, organic agriculture, agroforestry, permaculture, food sovereignty, sustainable intensification, climate-sensitive smart and -resilient agriculture, nutrition sensitive agriculture, and sustainable food value chains. These innovative approaches are considered to lie along a continuum – from those that place more emphasis on holistic solutions, to rights-based approaches and to those that focus on a single**~~	USA

	~~outcome, measured quantitatively, often productivity per unit of resource (e.g. land, water).”~~	

This example, feedback on point 10 of Draft One of the policy recommendations, provides a very interesting insight into the different negotiation positions of different countries. Reading the edits by both the EU and the USA, the result are two widely different statements. The EU maintains the reference to the work of the HLPE report, mentions “agroecology”, and provides feedback that puts the text in line with the content of the HLPE report. The USA edits, in comparison, delete all references to the HLPE and agroecology, turning the text into a statement exclusively about “innovative approaches”. Thus, tactics of avoiding the mention of agroecology and shifting the focus away from the HLPE report and associated rights-based statements to innovation, is clearly displayed here.

The edits on draft one analysed here show clearly the starting negating position of the different countries and mechanisms. The final policy recommendation on this point reads:

> Agroecological and other innovative approaches mentioned in these policy recommendations are a set of practices, technologies and/or methods and that look beyond single technological social or institutional innovations and must contribute to sustainable agriculture and food systems that enhance food security and nutrition for current and future generations. The implementation of these approaches must be inclusive and equitable, in accordance with the three dimensions of sustainable development. The HLPE report analyzed a number of agroecological and other innovative approaches, including those that place more emphasis on holistic solutions and those that focus on specific outcomes, often measured quantitatively. (CFS, 2021)

The final text is a measured reflection of the different negotiation positions in this case. It reflects the fact that there were many rounds of edits and feedback that followed the comments on draft one analysed above. For example, the suggested erasure of the section on the HLPE report from the USA was not adopted. The mention of food sovereignty that was present in draft zero was negotiated out and is not present in the final text. The final text does not include the words “food sovereignty” at all. At the same time, “holistic solutions” did make it into the final

text. What is important about this section of the policy recommendations is that it sets the parameters of what is meant by "agroecological and other innovative approaches" and the fact that the CFS upholds the reference to the HLPE report, despite the negotiation efforts from the USA, for example, was a win for the advocates of agroecology. However, the reference to the HLPE report stops short of listing the defining features of agroecology. At the same time, the parameters set by the CFS in terms of what is meant by "agroecological and other innovative approaches mentioned in these policy recommendations" falls short of the transformative vision of agroecology advocated by the CSIPM, which was part of the reason they did not endorse the final product, as discussed through-out the dissertation.

Example 4 - Comments on Draft One

Point	Text	
14	The aim of the following policy recommendations is to assist Members and stakeholders to **promote and encourage the use and large-scale implementation of agroecological principles** and strengthen other innovative sustainable approaches **similar to agroecology, with a view to transforming** sustainable agricultural and food systems that **improve food security and nutrition.** - Add the following at the end of para 14: **The present recommendations recognize and underline the fundamental character of agroecology among all the innovative approaches for agricultural and sustainable food systems.**	Senegal
14	The aim of the following policy recommendations is to assist Members and stakeholders in strengthening **the contributions of ~~agroecological and other~~** innovative approaches **to achieving more ~~for~~** sustainable agriculture	USA

	and food systems that enhanve food security ~~**and nutrition.**~~ Sustainable agriculture and food systems are resilient, equitable, diversified, support climate change adaptation and mitigation, provide healthy, **safe and affordable** diets, **decent livelihoods for farmers, and other food system workers,** and respect human rights – for current and future generations. ~~**The FAO Conference considered the further integration of sustainable agricultural approaches, including agroecology, in 2019.**~~ **As the HLPE Report states, there is no "one-size-fits-all" solution to realizing the transformation of food systems globally required to achieve food security and nutrition (FSN). It will require supporting a diversity of transitions from different starting points, along different pathways, adapted to the local conditions and challenges faced in different places by different people.** ~~**Since then, the HLPE report has enhanced understanding of the evidence base, showing that while there are overlaps among some innovative approaches, not all innovative approaches contribute to sustainable agriculture and food systems in the same way.**~~	

The above excerpt is another telling comparison of different negotiation positions on point 14 of Draft One, which is a statement of the purpose of the policy document. Senegal added the language "promote and encourage" in reference to the "implementation of agroecological principles", in addition to including and elevating the importance of agroecology. The desired outcome of these policy documents according to Senegal is "transforming sustainable agriculture and food systems that improve FSN." The USA removed all references to agroecology and shifted the focus to "innovative approaches." The desired outcome of the policy

document according to the USA is to "achieving more sustainable agriculture and food systems." The removal of references to "food systems transformation" is significant, as achieving more sustainable food systems is very different than transforming food systems.

Example 5

To demonstrate how the repeated editing of the wording to weaken the language of the policy recommendations played out, I present the zero draft, first draft, and final draft of the first point in the policy recommendations:

Zero Draft

POLICY RECOMMENDATIONS

I. Lay policy foundations for transforming food systems to ensure sustainability and enhance food security and nutrition through agroecological and other innovative approaches

States should:

10) Ensure that public policies, budgets and incentives support sustainable food systems in a coherent manner, adapting policies and re-directing budgets and incentives based on impact assessment findings.
11) Ensure that policies promote innovations that are appropriate, affordable and acceptable and contribute to the three dimensions of sustainability – economic, social and environmental – in such a way that they strengthen the four pillars of food security and nutrition (availability, access, stability and utilization).

Draft One

POLICY RECOMMENDATIONS

1. Lay the policy foundations for agroecological and other innovative approaches to contribute to sustainable agriculture and food systems that enhance food security and nutrition

States (and regional and local authorities, as appropriate) in consultation with inter-governmental organizations, producer organizations, the private sector (including small and medium sized enterprises) and civil society, are invited to:

Recognizing the need for context-appropriate pathways to move towards sustainable agriculture and food systems:

a) Undertake comprehensive assessments of the sustainability of their agriculture and food systems (see Recommendation 2), paying due attention to all positive and negative environmental and social externalities, as the first step to developing context-appropriate transition pathways;
b) In cases where comprehensive assessments show that sustainability can be improved, develop context-appropriate plans to move towards sustainable agriculture and food systems through inclusive and participatory processes based on the results of such assessments; ensure the participation of all relevant stakeholders (giving particular importance to the needs of the most vulnerable) and all relevant sectors, including agriculture, health, labour, gender, education, social protection, youth, finance, trade, energy and environment;

Noteworthy changes that occurred between the zero draft and draft one include: the purpose statement shifting from "lay the policy foundations for transforming food systems" to "lay the policy foundations […] to contribute to sustainable agriculture and food systems"; removal of the word "ensure" throughout the text; the stakeholder group was expanded substantially from "states" to many other food systems actors, thereby weakening the obligation to enact the policy recommendation. Overall, point one of the policy document went from recommending that states should ensure a coherent policy framework for the transformation of food systems to achieve FSN through agroecological and other innovative approaches, to recommending that a large array of food systems actors undertake an assessment of the sustainability of food systems policies and develop context-specific plans to "move towards" sustainable agriculture and food systems. These two recommendations are very different from each other, and they reflect that the input of those actors that negotiated to weaken the policy recommendation were taken up into the policy document.

Final draft

1. LAY OR STRENGTHEN, AS APPROPRIATE, THE POLICY FOUNDATIONS FOR AGROECOLOGICAL AND OTHER INNOVATIVE APPROACHES TO CONTRIBUTE TO SUSTAINABLE AGRICULTURE AND FOOD SYSTEMS THAT ENHANCE FOOD SECURITY AND NUTRITION

Governments (national, regional and local authorities, as appropriate) in consultation with inter-governmental organizations, producer organizations, the private sector (including micro, small and medium as well as larger-sized-entities) and civil society, are invited to:

Recognizing the need for context-specific measures for moving towards and improving sustainable agriculture and food systems:

a) Undertake comprehensive and inclusive assessments of the sustainability of their agriculture and food systems (see Recommendation 2), paying due attention to all positive and negative environmental, economic, social externalities, trade-offs and synergies, as the first step to developing context-specific transition pathways, in a coherent manner, as appropriate and in accordance with and dependent on national context and capacities;

b) In cases where comprehensive assessments show that sustainability can be improved, develop context-specific policies and plans to move towards, and to improve, sustainable agriculture and food systems through inclusive processes based on the results of such assessments; ensure the participation of all relevant stakeholders: particularly women, youth, indigenous peoples and local communities, and people in vulnerable situations, and sectors;

Interestingly, there is not a significant difference between Draft One and the Final Draft in point one of the policy recommendations. The only difference worth mentioning is that the final draft is wordier than Draft One, in the sense that phrases were added to bring some specificity to the statement that doesn't significantly alter the meaning of the recommendations: "Undertake comprehensive assessments" became "undertake comprehensive and inclusive assessments"; economic externalities were added to the list of environmental and social externalities to pay attention to; in addition to externalities, "trade-offs and synergies" are to be considered; and so on. Thus, the final document is less concise and easy to understand, without changing the central impetus of the policy recommendation.

Tracing this one policy recommendation point from zero draft, through first draft, to the final version of the policy recommendations illustrates how the negotiations impacted the wording of the final document. The informal discussions (which included smaller "friends of the rapporteur" meetings), recorded online negotiations, and formal written input significantly changed the policy recommendations. This one example is representative of the entire policy document, as throughout the document this systematic weakening of content and expansion of words can be seen. Below, I present a comprehensive side by side analysis of the HLPE policy recommendations and the final CFS policy recommendations.

Negotiation Outcomes

The examples presented above are a few of many textual pieces of evidence for the different negotiation positions in the written feedback stage of the negotiations. The recordings of the virtual meetings display a similar back and forth between different positions with widely different ideas about the purpose and the desired outcomes of the CFS policy recommendations. Which edits appear as the final text is the result of a long and complex back and forth, as reflected in the CFS negotiation outline at the beginning of the Chapter (Figure 14: CFS Agroecology Negotiations – Process and Document Overview). Alberta Guerra articulated the process as follows in our interview:

> Policy negotiations are really not easy. I could realize it just only by being part of them, by taking part in those discussions. How every comma, every word, every preposition is not there by mistake. Everything is studied because even when words such as "and" and

> "or" are in… everything was debated, even commas. (Alberta Guerra, Senior Policy Analyst, ActionAid USA)

This quote reflects the formidable effort that is put into the CFS policy recommendations by all parties involved. The negotiating parties are invested in arriving at a document that reflects their interests and opinions. The CFS policy recommendations are non-binding and voluntary guidelines that food systems actors are at liberty to implement to whatever degree they see fit.

The fact that the different negotiation positions invest as heavily into the CFS policy documents speaks to the normative power that this document, and the CFS has. As mentioned throughout this dissertation, the CFS policy recommendations are seen as a normative instrument in the global governance of food (McKeon, 2016; Canfield et al., 2021). This means that the final policy recommendations are significant in shaping governance discourse in other venues.

Policy recommendations also impact available funding, which is part of the normative power of the CFS. Interview data suggests that the outcomes of the negotiations impact the availability of funding for different initiatives, and that they can be a strong tool in national policy development. For example, Timothy Wise, an academic involved with the CFS, stated:

> Advocates within those countries then jump on the opportunity to take advantage of that new space, some funding, some expertise, and certainly, the legitimacy that's come from it. Because getting something approved at the CFS doesn't guarantee anything. (Timothy Wise, Senior Fellow at Tufts University)

The interviewee here was referring to the new opportunities that are created with the CFS publishing policy recommendations on a topic such as agroecology. Similarly, Interview 17, also an academic working on agroecology, corroborated the increased funding available to local agroecology projects:

> So, on the positive side, the use of the word is legitimized pushing for policies based on agroecology. It's freed up a lot of funding for activities ranging from research to rural development to other things related to agroecology. It's given more legitimacy to the social movements, struggling for agroecology but on the other hand, it's also becoming a vehicle for green capitalism to advance in the penetration by capital of all aspects of the food system and in rural territories. (Interview 17)

Finaly, Interview 2 made the same observation, when referring to the hesitancy of some civil society actors to engage with the CFS and FAO on the topic of agroecology:

> They see how that policy work then begins to influence funding agencies and different organizations who are now much more on board with some of the work that we've been doing. (Interview 2)

The CFS policy negotiations, and the importance placed on the wording of the policy recommendations, illustrate the significance of the normative power of the CFS. It is evident from the negotiations that there are entrenched interests that advocate strongly for the wording of the CFS recommendations to be vague, non-committal, and to lack urgency. The consequent weakening of policy recommendations is the subject of this analysis.

Some research participants argued that it is better to have weak policy recommendations on agroecology, than none at all. This opens the question of the function of policy recommendations more broadly. There is a field of scholarship dedicated to making sense of and describing the nuances of the policy process (Birkland, 2019; Drezner, 2007; Weible, 2023). For example, Gundersen (2024) argues that the purpose of policy recommendations is to provide a broad range of possible policy responses that decision makers can choose from according to their interests. While this might be the case in some policy contexts, my interview data highlighted the fact that the CFS policy recommendations serve as a normative guide for food systems change[21]. Advocates of agroecology were critical of the framing of agroecology as a "tool in the basket of tools" that the CFS approach took to agroecology through the pairing of innovation in the reports, as discussed earlier. Consequently, it was seen as important that the CFS take a stand on particular issues, instead of providing a broad range of possible options, which in food systems governance are frequently contradictory. For example, Interview 19 noted:

> These are framed into international agreements, which have very strong normative value and very strong normative hierarchies and very strong normative instruments to redress particular attempts to divert or diverge from that international global order. It's impossible to look at global value chains as if they are food value chains only - they are not. They are in many ways the backbone of the current global economy. So, it's not very simple for any one country to deviate away from that particular approach. (Interview 19)

Due to the interconnected nature of global food systems, presenting different (and opposing) policy options as equally accessible is not engaging with the issues at hand. As articulated by Interview 19, the CFS policy recommendations have strong normative influence.

[21] The importance of the CFS as a normative governance space was mentioned by Interview 3, 9, 13, and 19

The CFS publishing policy recommendations on agroecology are not what civil society had advocated for. Nevertheless, the CFS policy recommendations can be seen as an advocacy tool for implementing different policies at various governance levels, as well as a normative guide for approaches to the food systems crises discussed throughout this dissertation. For example, Interview 6, who is an academic that was involved with the CFS negotiations, said: "I think it's useful to have organizations like FAO and others within the United Nation, maybe even the World Bank, to come up with reports that say they promote agroecology." (Interview 6). The position that weak policy recommendations can still be used as advocacy tool in different governance venues was also reflected in my interview data. In that context, it was a major achievement for civil society and other advocates of agroecology to have the CFS publish policy recommendations on agroecology at all.

There are two possible interpretations of weak policy recommendations on agroecology: on the one hand, they can be seen as elevating agroecology as a legitimate policy approach to addressing global food systems crises, on the other they can be seen as weakening a stronger politically transformative vision of agroecological food systems. Stronger policy recommendations would also strengthen the link between policy environments, such as connecting food security and trade policy environments for example (Alabrese & Coli, 2022). While the CSIPM did not endorse the final CFS policy recommendations due to the absence of key statements in the document, as discussed throughout this chapter, there was also the opinion amongst some interviewees that a weak policy on agroecology was better than none.

Negotiations Actors

Which countries were supportive of agroecology in the negotiations, and which countries were not? The following countries stood out as being particularly in favour of strong wording in support of agroecology, or being particularly opposed to it:

Country	**Position**
USA	Oppose
Russia	Oppose

Argentina	Oppose
Australia	Oppose
New Zealand	Oppose
Canada	Oppose
Netherlands	Oppose
Malaysia	Oppose
France	Support
Brazil	Support
Switzerland	Support
Senegal	Support
EU (sometimes)	Support
Hungary	Support

According to my interviews, there were three different negotiation positions: one position that opposed strong wording on agroecology in which the countries grouped together, another position that tried to continually insert stronger wording in support of agroecology, and those that did not take a strong stance either way. Emile Frison, of IPES-Food, recollected in our interview the fact that there was a negotiation group that strongly opposed agroecology:

> Argentina was one of the most vocal [opposing agroecology], and I think the US was hiding a little behind Argentina in that sense, but they formed a block of six or seven countries that systematically objected to being a bit clearer about these recommendations and more ambitious. (Emile Frison, IPES-Food)

Reviewing the negotiations and interview data corroborates the quote above, with there being eight countries that opposed the mention of agroecology in the CFS negotiations process, as listed above. One of the central parameters by which to understand why particular countries

opposed strong wording in support of agroecology in these negotiations is agricultural trade. The transformation of national food economies into trade driven food economies has been an ongoing process since the 1870s, with distinct phases of colonial, food-aid driven, and neoliberal trade-liberalization (Beckman et al., 2017; Clapp, 2020; McMichael, 2013). The global re-organization of national food systems into global import- and export- driven systems has shaped the modern world and was fundamental to the formation of the global food system (Clapp, 2020). Trade is a central organizing principle in global food systems.

The idea that global food security can be achieved through trade is a foundational (and contested) premise of the governance organizations that are subject of this dissertation (FAO, 2024a; Otero et al., 2013). The integration of a country's agricultural economy into trade systems is highly determinative of their political position as regards to global policies (Davis, 2011). Agroecology is seen as a paradigm that is either opposed to free trade, or not as supportive of free trade as some of the other innovations discussed as possible solutions to food systems crises (Hoffmann, 2015). One mechanism through which agroecological policies might impact agricultural trade is through changed standards in import regulation, such as the General Food Law Regulation of the EU (European Commission, 2025). There remains substantial room for analysis of the interaction of agroecological principles and global trade rules.

The degree of international trade integration of the agricultural economies of a nation greatly influenced their position in the agroecology negotiations. The countries listed above as opposing the agroecology negotiations (USA, Russia, Argentina, Australia, New Zealand, Canada, Netherlands) are some of the world's largest agricultural trade economies. In 2023 the USA (USD 142 billion), Brazil (USD 127 Billion) and the Netherlands (USD 99 Billion) were the world's largest agricultural commodity exporters (FAO, 2024a). Argentina, Australia, Indonesia, New Zealand, and Canada, also belong to the world's largest agricultural trade countries (FAO, 2024a). Trade relationships are vastly complex and changeable, with variation based on type of agricultural commodity, geo-political conditions, and time-period being considered (FAO, 2024a). Consequently, a full analysis of the trade policies of the countries and their positions in the CFS negotiations is beyond the scope of this analysis. However, it is important to note that alongside the geo-political factors discussed throughout this dissertation, financial interests such as trade also influence the CFS negotiations.

There is not a perfect overlap between the two categories of size of trade economy and position in CFS agroecology negotiations. This is due to both the complexity of agricultural trade, and also due to multiple competing political forces that shape negotiations on a broad range of topics such as trade, agricultural inputs, seeds and genetic materials, and others. Consequently, the position of Brazil as one of the largest global food trade economies, while also spearheading the agroecology negotiations, is interesting. Similarly, France was also supportive of agroecology in the global negotiations, while also being a food exporting nation. The seemingly contradictory position can be understood through the co-existence of different agricultural departments in Brazil, as discussed in the Chapter 3 of this dissertation.

Other countries that might support local agroecological projects would still negotiate in opposition to the concept on the global stage. Argentina, for example, has significant local agroecology initiatives (Sarandon & Marasas, 2017), however its economy depends on agricultural exports (Pinilla & Rayes, 2019). Argentina's economy began transforming into an agricultural export nation in the 1880s and on a global level the country strongly advocates for free trade arrangements (Pinilla & Rayes, 2019; Sarandon & Marasas, 2017). There are several other countries for which this is the case. Alberta Guerra, CSIPM representative in the agroecology policy negotiations, articulated the role of individual countries in the negotiation process as follows in our interview:

> The United States, Australia, and Canada. I think there were also some Asian countries, if I'm not wrong, I think that it was Malaysia. It was Malaysia because of the fear that agroecology became another kind of trade barrier against their produce, like the palm oil products that were facing a lot of challenges now in exporting oil palm products because of their liabilities posed by the European Union. And so, they were very scared that putting agroecology as the new organic label for imports will prevent us from exporting again. And so, there was a lot of push-back also from a few Asian countries. (Alberta Guerra, Senior Policy Analyst, ActionAid USA)

This quote reflects some of the complexities in the negotiation positions of different countries, and how they relate to trade. The USA was mentioned throughout interviews as a country that spearheaded the shift in focus from agroecology to innovations in the CFS negotiations, as discussed in the previous sections that analysed the negotiation process in detail. The importance

of free trade in the agricultural economics of the USA is clearly reflected in the historic account of world trade according to the USDA (Beckman et al., 2017).

The countries that were supportive of agroecology were not as uniform in their support, as the other countries were in their opposition. There was not necessarily a unified vision of which type of agroecology to support amongst these counties. Alberta Guerra articulated the differences in national interpretations of agroecology by countries that supported agroecology on the global stage as follows:

> The issue there was okay, what kind of agroecology you are supporting. So not all governments were supporting the same kind of agroecology as social movements. And not all governments were doing this to the same extent. So, I can say, yes, France is a champion of agroecology. But then when you go into the details, it did not reflect what we mean by agroecology. (Alberta Guerra, Senior Policy Analyst, ActionAid USA)

This quote reflects the fact that while there were many different advocates of agroecology in the negotiations, there were differences amongst these advocates in their use and understanding of agroecology. France, for example, as mentioned by the quote above, was a supporter of agroecology in the global negotiations. The position France took in the negotiations can be understood in a similar way as that of Brazil: while both countries rely on agricultural exports for their economy, they have strong local and regional agroecological initiatives. These positions co-exist in these countries in a way that they do not, in the USA for example. In addition, France saw the potential of the normative power of a strong global governance text positively impacting local agroecology projects. According to one Interview 4, this was because a strong policy document on the global governance level would have enabled interested parties to exert more pressure in support of agroecology nationally. Thus, the CFS was seen as a forum that could impact national political stalemates on the topic. There is a set convention of how EU countries engage in global governance negotiations. EU countries follow specific procedural restrictions:

> Sometimes EU member states do speak separately. France definitely spoke separately as well, but whenever they speak separately, first, first, the representative of the EU speaks with the EU position, and then the other members. Now Hungary was another outspoken supporter of agroecology, not because the government of Hungary is very supportive but because the specific ambassador of Hungary was very pro agroecology. So, after the EU

> representative speaks, France can speak, Hungary can speak, and they would add a little bit of more support for whatever topic they're discussing on agroecology, but it's always under the frame of the EU position. So, their hands are a bit tied. They can't go completely against the EU. (Interview 9)

This quote describes the dynamics of the different negotiating positions. The country representatives bring their own positionality and projects, which they express within the formal procedures of the UN forum. Consequently, understanding the position of each country in the negotiations entails looking at several factors simultaneously: is the country a net agricultural exporter, does the country have national or regional agroecology projects, what is the position of the individual negotiator, and how do these variables interact with the UN forum. At the same time, the countries that were supportive of agroecology had very different understandings of what kind of agroecology to promote, as mentioned by Interview 9, above. In addition, supportive countries might pursue agroecology for some aspects of their agricultural policies, and not others. For example, Brazil was a strong advocate of agroecology in their rural development department, while being a strong advocate of in-put heavy, export-based food systems internationally. Some countries view agroecology primarily as an international development policy, rather than one that is applicable to their own national farming policies. This speaks to some of the complexity inherent in the vision that agroecology presents as an alternative paradigm, as discussed in Chapter 1 of this dissertation.

This concludes the section of the Chapter on the CFS negotiations in which I have outlined the different negotiation positions in the process of developing the agroecology policy recommendations. The following section is a comparative analysis of the final products. I present a side-by-side analysis of the two different policy recommendations on agroecology – those published by the HLPE and those published by the CFS. The purpose of the first section was to describe and explain the details of the negotiations that were involved in the development of the policy recommendations. The purpose of the following section is to show how the policy recommendations were changed by the negotiations. In the side-by-side comparison I detail the topics and words that were contentious in the negotiations, how these were articulated in the final CFS document, and the implications of the differences in the two documents.

Comparison of the Policy Recommendations of the High-Level Panel of Experts and the Committee on World Food Security

Both policy recommendations on *Agroecological and other Innovative Approaches* published by the HLPE and the CFS being with a preamble that provides the problem statement, the purpose of the policy document, and the larger positive vision of food systems. I begin with a discussion on the preambles, as they set the stage for the recommendations themselves. I then present an in-depth look at the policy recommendations, based on one example, organized by levels of the document: first the headings, second the audience (actor and target), third the recommendation text, and the fourth level discusses the recommendations of the HLPE that are directed only to the CFS.

Problem Statement

The CFS problem statement mentions both the need to achieve Agenda 2030 as well as the problem of increased prevenance of malnutrition globally. The final CFS policy recommendation document states that "challenges associated with agriculture and food systems require urgent attention" (CFS, 2021) and outlines the groups of people that are most affected by malnutrition. The positive vision of food systems articulated by the CFS in the preamble is the "progressive realization of the right to adequate food" and the purpose of the policy document is stated to "provide guidance" in achieving this outcome. The CFS's purpose for the policy document is to: "foster transition – in a coherent manner, as appropriate and in accordance with and dependent on national context and capacities – to resilient and diversified sustainable agriculture and food systems including through agroecological and other innovative approaches" (CFS, 2021). While at the same time acknowledging that "there is no single approach for achieving food security and nutrition and all food systems have the potential to contribute further to sustainable agriculture and food systems that enhance FSN" (CFS, 2021). The envisioned transition is to occur in the context of the One Health Approach, "policies should take a holistic approach that also prioritizes human rights" (CFS, 2021) and be based on previous CFS publications and other international instruments such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), and United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP).

While there is some overlap in language and reference to international frameworks between the HLPE's and the CFS's introduction to the policy recommendation, there are some noteworthy differences. Both documents reference Agenda 2030 as the guiding framework and the achievement of Agenda 2030 as the purpose of the work. Both documents also mention the right to food as a guiding framework. The HLPE elaborates on this rights-based approach by referencing the PANTHER framework, while the CFS aims to "achieve the progressive realization of the right to adequate food in the context of national food security" (CFS, 2021). Both documents use the wording of food security and nutrition (FSN), which has a very specific definition, as discussed in the previous chapter. However, the CFS does not reference the elements of FSN or elaborate on the concept. While the HLPE used the phrasing "sustainable food systems for food security and nutrition" (SFS for FSN), the CFS uses the phrase "sustainable agriculture and food systems that enhance FSN". The particular pattern of articulation is reflective of a trend in the CFS policy document, which is the inclusion of additional words that broaden and dilute the meaning of the text, while also making the document less accessible and legible. Another phased that exemplifies this language use, that is used throughout the CFS document, is: "foster transition – in a coherent manner, as appropriate and in accordance with and dependent on national context and capacities – to resilient and diversified sustainable agriculture and food systems" (CFS, 2021).

While the CFS and the HLPE both mention "transition" and "transition pathways" as means to achieving the positive visions of food systems, the CFS does not include the three operational principles of the HLPE: improved resource efficiency, strengthened resilience, and social equity and responsibility. This exclusion is in keeping with the trend in the CFS document of keeping the wording broad and inclusive of possibly opposing interpretations. Thus, the HLPE policy recommendation pre-amble, discussed in the previous chapter, puts forward a positive vision of food systems that require radical transformation to achieve desired outcomes. The CFS document mentions many of the same outcomes (FSN) but articulates the role of the policy document as a guide towards these outcomes, with all food systems solutions being equal. This is exactly the position that the advocates of agroecology oppose, as they argue that agroecology presents a unique vision for food systems transformation that excludes some food systems practices, such as food systems based on mono-cropping and agrichemical input dependent

agriculture. This position is reflected in the official CSIPM response to the CFS policy recommendations:

> The idea that we can just choose between opposing conflicting approaches and settle on the so-called incremental innovations — in the absence of a clear concrete commitment and plan to keep moving towards transformative approaches—ignores the "opportunity cost" of doing so, namely that there will be significantly less funding and fewer resources available at the end of the day for the transformative innovations that are desperately needed. This not only increases the risk that a transition process stalls at the lowest level of mitigating the worst harms and proceeds no further, but even more dangerously, mires us in problematic approaches that actively undermine the practice of agroecology and the needed agroecological transformation. (CSIPM, 2021)

The CSIPM's response to the CFS policy recommendations is indicative of the fact that civil society was arguing the position of fundamental structural changes to global food systems through the agroecology paradigm. The PSM's response, in contrast, was to argue the need to stay with incremental adjustments that would create positive environmental outcomes through use of new technologies, as articulated in the official PSM response to the CFS agroecology negotiations (PSM, 2020):

> In support of attaining this sustainable agriculture, fisheries and livestock we need to recognize that there are many important interlocking and mutually supporting approaches, techniques and strategies designed to sustainably improve production, enhance resilience and reduce/sequester GHGs. This includes agroecology, which is one of many innovative approaches but also, other approaches for sustainable production […] These 'solution pathways' include (but are not limited to) climate smart agriculture, precision agriculture and improved nutrient use efficiency that uses a variety of strategies and tools such as digitalization and improved seeds to support the adaptive capacity of agriculture. (PSM, 2020)

This statement is a clear articulation of the "tool in the toolbox" framing of agroecology discussed throughout this dissertation. It shows the difference between agroecology as a paradigm for reform versus agroecology as a technique that is equal to precision agriculture. The tension between articulating a vision of fundamental food systems transformation vs incremental changes is visible throughout the CFS document, which tries to provide guidance without

excluding any food systems actors. However, it is not possible to achieve food systems transformation without challenging the actors that have brought about the problematic dominant food system that everyone agrees needs transforming.

First level – Heading of Recommendation

Thematically, there is a direct carry-over of the policy recommendations from the HLPE to the CFS. The policy recommendations address 5 themes: purpose and focus of the policy recommendations, monitoring and evaluation, transition, research, and power. There is a slight difference in sequence, in which the HLPE put monitoring and evaluation on 5th place, and the CFS moved it forward to second place within the document. Here is a side-by-side presentation of the first level of the policy recommendations, namely the heading of the recommendation (bolding emphasis my own).

Theme	HLPE	CFS	Note
purpose and focus	1. Agroecological and other innovative approaches in an integrated way to foster **transformation of food systems**	1. Lay or strengthen, as appropriate, the **policy foundations** for agroecological and other innovative approaches to **contribute to sustainable agriculture and food systems** that enhance food security and nutrition	From HLPE "foster transformation of food systems" to CFS "lay the policy foundation to contribute to sustainable agriculture and food systems"
monitoring and evaluation	5. Establish and use comprehensive **performance measurement and monitoring frameworks for food systems**	2. Establish, improve and apply comprehensive **performance measurement and monitoring frameworks** to encourage the adoption of agroecological and other innovative approaches **for sustainable agriculture and food systems** that enhance food security and nutrition	CFS inclusion: "sustainable agriculture and food systems" phrase

transition	2. Support transitions to **diversified and resilient food systems**	3. Foster the transition to **resilient and diversified sustainable agriculture and food systems** through agroecological and other innovative approaches	CFS inclusion: "sustainable agriculture and food systems" phrase
research	3. **Strengthen support for research** and reconfigure knowledge generation and sharing to **foster co-learning**	4. **Strengthen research, innovation, training, and education** and **foster knowledge co-creation**, knowledge sharing and **co-learning**, on agroecological and other innovative approaches	Inclusion of innovation frame in CFS: HLPE "strengthen support for research" to CFS "strengthen research, innovation, training and education"
power	4. **Strengthen agency and stakeholder engagement**, **empower vulnerable and marginalized groups** and **address power inequalities in food systems**	5. **Strengthen institutions for stakeholder engagement**, create an **enabling environment for empowering people** most at risk of food insecurity and malnutrition and people in vulnerable situations and **address power inequalities in agriculture and food systems**	- Removal of word "agency" making HLPE "strengthen agency and stakeholder engagement" to CFS "strengthen institutions for stakeholder engagement" - shift focus from HLPE "empowering vulnerable groups" to CFS create "enabling environment for empowering" vulnerable groups

The first level of the policy document, though lacking in specific recommendations, provides an insight into the central narrative of the policy document. The HLPE articulates a vision in which food systems will be transformed through agroecology and other innovative approaches through diverse and resilient food systems, based on research and knowledge co-

sharing, strengthened agency and by addressing power imbalances in food systems. This requires monitoring through comprehensive performance measurement for food systems.

The central narrative of the CFS recommendations is that with strong policy foundations agroecology and other innovative approaches contribute to sustainable agriculture and food systems with a focus on food security and nutrition. A comprehensive performance measurement framework will encourage agroecology and other innovative approaches to be used for food security and nutrition. The transition will happen through agroecological and other innovative approaches via sustainable agriculture and food systems. This will require strong research and innovation, as well as co-learning. Strong institutions create an enabling environment for this transition to address power inequalities in agriculture and food systems.

While there is a one-to-one correlation in the broad themes of the two policy recommendations, there is a significant difference in the focus of the recommendations. The CFS put greater emphasis on the importance of monitoring and evaluation than HLPE. The CFS recommendations are longer and focus more on food security and nutrition, while the HLPE is focused on food systems transformation. In addition, the CFS leaves out some concepts that are central to the HLPE's vision of food systems transformation, for example that of agency.

Second level – Audience of Policy Recommendation

Following the introduction of the main recommendation, the headings discussed above, both policy documents state who they are addressing with the recommendation, both in terms of actor and in terms of the target group of the recommendation. A striking difference between the two documents is that following the statement of whom the recommendations are addressing as responsible parties, the HLPE document uses the phrase "should" and the CFS document uses "are invited to" and "are encouraged to". This wording is consistently used throughout the document, except for the policy recommendation on monitoring and evaluation, which the CFS also states "should" be acted on. The shift from obligation to invitation is in line with the analysis presented above, in which the CFS document is the result of systematic negotiations to weaken the language in terms of urgency and obligation.

I will not present a line-by-line side-by-side analysis of the named actors and targets of the policy recommendation, as it is not information-dense enough to warrant that level of analysis. There are, however, demonstrable trends in the difference between the two documents

on this level: The CFS's articulation is substantially broader both in actor and target groups. Listing more stakeholder could on the one hand be interpreted as being more inclusive. On the other hand, it could be interpreted as diluting the strength of the recommendations. If the recommendations clearly address one actor group as being responsible for enacting a recommendation, this creates very different lines of accountability than a long list of potential actors.

Actors:

The HLPE addresses either all, or a subset of: "all stakeholder involved in the food system", which includes "states, local authorities, intergovernmental organizations (IGOs), civil society and the private sector, research and academic institutions" (HLPE, 2019). The CFS addresses a subset of the following list of actors: "Governments (national, regional and local authorities), intergovernmental organizations, producer organizations, the private sector (including micro, small and medium as well as larger-sized-entities), civil society (including producer and consumer organizations), all relevant stakeholders, research organizations, extension agencies, academic institutions, Indigenous peoples, women's organizations, community leaders" (CFS, 2021). The CFS document is more specific about the actor group that it is addressing in the policy recommendation, while the specific categories are very broad. This is in keeping with the style of the CFS policy recommendations as very wordy, but not necessarily clearer than the HLPE text.

Targets:

The HLPE recommendations name 18 distinct stakeholders or groups of people that they are trying to reach with the policies. These never repeat, with the exception of one double mention of "producers and other stakeholders". The result is a clear and concise set of recommendations that are legible and have clear lines of responsibility. The CFS recommendations name 37 distinct groups with frequent repetition of the phrase "people in vulnerable situations". A noticeable difference between the two documents in terms of the target groups is that the HLPE report addresses the rules and regulations that contribute to the architecture of global food systems, whereas that is entirely absent from the CFS. For example,

the HLPE document mentions “trade agreements and rules” and “public procurement policies”, which the CFS does not. The impact of the absence of this level of analysis impacts the recommendations is evidenced by the example below, which is the policy recommendation on power (emphasis is my own). The HLPE text on this policy recommendation states:

> 4. Strengthen agency and stakeholder engagement, empower vulnerable and marginalized groups and address power inequalities in food systems **States, IGOs and, as appropriate, local authorities** should: b) explore ways for **trade agreements and rules** to better support transitions towards more sustainable agriculture and food systems. (HLPE, 2019)

In comparison the CFS text on this policy recommendation states:

> 5. Strengthen institutions for stakeholder engagement, create an enabling environment for empowering people most at risk of food insecurity and malnutrition and people in vulnerable situations and address power inequalities in agriculture and food systems”. **Governments, regional and local authorities, intergovernmental organizations, indigenous peoples, women’s organizations, community leaders, the private sector, academia, producers’ and consumers’ organizations, and civil society** are invited to: Considering that agroecological and other innovative approaches are more likely to contribute to sustainable agriculture and food systems that enhance food security and nutrition when **active participation of all stakeholders** is enabled: d) facilitate **active participation of people most at risk of food insecurity and malnutrition** in decision-making that affects them. (CFS, 2021)

There is a significant difference between: 1) empowering vulnerable and marginalized groups by changing the trade agreements and rules that impact their access to food and agricultural markets, as recommended by the HLPE, and 2) facilitating active participation of people at risk of food insecurity in decision making that affects them. Yes, participatory governance, as recommended by the CFS is valuable, however the onus to change the systems should not be on the most vulnerable, but on the most powerful and the states that regulate them. Consequently, looking at the targets of the policy recommendations illustrates the theory of change and accountability that the two different documents bring forward. The CFS lists many more actors, but both groups are targeting vulnerable populations and small-scale farmers with their policies. The focus on vulnerable populations is very prevalent in the CFS. In the context of the CFS negotiations this is problematic, as this perspective shifts the focus from regulating systems to

upholding individuals suffering from the system. In addition, the use of the language of "vulnerable" and / or "marginalized" peoples in the CFS recommendations references a complex practice of description, measurement, and categorization of groups of people that is politically contested (Dilley & Boudreau, 2001; HLPE, 2017; Lucas & Hilderink, 2005).

Third level – Policy Recommendations

At first glance of the policy recommendations side by side the most striking difference is the readability of each document. The HLPE recommendations are short and to the point, with clear language and lines of accountability. The shortest recommendation has 3 sub-points and the longest has 9, with a total of 29 recommendations under the 5 main topics presented above. The CFS recommendations range in length from 4 to 25 sub-points, with a total of 62 recommendations under the 5 main topics. Below I present the complete policy recommendations of the HLPE and the CFS on the topic of transition. This side-by-side analysis serves as an example of the difference of the two policy documents (emphasis my own).

HLPE		CFS	
2. transitions to diversified and resilient food systems		3. transition to resilient and diversified agriculture and food systems	
States and IGOs **should**:		Governments, regional, national and local authorities, as appropriate, along with relevant intergovernmental organizations, research organizations, extension agencies, civil society (including producer and consumer organizations) and the private sector (including micro, small and medium sized enterprises) **are invited to**:	
Recommendation	Details	Recommendation	Details
a) **support** production systems (diversified and resilient)	**redirect subsidies** / support participatory territorial management planning / build adaptation of **international**	a) **raise awareness** about diversified production systems	integrate livestock, aquaculture, cropping and agroforestry, as appropriate, to enhance resilient livelihoods

	agreements and national regulations on genetic resources and intellectual property (farmer access to local genetic resources) / **strengthen regulation** on harmful chemicals / build social capital at territorial landscape scale for policy implementation with trade-off management		
b) diets (healthy and diversified)	education and awareness/ food labeling and certification / support low-income consumers through **public procurement** and school feeding programs	b) strengthen policies, investment, research	support agroecological and other innovations
c) food value chain innovation (private and public investment in **sustainable food production**)	support local markets, processing, transportation increasing capacities for small and medium farmers / encourage incentives for young people, women, community enterprises / harness digital technologies to strengthen link between producer and consumer / adapt support to build recycling systems	c) provide policies and private investment for **diversification of production**	to small scale producers, including transition support, depending on national context

		d) strengthen policy instruments for conservation of **biodiversity**	fair and **equitable sharing** of benefits arising out of use of **genetic resources**
		e) foster One Health approach to address antimicrobial resistance and food safety	cooperation between human, animal and plant health
		f) promote healthy diets	improve food security and nutrition
		g) promote animal welfare	n/a
		h) **raise awareness** of the risk of pesticides and agrochemicals	n/a
		i) **promote alternatives** to chemical pesticides	promote removal of highly hazardous pesticides
		j) promote human rights of all	recognize the importance of peasants, indigenous peoples, local communities, family farms etc
		k) promote recycling, optimizing or reducing, as appropriate, the reliance on external inputs	facilitate regeneration of soil health
		l) tackle antimicrobial resistance	n/a
		m) govern at appropriate level with attention to	manage trade-offs, support social innovation,

		people in vulnerable situations	strengthen local food policy councils and multi-stakeholder management platforms
		n) strengthen responsible investment	in micro, small, and medium social enterprises
		o) enabling environment for young people in rural areas	protect rights and livelihoods, create decent work opportunities, address specific challenges (land access)
		p) promote local, national, regional, and global **markets**	for food security and nutrition
		q) increase food systems resilience by promoting diverse **market** arrangements	open, transparent, non-discriminatory, predictable, rules-based trade
		r) strengthen local, national, regional **markets**	capture value of production locally (processing hubs, transportation, adapted food safety regulation)
		s) support innovations that strengthen linkages between urban communities and food producers	could include CSA, participatory guarentee systems, product differentiation systems
		t) support innovative **public procurement**	school feeding, safety nets, food assistance, etc

		u) realize the full potential of digitalization	capacity building, cooperation and technology transfer. Include safeguards for data privacy and conflicts of interest. Assess benefit and risks of digital technologies.
		v) **promote agroecological** and other innovations through **digital** technologies	to involve youth, women, and indigenous peoples
		w) strengthen innovation platforms for wider networking	n/a
		x) **harness digital** technologies for links between producers and consumers	economic diversification, sustainable finance, market opportunities
		y) promote policies to bridge the **digital** divide	reducing barriers technical, legislative, economic, and educational. Facilitate access

The policy recommendation I have chosen to present as an example of the difference between the HLPE and CFS recommendations is on the topic of food systems transformation. The very first point in the recommendations, about production systems, provides an example of the ongoing theme throughout this chapter, namely that CFS recommendations are weaker and vaguer than the HLPE recommendations.

The HLPE recommends that states and IGOs should "support diversified and resilient production systems", whereas the CFS recommends that a long list of actors are invited to "raise

awareness about diversified production systems." This trend is true for most of the major topics covered in this policy recommendation. For example, on the topic of genetic resources the HLPE recommends "build adaptation of international agreements and national regulations on genetic resources and intellectual property (farmer access to local genetic resources)", where the CFS recommends "fair and equitable sharing of benefits arising out of use of genetic resources". Thus, the HLPE is recommending addressing the controversies surrounding genetic resources through international agreements and regulations. The CFS in contrast does not mention regulation of use but instead focuses on equitable distribution of benefits.

Similarly, on the topic of pesticides, the HLPE recommends to "strengthen regulation on harmful chemicals", whereas the CFS recommends to "raise awareness of the risk of pesticides and agrochemicals" and to "promote alternatives to chemical pesticides by promoting the removal of highly hazardous pesticides". Thus, the HLPE recommends the regulation of harmful chemicals, and the CFS suggests raising awareness and to promote the removal of a subset of harmful chemicals, those classed as highly hazardous, without mentioning regulation. Similarly, on the topic of production, the HLPE recommends "investment in sustainable food production" and the CFS "investment for diversification of production". Diversified production includes non-sustainable production methods. There are countless such examples to be found when comparing the two documents.

Alongside weaker articulation of specific topics, there are also topics that the HLPE addresses that are not mentioned at all by the CFS. For example, the HLPE's recommendation to redirect agricultural subsidies is not reflected in the CFS recommendation. At the same time, the CFS recommendations, being substantially longer than the HLPE document, include recommendations not made by the HLPE. For example, the CFS addresses the topics of recycling, soil health, and the One Health approach to address anti-microbial resistance.

A third mechanism by which the CFS policy recommendations create leeway for food systems actors to avoid significant change is by presenting multiple competing recommendations on the same topic. In the agroecology policy recommendation this is particularly visible in the section on pesticides. Point H) of the CFS recommendation suggests raising awareness about harmful chemicals and point I) suggests promoting alternatives. Thus, food systems actors can act on one of these points and still be said to be working to the recommendations. In this case, raising awareness instead of promoting alternatives. Similarly, with the topic of markets. Point P)

recommends promoting local, national, regional, and global markets, and point R) recommends strengthening local, national, regional markets. Thus, if a food systems actor is interested in promoting global markets (instead of the regional, territorial markets that are a defining feature of agroecology) they can find the recommendation to do so in the CFS policy recommendations. Identifying the problematic that is involved in contradictory policy recommendations within one document is in line with the argument made previously, that food systems change requires policy documents with strong language in favour of alternatives, and against harmful practices. Policy documents that are vague enough for all kinds of food systems practices to be reflected in them do not provide the needed tools for change.

Fourth level – Recommendations to the CFS

The fourth level of policy recommendations to be found in the HLPE report are specific recommendations to the CFS directly. There are three such statements to be found in the HLPE recommendations:

1. Under the heading "1. Agroecological and other innovative approaches in an integrated way to foster transformation of food systems". "CFS should consider the emerging importance of the concept of 'agency' and the opportunity to add it as a fifth pillar of FSN with the view to progress towards the realization of the right to adequate food" (HLPE, 2019). The word agency does not appear once in the CFS policy document.
2. Under the heading "5. Establish and use comprehensive performance measurement and monitoring frameworks for food systems". "CFS should: establish transparent, accountable and inclusive mechanisms to monitor if and how these recommendations are being implemented using clear metrics within a specified time frame". There were no mechanisms to monitor the implementation of the CFS policy recommendations established.
3. Under heading 5 monitoring and evaluation the HLPE recommended: "CFS should: raise awareness of the importance of the contribution of agroecological and other innovative approaches to achieving most of the 2030 Sustainable Development Goals and to advancing the Koronivia Joint Work on Agriculture (KJWA) at national level and consequently at regional and global levels." (HLPE, 2019). Whether or not this recommendation was addressed is not clear. The CFS does mention Agenda 2030 as a

central framework of the policy document, and makes reference to the KJWA, alongside many other international instruments.

Looking at the recommendations that the scientific advisory body, the HLPE, articulated to the CFS there remain open opportunities for translating the focus on agency and monitoring the implementation of CFS policy recommendations as advised by the HLPE. Whether the CFS will take up this recommendation in the future not clear, however, in the context of the agroecology policy process there was a missed opportunity to act on the scientific advice to the CFS.

Analysis

The CFS took up agroecology as a topic to work as a consequence of sustained advocacy, primarily from civil society, and the mounting pressures of the multiple food systems crises requiring urgent action, as discussed in previous chapters. The above analysis demonstrates what occurred in the years that the CFS negotiated the language of the policy recommendations, starting with the controversial title and ending with policy recommendations. While it is to be expected that policy recommendations change from the initial scientific assessment, through the multiple rounds of negotiations, to the final policy document, the agroecology negotiations demonstrate a significant shift with broad political implications, as illustrated above. In addition, the policy convergence process for this round of negotiations differed substantially from the usual procedures at the CFS with significant impact on the outcomes of the process. It is a matter of contention whether it is better to have weak policy recommendations on a given subject, rather than none. However, the advocates of the political vision of agroecology, which brought the subject to the forum to start with, did not see the vision that they advocated for reflected in the final policy recommendations (as evidenced by the lack of endorsement of the CSIPM of the policy recommendations).

The CFS negotiations saw a sustained pressure from countries that opposed the political vision of agroecology to weaken the CFS policy recommendations. After years of advocacy to bring agroecology to the CFS, the CSIPM, in their final statement on the CFS policy recommendations, concluded that:

> In the end, the resulting recommendations, while not a step backwards, are not a step forward either. At a time on the "clock of the world", when the CFS simply cannot afford

> to sit back and avoid providing member states with meaningful and clear guidance on how to move forward with the transformative changes that are urgently needed, this "missed opportunity" is unacceptable and indeed deadly. (CSIPM, 2021)

Consequently, the CSIPM saw the agroecology policy process as a failure that had real-world consequence for the crises that need to be addressed with clear governance, and the people impacted by compounding crises of food price instability, environmental pressures and others detailed in the crisis sections of this dissertation.

The PSM in turn did not issue a final statement on the CFS policy recommendations. The PSM voiced concerns throughout the negotiations that agroecology was an ideology that undermined farmer choices, as articulated in their statement on Draft One of the policy recommendations:

> PSM also noted that there is a concern that framing these strategies and approaches for sustainable food systems from only an ideological or political standpoint and not from the perspective of the farmer provides false dichotomies which can get interpreted as the environment vs. large corporate interests, social issues vs. big business. It therefore gets harder to focus on the tools and management practices that individual farms need to use to sustainably develop their farming operations. (PSM, 2020)

Despite the concerns of the ideological and political lens of agroecology, alongside changes made in the policy recommendations throughout the deliberations, as described above, the PSM did formally endorse the policy recommendations published by the CFS in June 2021.

Ultimately, the CFS is a global governance forum, which reflects a political process between the different member states. Consequently, the national politics of member states have a significant impact on the outcomes of negotiations:

> It was a bitter disappointment. I personally think that it's a reflection of where the members of the CFS are at …. and that the CFS the CSIPM. I mean, it's just a reality check. There are very few progressive governments in power in this world today. And also, those progressive governments that are around maybe don't have a strong voice in the CFS. There are some Latin American countries where there is progressive prevalence. But they're not very strategic in the CFS, So, at the end of the day, we are seeing this, it's not just on agroecology we are seeing this - now we're in the process of

> gender negotiations, the youth negotiations, also the voluntary guidelines on nutrition and food systems, and also the CSIPM denounced them even though they've been very involved in the process. (Interview 9)

The outcome of the many years of work invested in the CFS agroecology process is seen as a reflection of a global shift in political positions and interest in rights-based governance ambitions.

The agroecology negotiations illustrate the strengths and the weaknesses of the CFS as a governance forum to bring about transformative change in global food systems. The fact that the CFS is inclusive of diverse food systems actors, and the CSIPM has a significant voice within that forum, allowed the uptake of the work on agroecology to occur at all, despite strong opposition from member states. The science-policy interface of the CFS created a strong and politically progressive starting point for the CFS negotiations in the form of the HLPE report #14. Significantly, it ensures that there was a peer-reviewed assessment of the topic being negotiated to refer to at all times in the negotiations.

The fact that all parties participated in long and extremely challenging negotiations over many years is a testament to the importance of the CFS and the investment of member states and food systems actors in the outcomes of the negotiations. At the same time, the need to create a document that all parties could agree on led to compromises that ultimately created a weak set of policy recommendations. The procedural details of how the CFS negotiations are conducted are profoundly influential in the outcomes of the negotiations. The agroecology negotiations demonstrate that trying to build consensus between opposing world views is a fraught process. It is interesting that even though the CFS policy recommendations are voluntary guidelines with no formal obligations from member states or the Rome-based agencies, still member countries negotiated to avoid language of obligation or urgency in the document. While the CFS policy recommendations are non-binding, the process demonstrates that they have an important normative function in the governance of food systems.

In the end, the CSIPM did not get the progressive policy recommendations that they hoped agroecology would bring out of the CFS. The criticisms they had are specifically about the following topics, as articulated in the formal statemen of response by the CSIPM to the CFS agroecology policy recommendation:

> However, when considering the *Adopted document* as a whole, we understand that: i. it does not place the protection and realisation of human rights at the centre; ii. it does not assign a central role to agroecology nor its transformative potential is adequately recognised, while putting agroecology on an equal level with unsustainable approaches, without also recognising the imbalances between support for these and support for agroecological approaches; iii. fails to recognise the social, economic and environmental impacts of the industrial agri-food system; iv. fails to recognise the power imbalances within the food system; v. fails to recognise the ancestral and traditional knowledge of indigenous and peasant peoples and communities; and vi. includes recommendations that are antagonistic to agroecology, such as the use of agrotoxics. (CSIPM, 2021)

The CSIPM's list of criticisms reflects the refusal or inability of the CFS to take a strong stand on contentious topics in food governance. By not centering human rights, by "toolboxing" agroecology, and by not engaging with the harmful causes of food systems failures and the power imbalances in food systems, the CFS did not show the leadership that the CSIPM was advocating for through agroecology.

The analysis presented above argues that the CFS policy recommendations differ from the HLPE recommendations most significantly in terms of recommendations for structural reform to food systems on the level of regulation and subsidies. Thus, the major levers for food systems reform that would have far-reaching impacts through-out the system, such as changing the structure of agricultural subsidies, are replaced with policy recommendations on mitigating the impact of harmful systems. At the same time, the lack of oversight or monitoring and evaluation into the implementation of CFS policy recommendations is an additional weakness of the document, that the HLPE recommendations had warned against.

Other experts that I interviewed argued, that while the CFS policy recommendations were weak, they nevertheless raised the profile of agroecology. This had positive outcomes both in terms of broadening reach and the legitimacy of agroecology, as well as having a positive impact on funding for agroecological initiatives. Peter Rosset, academic and long-time supporter of social movement through agroecology, articulated the positive impact of the increased importance that agroecology gained through being discussed in the CFS as follows:

> I think that almost every ministry of agriculture in the world now has some program with the name agroecology attached to it, sometimes a very small program, sometimes a program that bears little resemblance to what we would call agroecology, but all of them have it and some cases, they've come knocking on the door of the social movement saying, okay, we've been instructed by the Minister to open this program, but we don't even know what it is. Give us a little bit of information here. But all of those come with budgets. And that's the part of the Minister of Agriculture that's giving credit. It can often be credited for green enterprises or things like that, or if it's the part that funds research funding for agroecology. Research and then of course, what then creates a new battle in each one of those spaces over who has access to those and does that distribution of those new funds, reinforce the status quo, or strengthen those who are challenging the status quo. So, it becomes like a microcosm in each local space of this larger debate. (Peter Rosset, Professor at Ecosur Advanced Studies Institute Mexico)

This quote reflects the position that the CFS has a strong normative impact, and the fact that the CFS worked on agroecology has created national and regional governance ripple effects, with different levels of government investing in agroecology.

In addition to national uptake of the idea of agroecology, there has also been a positive impact in terms of available funding for agroecology in other forums, such as IFAD and global food systems foundations. While the policy recommendations are non-binding they do have a normative function, and bringing agroecology into the discourse has positively impacted people's abilities to work on the topic. This is also true for the UN agencies, who now have a document on agroecology that can act as the foundation for cooperation on agroecological projects, as articulated by Doina Popusoi, Agroecology Consultant to IFAD:

> So how do we use it nowadays? I mean, it's a nonbinding document that we're talking about. So, it's really important in the cooperation with the other UN agencies, especially Rome based, so with FAO, we are already working together to promote the policy recommendations, but also in different countries where it is possible to do so. (Doina Popusoi, Agroecology Consultant IFAD)

This quote reflects once again the normative power that a CFS document has in shaping the work of UN organizations and actors therein. The CFS policy recommendations gives UN agencies a

document to refer to when advocating for, and implementing, agroecological collaborations and projects across agencies and nationally.

The other side of this profile-raising impact of the agroecology policy recommendations is the co-optation of the political vision of agroecology. Peter Rosset outlines this dynamic:

> It's [CFS policy recommendations] opened both major opportunities but also major threats in terms of co-optation and in terms of bad things being done under the name of agroecology. So, on the positive side, the use of the word is legitimized pushing for policies based on agroecology. It's freed up a lot of funding for activities ranging from research to rural development to other things related to agroecology. It's given more legitimacy to the social movements struggling for agroecology, but on the other hand it's also becoming a vehicle for green capitalism to advance in the penetration by capital of all aspects of the food system and in rural territories. And so, it has itself become an area of struggle. Whereas before we were struggling to get it talked about now, we have to struggle over the meanings and uses of agroecology. (Peter Rosset, Ecosur Advanced Studies Institute Mexico)

Consequently, according to this interviewee, the site of contestation for agroecology has shifted from inclusion in governance discourse to upholding the politically transformative aspects of agroecology in multiple governance venues. The struggles of food systems reform that are reflected in the negotiations around agroecology are on the one hand, for transformative ideas to gain political traction, and on the other hand for these ideas to be coherent and well-defined. A detailed analysis of the process that led from the HLPE report to the CFS policy recommendations illustrates how the debate around agroecology unearths the most contentious topics in food systems reform and what stands in the way of this reform.

Conclusion

This Chapter has presented an in-depth analysis of the CFS policy recommendations both in process and contents. The first section of the Chapter demonstrates and analyses the process through which the policy recommendations of the CFS were created. It begins by describing the CFS agroecology negotiation process to demonstrate what was involved in the negotiations and why they stood out as unusual in the workplan of the HLPE and CFS. I then show how the policy negotiation process unfolded, the details that shaped participation in the negotiations, and how

this impacted the final policy recommendations. From there, I presented an analysis of the contents of the policy recommendations, illustrating the details of the process by which the language of the recommendations evolved from Draft Zero through Draft One. I detail the different negotiation positions and how they can be explained, arguing that the policy recommendations were systematically weakened from the HLPE policy recommendations to those published by the CFS.

The second section of the chapter presents a side-by-side analysis of key elements of the HLPE and CFS policy recommendations. Analysis reveals the central differences in the articulation of food systems transformations in every level of the two documents, from problem statement, through actor groups, to the final recommendations. Throughout the development of the CFS policy recommendations many compromises were made to bridge the differences in the negotiation positions. This led to procedural details that were challenging, alongside key strategies used to arrive at a final policy document. The strategies identified in the document analysis include avoiding contentious issues with vague language, the presence of contradictory recommendations, weak language that emphasizes individual topics and avoids engagement with structural reform. The analysis section discussed the relevance of these findings in relation to the literature, arguing the need for strong policy recommendation to affect food systems transformation.

6. United Nations Food Systems Summit

Introduction

After the waxing and waning of agroecology's importance in the workplan of the FAO from 2014-2018, and the subsequent work of the CFS on agroecology from 2019-2021, agroecology continues to be an important concept in the global governance of food. While agroecology is not ubiquitous in policy documents, it remains an important concept in food governance, especially around food systems transformation. Given the fragmented nature of global food systems governance (van Bers et al., 2019; Candel, 2014), there are multiple important venues that influence food systems outside of the CFS and FAO. This chapter discusses the contestation around agroecology in one of these governance venues, the United Nations Food Systems Summit (UNFSS). I describe how the organization of the contentious UNFSS led to the formation of a global network advocating for agroecology, the Agroecology Coalition (AC). I argue that the UNFSS is a reminder of corporate dominance in global food systems, and therefor that global food governance is not only a matter of international relations but also and discuss the importance of corporate and philanthropic actors in shaping the contemporary landscape of food systems as regards agroecology.

In the UNFSS the contestation over agroecology can be understood in two phases: initial contestation around the exclusion/ inclusion of the word "agroecology" in the language of the event, followed by contestation around upholding the political vision of agroecology and avoiding co-optation of the term. In the UNFSS the two forms of contestation happened mostly in sequence, with initial exclusion of agroecology evolving into heavy use of the co-opted vision of agroecology. In this Chapter I detail the role of agroecology as cite of contestation in the UNFSS. I begin by describing the UNFSS, the role of agroecology within the UNFSS, and how the event led to the formation of the Agroecology Coalition. I then look at some of the recent publications from the UNFSS Stocktaking +4 event and how agroecology is used in these documents. The Chapter ends with a discuss on how corporate actors have taken up agroecology in their work. The purpose of this Chapter is to illustrate the continued significance of advocates in upholding the political vision of agroecology in the global governance of food, even as these governance venues are changing. In addition, this chapter illustrates the evolving representation of agroecology amongst different food systems actors, thereby providing context for the discussion about cooptation of agroecology.

The United Nations Food Systems Summit

The United Nations Food Systems Summit (UNFSS) took place on the 23rd of September 2021 in New York during that year's UN General Assembly. The UNFSS was a "worldwide mobilisation event" that "start(ed) the process of transforming the way the world produces, consumes, and thinks about food" (Caprile, 2021). The event had been in planning since 2019, when the UN Secretary-General António Guterres first announced it (Canfield et al., 2021). The planning of the UNFSS overlapped almost entirely with the CFS's work on agroecology, which also spanned from 2019 to 2021. While the CFS members were negotiating the articulation of a vision for the future of global food systems through agroecology and other innovations, another site of contestation around the future of food systems was being assembled in the UNFSS.

The stated purpose of the UNFSS was to "launch bold new actions to deliver progress on all 17 SDGs, each of which relies to some degree on healthier, more sustainable and equitable food systems" (UNFSS, 2025). The Summit was organized into five "action tracks", each focusing on a different aspect of food systems challenges, including nutrition, consumption, production, livelihoods, and resilience to shocks. Each of these action tracks convened multiple meetings and published discussion papers and reports in preparation of the Summit[22].

The UNFSS was branded as "the people's summit" and the organizers of the event published a press-release the day after the event, on 24 Sept 2021, which emphasized the leadership of diverse groups of actors in the summit, specifically naming "civil society, farmers, women, youth and indigenous groups" (UNFSS, 2021). In addition, the press release stated that conference outcomes were "a result of an 18-month inclusive and engaging process with diverse stakeholders" (UNFSS, 2021). The Summit was celebrated as a great success by the organizers of the event, with the announcement that "world leaders commit to tackling global hunger, climate change and biodiversity loss" and the announcement of new funding to support these commitments (UNFSS, 2021b). The UNFSS was a launch event for the continued work on the action tracks. The UN Food Systems Coordination Hub was established following the summit, which convenes actors to meet their stated targets. In addition, two UNFSS+ "stocktaking" events have occurred since the original UNFSS, the UNFSS+2 in 2023 (UNFSS, 2023) and the UNFSS+4 in 2025 (UNFSS, 2025b). While

[22] The "Discussion Starter" and "Synthesis Report" for "Wave 1" and "Wave 2" of each Action Track can be found on the UNFSS website (UNFSS, 2026). The initial documents were coordinated by the UNFSS secretariat, which coordinated academics and think tank employees to write these documents. The European Parliament Briefing document on the UNFSS provides an overview of this (Caprile, 2021).

the UNFSS appeared to be a progressive political space seeking to make fundamental changes to global food systems, as emphasized by the quoted press releases, a closer look at the event tells a different story.

With the formation of the UNFSS, a new global governance of food venue was created. Aside from the substantive criticism of the UNFSS, the very fact of the addition of a new governance venue in the fragmented governance landscape of food is problematic. On one hand, convening actors to elicit new commitments and funding to meet the Sustainable Development Goals seems like a necessary and valuable pursuit. On the other hand, scholars argue that the global governance of food requires cohesion and coordination, rather than the increased fragmentation that is the consequence of another governance venue being added to the fragmented governance landscape of global food systems (Canfield et al., 2021). Most importantly, however, the UNFSS was not organized in collaboration with existing governance actors, significantly the CFS (Anderl & Hißen, 2024; Montenegro & Iles, 2021). The UNFSS did not follow the usual channels of FAO leadership and early coordination between Rome-Based Agencies. Instead, the forum was conceptualized and organized from the UN headquarters in New York and only brought the Rome-Based Agencies into planning late in the process. Rather than following due process and organizing a Summit from within the existing structures, the UNFSS was announced to the CFS by UN Secretary-General Antonio Guterres and organized in collaboration with the World Economic Forum (WEF)[23] (Canfield et al., 2021).

The formation of the UNFSS can be understood as an instance of competition between New York and Rome-Based Agencies, resulting in fragmentation of global food governance structures. Allison-Marie Loconto, a food systems researcher based at a think tank, described the dynamic as follows:

> The FAO process really was consultative and participatory in terms of inclusion of social movements[24]. Even when it [agroecology] was at the CFS, the process was led largely through FAO. But the UNFSS process was led through the New York office of the UN and so therefore, it was a different group of people and there were some tensions between FAO and UN in New York about who's going to lead this process. And so, the UNFSS

[23] "The WEF signed a strategic partnership agreement with the UN prior to the announcement of the UNFSS and has developed an explicit agenda to 'reset' global governance in the mold of 'stakeholder capitalism'." (Montenegro de Wit et al, 2021) (WEF = World Economic Forum)

[24] The interviewee is referring to the FAO agroecology process here (described in Chapter 3 of this dissertation)

> process got a Rapporteur who was not related to the FAO processes before this[25]. The way they set up the scientific committees, the way they set up also the engagement with the private sector and with the civil society was quite different. And because of who that person was, the civil society just immediately was not engaged. (Allison-Marie Loconto, Research Professor at French National Institute for Research on Agriculture, Food and Environment)

This quote illustrates the dynamics that were behind the competition between the New York and Rome-based Agencies (RBAs) in the organizing of the UNFSS. The staffing choices referred to in this quote will be discussed in detail in this Chapter. Who originated the UNFSS, the process by which they organized it, and the people involved were such that the UNFSS did not add cohesion to global food governance but instead brought another set of actors into an already fragmented governance space. The dynamic of governance fragmentation through lack of coordination has a long history and is understood to result in benefits for corporate actors (Canfield et al., 2021a). Critics see the approach to organizing the UNFSS as an attempt to sideline the progressive governance space of the CFS through a corporate takeover of global governance of food (Montenegro & Iles, 2021; Anderson, 2021; Montenegro de Wit et al., 2021). Canfield et al. (2021) argued that "the Summit is an effort by a powerful alliance of multinational corporations, philanthropies, and export-oriented countries to subvert multilateral institutions of food governance and capture the global narrative of food systems transformation" (Canfield et al., 2021). Specifically, the UNFSS threatened the progressive and inclusive multi-lateralism of the CFS with pro-corporate multi-stakeholderism (McKeon, 2021). This is an argument supported by a wide array of leading food scholars (Montenegro de Wit et al., 2021; McKeon, 2021; Canfield et al., 2021) and of civil society (Chandrasekaran et al., 2021).

Given that many of the problems of the global food system originate in the corporate control of and corporate consolidation within food systems, it is particularly important for governance venues to be at arm's length to corporate power, as much as this is possible (Clapp, 2021; Clapp, 2022; Gumbert & Fuchs, 2018). The governance approach of multi-stakeholderism that characterizes the UNFSS instead convened some of the most powerful corporate interests in

[25] The UN Secretary-General named Agnes Kalibata as special envoy of the UNFSS. Dr. Kalibata, who is president of AGRA, had close ties to industry and consequently was not welcomed as special envoy by some food systems actors, as discussed in this Chapter.

food systems in one governance venue. Chandrasekaran and colleagues, who were part of the organizing committee of Food Systems 4 People, the counter-summit to the UNFSS argued that: "an ensemble including the World Economic Forum (WEF), philanthropies such as the Bill & Melinda Gates Foundation, the Rockefeller Foundation, and EAT, market-friendly NGOs like the World Wildlife Fund, and corporations including Unilever, Nestlé, Tyson, and Bayer has continued to encourage the elaboration of multi-stake- holder platforms in food systems" (Chandrasekaran et al., 2021).

The fact that civil society organized a counter movement, under the name "The People's Autonomous Response to the UN Food Systems Summit" and "Food Systems 4 People (FS4P)" shows the depth of the discontent with the UNFSS (FS4P, 2025). The organizations and people that constitute the Civil Society and Indigenous People's Mechanism (CSIPM) to the Committee on World Food Security (CFS) were the convenors of the countermovement to the UNFSS (FS4P, 2025). There is a long list of additional criticisms of the UNFSS from civil society and academia. The criticisms are that the UNFSS sought to undermine the authority of the CFS (Canfield et al., 2021), failed to address corporate power (Clapp et al., 2021), alienated hard-won trust of social movements towards FAO and institutional food governance (Anderl & Hißen, 2024), articulated future visions of global food systems that reproduce the status quo (Horton, 2024), did not approach food systems from a rights based perspective (FS4P, 2021), engaged in narrative capture of food systems transformation (Anderson, 2021), was characterized by lack of transparency and conflict of interest of organizers (Canfield et al., 2021), and several other substantial criticisms from civil society (FS4P, 2021) and academics alike. Thus, with the formation of the UNFSS, a new site of contestation within global food systems governance was created. As of late 2025, there does not appear to be a resolution to this contestation. Instead, the UNFSS has been established as another venue through which there is global convening to try and address the multiple compounding issues of global food systems.

Agroecology in the United Nations Food Systems Summit

In this section I show how agroecology was introduced into the work of the UNFSS through extensive pressure from advocates of agroecology. I argue that the evolution of the paradigm "agroecology" in the UNFSS reflects the two major forms of contestation that occur through agroecology in the global governance of food: inclusion / exclusion and co-optation.

Agroecology was first excluded from the work of the UNFSS, which instead used the term "nature positive production". The term "nature positive production" has been used widely in "policy advocacy and grantmaking to expand markets for corporate agro-inputs through multi-stakeholder and public–private partnerships" (Montenegro de Wit et al., 2021). Advocacy led to agroecology being included in the work of the UNFSS. In this chapter I show that once the UNFSS took up the language of agroecology, there was contestation around the co-optation of the word. Specifically, advocates argued for the politically progressive vision of agroecology to be articulated and not be overshadowed by the productivist narrative of innovation and efficiency.

Tracing the role of agroecology in UNFSS, it is evident that the language used to articulate positive visions for food systems is an important site of political contestation in contemporary food governance. Specifically, the continued struggle to protect and create food systems outside of corporate systems is reflected in the representation of agroecology as a politically transformative paradigm which resists being consumed by corporate public relations campaigns.

With the formation of the UNFSS, food systems actors that had advocated for and supported the political vision of agroecology in the CFS and FAO were confronted with the question whether to engage with the UNFSS or to distance themselves and their organizations. There was a mixed response to this problem in my interview data. On the one hand, people wanted to continue the work of advocating for the political vision of agroecology by protecting the paradigm from co-optation and by engaging with new opportunities to enact agroecological transformations. On the other hand, people objected to the existence of the UNFSS and did not want to participate in a governance process that sidelined the CFS. Some important food systems actors decided to not engage with the process at all, others initially participated and then withdrew, and others remained active in the UNFSS despite their misgivings. An example of an organization that withdrew from the UNFSS was the International Panel of Experts on Food Systems (IPES-Food), as articulated by Emile Frison, a co-founding member of IPES-Food:

> We discussed for a long time whether we should engage in the process or not because we have very strong objections to the way it was set up as a partnership with the private sector. Being so much involved in the initiation and the fact that it was sidelining the normal governance processes of the CFS, and even the Rome-based agencies as a whole, it being the private sector representation at the global level together with the UN in New York, that

> was the instigator of the process, and the multi-stakeholder approach in which no measure was taken to take into account the different power imbalances that exist and basically to counter the influence that the private sector would have on the process. (Emile Frison, IPES-Food)

This quote reflects the fact that many individuals and organisations struggled to position themselves in relation to the UNFSS due to the problematic organizational origins of the event detailed above. The multiple criticisms of the UNFSS outlined above, as well as sustained opposition within the UNFSS towards political agroecology were also reasons cited by Hans Herren, co-chair of the IAASTD Report and founder of the Biovision Foundation to not engage with the UNFSS:

> What happened is that the UNFSS 2021, which was boycotted by many, myself included, and my foundation, we participated at the beginning but then we, and others, withdrew when we realized that they only give lip service to agroecology, and they invented their own term of nature positive agriculture. Now why invent something new? We had a good term, agroecology, and we wanted that to be the discussion and then pushed for it but again, because of the Gates Foundation and the World Economic Forum, that never happened, because they were totally against it. (Hans Herren, Co-Chair of the IAASTD Report)

This quote illustrates the fact that in the UNFSS contestation around agroecology was also a key deciding factor for some actors whether to remain engaged in the governance venue or not. Others, such as Interview 15, participated in the UNFSS in a personal capacity while stepping away from official affiliations to do so:

> And when we saw the agenda of the pre-summit in, April or early May of 2021, there was no mention - the word agroecology didn't appear anywhere. And so, despite the fact that IPES-Food withdrew, I decided to stay on in my personal capacity to try to salvage what could be salvaged in the process, because there were some people supportive of agroecology in the process. (Interview 15)

Despite all the problems and criticisms of the UNFSS, some advocates of agroecology decided to remain engaged with the UNFSS in order to uphold the political vision of the term, also in a venue that was hostile to that paradigm. Emile Frison, of IPES-Food quoted above, also engaged with the UNFSS on the topic of agroecology, but not as a representative of IPES-Food:

> So, IPES-Food was very reluctant, and very critical of the food system summit approach. Nevertheless, we decided to engage in one particular aspect and that was trying to get agroecology the visibility it should have within that process. And that's why Olivier [De Schutter] and myself engaged in what was called track three. And at some stage, we pulled out of that because we saw that agroecology was not getting the support that it should have received at the Secretariat level. (Emile Frison, IPES-Food)

While the secretariat of the UNFSS did not support agroecology, its advocates struggled for inclusion of the term, the supporters of the political vision of agroecology organized a new coalition to uphold the political importance of the CFS and the position of agroecology within it. The advocacy for agroecology in the UNFSS gave rise to the Agroecology Coalition (AC), which was one of many coalitions to be created in the context of the UNFSS. The UNFSS was organized as a "solutions-oriented" summit, and part of this approach was the formation of a total of 26 coalitions and six "solutions clusters" (Canfield et al., 2021a). The "solution clusters" are coalitions that have been criticized for being independent of member states and having no accountability to formal public governance structures (Canfield et al., 2021a). The formation of the Agroecology Coalition (AC) is detailed below.

In his analysis of agroecology in the UNFSS, Gliessman (2023) writes:

> It was only after considerable protest and threats of boycott from many voices from civil society and the pressure from a few countries, that the term agroecology was even included. Agroecology was accused by some summit organizers as being an ideological concept rather than a practical vision for future food systems […] In the end, agroecology only appeared in final documents from the summit as "one more tool in the toolbox", rather than as a foundation for transformational change. (Gliessman, 2023).

Similarly, Canfield et al. (2021) argue:

> Agroecology is hardly visible in the description of the Action Track on "nature-positive production" nor in its revised Discussion Starter Paper, despite the significant work on it by FAO and the High-Level Panel of Experts of CFS. In the Discussion Paper, agroecology is mentioned as an example of "efficiency" in production […] and "efficiency" as a goal is routinely associated with industrial food systems. (Canfield et al., 2021)

These quotes reflect the criticism that the UNFSS sidelined the extensive work done on agroecology through the FAO and the CFS.

Despite initial systematic exclusion of agroecology, and the conflicted engagement of progressive food systems actors with the UNFSS, there was an eventual uptake of agroecology in the discourse of the UNFSS. The advocacy on behalf of agroecology at the UNFSS had two results. On one hand, agroecology was eventually taken up into the language of the UNFSS, on the other, a new coalition was created. With agroecology being integrated into the language of the UNFSS, the struggle over the co-optation of agroecology took shape.

In reviewing the publications of the first UNFSS, specifically the Synthesis Report from Action Track 3 "Boost nature-positive production" titled *Synthesis Report: Game-changing and Systematic Solutions – Wave 2* (UNFSS, 2021c), the advocacy that was conducted to include agroecology in the work of the UNFSS clearly had born fruit. The synthesis report mentions agroecology 48 times, including a section titled *Transformation Through Agroecology and Regenerative Agriculture.* The synthesis report proposes a "solution cluster" to be guided by the "13 Principles of the HLPE report", specifically: "They will call on all innovations and technologies that are compatible with the 13 Principles, such as optimizing/reducing/replacing synthetic inputs while improving soil health, restoring degraded agricultural lands, improving ecosystem services and increasing wild biodiversity in agricultural landscapes" (UNFSS, 2021c).

While the word "agroecology" was added to the work of the UNFSS, the political vision of agroecology was not, with agroecology in the UNFSS being subsumed by the innovation paradigm and being treated as no more than a production method. Illustrating the argument of Gliessman (2023), quoted above, the UNFSS incorporated the language of agroecology as a "tool in the toolbox" rather than a whole-system paradigm. Gliessman & Montenegro de Wit (2021) argue:

> By not putting agroecology and food sovereignty at the center of the Summit, the systemic, whole-system, participatory, change-oriented vision of the food systems needed for the future was never going to come about. Instead, we are in danger of this important international body known as FAO closing the window that has only recently been opened for agroecology in this tower of the Green Revolution. (Gliessman & Montenegro de Wit, 2021)

The reflection of Gliessman & Montenegro de Wit opens the question that if agroecology is not central to the work of the FAO, what other governance outlets does agroecology have on the global level? The formation of the Agroecology Coalition, that arose out of the UNFSS, presents an interesting new actor in the landscape of advocates for a food system based on diversity and plurality. I detail the formation of the Agroecology Coalition below, as a further example of the multiple diverse actors that act as advocates for agroecology in global food governance.

The Agroecology Coalition

While the political vision of agroecology did not find it's way into the work of the UNFSS in 2021, the event gave rise to a new international coalition working on agroecology in global food governance forums. The Agroecology Coalition (AC) was formed through advocacy and coordination from a handful of food systems actors. I interviewed several of the people that were instrumental in the formation of the AC. I conducted the interviews for this research from Oct 2022 to April 2023. At that point the Agroecology Coalition was a recent creation and people I spoke with were either shaping it or watching with interest to see how it would evolve.

Below I present the story of the formation of the AC, as told by one of its co-founders. The formation of the Agroecology Coalition is another example of the guiding thread throughout this dissertation, namely that crisis, advocacy, and science co-create agroecology as a significant paradigm in the global governance of food. In this instance, the crises were the attempted corporate capture of global food systems governance as well as the attempted narrative capture of food systems transformation more broadly. As outlined above, the UNFSS saw corporate actors shape the architecture of global food systems governance as well as the narrative around food systems transformations (Anderson, 2021; Canfield et al., 2021). For agroecology, the attempted exclusion followed by the attempted co-optation of the term by the UNFSS threatened to dissipate both the integrity of the term as well as the many years of political advocacy that had gone into establishing agroecology as a concept for a different vision of food systems. The coordinated advocacy that worked to establish the AC did so to maintain agroecology as a concept through which the political transformative vision of diversity in food systems can be supported, as well as to uphold the legitimacy of existing multi-lateral governance of food venue, primarily the CFS.

Emile Frison, member and co-founder of the IPES-Food panel as well as co-founder of the Agroecology Coalition, was one of the people that was instrumental in bringing the AC into being. In our interview, Emile Frison described the different dynamics and events that led to the formation of the AC in the UNFSS context. Below I present the details of the formation of the AC as told in our interview. The story of the creation of the AC details the dynamics of political advocacy for agroecology. While each instance of advocacy for agroecology in global food governance discussed in this dissertation is unique, the work involved to uphold the political vision of agroecology has been formidable throughout. In the context of the UNFSS, first there was the engagement with the "friends of agroecology in Rome", to build awareness and a coordinated effort to represent agroecology in the UNFSS context:

> I approached what was called the group of friends of agroecology in Rome, which is the permanent representatives of different countries to the UN organizations based in Rome, FAO, IFAD, and WFP. There were about 15 or so countries that had been coming together occasionally and they define themselves as friends of agroecology […] I approached the chair of that, which was the ambassador of Senegal, and made him aware of the fact that there was no mention of this [agroecology] and suggested to call a meeting of the Friends of Agroecology and to broaden the invitation beyond the friends of agroecology […]We invited about 60 countries that were supposedly more open to agroecology. (Emile Frison)

A meeting was organized drawing on an existing loose affiliation of supporters of agroecology within this "friends of" system. The "friends of" system is part of the UN infrastructure and exists for many different initiatives within the UN system (Whitfield, 2010). It provides an opportunity "for countries to come together and discuss issues where they share a common view" (Emile Frison). That meeting served as the catalyst for organizing a strong presence for agroecology in global food governance. The participants of the meeting advocated for agroecology to be included in the UNFSS, as articulated by Emile Frison again:

> Ten countries decided to sign a letter to the Deputy Secretary General of the UN, and to the special envoy Kalibata, demanding in very strong terms, demanding, not just suggesting, but demanding, that there be a session on agroecology organized in the agenda of the pre-Summit. That letter was sent end of May [2021]. It was only five or six days before the pre-summit that we got a reply, saying we added a session on the first day, during

> the lunch break at a time when there were 18 side events organized. But it was an official session. It was not a side event, it was an official session of the pre-Summit. (Emile Frison)

With the advocacy efforts leading to an official session on agroecology within the pre-Summit began the struggle for who controlled the narrative of agroecology in that venue:

> And there had been a fight, I had to fight with the Secretariat of the Food System Summit to keep control over that session. Because we lined up five ministers to speak in that session and the Secretariat wanted to add their own people to talk there. It wasn't until Sunday, the meeting was on Monday lunchtime, and it wasn't until Sunday night that they finally said okay, you go ahead and organize it.

The session ended up being very well attended, Emile Frison said there were approximately 1361 participants in that event. The outcome of that meeting was the creation of the Agroecology Coalition: “In short, the Agroecology Coalition came about despite the Food System Summit and not through the Food System Summit" (Emile Frison, IPES-Food).

The story of the creation of the AC details clearly how it takes a coordinated effort from politically influential people, countries, and organizations to create spaces for agroecology in global governance venues. The UNFSS inadvertently put wind in the sail of the agroecology movement on the global level by bringing people together and giving them something to organize against. The AC explicitly and intentionally reports to the CFS, thus seeking to uphold the legitimacy of the CFS as the foremost governance venue of food on the global level.

The Agroecology Coalition conceptualizes itself as the culmination of the political advocacy work in support of agroecology on the global level, which has been the subject of this dissertation. In the AC strategy 2024-2030 document, in which the Coalition published its mission and theory of change, they state: “Our mission: To accelerate the transformation of food systems through agroecology by facilitating collective actions and empowering members with capacities needed to drive positive change at all levels” (AC, 2024). The purpose of the AC is “to provide a mechanism for countries and organization to collaborate on food systems transformation through agroecology to address multiple crises simultaneously.” (AC, 2025). Since the interviews for this research were conducted prior to the coalescence of the AC’s vision and mission, shortly after it’s initial formation, the impact of the AC in the global governance of food remains a subject of future study. In December 2022 the AC’s membership included 43

countries and 85 organizations (Gliessman, 2023), at present (Aug 2025) the membership is constituted as follows:



Figure 17: Agroecology Coalition (Agroecology Coalition, 2025c)

In joining the AC, members sign on to a "Declaration of Engagement", which is intended to motivate action on the coalitions "three pathways": knowledge exchange, investment, and political engagement (Gliessman, 2023). The AC bases it's work on the HLPE's 13 Principles of Agroecology, and is structured into six working groups on markets, research and innovation, policies, finance and investments, implementation, and communications (AC, 2024a). Through these working groups the AC is coordinating a strategic presence in most governance of food venues, including the Conference of the Parties, the UNFSS Stock-Taking events, the CFS, and others (AC, 2024a). Consequently, the Agroecology Coalition has evolved to be an active and coordinated advocate for agroecology on diverse levels of food systems, regional and national as well as the global.

The formation of the AC was a significant outcome from the UNFSS for the agroecology movement in the sense that it represents a coordinated effort to uphold the agroecology as a significant paradigm in global governance discourses, even as these are shifting. Considering the literature on fragmentation of global food governance, and the need for coherent governance, instead of increasing cites of contestation (Candel, 2014), it could be argued that the creation of the AC was not constructive. It could be argued that the AC is to the International Planning

Committee for Food Sovereignty (IPC) (the early social movement advocates of agroecology) what the UNFSS is to the CFS. With the AC a new venue of convening is created, instead of focusing on addressing the issues at hand in the existing venues. On the other hand, it could be argued that the AC is a significant venue for supporters of agroecology outside of social movements, such as state actors, to convene and organize. This speaks to the literature that argues that fragmentation in governance can be understood as a creative and democratizing process (Acharya, 2016). How this dynamic will evolve, and the impact that the AC will have on bringing to life the political vision of agroecology in global governance forums, is yet to be seen.

United Nations Food Systems Summit Stocktaking Moments

In the years following the 2021 UNFSS launch there have been regular follow-up events, which are called "Stocktaking Moments". These events are coordinated by the Food Systems Coordination Hub and serve as a venue for countries and food systems actors to convene in the context of the UNFSS and the program of work established in the initial 2021 UNFSS. The Stocktaking events are scheduled to occur every two years, and at present (early 2026), there have been two such events: UNFSS+ 2 held in Rome, Italy 24-26 July 2023, and UNFSS+4 held in Addis Ababa 27-29 July 2025. The purpose of the UNFSS+2 was to continue working on the initiatives and action tracks launched through the 2021 UNFSS, as published by the UN Food Systems Coordination Hub:

> The purpose of the UN Food Systems Summit +2 Stocktaking Moment was to build on the momentum of the 2021 Food Systems Summit and create a conducive space for countries to review progress on the commitments to action and identify successes, enduring bottlenecks and priorities in order to close the implementation gap by effectively and efficiently utilizing the Means of Implementation for food systems transformation. (UNFSS, 2023)

The following UNFSS+4 event focused on three main areas: "reflecting on progress, strengthening partnerships and tracking commitments, and unlocking investments" (UNFSS, 2025). The continued work and convening that is ongoing in the UNFSS establishes the UNFSS as another global governance of food venue that is being sustained by the UN system. Both of the UNFSS Stocktaking Moments occurred after my interviews for this research project, consequently I refer to published material, and not interview data, to contextualize this work.

The UNFSS shows the continued evolution of the global governance of food. While the creation of the UNFSS created fracture in the global venues of food governance, as discussed above, the subsequent Stocktaking Moments published material emphasizing collaboration. For example, the fact that the UNFSS+2 was hosted in Rome by Rome based agencies is front and centre in the introduction to the event on the website:

> The UN Food Systems Summit +2 Stocktaking Moment took place in Rome, Italy from 24 – 26 July 2023, on the premises of the Food and Agriculture Organization of the United Nations (FAO). It was hosted by Italy, in collaboration with the Rome-based UN Agencies (FAO, IFAD, WFP), the UN Food Systems Coordination Hub and the wider UN system. (UNFSS, 2023)

The emphasis on the collaboration with the Rome-based Agencies can be seen as a reconciliation after the initial criticisms of the UNFSS being established in the UN's New York office, as discussed above. In addition, the UNFSS+4 published a statement on the CFS titled *The Hub strengthens collaboration with CFS to deliver on the UNFSS+4 Call to Action*:

> At this year's 53rd session of the Committee on World Food Security (CFS), delegates gathered at FAO Headquarters in Rome to discuss how global policies can better respond to the growing pressures of hunger, inequality, and climate change. For the UN Food Systems Coordination Hub, it was an opportunity to reinforce one message: Food systems transformation progress depends on turning global commitments into tangible results on the ground. (UNFSS, 2025)

The statement above can be seen as the new Food Systems Coordination Hub (FSCH) positioning itself as the governance actor for implementing policy recommendations and food systems transformation. In addition, the statement on the relationship between the CFS and the FSCH states that there is a "deepening collaboration" between "the Hub" and the CFS:

> The collaboration between the Hub and the CFS continues to deepen. Building on existing synergies, the two entities have partnered in implementing webinars and side events aimed at promoting the uptake of CFS policy tools among National Convenors and UN Country Teams. The CFS Chair, who also serves on the UN Food Systems Summit Advisory Group, has been instrumental in connecting both platforms to ensure that global policy guidance translates into national action. Both institutions share a common goal: inclusive transformations towards more sustainable food systems to realize

> the right to food for all. Together, they are helping governments translate broad international commitments into targeted policies that improve food security, strengthen nutrition, and build climate resilience.

This text shows that there are ongoing efforts to coordinate the work between the new governance venue of the FSCH and the existing CFS. As these developments are recent, and have occurred since my interviews, I am unable to provide a perspective from the different food systems actors to these statements. I did however look at how the documents published in the context of the UNFSS Stocktaking Moments reference agroecology.

The UNFSS+4 *Report of the Secretary General* mentions agroecology once in the context of financing and investment: "Finally, projects promoting agroecology, traditional agriculture, digital tools and gender-responsive approaches are gaining traction as viable investment opportunities" (UNFSS, 2025a). The *UNFSS+4 Independent Stakeholder Report* has 41 mentions of agroecology, including in the section "challenges of engagement", which reads:

> Stakeholders across all groups report significant challenges in relation to meaningful engagement by key institutional actors in food systems governance. At the national level, opaque consultation processes, fragmented governance, and bureaucratic rigidity are mentioned for hindering effective participation, especially for farmer cooperatives, grassroots groups, and those promoting agroecology and rights-based approaches. Business and academic stakeholders note weak interministerial coordination, while political instability and limited access to funding further widen the participation gap. (UNFSS, 2025b)

This statement illustrates clearly that the creation of the UNFSS and the new global food governance venue of "the Hub" come with new governance challenges. In addition, the documents also show that agroecology has been established as part of the discursive arena of the UNFSS. How the ongoing discourse on agroecology in this governance venue interacts with the politically transformative vision of agroecology that is at the heart of the paradigm is an evolving process that I will follow with interest. In understanding the evolving nature of global food governance in the shifting global governance landscape of the late 2020s , it is clear that the 2021 UNFSS has launched another governance platform.

Corporate and Philanthropic Interest in Agroecology

The UNFSS raises the important topic of corporate and philanthropic interest in agroecology. Throughout the literature, global food systems are conceptualized as corporate systems due to the overwhelming influence and power corporate actors have in these systems (Clapp, 2021; Godfray et al., 2010). From agricultural inputs, through farming equipment, to distribution, retail and all the steps in-between, a few corporate actors own and operate the global food systems (Clapp, 2025). The UNFSS showed clearly that these corporate actors are also heavily involved in shaping the discourse and governance outcomes around food systems governance and transformation.

The involvement of corporations in the work on agroecology is an important topic. We know that corporate lobbies influence food relevant policies nationally and internationally, ranging from nutrition to agricultural inputs to trade and beyond (Miller & Harkins, 2010; Nestle, 1993; Clapp & Scrinis, 2017). It is fair to assume that the FAO and CFS are not immune to the influence and lobbying of corporate actors in the food system (McKeon, 2016). As regards the integration of agroecology into governance documents, the question of profitability is central in understanding the position of different actors. The diverse, localized, low-input, sovereign food systems articulated through agroecology do not present financial opportunities for companies shaping food systems.

The UNFSS shows clearly that corporate actors have little to no interest in supporting the political vision of agroecology and consequently seek to either exclude or co-opt the meaning of agroecology. The evidence for this claim is presented in the earlier discussion on the UNFSS 2021 and in the literature on the corporate capture of food governance through the UNFSS (Anderson, 2021; Canfield, 2021; Chandrasekaran et al., 2021). The marginalization of agroecology by corporate actors has been reflected throughout this dissertation by quotes from the PSM to the CFS, in which agroecology is represented as an ideology lacking practical solutions, at best. The heart of the issue here is that on one hand there is no clear profit pathway for corporate actors through political transformation, and on the other hand the social movement behind agroecology seeks to change the food systems fundamentally, to the detriment of corporate actors. For example, the European Coordination Via Campesina (ECVC) is seeking to change agricultural policy, the European Common Agriculture Policy (CAP), so that the

substantial government subsidies which uphold the current food system are shifted in favour of small diverse producers (Chancellor, 2021).

In terms of corporate involvement in the UNFSS, Chandrasekaran et al. (2021) present a comprehensive analysis of which companies and corporate research and lobby groups shaped the UNFSS. The World Economic Forum was particularly influential, as they conceptualized and convened the event; other actors included Nestle, Bayer, Tyson and the Bill and Melida Gates Foundation (Chandrasekaran et al., 2021).

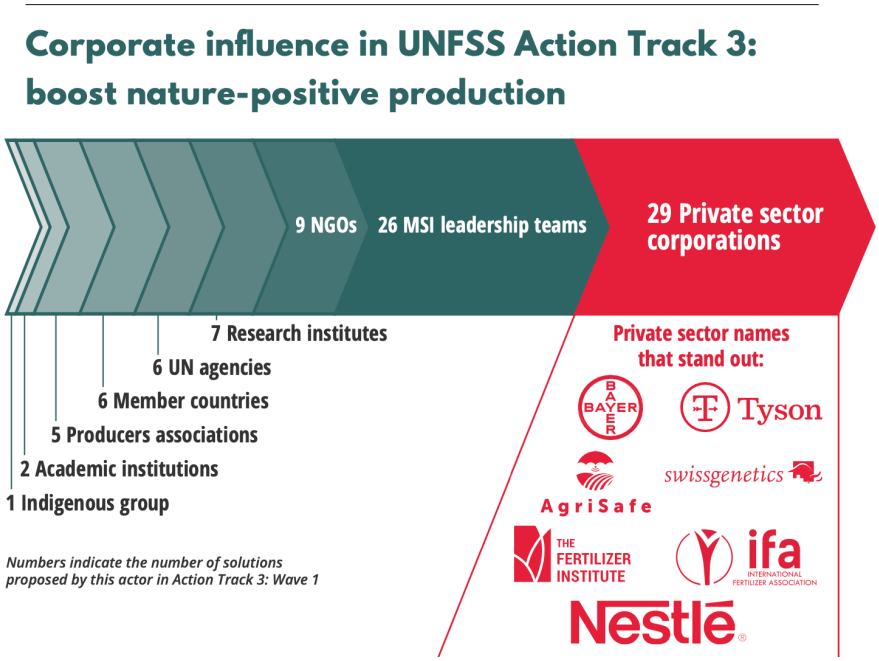


Figure 18: Corporate Influence in UNFSS (Chandrasekaran et al., 2021)

Outside the UNFSS process, agroecology is also being taken up as paradigm in corporate food systems activity. An in-depth analysis of "regenerative agriculture" in corporate programs and policies illustrates how these food systems actors use sustainability narratives to legitimize their power and construct a "corporate environmental food regime" (Bless et al., 2023; Bless, 2025). Within this context agroecology is used as a sub-set of regenerative agriculture in corporate discourse. For example, the world's largest food manufacturer Nestlé, in their 2024 publication "The Nestlé Agriculture Framework" (Nestlé, 2024) features agroecology prominently. "The Nestlé Model" declares that "we are guided by agroecological principles and practices" and dedicates a chapter to describing this approach. It begins with the statement that "there is currently no collectively recognized and approved precise definition for regenerative

agriculture. As a concept, it intends to bring together the best of a number of approaches (conservation agriculture, sustainable intensification, climate-smart farming, agroecology, low input farming, precision farming …), into the ambition to not only maintain but actively help improve and restore natural resources." (Nestlé 2024). This statement articulates precisely the main criticism that social movements have of the corporate capture of agroecology as "just another tool in the toolbox" of possible approaches, thereby ignoring the political vision of agroecology as a central paradigm for food sovereignty.

In addition, Unilever, the fourth largest food manufacturer in the world, behind Nestlé, PepsiCo, and Coca-Cola, with a revenue of 60.8 Billion Euros in 2024 (Unilever, 2024), has incorporated agroecology into their corporate social responsibility program. *The Unilever Regenerative Agriculture Principles* was published in 2021 (Unilever, 2021), as part of the company's Sustainable Agriculture Code first published in 2010. The document outlines "good agricultural practices" that is an articulation of the company's "sustainable sourcing program". In this document agroecology is mentioned as part of principle 3 "support smallholder farmers in income diversification" in which it is stated that "crop diversification, agroecological practices, farmer associations and social protection schemes all contribute to income diversification and increased resilience" (Unilever, 2021). Agroecology is understood as "agroecological practices including intercropping and agro-forest systems" and therefore conceptualized as a method of crop diversification in the field. It is noteworthy that there is no reference to the HLPE, FAO, or CFS discussions or definition of agroecology in either Nestle or Unilever's publications.

The UNFSS also highlights the importance of other influential actors in the discourse around agroecology in the global governance of food. One such actor group outside of corporations or research institutes are foundations and philanthropic organizations. For example, the Bill and Melinda Gates Foundation (BMGF) was heavily involved with the UNFSS. The BMGF is well known for financing corporate agricultural systems, through the Green Revolution in India and Africa (Holt-Gimenez, 2006; Gliessman, 2020a; Biovision & IPES-Food, 2020; Wise, 2019). For example, the BMGF was the largest single donor to the Alliance for a Green Revolution in Africa (AGRA)[26], which seeks to transform agriculture in Africa through

[26] The former president of AGRA, Agnes Kalibata, was selected as the Special Envoy of the UN Secretary-General for the 2021 Food Systems Summit. In this role, she was responsible for leading the UNFSS 2021

commercial seed and inorganic fertilizer to high-yield production (Wise, 2020). In an analysis of the foundation's funding, it was found that 3% of the projects receiving money from the BMGF could be described as agroecological (Biovision & IPES-Food, 2020).

There are also a handful of foundations that exist to specifically support the political vision of agroecology. These include the Global Alliance for the Future of Food, Biovision Foundation, Agroecology Fund, and the McKnight Foundation (which funded a lot of the FAO's work on agroecology). The subject of financing agroecological transitions, and the role of philanthropic investment in this process, is a far-reaching and complex topic that is outside the scope of this dissertation. It is important to note that alongside traditional governance actors, such as states, powerful corporate and philanthropic actors are shaping the discourse and resources available to food systems transformation with profound implications for nutrition and global health (Caraher, 2023; Canfield, 2023; Kalfagianni, 2022; Nickel & Eikenberry, 2010; Stevenson, 2014). Recent research on this topic argues that the idea that private funds are needed for agroecological transitions in food systems is a misconception, as there are a multitude of public funds that could be drawn on (Pimbert, 2025). The availability of public funding opens the question of the political processes that influence the allocation of public funds and subsidies in food systems, as well as the use of philanthropic funding as a leverage for political influence in food systems discourse.

Conclusion

The UNFSS acts as a reminder that, while there are global governance venues that seek to steer global food systems through voluntary guidelines, such as the CFS, the global food system remains essentially a corporate system. Despite advocacy for the right to food, food sovereignty, and agroecology, we see food being treated as a commodity, traded in markets, and corporate profits taking precedent over all environmental and humanitarian concerns such as sustainability, equity, and public health. With the expansion of the financialization of food and agriculture and increased corporate consolidations, there is a need for regulatory frameworks to limit these trends (Clapp, 2021).

event and associated publications and coordination work. This appointment was one of the many controversial aspects of the UNFSS discussed above.

Corporate interests have constructed global food systems to the point that it is difficult to imagine what different systems might be on the global scale. While agroecology describes foundational principles of such alternative systems, many of the important issue topics (land, labour, trade, generational succession, livelihoods, and more) remain nebulous. The interaction of agroecological systems and ideals with global systems and power relationships is theorized in the literature (De Molina et al., 2019; López-García et al., 2021; Parmentier, 2014). However, the interaction of global governance structures and rules with the political vision of agroecology remains an ongoing site of contestation in terms of the translation of agroecological principles on the global scale. Research shows that a small fraction of public funding for agriculture goes towards agroecological projects, and of those, even fewer enact agroecological principles beyond the field level (Biovision & IPES-Food, 2020). Nevertheless, agroecology is a leading framework through which alternative food systems are being advocated for. The role of agroecology in the UNFSS detailed above reveals how inclusion / exclusion followed by co-optation are sites where the political vision of agroecology is being undermined and defended. Simultaneously, the formation of the Agroecology Coalition as a network advocating for the growth and support of agroecology on a global level creates a venue for the continued work of realising the political vision of agroecology in local, regional, and national projects. With the establishment of the UN Food Systems Coordination Hub the global governance of food has become more fragmented. The governance responses to global food systems challenges is an evolving process. This Chapter has showed how agroecology is framed and presented by different food systems actors, showing that agroecology continues to be an active cite of contestation in the different visions of food systems transformation.

7. Conclusion

Introduction

The geopolitical world has changed significantly in the years that it took to conduct this research. The world of late 2025 is in a new state of fragmentation and disintegration of international cooperation. The contemporary geopolitics has been described as the disintegration of the rules based international order with far-reaching destabilization of traditional trade and geopolitical alliances (Golub, 2025; Diesen, 2024). The crises in global food systems addressed throughout the dissertation, that were already evident in the early 2000s with the 2007/2008 food price crises, are not stabilizing under the new geo-political situation (Samad et al., 2025; SOFI report, 2024; Clapp, 2023). As argued throughout the dissertation, moments of crisis can be an opportunity for change. This research is a testament to the importance of, and the struggles over, inclusive participatory multilateralism in global food governance, the indispensable nature of well-structured arms-length science-policy interfaces and policy processes, and the need to address the continued corporate capture of food systems governance.

The contribution to the scholarship of global food systems of this dissertation is the first comprehensive analysis of agroecology as a discursive paradigm in global food governance. By tracing the evolution of agroecology from the first appearances of the word agroecology in a global governance report, to the present (late 2025) political function of the term, this research contributes data and case studies to following debates: transformative vs reformist approaches, co-optation of agroecology, corporate capture of food governance, directionality of governance.

This final Chapter presents key findings of the research project and summarizes both the three-fold explanatory structure of crises, advocates, and science which explain the factors that brought agroecology into global governance discourse. In addition, I present an analysis of the cites of contestation in agroecology, which are the inclusion/ exclusion of agroecology in governance discourse as well as framing agroecology when it is discussed. I conclude with a discussion on the political function of agroecology and areas of future scholarship.

Crises / Advocates / Science

Focusing on agroecology as a discursive frame in global food governance, this research project presents case studies of the leading global food governance venues, analysed through a

constructivist lens in the format of grounded theory research, to address the research question: "What explains the rise of agroecology as a significant discourse in the global governance of food?". I argue that the complex interaction of global crises in food systems, the sustained advocacy from supporters of agroecology, and the legitimization of the scientific aspects of agroecology, made it possible for the counterhegemonic discourse of agroecology to enter into global governance venues.

This dissertation describes the impact of the compounding environmental, financial, and social crises in global food systems and how these crises created the conditions for openness to new ideas in governance venues. The sustained advocacy of civil society and academics in global governance forums, over approximately 20 years, built agroecology into a strong concept that other important advocates, such as individual politicians and countries, could leverage at key moments of institutional openness. In addition, the scientific aspect of agroecology acted as a door opener and legitimizing discourse, allowing agroecology to enter traditionally science-oriented productivist governance spaces. At the same time, the scientific aspect of agroecology is used to undermine the political vision of agroecology, frequently in the framing of agroecology as one of many innovations. Consequently, agroecology as a paradigm is an active site of contestation in global food governance between competing visions of how to address the compounding crises in food systems.

Crises

Considering the first of the three factors that have brought agroecology into governance discourse, crises: This dissertation has detailed some of the crises that are cause for alarm and that are motivating different food systems actors to look for alternative approaches to food systems governance. Notable early moments of global cooperation to address compounding crises in food systems with agroecology include the commission and publication of the first comprehensive assessment of the state of global food systems in the form of the IAASTD report in 2009, as discussed in Chapter 2. In addition, the relevance of the 1992 Rio Earth Summit as a significant moment of global cooperation on environmental and social crises connected to food systems is discussed in Chapter 6. The importance of the reform of the CFS in light of the food

price crises of 2007/2008 is a third, and deeply significant, instance of global cooperation in food systems governance discussed throughout this dissertation.

The IAASTD report, the Rio-Trio conference, and the reform of the CFS are instances of global cooperation to address compounding crises with far-reaching impact on food systems. The symptoms of dysfunctional food systems (described as crises throughout this dissertation), that have motivated global cooperation, include: rising food price volatility and associated impact on global health and nutrition; the rising rates of hunger and malnutrition described as the state of food security and nutrition globally as assessed by United Nations monitoring systems, such as the SOFI reports; the environmental states of emergency that are climate change, biodiversity loss, and desertification.

Throughout the dissertation I present evidence and quotes by people centrally involved in the instance of global cooperation, such as the IAASTD report, about the motivating force that these crises exercise in bringing about discussions about alternatives to neoliberalism and Green Revolution technologies in food systems. The discourse analysis presented in this dissertation explores the role of agroecology as a paradigm through which food systems transformation is enacted. In tracing the emergence of agroecology as a discursive frame in food systems governance one can see the increased importance of the term as a site of contestation for different organizing principles of global systems. Agroecology is a paradigm based on diversity (diversity of plants, ecosystems, economies, trading systems, governance) that stands in stark contrast to the continued concentration of global corporate food systems. Agroecology is a rich site of contestation both due to the call to diversity that it embodies, and also due the composite definitional structures of the term agroecology that can be understood as a "library object" (Trompette & Vinck, 2009) in political discourse.

The analysis of the policy negotiations of the CFS on the topic of agroecology, for example, illustrate the central topics of contestation in the different visions of food systems. In addition, the analysis presented in Chapter 5 illustrates how the articulation of policy recommendations differ between the scientific recommendations put forth by the HLPE and the final policy recommendations of the CFS. Topics of contestation include permissible agricultural inputs, genetic materials and farmer agency, the framing of agroecology as an innovation or a political paradigm, types of farming approaches and farmer representation in governance, appropriate markets and associated political economic systems.

While crises are an opportunity for change (Ben Hassen et al., 2025), research has shown that previous crises have deepened corporate concentration in food systems (Clapp, 2024; Clapp & Moseley, 2020). There have been some attempts to counter-act the corporate influence in food systems governance, specifically by elevating the voice of those most affected by food insecurity and malnutrition in the global governance forum of the reformed CFS. Nevertheless, my research shows that the deeply entrenched interests that maintain current systems shape the discourse even in the most progressive political venue in global food systems governance. At the same time, my research shows that the advocacy of those that support profound food systems transformation is powerful in terms of agenda setting and sustained opposition to corporate capture. Systemic failures and the symptoms that manifest as crises add fuel to the fire, so to speak, in that they motivate the different actor groups to convene and discuss possible responses.

Advocates

The second factor that brought agroecology into the work-plans and discursive arenas of global food governance venues (such as the FAO, CFS, and the UNFSS), was the sustained advocacy (from a large variety of different actors), for the political vision of agroecology as a discursive frame for food systems transformation. Starting with the scholarship on the history of agroecology as a scientific concept, and its uptake in Latin American social movements, Chapter 2 details the growth of agroecology as an important discursive frame. Depending on where in time one locates the origins of agroecology one can see an almost 100-year history, with the scientific discipline of agronomy coining the term in the 1930s, followed by the adoption of the term by social movements in the 1970s, and finally with agroecology appearing in global governance texts starting in 2009 (see Chapter 2).

An important aspect of the emergence of agroecology in global governance discourse is the formal establishment of definitional structures of agroecology. The history and definition of agroecology are co-constructed, and in the definitional structures that have been presented in global governance venues, as described in Chapter 2, one sees a continued advocacy for the political vision of agroecology by social movements through publications such as the Nyéléni Declaration on Agroecology of 2015 (Nyéléni, 2015). The Nyéléni Declaration was published after the FAO began working on its definitional structure, the 10 Elements of Agroecology, in 2014. The publication date of the Nyéléni Declaration is significant, as it emphasises social

movement's claim to agroecology, as well as the movement wanting to ensure a clear articulation of the political vision of agroecology independent of the work of FAO on the topic.

While social movements are the most important driver of agroecology as a politically transformative paradigm (McKeon, 2015), this dissertation also highlights the importance of other actor groups as advocates. Both the case study of the FAO (Chapter 3) and the case study of the UNFSS (Chapter 6) illustrate the central role of civils society alongside academics, civil servants, and politicians, in bringing agroecology into these governance venues. In addition, political "insiders" also play a key role in the uptake of discourse in governance contexts (Moseley, 2024), as seen in the example of the Director General of FAO. However, which aspects of agroecology are emphasized varies by different actor groups, and the framing of agroecology in governance texts is a major theme that runs throughout this dissertation. In addition, the advocacy for the political vision of agroecology that is upheld by academics both in academic publications, which inform political discourse, and in the science-policy interface of the CFS, as well as within the negotiations of the CFS, is demonstrated in Chapters 4 and 5 of the dissertation.

The favourable geopolitical conditions of the time, alongside a supportive Director General, were other important factors that allowed the advocacy for agroecology to land on fertile ground in the work-plan of the FAO. The case study of the FAO, presented in Chapter 3, details the significance of the then Director General, José Graziano da Silva, in opening the organization to seriously engaging with a paradigm that stands in opposition to the Green Revolution technologies that have been central to FAO's work to date. In addition to the Director Generalship looking favourably on agroecology, the confluence of several geopolitical events created an opening for agroecology in global discourse. Another example of geopolitical events that impacted the uptake of agroecology, outlined in Chapter 3, includes the election of liberal governments in many countries, which were supportive of engaging with alternative solutions to emerging crises.

This dissertation shows how those that are classically considered "the governed" (Ong, 2006) are shaping governance discourse through civil society networks (Keck & Sikkink, 2014). There is no clear distinction between "those that govern" and "those that are governed" when it comes to food systems. Weiss & Wilkinson's (2018) phrase "governance from below" describes the hierarchical permeability in global governance discourse that is exemplified by my research. An

important avenue for this permeability is the structure of the reformed CFS, both through the establishment of the HLPE to create policy debates based in the scientific state of knowledge, and through the principle of centering those that are most affected. As illustrated in Chapters 4 & 5, the policy process however is fraught. Chapter 6 discusses the attempted corporate capture of global food systems governance through the formation of the UNFSS and argues for the need to uphold the CFS as the central authority in global food systems governance, despite the criticisms leveled by this research. The research presented in this dissertation is an illustration of the mechanisms by which discourse contestation is a vehicle for non-traditional governance actors, such as civil society, private sector, and philanthropy to shape governance venues and outcomes.

The significance of the research on the role of advocacy in bringing agroecology into global governance venues is that it both illustrates the importance of non-state actors in shaping global governance discourse, and that it speaks to the complexity of the directionally of governance. Every one of the case studies of this dissertation shows that the sustained advocacy of non-state actors, alongside receptive and supportive institutional actors, brought agroecology into the forefront of the various governance venues for a period of time. Consequently, this dissertation research contributes to the scholarship of Keck & Sikkink (2014) and others, that argue that the directionality of governance is complex and that there is a significant role in civil society shaping global governance discourse.

This dissertation also details the mechanisms by which corporate and state actors undermine the political vision of agroecology through policy negotiations, in this case leading to CFS policy recommendations on the topic of agroecology that were not endorsed by the CSIPM. The fact that the civil society actors that advocated for agroecology for decades did not endorse the final recommendations is significant, and Chapter 5 discusses the details of the choice not to endorse the recommendations. One of the main criticisms of the report from the CSIPM was that it did not adequately represent agroecology in its entirety and instead subsumed agroecology in the framing of innovations.

The PSM did endorse the document, despite misgivings that agroecology is too political and does not represent the needs of farmers in light of the challenges they face. This highlights one of the fascinating aspects of food systems governance, namely that farmers occupy a unique position in the geopolitics of food. Farmers are a truly heterogenous group with a diversity of needs and approaches, evidenced in the fact that they have two different mechanisms of

engagement with the CFS. At the same time, they occupy an important position in food systems, as they enact policy, are deeply affected by the consequences of increased food price volatility, and also stand at the front-line of hunger. Farmers sustain food systems while also being the most affected by them, and consequently they occupy a unique position within the geopolitical dynamic of food systems as well as the advocacy for the transformation of these systems. Particularly important voices in the advocacy for agroecology as a vehicle for food systems transformation in global discourse are the civil society organizations that represent farmer groups such as La Via Campesina, academics and scientists, as well as state and institutional staff.

Science

The third factor that was decisive in the rise of agroecology as a discursive frame in the global governance of food was the scientific aspect of the paradigm. As detailed in Chapter 2, the paradigm agroecology arose through an interaction of the western sciences of agronomy and the experiential knowledge of Global South farmers, and was nurtured and advocated for by social movements and other supporters. These roots are evident throughout the definitional structures of agroecology established by the FAO and the CFS. Alongside the political vision of agroecology, the heart of the paradigm is a scientific approach to farming grounded in diverse farming ecosystems and soil health. The discursive authority that comes with scientific approaches (Kinchy, 2012; Haas, 1992) enabled the advocates of agroecology to present the paradigm as legitimate and authoritative in traditionally conservative spaces. Chapter 3 of this dissertation details how agroecology became a focal point for the work of FAO for a few years around 2014-2018.

In the uptake of agroecology in the FAO, the fact that agroecology first appeared in a technical and scientific division of the organization, namely the Plant Production and Protection Division, which is concerned with pollination, instead of one the social welfare divisions for example, is significant. Agroecology gave the scientists of the FAO an umbrella term to coordinate a more holistic approach to solving the environmental problems that they were working on. The scientists that advocated for agroecology gave credibility to the social movements that were organizing behind agroecology to bring coordinated attention to the human rights and social justice problems in modern food systems. This example is illustrative of the importance of the scientific aspect of agroecology in opening institutional doors.

The authority of scientific discourse interacts with agroecology in a contradictory manner. For one, the legitimizing and door-opening aspect of the scientific nature of agroecology discussed throughout the dissertation, has allowed a counter hegemonic paradigm to enter governance venues. However, it is also evident throughout the research presented in this dissertation that scientific discourse is used to undermine the political vision of agroecology. The most prominent mechanism through which agroecology is undermined is through the framing of agroecology as one of many innovations, as discussed in Chapter 4 on the HLPE report. By incorporating agroecology in the innovation frame it is set equal to other technical approaches (or innovations) that do not contain the holistic social and political components of agroecology. Throughout the CFS negotiations, the actors that pushed against agroecology did so by arguing that agroecology is not scientific, too ideological, not concrete and measurable, and generally not as scientifically rigorous and legitimate as other methods and technologies. The contestation around what knowledge, data, and system of analysis is valid is a complex and ongoing site of debate as regards agroecology (Global Alliance for the Future of Food, 2021). Agroecology exists in a complicated relationship with science and science's authority and claim to truth.

Sites of Contestation

The research presented in this dissertation illustrates that the active sites of contestation around agroecology in global governance discourse are twofold: the inclusion / exclusion of the word "agroecology" in important texts and discourses, and the articulation of the politically transformative aspects of the paradigm (framing). These sites of contestation describe the avenues of advocacy for the political vision of agroecology in global governance discourse alongside the resistance to this advocacy from entrenched interests. Consequently, the research contributes to the discussion about the co-optation of agroecology by detailing the representation of the political aspects of agroecology in global governance venues.

Inclusion / Exclusion

The presence of the word "agroecology" as a stand-alone paradigm is a major theme throughout the research presented in this dissertation. There is an astounding amount of work

and advocacy that has gone into almost every mention of the word agroecology in policy recommendations and official governance texts that are the subject of this research. The case study of the CFS policy negotiations presented in this dissertation (Chaters 5) illustrates the details of the contestation that goes into the inclusion of the word "agroecology" as well as into preventing the erasure of the word. The case study of the UNFSS (Chapter 6) details how the attempted exclusion of agroecology in this relatively new governance venue led to a strong reaction advocating for the inclusion of agroecology, which then led both to the incorporation of the word in UNFSS texts, however in a limited manner, as well as the formation of a new global coalition, the Agroecology Coalition. In addition, the case studies of the Rio-Trio governance spaces illustrate how, even if agroecology is part of the larger discourse of the solution search space, the word rarely appears in the final agreements and statements, with a few notable exceptions.

The exclusion of counterhegemonic discourses from global governance discourse is not a new phenomenon. Sassen refers to the systematic exclusion of ideas and people from governance as "savage sorting", in which institutions and governance systems are increasingly geared to serve corporate economic growth and those that do not serve this purpose are not included (Sassen, 2014). In addition, the political theorist Ong (2006) describes the same phenomenon in terms of "exceptions to neoliberalism" in which particular people and geographies are excluded from governance venues for the strategic use of free-market ideology to create governance leverage for corporate actors. Consequently, my research can be seen as an example of the processes of "savage sorting" in global food governance, or as an investigation of "exceptions to neoliberalism" (Ong, 2006). The attempted exclusion of diversity-based worldviews is a central site of contestation fought through the paradigm of agroecology in global food governance venues.

Framing

While the inclusion of the word agroecology is significant in and of itself, as discussed above, the format and framing of agroecology in governance texts is almost equally important. The varied uses of the word agroecology throughout different venues and discussions have led to academics arguing that agroecology is being co-opted (Rivera-Ferre; 2018; Giraldo & Rosset,

2018; Gliessman et al., 2019). There is a debate about whether the political vision of agroecology has been subverted, and whether agroecology still has the counterhegemonic significance that was initially intended by social movements.

I argue that the data analyzed for this dissertation research show that the definitional structure of agroecology published by the FAO and HLPE have constructed agroecology as a clear and unambiguous paradigm. Throughout the policy negotiations analyzed in Chapter 5, the definitional structure of agroecology (10 Elements and 13 Principles of Agroecology), were protective of the holistic integrity of the paradigm. While there are repeated attempts to discredit these definitions, the discreditation happens primarily through ignoring the definitions (exclusion as per above, and as discussed in Chapter 6) or engaging with them selectively. I could not find any instances of the contents of the definitions themselves being brought into question.

My research shows that the co-optation of the political vision of agroecology occurs in governance discourse through the framing of, and the selective engagement with, the definitional structures of agroecology. The finding of the framing of agroecology impacting the political significance of the term is supported by the work of Anderson & Maughan (2021). Anderson & Maughan (2021) analyzed the feedback that was received on Draft Zero of the CFS policy recommendations on agroecology and argue that the "innovation paradigm" is the central mechanism of co-optation. They state that "innovation can serve to contain and co-opt the transformative potential of agroecology" by delegitimizing the social and political components of agroecology (Anderson & Maughan, 2021). The framing of agroecology as an innovation in the work of the CFS was highly contentious from the start due to the CFS request to the HLPE to issue a report on "Agroecological and Other Innovations", as discussed in the HLPE case study (Chapter 4).

In addition to the framing of agroecology shaping the political function of agroecology, my research shows that selective engagement with the definitions of agroecology has led to intentional, and unintentional, co-optation (or dilution) of the political vision of agroecology. I use the political theory construct of the "library object" (Trompette & Vinck, 2009) to describe this phenomenon in my research. The 10 Elements of Agroecology published by FAO in 2018, that were later expanded on by the HLPE through the publication of the 13 Elements of Agroecology in 2019, present a composite construct to create a consensus definition of the term. These definitions build bridges over political differences and can consequently be understood as

"boundary objects" (Star & Griesemer, 1989). At the same time, there is evidence of actors engaging with only a couple of the 10 Elements or 13 Principles and referring to their work as "agroecology" (Biovision & IPES-Food, 2020). Most commonly, projects focus on the technical field level elements of agroecology to the exclusion of the market and political levels of the paradigm. The definitions of agroecology have constructed agroecology as a "library object" from which actors choose selectively to serve their political interests. Consequently, it is not the lack of conceptual clarity of agroecology that impacts the co-optation of the term, instead it is the framing of, and the selective engagement with, the paradigm that impacts its political significance.

The Political Function of Agroecology in Global Food Governance

The guiding line of enquiry that is at the heart of this research is a curiosity about the dynamics and mechanisms by which institutional change takes shape in global food governance. By asking the question "What explains the rise of agroecology as a discursive frame in global food governance?", I have used the lens of agroecology to provide a perspective on how counterhegemonic discursive frames enter global governance venues and what happens to them in the process. The research data and analysis have led me to conclude that the current political function of agroecology as a discursive frame in global food governance can be categorized into three themes: ambiguity, transformation, and resistance.

Ambiguity / Resistance/ Transformation

As discussed in the introduction chapter of this dissertation, the political function of the paradigm "agroecology" in global food systems governance can be conceptualized in terms of three distinct functions: ambiguity, resistance, and transformation. The ambiguity argument describes agroecology as a "boundary object" (Star & Griesemer, 1989) that is ambiguous and consequently serves the function of different political interests engaging with the term while referring to different practices and food systems visions. I have argued throughout the dissertation the definitional structures of agroecology published by the FAO and HLPE contribute to the boundary object function of agroecology due to the complex and modular nature of the definitions. Examples of agroecology being used to reference different practices

and food systems can be found primarily in Chapter 6 of this dissertation, in which I discuss the case study of agroecology in the UNFSS and the uptake of agroecology in corporate social responsibility programs.

In addition, the fact that the diversity of political interests that convene through the CFS were able to engage with agroecology at all, as discussed in Chapters 4 & 5 of the dissertation, is also an example of the boundary object nature of agroecology. Other topics, such as seed sovereignty for example, have not been able to enter the CFS as a topic of discussion and policy recommendation, as it does not provide the same ambiguous leeway for different political interests to see themselves represented through it. Consequently, the particular characteristics of agroecology, as a well-defined construct that can be selectively represented to suit a specific political interest, is an important component of understanding why this particular paradigm has gathered the political support and traction that it has.

The resistance argument describes agroecology as a paradigm that stands in opposition to the logics of corporate consolidation with systems based on diversity. In addition, it resists the expansion of productivist agricultural logics and associated food systems into the existing agroecological food systems. Consequently, a second important political function of agroecology is to act as a paradigm through with diverse actors organize to protect ecologically and sociologically diverse agricultural systems that have not been incorporated into global corporate systems. Evidence of this function of agroecology can be found in Chapter 6, in which I discuss the early occurrences of agroecology in governance texts as a paradigm for Indigenous food and knowledge systems. The resistance function of agroecology is also clearly articulated in the Nyéléni Declaration of 2015, which claimed agroecology for a paradigm of upholding values of diversity and food sovereignty as articulated by farmer movements and social movements, as discussed in Chapter 1 of this dissertation.

The political function of resistance that agroecology serves also constructs it as a site of contestation throughout the various governance venues discussed in this research. The worldview that the Nyéléni Declaration articulates through agroecology stands in stark contrast to the worldview that corporate food systems are built on. Consequently, the continual process of entrenched interests seeking to either erase or de-politicise agroecology, countered by the sustained advocacy upholding the political vision of agroecology, is a dynamic that runs through

the approximately 10 years (starting in 2014 with the FAO work on agroecology) of agroecology as a discursive frame in global governance venues, that I have analysed in this research.

Finally, the transformation argument conceptualizes agroecology as a paradigm to change existing global food systems. As discussed in the introduction chapter, the transformation of global corporate food systems through agroecological principles is a tricky subject. Assuming that resistance to the expansion of corporate systems does not equal transformation of these systems, the specific inroads into true transformation of global food systems, as opposed to reforms, leaves many open questions. Considering the "messy particulars", to use the language of Tsing (2005), of food systems transformation through agroecological principles requires engagement with the systems of trade, land ownership, labour conditions, development paradigms, and other central topics in food systems scholarship. There is admirable work being done on these subject (McKeon, 2015; Pimbert, 2025; IPES-Food, 2024; Moseley, 2024; Dommen et al., 2025), and there is substantial room for further engagement.

This research project illustrates the specific details and mechanisms through which systemic food systems transformation through global governance venues is undermined and prevented from taking shape. With twenty years of sustained advocacy for agroecology towards global governance forums (considering the start of this advocacy in the Rio Conference of 1996) leading to policy recommendations from the CFS that the CSIPM did not endorse is a sobering fact. However, the continued incremental growth of the political vision of agroecology, as articulated through national programs, FAO programs, the formation of new global alliances (such as the Agroecology Coalition), foundations taking on the mandate to fund agroecological projects (for example, the Agroecology Fund and the Global Alliance for the Future of Food), is evidence that the transformative vision of agroecology is not being fully erased or subverted by entrenched political interests.

With the start of the second USA Donald Trump presidency in 2025 the world of global cooperation has changed fundamentally. We are witnessing the disintegration of the global international order, as it had been established after World War 2 (Kimmage, 2025; Jeffer, 2025). The impacts on international relationships through trade and aid have been particularly impactful, with profoundly damaging outcomes on international trust and cooperation (Haug et al., 2025; Moynihan & Zuppke, 2025). With the destabilization of the global world order, there are also many voices that are arguing that this is a moment to enact chang to build international

cooperation that addresses systemic inequalities (Efstathopoulos & Mehmetcik, 2025; Belay, 2025; Ody, 2025). Given the current geopolitical situation of instability, in combination with continued environmental and social crises, this may be the moment in which levers of change can bring about the much-needed food systems transformation. The fact that there is a well-defined, consensus positive vision of what food systems could and should be, as articulated in the 10 Elements and 13 Principles, is significant for food systems transformation.

Scholarly Contribution

The specific contribution to the scholarship of global food systems that this dissertation makes is that it is the first comprehensive analysis of agroecology as a discursive paradigm in global food governance. By tracing the evolution of agroecology from the first appearances of the word agroecology in a global governance report, to the present (late 2025) political function of the term, this research contributes data and case studies to following debates.

The debate in the literature about transformative vs reformist approaches to addressing crises in global food systems is significant. This research illustrates how transformative visions for food systems struggle to move beyond reformist constraints in governance discourse. I present an analysis of the details of the CFS policy negotiations on agroecology and compare how the policy recommendations changed from the HLPE to the CFS. The policy negotiations present a concrete example of how transformative visions are constrained and do not find articulation in policy recommendations. Consequently, my research adds to the debate about reformist vs transformative approaches the perspective that realizing official policy articulations of transformative recommendations is an extremely fraught and contentious process. The agroecology negotiations of the CFS illustrate that the scientific state of knowledge, as expressed by the HLPE, assesses there to be an urgent need to enact transformative interventions in global food systems governance. However, the political venue of the CFS was not able to bring the necessity of transformation, as articulated by the HLPE, into expression in the official policy recommendations, which ended up issuing reformist recommendations. Consequently, this research presents examples of the concrete mechanisms by which transformation of global food systems is constrained. The topic of permissible inputs, which is also a lively debate in the literature, is one of the central topics through which the transformative vs reformist perspectives are negotiated.

This dissertation research contributes a clear analysis to the co-optation of agroecology debate by analyzing the sites and mechanisms of contestation around the political vision of agroecology in global governance venues. I argue that both the framing of agroecology as a stand-alone paradigm, or an innovation, as well as the selective engagement with definitional elements of agroecology, are mechanisms for co-optation of agroecology. However, the definitions of agroecology published by FAO and the HLPE create a clear consensus understanding of the positive vision for food systems that is articulated by agroecology. The lack of ambiguity in the term itself allows for continued advocacy to counteract the framing and selective engagement with agroecology.

The corporate capture of global food governance is another topic in food systems scholarship that this research speaks to. The case studies of the UNFSS and the CFS presented in this dissertatio illustrate in detail the mechanisms and procedures by which governance forums and policy processes are contested and co-opted. Consequently, this research present detailed evidence for the argument that businesses shape governance outcomes (Clapp, 2021; Fuchs, 2007; Fuchs & Kalfagianni, 2010). At the same time, however, this research illustrates how corporate involvement in food systems governance is heavily contested by diverse groups of advocates, notably civil society, academics, and civil servants. Consequently, this dissertation illustrates the significance of non-state actors in shaping global governance discourse thereby adding a perspective on the complexity of the directionality of governance, as discussed throughout this dissertation. In addition, the importance of democratic and well-structured policy negotiation processes is discussed in Chapter 5. In order to explain the different instances of contestation by different political interests through agroecology, I argue for a three-fold understanding of the political function of agroecology in terms of ambiguity, resistance, and transformation.

Finally, this dissertation contributes to the scholarship that seek to understand and describe global food systems, detailed in the introduction. Conceptualizing of global food systems as complex political economic systems with guiding logics, this dissertation presents a perspective on the interaction of policy and governance discourses with these complex systems. As discussed in Chapter 6, the creation of the UNFSS further fragmented the already disjoint governance landscape of global food systems. Throughout the case studies presented in this research one can see the disintegration of political focus on transformation through increased

complexity both in governance structures and in the language of the CFS policy recommendations. Clear and accountable mechanisms of governance are lacking in global food systems.

Future Scholarship

The work presented in this dissertation leaves many open questions and avenues for further enquiry. One major theme that requires further scholarly attention is the translation of global governance policy recommendations into concrete projects. It would be very interesting to see how the policy recommendations on agroecology, as well as other CFS policy recommendations, are used by different governments and funders. This line of enquire would address some of the open questions about the implementation of policy recommendations and the significance of the articulation of positive visions for food systems.

Alongside the enquire of implementation, comes the question of venues and mechanisms for food systems transformation. I have presented an in-depth analysis of agroecology in global food governance venues. It would be fascinating to see an in-depth analysis of the rules and regulations that uphold global systems and how these interact with agroecological paradigms. With the current geopolitical situation and the weakening of the rules-based order, considering how the positive vision articulated by social movements through agroecology interacts with shifting political economic dynamics would be a fruitful line of enquiry.

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Appendix A

Interview Questions

My research question is: What explains the rise of agroecology as a discourse in food systems governance, despite ongoing debate over the meaning of the term among actors with widely different interests?

Central Questions

1. When did you first become aware of agroecology in global governance discourse / spaces?
2. the HLPE report. What led to the commissioning of this report? What was the process like? How was it received?
3. How CFS policy recommendations on agroecology and other innovative approaches received? Did you follow the negotiations that lead to the final report? Any insights about it?
4. What is the role of global governance forums in bringing about agroecological transitions? What function does agroecology play in governance venues?
5. My research question is ….. is there something I'm forgetting? Anything that came up in our conversation that you wanted to address? Anything I haven't asked that I should be thinking about?
6. Is there anyone you would recommend that I should speak to?

Additional questions

1. What is the role of global trade in agroecology?
2. What do you think the transformative potential of agroecology is? How do you understand the vision of transformation that agroecology aspires to in global forums? How does agroecology interface with existing industrial food systems and structures in terms of trade policies, mechanization, etc.?
3. How do agroecologists think global trade should be structured?
4. Who do you think are significant governance actors in agroecology (beyond the UN FAO)
5. Who are the private sector actors?

6. What are your thoughts about the general evolution of the global governance of food in the context of the UNFSS? What trends do you see? How does agroecology interact with this?
7. What do you think the transformative potential of agroecology is? How do you understand the vision of transformation that agroecology aspires to in global forums? How does agroecology interface with existing industrial food systems and structures in terms of trade policies, mechanization, etc.?

Verbal Consent Script

Preamble

Thank you very much for taking time to speak with me today. Have you had a chance to read the information letter that I sent to you? Just to recap, the interview will take approximately 30-45 minutes and I will be asking you questions about agroecology in global food systems. Your participation is voluntary and if you want to skip a question let me know and I will move on.

Consent Questions

-"Do you agree to participate in this study?"

- "Do you agree that the interview can be audio-recorded so that I can produce an accurate transcription"?

- "Do you agree to the use of anonymous quotations? "

- "Do you agree to the use of attributed quotations? If yes, do you consent to quotations being attributed to you by name or by your title / role or both?"

Final remarks

As noted in the information letter I sent with the request for this interview, I will share with you a transcribed version of our conversation for your approval which will give you the opportunity to clarify any points that you wish, including noting passages that you wish to be off the record or not for attribution. I will give you one month to review that transcription. Is this procedure acceptable to you?

Appendix B

Publication Schedule: HLPE Reports and CFS Policy Recommendations[27]

CFS Session Number	CFS Session Date	CFS Policy Recommendation	Informed by HLPE Report	HLPE Report Publication Date
41	October 2014	*Food Losses and Waste in the Context of Sustainable Food Systems*	#8 (same title as CFS Policy Recommendation)	May 2014
42	October 2015	*Water for Food Security and Nutrition*	#9 (same title as CFS Policy Recommendation)	May 2015
43	October 2016	*Sustainable Agricultural Development for Food Security and Nutrition: What Roles for Livestock?*	# 10 (same title as CFS Policy Recommendation)	July 2016
44	October 2017	*Sustainable Forestry for Food Security and Nutrition*	#11 (same title as CFS Policy Recommendation)	June 2017
45	October 2018	NONE		
46	October 2019	NONE		
47	February 2021	*Voluntary Guidelines on Food Systems and Nutrition (VGFSyN)*	#12 *Nutrition and Food Systems*	September 2017
48	June 2021	*Agroecological and Other Innovative Approaches for Sustainable Agriculture and Food Systems that Enhance Food Security and Nutrition*	#14 (same title as CFS Policy Recommendation)	July 2019
49	October 2021	NONE		
50	October 2022	*Promoting Youth Engagement and Employment in Agriculture and Food Systems for Food Security and Nutrition*	#16 (same title as CFS Policy Recommendation)	July 2021

[27] Source: https://www.fao.org/cfs/policy-products/en/