The Rise of Food Security Governance: a Synthesis of its Key Features and Challenges

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Abstract

The role of governance has received increasing attention of food security scholars in recent years. However, in spite of the recognition that governance matters, it is still largely unclear what food security governance entails, and what its key features and challenges are. To address this gap, this paper reports the results of a systematic review and synthesis of the state-of-the-art of the food security governance literature. The synthesis revolves around eight themes that can be observed throughout the literature: i) there is no agreed-on definition of food security governance; ii) governance can both ameliorate and endanger food security; iii) food security is a complex issue to ‘govern’; iv) the current governance architecture has largely failed; v) more coherency and coordination are needed; vi) ideas about food security governance vary and conflict; vii) new players arrive at the forefront; and viii) good food security governance relies on respecting democratic values and adequate resources. The paper ends by proposing a definition that combines various elements of earlier definitions, by arguing that more empirical studies should be conducted, particularly on sub-national governance levels, and by suggesting that drawing on the governance literature could provide new opportunities for studying and designing food security governance.

Keywords

Food security – Governance – Systematic literature review – Food governance
1. Introduction

Food security has received a large amount of attention in recent years, of both academics and non-academics (Lang and Barling 2012; Allen 2013). This increase of attention particularly persevered after the 2007-2008 and 2010 world food price crises and the 2008 World Development Report, which called for greater investment in agriculture in developing countries. Since these events, food security has come to serve as a concept that finds wide resonance among academic institutions and in policy considerations (Mooney and Hunt 2009; Candel et al. 2013).

Within these recent food security debates, the role of governance has come to attract increasing attention. This development stems from the often heard notion that food security solutions or approaches should not only address the technical and environmental dimensions of the issue, but also take social, economic, and political aspects into account (Wahlqvist et al. 2012; Maye and Kirwan 2013). A good example of this call is given in the book “Food for all”, published for the 95th Dies Natalis of Wageningen University:

“Food security cannot be realized by means of idealistic plans or new technologies only. It requires advanced steering strategies that involves governments as well as companies, NGOs and citizen[s].” (Termeer in: Kropff et al. 2013)

Similar statements were made by José Graziano da Silva, director-general of the Food and Agriculture Organization of the United Nations (FAO), and Joachim von Braun, director-general of the International Food Policy Research Institute (IFPRI):

“Food prices and volatility have increased in recent years. This is expected to continue in the medium-term. [...] In this context, it is important to improve governance of food security. In the globalized world we live in, it’s not possible to have food security in one country alone.” (FAO 2012)

“Ensuring food security today not only requires appropriate agricultural management and utilization of natural resources and eco-systems, but also good governance and sustainable political systems.” (von Braun 2009)
Governance refers to the alternative ways of steering and managing of both natural and societal phenomena (Torfing et al. 2012). Food security governance then, refers to the various ways of steering and managing food security\(^1\), which is most often defined as “all people, at all times, having physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.” (FAO 2003) However, in spite of various calls for food security governance, it is not very clear yet what food security governance entails, what its essential characteristics or features are, and how it could be enhanced. Food insecurity is a complex problem that involves a plurality of governance levels, domains, issues, interests, and ideas. How do and can governance arrangements respond to such complexity? And is there any space for improvement in the ways in which food insecurity is being addressed?

The aim of this paper is to clarify what food security governance entails, thereby identifying its key characteristics, debates and challenges. This objective was addressed by drawing on the current state of knowledge, through performing a systematic review of both academic and grey literature elaborating on food security governance. This paper presents the synthesis that resulted from this review. The reason for choosing this method is that bits and pieces of knowledge regarding food security governance already exist, but these are only sparsely linked to each other. In other words, there is no clear community of scholars doing research on food security governance. On the one hand this has proved to be an advantage, because it resulted in food security governance being studied through various lenses, disciplines and approaches, offering complementary insights. On the other hand, it has prevented the realization of a combined understanding up to now. This paper aims to fill this gap by providing a comprehensive synthesis of the state-of-the-art and by a first identification of opportunities for future research.

The article proceeds with a clarification of the systematic review methods that were used in the following section. The data is described in section 3, which provides overview of the characteristics of the articles and other texts that were included in the review. The synthesis of the literature is presented in section 4, and discussed in section 5. The paper ends with some conclusions and recommendations for further research.

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\(^1\) Food security governance thus refers to the governance of food security, and not to a specific type or mode of governance.
2. Methodology

To analyze what food security governance is and entails, systematic methods were used to review the current state of literature. The advantage of using systematic review methods over other review types is that researcher bias can be limited and made visible. Systematic methods involve, inter alia, a certain structured way of working, the use of clear inclusion and exclusion criteria when selecting eligible literature, and a positive attitude towards transparency, in both doing the analysis and when reporting findings. They require the researcher to take one’s reader by the hand and walk him or her step by step through the procedures being followed and the choices being made during the research process. As such, systematic review methods can enhance the trustworthiness of the conducted research, and, consequentially, the legitimacy of claims being made (Gough et al. 2012).

Before searching the literature, a protocol was written, explicating, inter alia, the background of the study, the objectives of the review, inclusion and exclusion criteria, a search strategy, and a strategy for developing the synthesis. Throughout the process, a general log was kept, as well as a specific log for the literature search. It is important to note that this structured way of working does not imply that the research process was linear. Instead, the process was highly iterative, involving continuous reflection on and adjustment of the formulation of the research objective, search strategies, data sources, et cetera. The choices being made during this process were recorded in the log.

2.1 Data collection

Both academic and ‘grey’ literature were searched in the data collection process. Grey literature refers to “document types produced at all levels of government, academia, business, and organization, which are delivered in electronic and print formats not controlled by commercial publishing, and thus publishing is not the primary activity of the producing body” (Higginbottom et al. 2012). For both types of literature, reflections on both, concrete food security governance arrangements and food security governance in general were included. Both empirical and theoretical or conceptual articles and documents were considered potentially relevant, whereby the key criterion was whether documents could provide relevant insights into the nature of food security governance.
Academic articles, reviews, articles in press, and conference papers were retrieved through searching two digital bibliographical databases: Scopus and Web of Science. Scopus and Web of Science were both chosen to prevent either European (Scopus) or American bias (Web of Science). Grey literature was retrieved through searching Google Scholar, and the websites of five global organizations: the UN Food and Agriculture Organization (FAO), the World Food Programme (WFP), the World Trade Organization (WTO), the International Fund for Agricultural Development (IFAD) and the World Bank. Although Google Scholar has some serious limitations when performing a systematic review (cf. Anderson 2013), it did provide two relevant documents that could not have been retrieved otherwise. I therefore choose to accept this impurity for the good of the comprehensiveness of the included body of literature.

All databases were searched on a combination of the terms “food (in)security” and (synonyms of) governance (Appendix I). For the academic databases, this query was restricted to the titles, abstracts, and keywords of articles. The first search led to 663 academic articles, 2 additional documents on Google Scholar, and 10 texts from global organizations. All abstracts were loaded in Endnote and read. Academic articles were judged potentially relevant when they matched the inclusion criteria (Appendix II) (n=65).

Full papers were read and judged again by using the inclusion and exclusion criteria. This led to a final body of academic literature of 30 articles. Backward and forward reference checking led to 8 more articles (Appendix III), resulting in a total of 50 documents. It is important to note that no quality criteria were used. Quality criteria are less relevant for configurative reviews that aim to combine various theoretical notions and conceptualizations into an encompassing synthesis (Gough et al. 2012). Instead, the arguments and conceptualizations in the various documents were compared to each other with the aim to examine how they make sense in relation to each other and how various approaches or conceptualizations fit within a broader picture.

2.2 Data analysis

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2 Duplicates excluded
3 I scanned the first twenty pages of results. All other relevant results were already retrieved through searching Scopus and Web of Science, global organizations' websites, or reference checking.
4 8 from the FAO website, 2 from IFAD. Searches on the other websites did not lead to relevant results.
All articles and other documents were read again, and data was collected in a data extraction table (Appendix IV). The data extraction table presents the results literally, thus without interpretation of the researcher, and includes the following categories: governance level, governance locus, type of document, method, theoretical orientation, definition of food security governance, core argument and insights in the nature of food security governance, and recommendations that are made to improve food security governance. The table is a summary of the key insights into food security governance that each document provided, and served as the basis for the synthesis.

Before writing the synthesis the various insights in the table were compared to each other and grouped under the main themes or observations that recurred throughout the literature. This provided the opportunity to identify differences and similarities between the data, and to interpret these. The themes eventually became the headings of the synthesis. The synthesis is thus the researcher’s interpretation of the core arguments throughout the data extraction table and associated literature.

2.3 Limitations

In spite of the attempt to review a body of literature that is as comprehensive as possible, this review has some serious limitations. First, only documents written in English were included. The initial search led to several results in other languages, such as French, Spanish, and Portuguese, that could be highly relevant for the purposes of this review but were excluded nevertheless (e.g., Lerin and Louafi 2012). Second, the review is heavily skewed towards academic peer-reviewed articles. Although some book chapters, conference proceedings and grey literature documents were included, it is quite conceivable that complementing the body of literature with books, dissertations, and more grey literature, could lead to additional insights. Finally, academic literature was searched using the two biggest databases, Scopus and Web of Science. Although these two databases together cover a significant majority of international peer-reviewed journals, other, more specialized databases might cover other potentially relevant journals. In addition, new journals are often not (yet) covered by both databases.

3. Data description
The included body of literature can be categorized along various characteristics. This section presents a ‘map’ of the literature on food security governance (see: Gough et al. 2012).

Using the ISI Web of Knowledge Journal Citations Report shows that the various journals in which the 35 included academic articles were published cover a broad range of disciplines within both the natural and social sciences. Among these fields are International Relations (n=5), Food Science & Technology (n=4), Sociology (n=4), and Economics (n=3). Only one journal covered three included articles (Food Security), which, together with the journal categories, indicates the spread of academic attention across various disciplines and communities.

Regarding the years in which the documents were published, one can see an upward trend from 2009 onwards. Whereas none of the years before 2009 cover three or more documents, this increases to five and four in 2009 and 2010 and ten, twelve and nine in 2011, 2012, and 2013. This observation confirms the notion that the recent food crises formed the impetus for an increase of research on food security in general (Rockson et al. 2013).

Figure 1 shows that a big proportion of the documents included focus on the global governance level. The concept of food security governance seems most integrated in the discourse of and research on global organizations, such as FAO, the Committee on World Food Security (CFS), and the G20. Nevertheless more than a fifth dealt with national food security governance. Countries that were covered range from developed countries like Canada and Japan, to developing countries such as South Africa, Malawi, the Philippines, and Brazil. Only a relatively small proportion of the literature covered governance of food security on sub-national levels.

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5 Based on journal subject categories in Journal Citations Report. Only ISI-indexed journals were included in this analysis (10 articles did not publish in an ISI-indexed journal. In case journals were ascribed to multiple categories, all categories were included.

6 Up to the time of data collection, see Appendix I.
Finally, the data extraction table indicates that 71% (n=29) of the 41 academic publications did not collect data, or did not account for the methods being used. Those that did mention the methods, most often used interviews (n=8) or documents analysis (n=6).

4. Synthesis of the food security governance literature

In this section, a synthesis of the body of included literature is presented. The section starts with elaborating how food security governance has been defined in the literature. The remainder of the section focuses on seven important themes or observations that recur throughout the articles and documents.

Definitions of food security governance are scarce and vary

Of the 50 included documents only 9 provided a definition of food security governance, or mentioned what food security governance refers to (FAO 2009; Mohamed Salih 2009; High-Level Task Force on the Global Food Security Crisis 2010; FAO 2011a, 2011b; Margulis 2012; Pérez-Escamilla 2012; Colonelli and Simon 2013). The remainder of the articles and documents did either discuss food security governance without explicitly defining the concept, or did not have food security governance as their core focus but provided some insights in the margins.

The oldest definitions of food security governance are given by FAO (2009) and Mohamed Salih (2009). According to a FAO communication, global governance of food security refers to “a mechanism that will facilitate debate, convergence of views and coordination of actions to improve food security at global but also at regional and national levels.” (FAO 2009) The definition is thus constricted to global governance, which actions should also benefit food security on ‘lower’ levels. Governance of food security on these levels themselves is not mentioned. Governance is approached as a mechanism to exchange and coordinate views and actions, which is considered necessary for effectively addressing food insecurity. Mohamed Salih takes a somewhat different approach and argues that the governance of food security is about “the exercise of power within institutional contexts, particularly crafted to direct, control, and regulate activities concerned with food security whereby these institutions are viewed by citizens as legitimate, accountable, and transparent.” (Mohamed Salih 2009). This definition does not so much emphasize exchange
and coordination but, rather, the exercise of power that should lead to action that
contributes to food security. Although it does not say so explicitly, it seems to be focused on
formal governmental institutions, thereby providing some quality criteria that this
institutional exercise of power should meet: legitimacy, accountability, and transparency.

The High Level Task Force on the Global Food Security Crisis also defines what
constitutes good governance for food security, and expressed this goodness in terms of
effectiveness rather than democratic quality criteria: “Good governance for food and
nutrition security is fundamentally about national governments prioritizing policies, plans,
programs and funding to tackle hunger, malnutrition and food insecurity in the most
vulnerable populations, whether it be through humanitarian or development assistance,
nationally, bilaterally or multilaterally.” (High-Level Task Force on the Global Food Security
Crisis 2010) In contrast to the earlier FAO definition, this definition places food security
governance primarily at the level of national governments. In line with Mohamed Salih, the
taskforce emphasizes formal governmental actions, which could be taken in the context of
international cooperation. Note that, apart from food in itself, the definition explicitly
highlights the nutritional dimension of food security.

A specification that is used in multiple pieces, (FAO 2011a; Pérez-Escamilla 2012;
Colonelli and Simon 2013) is one provided in a FAO background paper for a workshop on
good food security governance in 2011, which is states that food security governance
“relates to formal and informal rules and processes through which interests are articulated,
and decisions relevant to food security in a country are made, implemented and enforced on
behalf of members of a society.” (FAO 2011a). What strikes is that this description does not
only accentuate formal, but also informal rules and processes, which implies that food
security governance goes beyond formal policy-making in government institutions. It also
stresses that not only do views on food security differ, as mentioned in the previous FAO
definition, but also that various interests are involved. Additionally, like in Mohamed Salih’s
definition, governance should rest on a society’s mandate. In the report that followed the
workshop, the definition was slightly adjusted: “governance for food and nutrition security
relates to formal and informal rules and processes through which public and private actors
articulate their interests, and decisions for achieving food and nutrition security (at local,
national and global level) are made, implemented and sustained.” (FAO 2011b). What this
description adds to the previous is a focus on nutrition, on both public and private actors,
and on multiple-levelness. Regarding the last, it is not clear whether this refers to multiple levels of governance, or of merely aiming to have an impact on multiple levels of food security.

A last description of food security governance again primarily relates to global food security. According to Margulis, “there are over a dozen international institutions active in the field of food security. Working alongside these institutions are numerous regional, non-governmental and private organizations. This decentralized patchwork of institutions constitutes what may be best described as global food security governance.” (Margulis 2012)

This description thus involves an understanding of food security governance as the global constellation of institutions and organizations that are active on food security.

Food security governance is thus defined and described in various ways, whereby each description highlights different elements (table 1). Also, definitions use various nomenclatures, such as ‘food security governance’, ‘governance of food security’, and ‘good governance for food security’ (FAO 2011a). Moreover, most definitions and descriptions sketch an ideal state of (good) food security governance, instead of a reflection of a current regime. Important elements of such an ideal state seem to be the exchange and coordination of views and actions, multilevel governance, good governance quality criteria, the nutritional dimension, the involvement of both public and private actors, and of both formal and informal rules and processes. However, none of the definitions above included all these elements. Consequentially, it remains unclear which criteria a concrete governance arrangement should meet before it can be considered a form of (good) food security governance.

Table 1 Elements of the various definitions

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Governance can be both a driver of and a solution to food insecurity

Governance is both a potential driver of, and a potential solution for situations of food insecurity. In some situations, poor governance, and not so much natural conditions, constitutes the main driver of hunger. Conflict, lack of institutional capacity, poor policy design, and lagging implementation, can inflict serious harm to the production and distribution of healthy food. Boyd and Wang (2011), in this respect, refer to Peter Bauer’s earlier example of North and South Korea, which have similar natural conditions but big differences regarding their levels of food security, which can be traced back to differences in the quality of governance. Poor governance can also be a contributing factor of food insecurity, when it fails to effectively address natural, economic or social drivers of conjectural or structural hunger (Sahley et al. 2005; Committee on World Food Security 2012; Pereira and Ruysenaar 2012). For example, in a food security assessment of Malawi, Sahley et al. (2005) argued that the limited capacity of the Malawian government to implement its own policies and programs formed a significant restraint to tackling the country’s development challenges. Likewise, Pereira and Ruysenaar (2012) mentioned that governments often fail to respond to crises because of poor decision making, limited coordination, weak institutions, and scarce resources. It is thus of utmost importance to include governance concerns when developing food security programs.
Whereas bad governance often has a significant negative impact on food security, the opposite is true for good governance. Although often overlooked, well-developed governance arrangements that are able to respond effectively to both crisis situations and structural concerns are key to eradicating hunger (High-Level Task Force on the Global Food Security Crisis 2010; L. Haddad 2011; Galiè 2013). What such a governance regime and associated arrangements should look like will be further elaborated in the following sections.

Food security is a complex issue to ‘govern’

Although the importance of food security governance has become more and more acknowledged, food security is not an issue that lets itself being governed easily. It is now increasingly being recognized that food security is a highly complex and multidimensional issue that is impacted by a broad range of drivers, stretches across various scales, and involves multiple sectors and policy domains (Makhura 1998; Maluf 1998; Drimie and Ruysenaar 2010; Behnassi and Yaya 2011; Margulis 2011; Marzeda-Mlynarska 2011; McKeon 2011; Duncan and Barling 2012; Pereira and Ruysenaar 2012; Colonelli and Simon 2013; Margulis 2013). Regarding the last, food security is not so much a domain in itself, but, instead, an issue that is being affected by a wide array of domains, such as agriculture, trade, fisheries, environment, development cooperation, and energy, as a result of which many actors and institutions are involved in food security governance (Mohamed Salih 2009).

Consequentially, it is difficult to identify the main drivers of food insecurity, the more so because there is a distinction between structural food insecurity and associated drivers, and conjectural food insecurity, such as hunger related to sudden food price spikes (High-Level Task Force on the Global Food Security Crisis 2010; Clapp and Murphy 2013). Nevertheless, there is increased awareness of the structural factors that play a role (Margulis 2013).

Not only does food security spread across domains or sectors, it also stretches across spatial scales. States of as well as challenges to food security can be considered on a global, regional, or national level, but have also increasingly come to be studied and addressed at the local, community, household, or individual level over the last decades. Whereas Robert Paarlberg (2002) argued that the main drivers and solutions should primarily be sought at the national level, recent food crises have shown that ongoing globalization and associated entanglement of world food systems has led to a situation in which food insecurity drivers
have increasingly come to lie outside the scope of national governance (McKeon 2011). The multi-levelness of food security therefore requires an integrated, multi-level governance approach, including both national and global governance.

As a result of this complexity, and because of the multitude of actors and institutions involved in food security governance, the issue has become highly contested. As will be further elaborated below, interests, perspectives, resources, power levels, and paradigms vary, which makes an integrated response even more complex (ibid.).

Current governance architecture is fragmented and ineffective

Addressing an issue as complex and contested as food security requires a well-designed and comprehensive governance regime. Nevertheless, a majority of the reviewed literature is highly critical about the current architecture and practices of food security governance, and offers recommendations for a more effective and/or democratic future regime.

Most of this critique is focused on the global level of food security governance. However, to a large extent this can be attributed to the lack of national and sub-national governance arrangements and associated studies, especially in developing countries (Thomson 2001). The main critique on the global governance of food security is that there is no truly authoritative and encompassing body or institution with a mandate to address food security concerns across sectors and levels (Amalric 2001; von Braun 2009; Behnassi and Yaya 2011; Margulis 2011; McKeon 2011; Colonelli and Simon 2013). Instead, responsibilities, jurisdictions and foci are spread across a broad range of international organizations and forums, which all have their own core business, but none of which deals with food insecurity in a holistic and inclusive manner (Global Forum on Food Security and Nutrition 2011; Committee on World Food Security 2012). Margulis (2013) and Orsini et al. (2013) have termed this the shift from an international food security regime towards a regime complex for food security, in which food security is affected by a wide array of governance regimes that all have their own actors, forums, discourses, interests, et cetera. As a result, considerable overlap of mandates and actions exists, in the best scenario resulting in duplicate actions, but in the worst to conflict between interests, visions, and paradigms (Margulis 2011, 2012, 2013; McKeon 2013). Moreover, this fragmented effort has resulted in a large number of projects that lack the scale to make a real difference (Committee on
World Food Security 2012). This global governance vacuum has therefore led to a general inadequacy to effectively tackle both structural hunger and sudden food crises (McKeon 2011). The recently reformed CFS could potentially fill this vacuum, but still needs to prove its effectiveness (FAO 2010; High-Level Task Force on the Global Food Security Crisis 2010; Global Forum on Food Security and Nutrition 2011; FAO 2012; Clapp and Murphy 2013).

In addition to the occurrence of conflict between international bodies, these bodies also affect each other through their norm-setting tasks, the creation of rules, and diffusion of paradigms. This effect is reinforced by the participation of actors in several of these bodies at the same time, all of which attempt to pursue their interests through various channels (González 2010). Clapp and Murphy (2013), for example, argued that the G20 actions regarding food security had a “chilling effect” on the progress being made in the CFS.

This raises questions about the appropriateness of institutions’ involvement. On the one hand, the involvement of multiple bodies may increase resources and political priority, on the other hand, it can cause overlap, conflict, inertia, and administrative burdens.

Although a big proportion of documents focuses on the global level, part of the literature describes similar dynamics in national or local governance. Sahley et al. (Sahley et al. 2005), for example, observed that policy formation in Malawi was ad hoc, and resulted in a “plethora” of policies and programs, which were sometimes disconnected and contradictory to each other, and which were spread over central government agencies. Similarly, Drimie and Ruysenaar (2010) argued that the South-African Integrated Food Security Strategy (IFSS) was poorly executed, and had a strong emphasis on agriculture.

Coordination between departments lacked, sub-programs were weakly integrated, and supportive legislation was lagging behind. This indicates that fragmented responses can occur at various governance levels.

Effective food security governance requires coherency and coordination across multiple scales.

Whereas the previous section described the flaws in current food security governance, this section focuses on how these flaws could, ideally, be addressed. Current food security governance is generally characterized by fragmentation, overlap, conflict, and
ineffectiveness. Good food security governance would involve high degrees of coherence and convergence, coordination and integration, and institutional capacity.

Addressing the complex food insecurity drivers requires policies and programs that mutually reinforce each other, thereby contributing to shared goals and outcomes. The individual actions of (international) organizations, countries, donors, corporations, and other private actors can address various drivers and aspects of food insecurity, but would, together, have to result in a coherent and holistic approach, whereby trade-offs and duplicated efforts are minimized and one’s course of action does not impair that of others (Maluf 1998; MacRae 1999; FAO 2009; Drimie and Ruysenaar 2010; High-Level Task Force on the Global Food Security Crisis 2010; Margulis 2011; McKeon 2011; FAO 2012; Clapp and Murphy 2013; Margulis 2013; Rola 2013; Seed et al. 2013). Realizing this, calls for high degrees of coordination, both horizontally (i.e. across bodies at the same governance level) and vertically (between governance levels), and integration of food security concerns into other policy domains or sectors. This would imply that on each of the governance levels regimes, sectors, policy domains, and associated actors and institutions, would have to be brought into line, which can only be realized by active coordination on the one hand, and the inclusion of multiple public and private actors and decentralized initiatives on the other (Edralin and Collado 2005; FAO 2009; Drimie and Ruysenaar 2010; High-Level Task Force on the Global Food Security Crisis 2010; Behnassi and Yaya 2011; Marzeda-Mlynarska 2011; Committee on World Food Security 2012; Lang and Barling 2012). At the same time, coordination between governance levels needs to be stimulated, so that drivers of food insecurity are addressed on the appropriate level, thereby complying with the principle of subsidiarity (Global Forum on Food Security and Nutrition 2011; McKeon 2011). On both scales, that of sectors and governance levels, boundary organizations can play an important role (Misselhorn et al. 2012). As the term indicates, these organizations operate on the boundaries between sectors or governance levels, and as such have the potential to stimulate coordination. Regional organizations, such as the European Union or ASEAN, or their divisions, provide promising opportunities in this regard (FAO 2011b).

These last examples point to the issue of institutional capacity, which is required to organize sustained coordination (Thomson 2001; L. Haddad 2011; Margulis 2011). As the example of Malawi showed, a lack of institutional capacity can lead to lagging implementation, whereas it may also hamper the quality of policy formation and the
integration with multiple policy sectors and governance levels (Sahley et al. 2005). Moreover, not only the capacity itself matters, but also where this capacity is situated institutionally. Drimie and Ruysenaar (2010) showed that although there was a certain amount of capacity to implement the South African IFSS, this capacity was mainly positioned at the Department of Agriculture, which led to a neglect of non-agricultural issues and actors related to food security. For that reason, the researchers pleaded for a ‘concerted effort’ of departments and other actors. Here, the importance of boundary organizations, such as interdepartmental committees, becomes clear again. Various authors have either showed the effectiveness of these kinds of organizations, or plead for the creation of them (Maluf 1998; FAO 2011b; Misselhorn et al. 2012). Both Misselhorn et al. (2012) and Pereira & Ruysenaar (2012) argued that creating such capacity demands a different governance perspective. According to Pereira and Ruysenaar, states should adapt their monocentric or politicotechnical understandings of governance through to adaptive governance. Adaptive governance refers to new concepts of governance to deal with socio-ecological systems that are highly complex and unpredictable. Food, and food security in particular, are good examples of such systems. Adaptive governance, then, “is the attempt to reconcile, not only interactions across multiple levels and scales, but the cross-level and the cross-scale interactions too.” (ibid., p. 44)

Food security governance is characterized by a wide variety of conflicting ideas. One of the most crucial aspects that coordinative institutions need to deal with in order to establish a coherent and comprehensive response to food insecurity, is the plurality of ideas around food security in general, and food security governance more specifically. This multitude of ideas about how food insecurity could most effectively be addressed is a result of the variety of sectors, countries, governance levels, and associated actors and interests, that are involved in food security governance. Ideas, here, are an umbrella concept for ideational concepts that are being used in the literature on food security governance, such as discourse, paradigm, norms, governmentality, or philosophies. Each of these concepts originates from different academic communities and traditions. It goes beyond the scope of this article to reflect on the differences between those traditions, but what binds these
ideational concepts is that they shape how actors make sense of a perceived reality and communicate about it.

Some of these ideas are deeply embedded in the culture or administrative philosophy of organizations, countries or other actors. Barclay and Epstein (2013), for example, explained how Japan’s approach towards food security is firmly grounded in the ways of thinking about the protection of national culture and social and environmental responsibility. This ‘governmentality’ led the Japanese government to support both free trade and protectionism at the same time. Similarly, Edwards (2012) empirically showed that collaborative governance had become deeply institutionalized in the administrative philosophy of various U.S. state agencies. Edwards’ results form an interesting contrast to Seed et al. (2013), who revealed that bureaucratic cultures in state agencies in British Columbia were strongly dominated by ideas of top-down policy-making. A third example is provided by Haddad (2012), who by analysing the Quran showed that Islam champions a state-centred perspective on food security.

On an aggregate level, these perspectives or modes of thinking can result in encompassing discourses or paradigms, which can have a significant impact on how food security is approached, on the distribution of power and resources, and on which governance or policy options are being considered. Often, various discourses or paradigms exist at the same time and compete for domination, which leads to conflicts between their proponents about the courses of action to follow and about who is to decide (cf. Lang and Barling 2012). These conflicts in food security governance become most visible in the work of Matias Margulis (2011, 2013), who’s central argument is that diverging rules and norms (paradigms) across the global regimes of agriculture and food, international trade, and human rights concerning the appropriate role of states and markets in tackling food insecurity, cause conflict and have a detrimental effect on policy coherency. Before global food security governance became a regime complex, assumptions and principles were more shared within the food security regime (Coleman and Gabler 2002; Margulis 2013).

Similar ideational conflicts can also occur within organizations. Both González (2010) and Jarosz (2009) argued that the FAO is subject to conflicting discourses. According to Jarosz, the ineffectiveness of FAO can to a large extent be traced back to a conflict between a discourse that centres around free trade and productivity, and one that is more concerned with a shared moral responsibility and human rights. Stakeholders in these organizations
play an active role in protracting these conflicts by actively framing food security (governance) according to their views and interests (McKeon 2011; Barclay and Epstein 2013; Clapp and Murphy 2013).

Recapitulating, the variety of, conflicting, ideas on food security governance further increases the complexity of dealing with the issue. There is no clear and easy solution in this respect, but first steps would be to increase awareness and understandings of the multitude of ideas, and to agree on some basic principles and values (McKeon 2011; Margulis 2013).

New players arrive at the forefront

Besides an increased pluralism of ideas, and very much related to it, food security governance has witnessed an increase of actors that are involved in designing food security approaches or that have a direct or indirect impact on food security worldwide (Koc et al. 2008; von Braun 2009; Behnassi and Yaya 2011; McKeon 2011; Duncan and Barling 2012; Edwards 2012; Margulis 2012; Pereira and Ruysenaar 2012; Seed et al. 2013). This increase of stakeholders can be reduced to three types in particular: international organizations, civil society organizations (CSOs), and private sector corporations. These actors are active on all governance levels and within international organizations or government agencies, whereby they often ‘shop’ between forums or venues, depending on where their interests are best represented (McKeon 2011; Duncan and Barling 2012).

The increase of international bodies particularly followed the 2007-2008 world food crisis. After the crisis, the CFS was thoroughly reformed, the UN installed a High-Level Task Force, the World Bank renewed its focus on agriculture and food security, and the G8/G20 got more and more involved (Jarosz 2009, 2011; Margulis 2012; Clapp and Murphy 2013). However, as the above section on the global architecture made clear, this increase of organizations has not been without criticism.

Civil society participation has not only increased in recent years, but is also considered crucial for effectively addressing food insecurity on all levels (Makhura 1998; Thomson 2001; FAO 2009; Jarosz 2009; Rocha and Lessa 2009; von Braun 2009; High-Level Task Force on the Global Food Security Crisis 2010; Global Forum on Food Security and Nutrition 2011; Margulis 2012; Seed et al. 2013). The literature indicates a broad range of advantages that CSOs could provide to more traditional government-centred approaches.
First, civil society can provide the policy-making process with valuable information. Local, bottom-up knowledge creation may contribute to identifying food insecurity problems and response gaps that policy-makers are often unaware of (Koc et al. 2008; Bastian and Coveney 2012; Brownhill and Hickey 2012; Seed et al. 2013). Second, CSO participation brings food security governance closer to those who are hungry. It therefore enhances the legitimacy of and public support for food security interventions, which, together with the resources that CSOs can bring in, stimulates effective implementation (Koc et al. 2008; Behnassi and Yaya 2011; Edwards 2012). Third, CSOs can form ‘bridges’ between government agencies that did not cooperate before, or between various governance levels (global – national, national – local, global – local), and as such contribute to a multi-sector and multi-scalar approach (McKeon 2011; Edwards 2012). Fourth, CSOs often operate as co-workers of government agencies and can offer the capacity that government is often lacking (Seed et al. 2013).

However, in spite of these potential advantages and a handful of best practices, the inclusion of CSOs in food security governance is not self-evident. Both Seed et al. (ibid.) and Koc et al. (2008) showed that these forms of collaborative governance call for appropriate structures, capacity, and political will, which are not always on hand. In addition, involving civil society actors calls for a shift in bureaucratic philosophies, which requires time and continuous efforts. Moreover, some actors may benefit from the exclusion of others, because it enables them to fulfil their own agendas. The inclusion and exclusion of actors influences the structures and mechanisms of food security governance as well as the substance of decisions being made, and is therefore important to take into account when setting up or analysing arrangements (Duncan and Barling 2012).

A third group of actors that are increasingly involved in food security governance are private corporations and related associations. Compared to CSOs this group has received relatively limited attention. This is partly because, although private corporations do participate in global forums and organizations, most of their activities and impacts remain relatively hidden. This has led to critiques about the lack of regulation and democratic control of private sector interests (Behnassi and Yaya 2011; McKeon 2011), but others have argued that this new reality should be accepted and that these players should be further embedded in food security governance (von Braun 2009).
‘Good’ food security governance relies on resources and democratic values

As repeatedly stated in the above sections, most of the literature focuses primarily on what food security governance should ideally look like, thus on what good food security governance entails. The previous sections already showed that coherency, coordination, and dealing with ideational pluralism and a broad range of actors, are crucial elements of a good governance approach. Here, two more are added: resources and democratic values.

Sufficient resources are essential in order to create and maintain responsive and effective governance arrangements. Many arrangements have failed to effectively address hunger because most energy was spend on shaping their architectural features, without sufficiently thinking out a sustainable resource allocation that these architectures need to be effective on the long term. Various types of resources can be distinguished in this respect. First, financial resources, i.e. a sufficient budget (FAO 2009). Edralin and Collado (2005), for example, argued that although decision-making authority was decentralized in the Philippines, the effectiveness of these measures was hampered by a lagging decentralization of financial resources. A second crucial resource is political will, leadership and prioritization (Makhura 1998; Sahley et al. 2005; High-Level Task Force on the Global Food Security Crisis 2010; Global Forum on Food Security and Nutrition 2011; L. Haddad 2011; Committee on World Food Security 2012). The success of an approach often relies on the sustained efforts of one or more actors. A particular concern in this regard are political shifts, such as changes of office. Such shifts can lead to a discontinuation of political efforts (Rocha and Lessa 2009).

A third resource often mentioned is knowledge. Knowledge can come, inter alia, from stakeholders who are active on the ground, from the experience and expertise of policymakers, or from research institutes in the form of scientific evidence (Koc et al. 2008; FAO 2009; Rocha and Lessa 2009; Behnassi and Yaya 2011; Global Forum on Food Security and Nutrition 2011).

Besides resources, another element that is generally considered essential for good food security governance are democratic or ‘good governance’ values. However, good governance, here, does not necessarily refer to effective governance. It is well thinkable that governance arrangements are effective in addressing food insecurity without fulfilling particular democratic values. Values that are repeatedly mentioned are accountability, transparency, legitimacy, inclusiveness, and responsiveness (Mohamed Salih 2009; Rocha
These values are not only applicable during policy formulation, but throughout all governance processes, including implementation and evaluation (FAO 2011a). Regarding this last point, an important issue is how to measure the effectiveness of interventions. A solution proposed by Pérez-Escamilla (2012) is to use Experience Based Food Security Scales to measure household food security before and after interventions. Apart from these values, good food security governance relies on a general supportive environment in which human rights are respected and in which provision of basic public goods is guaranteed (Paarlberg 2002; Global Forum on Food Security and Nutrition 2011; FAO 2011a).

5. Discussion

The synthesis presented in the previous section together with the data description in section 3 show that attention to food security governance is rapidly rising among academic scholars and international organizations. The thread of the review was that food security is a complex issue to govern. To a large extent, this complexity is a result of globalization processes, which have resulted in flows of food and resources across the world and in an increasing interconnectedness and integration of food systems, governance regimes, and spatial scales (Oosterveer 2007; Margulis 2013). As a result of these processes, identifying the structural and conjectural drivers of food insecurity has become far from simple. In addition, food security approaches are highly contested. Food security governance involves a wide array of stakeholders, who have different and sometimes incompatible interests and ideas. Governing food security therefore requires the design of well-tailored governance arrangements in order to address hunger effectively. The sum of these arrangements would ideally form a governance regime that manages to transcend and align the plurality of sectors, policy domains, governance levels, ideas, and actors, in a holistic manner. Therefore, the main contribution of the insights that the literature provided, is the foundation it laid for what (future) good food security governance should look like.

However, beside the contributions that the current state of literature has made to obtain an understanding of food security governance, several gaps or points of discussion can be identified. Here we name four. First, one of the things that strikes is the absence of an agreed-on definition of food security governance. Several definitions circulate in the
literature, but none of them includes all important elements, and all have problematic shortcomings. Take for example the definition of the High Level Task Force, which emphasizes the role of government. Does this imply there is no governance when governments are not involved? Combining the various elements that have been mentioned throughout the body of literature with the definition of governance of Torfing et al. (2012) that was mentioned in the introduction, I propose the following definition of food security governance: (1) the whole of alternative ways of steering and managing both structural and conjectural food (in)security, (2) in which both public and private actors and institutions are involved, (3) which spans across spatial scales, (4) and which includes both formal and informal rules and processes.

Second, in spite of rising attention to food security governance, a majority of the reviewed publications was of a conceptual or normative nature. It seems that not many empirical studies have been conducted⁷, although it could be the case that some researchers did use empirical methods but did not account for them. Our knowledge of food security governance is thus to a large extent dependent on narratives. Although these narratives have contributed to the rise of attention to governance in food security approaches, this lack of empirical foundations is somewhat worrying. Not only does it hinder obtaining a sound academic understanding of the governance issues at hand, it also weakens the strength of recommendations that are made to policy-makers and stakeholders involved in designing food security governance arrangements. Food security governance is therefore in need of further empirical investigation and theory testing, for which the state-of-the-art and this review could serve as a starting point.

Third, and related to the previous point, a large proportion of the current literature focuses on what food security governance should ideally look like, instead of how the governance system is functioning at present. Food security governance is often used as a synonym for good food security governance, meeting particular effectiveness and democratic criteria. Notwithstanding the importance of good governance, more is to be told about current governance (best) practices. In particular, more research should be done on sub-national governance levels and initiatives, as these have been largely neglected in the

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⁷ Nota bene: this refers to empirical studies on governance (arrangements) on a more meta-level, not on particular food security solutions, projects, or programs.
literature so far. It is not clear whether this is due to a lack of sub-national governance
initiatives or to a blind spot in the research being done.

Fourth, although all included literature provided at least some insights in food
security governance, only a few articles used an explicit governance lens (Marzeda-
Mlynarska 2011; Duncan and Barling 2012; Edwards 2012; Pereira and Ruysenaar 2012).
Applying such a perspective would prevent re-inventing the wheel, because a lot can be
learned from comparable issues and associated communities, such as climate change
adaptation (e.g., Biesbroek et al. 2013; Termeer et al. 2013b). In particular, the governance
literature could contribute to furthering the thinking about how to design governance
arrangements that can effectively address an issue as complex and unpredictable like food
insecurity. For example, both highly complex and contested, food security has all the
characteristics of a “wicked problem” (Rittel and Webber 1973). Wicked problems are policy
problems that are “ill-defined, ambiguous, and contested, and feature multilayered
interdependencies and complex social dynamics” and which “are highly resistant to solutions
because today’s problems emerge as a result of trying to understand and solve yesterday’s
problems”. (Termeer et al. 2013a) These type of policy problems cause serious challenges
and frustrations to policy-makers and stakeholders because there is no final solution to the
problem. One might argue that this does not apply to food insecurity, because there is a
simple solution: making sure that everyone has enough to eat. However, as the review has
showed, food security is a multidimensional issue that does not only involve the quantity of
food that people have access to, but also involves aspects as broad as sustainability, human
health, nutritional quality, and human rights. Taken together with conflicts about the roads
to follow, this multidimensionality implies that a final solution is very hard, if not impossible,
to reach. This does not mean that nothing can or should be done. Termeer et al. (2013a)
argue that ‘small wins’ can be achieved through designing and using governance
arrangements that are responsive, reflexive, resilient, and able to revitalize deadlocks.

Although reflections on governance modes proved largely absent from the food
security governance literature, some articles made suggestions that come close to the
recommendations of Termeer et al., most notably the articles of Misselhorn et al. (2012),
Pereira and Ruysenaar (2012), and Edwards (2012). The first two both underlined the
importance of adaptive governance. Adaptive governance refers to the development of
“new governance concepts that can handle the inherent complexity and unpredictability of
dynamic social-ecological systems.” (Termeer et al. 2010) In addition, Misselhorn et al.
mentioned the role that boundary organizations could play in these innovative governance
arrangements. Edwards emphasized the potential of collaborative governance, which is
defined as “a governing arrangement where one or more public agencies directly engage
non-state stakeholders in a collective decision-making process that is formal, consensus-
oriented, and deliberative and that aims to make or implement public policy or manage
public programs or assets.” (Ansell and Gash 2008) Although it goes beyond the scope of this
article to examine how these governance approaches could contribute to understanding
food security governance, I believe much can be gained by further applying and combining
them in future food security research.

6. Conclusions

Although the importance of governance for effectively addressing food insecurity has
increasingly been recognized, not much is known yet about what food security governance
entails and what its key characteristics and challenges are. The synthesis presented in this
paper aims to fill this gap. A systematic review of the food security governance literature led
the researcher to identify eight main themes or observations:

1. There is no agreed-on definition of food security governance. Existing definitions
differ regarding the elements they consider crucial in food security governance.
2. Governance can have both a positive and a negative impact on food security. Bad
governance may be the principal or a contributive driver of hunger, whereas good
governance is crucial for any food security approach to be effective.
3. Food security is a complex issue to ‘govern’. Food security is multidisciplinary and
involves multiple scales.
4. The current governance architecture has largely failed. On the global level, too much
overlap and conflicts exists, whereas on national and sub-national levels governance
arrangements are often absent.
5. Effective food security governance requires a holistic approach with a focus on
coherency, integration and coordination.
6. Ideas about what food security governance is, and how food security could most effectively be addressed vary and often conflict with each other. These ideational conflicts increase the complexity of designing holistic governance solutions.

7. Food security governance involves a broad range of actors, at multiple levels and from both public and private sectors. The inclusion of ‘new’ stakeholders offers the potential to enhance the effectiveness of governance systems, but also leads to new challenges.

8. ‘Good’ food security governance includes notions of good governance and democratic values, as well as the provision of adequate resources.

In the discussion of the synthesis, a new definition of food security governance was proposed, which combines various elements of previous definitions: (1) the whole of alternative ways of steering and managing both structural and conjectural food (in)security, (2) in which both public and private actors and institutions are involved, (3) which spans across spatial scales, (4) and which includes both formal and informal rules and processes.

This synthesis aims to provide a starting point for further research on the governance of food security. More empirical studies should be conducted, because the current state of knowledge, and consequential governance recommendations, largely lack a sound empirical basis. In particular, more attention should be paid to national and sub-national levels of governance, has these have been largely overlooked in the literature. Drawing from the vast body of governance literature would prevent reinventing the wheel and could offer valuable insights into and recommendations for food security governance. Examples of particularly promising theoretical developments are the recent waves of studies on adaptive governance, collaborative governance, and boundary organizations. In this respect, much could be learned from communities that focus on similar complex or wicked issues, such as that of climate change adaptation. This is even more so the case because many of these issues are strongly linked with food security, and should therefore be included in a holistic approach. Eventually, it is only through obtaining a better understanding of current flaws in food security governance and of food security’s linkages with multiple issues, sectors and governance levels, that a smart governance system, that has the potential of effectively addressing hunger, can be developed.
Acknowledgements

The author would like to thank Robbert Biesbroek, Peter Tamas, and Hilde Tobi for their helpful comments and suggestions regarding the methods being used in this review, and Gerard Breeman for his feedback on a previous draft version.

To be complemented.
References


FAO (2012). FAO calls for strengthened food security governance. 


Appendix I: Search Strategy

<table>
<thead>
<tr>
<th>‘Food security’</th>
<th>‘Governance’</th>
<th>Search terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Food insecurity’</td>
<td>‘Government’</td>
<td><em>governance</em>;</td>
</tr>
<tr>
<td></td>
<td>‘Administration’</td>
<td>government*;</td>
</tr>
<tr>
<td>(synonym, although not matching exactly)</td>
<td>administration*: handling:</td>
<td></td>
</tr>
<tr>
<td>‘Handling’ (idem)</td>
<td><em>management</em>;</td>
<td></td>
</tr>
<tr>
<td>‘Management’ (idem)</td>
<td>stewardship; policy-making; “policy formation”;</td>
<td></td>
</tr>
<tr>
<td>‘Stewardship’ (idem)</td>
<td>superintendenc*</td>
<td></td>
</tr>
<tr>
<td>‘Superintendence’ (idem)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Policy-making’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Policy formation’</td>
<td></td>
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</tr>
</tbody>
</table>

When possible, we searched databases for an occurrence of “food (in)security” and (synonyms of) “governance” within a distance of five terms from each other. For Scopus and Web of Science, the search was restricted to titles, abstracts, and keywords of articles.

The exact queries were:

Scopus, performed on June 26, 2013:

(TITLE-ABS-KEY("food *security" W/5 (*governance* OR government* OR administration* OR handling OR stewardship OR policy-making OR "policy formation" OR superintendenc*)) OR TITLE("food security" W/5 *management*) OR ABS("food security" W/5 *management*)) AND DOCTYPE(ar)
Results: 396

(TITLE-ABS-KEY("food *security" W/5 (*governance* OR government* OR administration* OR handling OR stewardship OR policy-making OR "policy formation" OR superintendenc*)) OR TITLE("food security" W/5 *management*) OR ABS("food security" W/5 *management*)) AND DOCTYPE(re)
Results: 65

(TITLE-ABS-KEY("food *security" W/5 (*governance* OR government* OR administration* OR handling OR stewardship OR policy-making OR "policy formation" OR superintendenc*)) OR TITLE("food security" W/5 *management*) OR ABS("food security" W/5 *management*)) AND DOCTYPE(ip)
Results: 6
Because the keyword “management” led to too many irrelevant results, we restricted the combination of “food security” and “management” to the abstracts in Scopus (this was not possible in Web of Science).

Web of Science, performed on June 26, 2013:

(TS=("food *security" NEAR/5 (*governance* OR government* OR administration* OR handling OR stewardship OR policy-making OR "policy formation" OR superintendenc*))) AND Document Types=(Article OR Editorial Material OR Proceedings Paper OR Review)

Databases=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH Timespan=All years

Google Scholar, performed on July 5, 2013:

“food security governance”
Appendix II: Inclusion and Exclusion Criteria

Inclusion criteria:

1. In English
2. Both empirical and theoretical
3. Papers that reflect on concrete food security governance arrangements, or papers that provide insights into food security governance in general

Exclusion criteria:

1. Language: Not in English
2. Food security: Paper is not about food security, or no part of the paper is about food security
3. Governance: Paper does not reflect on either concrete food security governance arrangements or on food security governance in general.
# Appendix III: Reference Checking

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<th>Reason for not showing up in search results</th>
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<td>B</td>
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<td>Not covered by databases</td>
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<tr>
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<td>B</td>
<td>Lang, Barling 2012</td>
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<td>B</td>
<td>Margulis 2013</td>
<td>Book chapter</td>
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<td>B</td>
<td>Pereira 2012</td>
<td>Use other terms (institutional arrangements)</td>
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<td>Mohamed Salih 2009</td>
<td>B</td>
<td>Pereira 2012</td>
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<td>F</td>
<td>Gonzalez 2010</td>
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<td>Jarosz 2011</td>
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<td>Jarosz 2010</td>
<td>Governance link mainly in full paper (lacking in abstract)</td>
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Forward references were checked in both Scopus and Web of Science.
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<th>Locus</th>
<th>Type of FS document</th>
<th>Method</th>
<th>Theoretical orientation</th>
<th>FS governance definition</th>
<th>Argument &amp; Insights in FS Governance</th>
<th>Recommendations</th>
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<td>Amairic 2001</td>
<td>Global</td>
<td>WFS</td>
<td>Academic article; narrative</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Analyses why the World Food Summit of 1996 did not lead to significant outcomes, i.e. an effective food security approach. It argues that this was the case because the WFS has no competence over the global economy (regulation), over national policies, and over national political processes.</td>
<td>Two options are open: to fight for greater influence over national policies internationally (a stronger position of FAO vis-à-vis World Bank and IMF, and engagement in national politics by supporting particular initiatives or stakeholders. The latter is not seen as a very realistic option.</td>
</tr>
<tr>
<td>Barclay &amp; Epstein 2013</td>
<td>National</td>
<td>Japan</td>
<td>Academic article; narrative</td>
<td>None</td>
<td>Governmentality</td>
<td>None</td>
<td>Explains Japan's approach towards food security using the notion of governmentality, answering the question why Japan supports free trade and trade protection at the same time. Argues that the protection of domestic food production, particularly fisheries, is the result of deeply embedded in ways of thinking about protection of national culture, and social and environmental responsibility, which, in its turn, affect policy. In Japan, discussions of food security are always about self-sufficiency, and it actively frames food security as such internationally. Differences in definitions of food security reflect different policy positions. Applying governmentality highlights how the Japanese approach is entrenched through a range of apparently unrelated institutions and areas as different as whaling and tuna fishing.</td>
<td>A change to the approach could not occur simply through altering policies, or breaking up the entrenched interests. It would involve a fundamental rethinking of government obligations to the population regarding food as a whole and of Japanese diplomacy, thus in popular understandings of the way food production and food security should be done.</td>
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<tr>
<td>Bastian &amp; Coveney 2011</td>
<td>Regional (sub-national)</td>
<td>South Australia</td>
<td>Academic article, empirical</td>
<td>Interviews</td>
<td>None</td>
<td>None</td>
<td>The article aims to examine realist policy options for the South Australian government to improve food security. It argues that food security policies can better fit to local contexts by drawing on local knowledge. Local stakeholders can 44 policy options. Use of local knowledge.</td>
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<td>4</td>
<td>Behnassi &amp; Yaya 2011</td>
<td>Local, national and global</td>
<td>Academic book chapter</td>
<td>None</td>
<td>Argues that at root of the failure to effectively reduce hunger the failure of the global food security governance and architecture is a key factor. It is therefore necessary to develop adequate global food governance arrangements from a North-South redistribution perspective, with the active involvement of major stakeholders and support of sound scientific evidence. Food insecurity drivers are complex and play at different levels. Governance arrangements should therefore be set up at local, national and the global level. Weak institutions and lack of effective coordination and participation at all these levels impede the implementation of sound policies. At the global level, a truly representative, action-oriented body with strong political support, a credible scientific basis and financial support is lacking, at national levels, good governance and right to food principles are not promoted. Analyses the actors, powers and dynamics of the global food governance regime. Notices a shift from a governance regime dominated by powerful states and agriculture corporations to one dominated for most part by corporations, mainly food retail companies, which are increasingly independent from governmental power and control. The regime is fragmented, incoherent, and far removed from daily struggles of hungry. Food security governance should be a domain of governance in its own right.</td>
<td></td>
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<tr>
<td>5</td>
<td>Boyd &amp; Wang 2011</td>
<td>Not specified</td>
<td>Academic article; narrative</td>
<td>None</td>
<td>Article is not really about food security governance, but briefly refers to work of Bauer, who argues that good governance</td>
<td>Improving governance at national level is highest priority. However, global governance remains crucial to address some of the main drivers of food insecurity.</td>
<td></td>
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</tbody>
</table>
could bring about food security, and that famines are often the result of ill advised government policy. Bauer held that famines are often created or perpetuated by human beings and governments, rather than natural forces. Illustrated with the example of the two Koreas.

| 6 | Brownhill & Hickey 2012 | National, local, Kenya | Academic article, empiric | Interviews | None | The article presents a study that used key informant interviews of respondents from three interlinked institutions to provide a multiperspective lens through which Kenya’s food security policy barriers could be examined. The assumption is that mobilizing different parties’ knowledge results in new syntheses of information, which can be used to enhance policy-making. “Bottom-up” knowledge creation can lead to greater public ownership of policies, and combining sources of knowledge has the potential to provide a deeper, richer and more integrated understanding of the existing institutional and communication factors affecting food security policy outcomes in a range of contexts. |

| 7 | CFS 2012 | Global | CFS | Strategic framework | None | None | Provides a global strategic framework for food security and nutrition and particularly the position of the CFS within this framework. Framework is not explicitly focused on governance. States that the ambitious reform of the CFS was a way to address the fragmented governance of food security, so that the CFS could come to play its vital role in the area of food security and nutrition, including international coordination. Further argues that (the lack of) governance was/is one of the root causes of hunger: *Lack of good governance to ensure transparency, accountability and rule of law; *Lack of high-level political commitment and prioritization, including failure to fully implement pas pledges and commitments and lack of accountability; *lack of coherence in policymaking within countries, but also globally and regionally; *war, conflict and lack of security; *weak international governance of FS, resulting in fragmented cooperation and financing, dispersion of assistance in large numbers of projects that lack scale to make significant impact and add to high Good governance needed at country level; peace and the rule of law, to provide tenure of assets and a conductive business environment, are essential; foster coordination at national, regional and global level. Good governance requires governments to prioritize strategies, policies, programmes, and funding to tackle hunger, and the int. community to coordinate and mobilize meaningful support. A challenge is also |

---
| 8 | Clapp & Murphy | Global | G20 | Academic article; narrative | None | None | None | Analyses the engagement of the G20 with food security issues. Argues that the G20 has shown it’s not the most appropriate forum, because: 1) it didn’t tackle structural FS problems, 2) it had a chilling effect on other forums (CFS), 3) small and import-dependent countries are not members, 4) its decision-making process, based on consensus, is inappropriate, 5) it lacks expertise, and 6) CSOs have been shut out. Learns that: *Food crisis has various economic dimensions. *Forums affect each other, and can undermine each other. *Forums involve questions of inclusion and exclusion, and thus of legitimacy. *Structural solutions vs. coping measures. *Forums/venues each have a certain range of instruments and jurisdictions. *Not every global organization’s involvement in dealing with FS is appropriate or desirable. *There’s a call for (and thus a lack of) coordinated action between GOs. *FS can get redefined/reframed in forums. The discourse of forums has an impact on debates elsewhere. *As definitions FS have evolved, the complexity of policy challenges has grown. | 9 | Coleman & Gabler | Global | Multiple | Academic paper; narrative | None | International regimes & Normative-institutional arrangements | None | Shows that biotechnology is surrounded by four normative-institutional arrangements that are organized around distinct general principles, of which one is "world food security and safety". Main part is not about food security governance, but outlines the core principles, norms, and institutions of this arrangement. The 10 principles include, inter alia, that biotechnology is crucial but potentially risky, state sovereignty remains primary in governing, liberalized trade is positive, sustainability, and that GMOs are a threat to biological diversity. The norms are, inter alia, that agriculture should become more productive, health has priority above other things, measures should be science-
<table>
<thead>
<tr>
<th></th>
<th>Colonnelli &amp; Simon 2013</th>
<th>Global Multiple Academic paper; narrative None None</th>
<th>Working definition FAO Good Food Security Governance: relates to formal and informal rules and processes through which interests are articulated, and decisions relevant to food security in a country are made, implemented and enforced on behalf of members of a society. Provides a historical overview of both the definition of food security and FS governance. There is no authoritative body that can take the lead, could be the CFS, although is still in its starting phase. Such a body should be inclusive. Goes further into the development of the CFS and HLPE. Important test to CFS is represented by the consideration that will be devoted to its guidelines by policy makers and their incidence on the ground. Need for effective and inclusive governance. CFS fulfils requirements. CFS should not avoid addressing controversial issues, and aim to have an impact on a wide range of topics, given the multi-sectoral and cross-cutting issues having an impact on FS.</th>
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<tr>
<td></td>
<td>Drimie &amp; Ruysenaar 2010</td>
<td>National South Africa Academic article; narrative Document s analysis and interviews None None</td>
<td>None</td>
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<td>12</td>
<td>Duncan &amp; Barling 2012</td>
<td>Global</td>
<td>CFS</td>
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<td>14</td>
<td>Edralin, Collado 2005</td>
<td>Local</td>
<td>Municipalities in Bulacan Province, the Philippines</td>
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<tr>
<td>13</td>
<td>Edwards 2012</td>
<td>State</td>
<td>Multiple US states</td>
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<tr>
<td>15</td>
<td>FAO 2009</td>
<td>Global</td>
<td>Multiple</td>
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that will facilitate debate, convergence of views and coordination of actions to improve food security at global but also at regional and national levels.

Greater coherence is still needed to encourage convergence of policies and actions taken by all stakeholders. The reform of the CFS is a first step in this.

**FAO 2010**

<table>
<thead>
<tr>
<th>Global CFS</th>
<th>News article</th>
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| News article about the reformed CFS. Sees CFS as the cornerstone of the global governance of agriculture and FS, which, after the reform, can face challenges to FS more effectively.

**FAO 2011a**

<table>
<thead>
<tr>
<th>Global - national</th>
<th>Background paper workshop</th>
<th>None</th>
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| Defines "good food security governance" as: Food security governance relates to formal and informal rules and processes through which interests are articulated, and decisions. Paper explores what (good) food security governance is, and develops a country-level framework for analyzing and integrating governance in food security interventions. Good governance of food security can have a positive effect on twin-track food security programmes. The concept of food security governance recently emerged, but even within FAO it is not very clear what it means. Different nomenclatures have been used, such as governance of FS, FS governance or good governance for FS, of which the first two are most used in context global.
relevant to food security in a country are made, implemented and enforced on behalf of members of a society. Governance. Although these global governance regimes should also comply with a number of good governance principles, the paper primarily develops a framework for the country level. Good food security governance at the country level matters because it forces governments to respond to the needs of the final users and beneficiaries. Nevertheless, food security governance does not stand on its own, and is dependent on general good governance and socio-political contexts at national, regional and global levels.

The proposed framework is organised around four stages of the food security policy cycle: policy and legal framework, coordination and coherence, implementation and enforcement, and information, monitoring and evaluation. These stages can be analysed using the good governance quality criteria of effectiveness and efficiency, equality and fairness, accountability, responsiveness, transparency, participation, and rule of law. It should be noted that what makes good food security governance is highly contextual. Different mix of governance dimensions and different forms of institutions may be needed across countries.

FAO 2011b

Follow-up of FAO 2011a, after workshop. Some points it adds:

*Regional organizations hold a key place in the reformed FS governance structure as they perform essential functions that guarantee the smooth linkages between global and national levels. These organizations are critical to ensure that policies at national, regional and global level are coherent and adhere to the right to food.

*National food security bodies ensure that national responses to food insecurity target the most vulnerable and are well coordinated among stakeholders that bear responsibility for a component of the FS response.

*Regarding the language, the workshop considered “governance for FS” more appropriate than “FS governance”, as FS is an outcome, not a sector or goal in itself. Food security governance could still be

Inter alia:

R1: Learn from experiences about which principles are most relevant.

R3: work more systematically towards improved governance as a means to achieve improved FS outcomes.

R4: participation and inclusion.
and sustained. used to refer to the institutions that comprise the governance regime for FS at global level. "Governments and development agencies have to go beyond the recognition that governance matters. It does five recommendations in this respect.

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<tr>
<th>Source</th>
<th>Region</th>
<th>Type</th>
<th>Source of Evidence</th>
<th>Methodology</th>
<th>Findings</th>
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</table>
| FAO 2012 | Global | Multiple | News article | None | News article about a ministerial meeting. They agreed that continuing food price volatility requires improved global governance of FS. Graziano da Silva: "In this context, it is important to improve governance of FS. In the globalized world we live in, it's not possible to have FS in one country alone. [...] The new global governance system of FS that we are building together, that has the CFS as its cornerstone and AMIS as one of its components, is part of a new world order that needs to emerge."

Advances are already made: the reform of the CFS, the most inclusive intergovernmental platform on FS and nutrition, the establishment of the High Level Task Force on Global Food Security, and the creation of the Agricultural Market Information System (AMIS). |
| Galiè 2013 | Not specified | Academic article; empirical research | Interviews; documents analysis; participatory methods | None | Paper is about seed governance, not so much about food security governance. Has a very small paragraph about "food security and governance", which states that good governance is the most important factor in eradicating food insecurity, and that grand statements about reducing hunger need to be translated into specific actions "on the ground". |
| Global Forum on Food Security and Nutrition 2011 | Global, national, local | Multiple, including CFS | Discussion summary | None | Paper presents the outcomes of a discussion on global governance for food security, asking the question whether the current arrangements are fit for the job. It was underlined that food security needs a multidisciplinary approach. Also, because of the spread of responsibilities amongst a number of international organisations that generates overlaps, conflicts and incoherence, a refocusing of roles is needed. Solution should primarily be sought locally, thereby respecting the subsidiarity principle, whereby methods and practices are exchanged. A State approach is essential for realizing this, whereas |
international support is needed to address factors that occur beyond the control of local and national institutions. The governance system should also ensure that governments adhere to food as a fundamental human right for everyone. The participants called for:
*Information by the global governance structures.
*Stronger civil society representation.
*Assistance to countries in the form of advice, advocacy, and capacity building.
*Monitoring of progress and compliance.
*Promotion of accountability and sharing of best practices.

The reformed CFS has already addressed most of these issues, but still needs to prove its effectiveness. Also, political will must be mobilized at national levels, and, at the international level, a stronger sense of solidarity must emerge.

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<thead>
<tr>
<th>22</th>
<th>González 2010</th>
<th>Global</th>
<th>FAO</th>
<th>Academic article; narrative</th>
<th>None</th>
<th>Justification regimes</th>
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<td>Argues that there have been three wide ranging debates on world FS, each with its own justification regime. These three regimes are the scientific, the political-ideological, and the ethical regime. The FAO does not play a neutral ‘scientific’ role in these debates, but chooses particular ideologies above others. FAO itself is also characterized by ideological struggle within the organization, whereby it’s influenced by the interests of governments, GO’s, NGO’s and corporations.</td>
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<tr>
<th>23</th>
<th>Haddad 2011</th>
<th>National</th>
<th>India</th>
<th>Academic article; narrative</th>
<th>None</th>
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<td>Pleads for a national nutrition strategy in India. Argues that stronger governance is needed to effectively address undernutrition. These governance arrangements would need high levels of capacity to invest coherently in reducing undernutrition, need to well-coordinated, should include high levels of accountability and transparency, and should be responsive towards rapidly emerging shocks. Successful governance requires a national nutrition strategy backed by strong national leadership.</td>
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<tr>
<th>24</th>
<th>Haddad 2012</th>
<th>Not specified</th>
<th>Islamic world</th>
<th>Research paper; empirical</th>
<th>Analysis of Quran texts</th>
<th>None</th>
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<td>Examine and evaluates the Islamic perspective of FS management by analysing Quran verses. The Quran states that Moslems in Islamic states or societies conduct their affairs by mutual consultation, and that they should refer</td>
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</table>
matters related to public safety, or the handling or management of fear, to those charged with authority amongst them i.e. the Islamic State leadership. The main responsibility for FS falls thus on the State, which should therefore establish an efficient administrative/institutional setup. The author proposes an institutional structure to do so.

| 25 | High Level Task Force on the Global Food Security Crisis 2010 | Not specified | None | Updated framework for action | None | None | Good governance for food and nutrition security is fundamentally about national governments prioritizing policies, plans, programs and funding to tackle hunger, malnutrition and food insecurity in the most vulnerable populations, whether it be through humanitarian or development assistance, nationally, bilaterally or multilaterally. Global governance mechanisms have shown to be fragile. Existing systems of resource mobilization do not respond rapidly, predictably, or adequately enough to the food and nutritional needs of poor people when they are affected by substantial external shocks. Tackling the structural causes of food insecurity calls for convergent policies, strategies and programmes that give urgent priority to meeting both long-term needs and emergency requests for food and nutrition security. This requires across-government support, political will, and long-term coordinated actions. The need to strengthen FS governance has now been recognized and is receiving attention at global, regional and country levels. Its reform must build on the best of existing structures. This includes the search of multiple stakeholders for stronger institutions, partnerships and renewed governance. The CFS, which provides the highest level of global governance, can play an important role in this respect. | Foster strategic coordination at national, regional and global level to improve governance, promote better allocation of resources, avoid duplication of efforts and identify response gaps. |

| 26 | Jarosz 2009 | Global FAO Academic article; narrative | None | Political economy | None | None | Examines the global responses to world hunger through an analysis of the political economy of global governance between 1945 and the present (2008) food crisis. The FAO has been critiqued for being ineffective in addressing food crises. Jarosz argues that this is not solely based upon its massive bureaucratic structure, but, more importantly, the result of a steady process of erosion of FAO's influence, that come from the tensions within the organization. These tensions are evident in discourses and practices that respond to world hunger, in which two assumptions can be identified. The first is | Despite decades-long assertions that only global institutions and organizations can eliminate world hunger, the analysis demonstrates their inability to do so. The hope lies in social movements that emphasize food sovereignty and food justice. |
that world trade, the ability to buy food, and productivity is the most effective approach. The second is that reducing world hunger is a collective moral, ethical, and social responsibility, and that people have a right to food. These two conflict with each other, whereby the first is mainly used by grain exporting countries, particularly the West, and the second by grain importing countries. These tensions have led to charges of incoherence and ineffectuality as FAO tacks between these positions.

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<tr>
<th>ID</th>
<th>Author(s)</th>
<th>Type</th>
<th>Country</th>
<th>Sector</th>
<th>Focus</th>
<th>Scale</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>27</td>
<td>Jarosz 2011</td>
<td>Global</td>
<td>World Bank &amp; FAO</td>
<td>Academic article; empirical Document analysis</td>
<td>Scale</td>
<td>None</td>
<td>Explores the changing definitions FS in its relation to scale in global governance. Definitions of FS are multiple, continuously evolving and contested. Over time, the definition has moved from one of national levels of production to a multi-faceted issue involving access, control, governance, poverty, gender, and HRs across geographic scale. The scaled definitions move from an early emphasis at international and national levels, to micro-level focus upon households and gendered individuals, to link individuals and global modalities of governance. In the current debate, different emphasis are laid, as has been set out in Jarosz 2009.</td>
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<tr>
<td>28</td>
<td>Koc et al. 2008</td>
<td>National</td>
<td>Canada</td>
<td>Academic article; narrative</td>
<td>None</td>
<td>None</td>
<td>Examines how civil society, particularly Food Secure Canada-Sécurité Alimentaire Canada, can make an impact within the increasingly reregulated policy decision system. In the article, FS and Community FS are subsumed under the term sustainable food systems. The article argues that shifts in decision-making authority and policy instruments (from parliament to government agencies) have profound implications for the future of civil society-federal government relations. In theory both have much to offer each other: creativity, information, on-the-ground successes, legitimacy from CS, and decision-making power, financial resources, and scaling-up capacity from government. In reality it is currently not obvious that either has the will, knowledge, structures, or capacity to work in loose networks of collaboration. The challenge for CSOs is how to get into the policy decision system. An opportunity is to interact more with middle and senior Provision of high-quality info, creativity and analysis is a starting place. Subsequently this cooperation could gradually be institutionalized. For both sectors, embracing regulatory pluralism will likely be essential.</td>
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<td></td>
<td>Author(s)</td>
<td>Location</td>
<td>Type</td>
<td>Study Design</td>
<td>Discourse</td>
<td>Article Details</td>
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<td>29</td>
<td>Lang &amp; Barling 2012</td>
<td>Global</td>
<td>Multiple</td>
<td>Academic article; narrative</td>
<td>Discourse</td>
<td>The paper explores the diversity of perspectives on what is meant by FS, concluding that the core 21st-century task is to create a sustainable food system. It is not primarily about governance, but provides a couple of insights in it. It argues that the policy responses to FS are fractured and contested, as is reflected in the definitional fluidity. The authors identify two encompassing food security discourses, which they term ‘old’ food security analysis and ‘emerging’ sustainable food analysis. These discourses conflict with each other. Such fluidity of debate is normal for food policy. The juggling of evidence, interests, challenges and policy responses is inevitably messy.</td>
<td>Policymakers need to explore, at global, regional, national and local levels of governance, how policy forums could better include ecological and social considerations into a discourse that is still shrouded by neo-Malthusian assumptions that production and demography are the key factors and that the solutions lie in producing more food.</td>
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<td>30</td>
<td>MacRae 1999</td>
<td>National</td>
<td>Canada</td>
<td>Academic article; narrative</td>
<td>None</td>
<td>Agriculture has been successful in terms of production but agricultural and food policy have failed to deliver sustainability and food security. The paper lays out some concerns and makes proposals for the transition to a policy making system that would be better equipped to address the complex problems facing the Canadian food and agriculture system. A viable policy making system must focus on the creation of food security and agricultural sustainability, and built on principles that contradict the current problems: *Integrated responsibilities and activities. *An emphasis on macro-policy *Transdisciplinary policy development *Policy makers are close to the diverse groups affected by problems needing resolution. *Food systems policy. To ensure this the paper proposes the creation of new units at the municipal level, and provincial and federal departments of Food and Food Security, which’ functions are worked out in the paper.</td>
<td>See left</td>
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<tr>
<td>31</td>
<td>Makhura 1999</td>
<td>National</td>
<td>South Africa</td>
<td>Academic article; empirical practical experience / action</td>
<td>None</td>
<td>Describes the process of developing the Food Security Policy for South Africa. During the process it was recognised that management and less to try influence parliamentarians.</td>
<td>50</td>
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</table>
research

food security is of multi-disciplinary nature, because of which the choice was made to develop the policy through a participatory consultative approach. The negotiations involved meetings and workshops where members and groups could debate proposals, before reaching compromise. The involvement of experts and (local) stakeholders is seen as key factor in the success of developing the policy. In addition, the political will within various departments was essential.

| 32 | Maluf 1998 | Regional | Latin America | Academic article; narrative | None | Development economics | None | Examines the main conditions for achieving economic growth with increasing social equity and with a special focus on FS. Argues that the multi-dimensional character of FS demands special political and institutional requirements, in which government and civil society partners. In addition, intra-governmental, i.e. inter-ministerial, coordination is needed. |
| 33 | Margulis 2011a | Global | Multiple | Research paper; narrative | None | Regime complexes | None | See Margulis 2013 for general argument. *No single international institution responsible for management FS. Responsibility spread among number of IO’s, which causes overlap rules and norms (paradigms). Challenge to achieving coherence. *Continuing hunger shows the failure of world food security governance so far. *Rule and norm conflicts are heightened by lack of coordination or coherence at the national level, especially between ministries. Also diversity of state interests represented at institutions within regime complex. *Food security multidimensional |
| 34 | Margulis 2012 | Global | CFS, CFA, G8/G20 | Academic book chapter; narrative | None | None | Does not give a definition, but states that global food security governance is constituted by the over a dozen international institutions and numerous regional, non-governmental and private |

Chapter analyses key, recent institutional developments in global FS governance and particularly focuses on three institutional responses to the 2008 global food crisis, i.e. CFS, CFA and G8/G20. Argues that the architecture of global FS governance has evolved over time along four connected dimensions: 1) An increasing density of international institutions, which occurred through a punctuated pattern, primarily in four key periods; 2) variation in institutional forms, including, more recently, transnational networks of government officials and NGOs; 3) increased awareness of the |

Improving global governance FS requires consensus among all the actors that are involved to be truly effective. Broad-based consensus, cooperation and participation among states and non-state actors is an increasingly accepted global
causes and effects of food security, which has influenced governance practices; 4) diffusion of FS across global governance, resulting in a wider spread of responsibility and disaggregation across many institutions.

Argues that the 2008 global food crisis was the catalyst for the development of new governance institutions. CFS, HLT/FCA and GB/G20 vary significantly in their memberships, mandates and sources of authority and legitimacy. They each claim a central position. Despite sharing policy objectives and engaging in formal, informal and ad hoc coordination there is considerable contestation among these institutions over direction of global FS governance. These contests cannot be resolved through state consensus alone and the CFA and CFS provide significant scope for non-state actors to exert influence and claim legitimate roles in global FS governance. Global FS governance thus appears to be shifting towards greater pluralism.

There is wide acceptance that global FS governance should be reformed and acknowledged that global scale, drivers, and complexity food insecurity are beyond capacity individual states. Reform drive includes cooperation and coherence across UN system, Bretton Woods, regional bodies, G20. However, the international food security regime has shifted in a regime complex for food security, which has implications for efforts to improve coherence and architecture. Diverging rules and norms across the elemental regimes of agriculture and food, international trade, and human rights concerning the appropriate role of states and markets in addressing food insecurity produced conflict, which makes a coherent approach more difficult.

Further learns that:
* History has shown that countries have a strong influence on the mandate of GO's.
* Overlapping rules may increase both problems and coherence. Regarding the former they can be the source of transnational conflict between states and IO's.
* IO's affect each other, and can have a

Margulis 2013

Global Multiple Academic article; narrative None Regime complexes None

Understanding conflict rules and norms.
“chilling effect” on each other (WTO).

*Regime complexes can produce transnational political conflicts related to actors’ perceptions of hierarchy.

*Norms can diverge between IO’s, between old and new powers, etc. They engender problems of trust among actors.

Also positive signals: food insecurity is now a priority issue, and there’s increasing cooperation.

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<thead>
<tr>
<th>Reference</th>
<th>Type</th>
<th>Level</th>
<th>Form</th>
<th>Academic Paper</th>
<th>Multi-level Governance</th>
<th>Summary</th>
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<tbody>
<tr>
<td>Marzeda-Mlynarska 2011</td>
<td>Multiple</td>
<td>None</td>
<td>Academic paper; narrative</td>
<td>None</td>
<td>Multi-level governance</td>
<td>Paper deals with the question whether food security governance can be considered a form of multi-level governance. It concludes that states are not willing to share power in the areas of trade and agriculture, but that there are some examples where multi-level governance does occur. At the same time, the paper argues that food security governance takes place at three levels: global, regional and national. Food security governance is typified as complex, multidimensional, and subject to institutional incoherence.</td>
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<tr>
<td>McKeon 2011</td>
<td>Global</td>
<td>Multiple</td>
<td>Academic paper; narrative</td>
<td>None</td>
<td>None</td>
<td>Provides a historical overview of food security governance, looks at institutions, paradigms and actors and interests. 3 aspects mal-governance: 1) Current architecture fragmented, incoherent, opaque, and unaccountable, 2) it is strongly conditioned by unregulated weight of private sector interests, 3) policies it proposes are inadequate, if not counterproductive. Argues that the food crisis provides a window of opportunity for change. New concepts are now seriously considered. New actors, such as CSO’s, who provide the essential link between national and global level. Further: *FS governance increasingly difficult in globalised world: multiple layers decision-making, FS households affected by development from local to global, even nation-states losing control. There is a vacuum in global governance, in absence of an authoritative and inclusive global body. *FS governance has become increasingly complex. Overlapping and contradictory policies and regulations, complicated by Prerequisites: better global governance system: set of basic values and principles; inclusive, legitimate, and democratic political process; effectiveness; multisectoral and holistic; principle of subsidiarity. Better system cannot be invented at drawing board, but reformed CFS potentially fulfils characteristics. Important to bring CFS to the regions.</td>
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<td>ID</td>
<td>Author(s)</td>
<td>Scope</td>
<td>Levels</td>
<td>Authors Focus</td>
<td>Type</td>
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<tr>
<td>38</td>
<td>McKeon 2013</td>
<td>Global CFS</td>
<td>Academic article; narrative</td>
<td>None</td>
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<td>None</td>
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<td>Article is not really about food security, but about access to land/land rights. However, it briefly elaborates on global FS governance, stating that the global food crisis revealed a global policy vacuum. In the absence of an authoritative and inclusive body deliberating on food issues, decision-making was being carried out by institutions that did not have FS as their core business as well as by groups of the most powerful nations and private corporations that are not subjected to any political control. A strong confrontation emerged between different approaches to filling the governance gap, illustrated by controversies around the establishment of the HTLF's CFA and the reform of the CFS.</td>
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<tr>
<td>39</td>
<td>Misselhorn et al. 2012</td>
<td>Multiple</td>
<td>Academic article; narrative</td>
<td>None</td>
<td>Food system</td>
<td>None</td>
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<td>Reviews current thinking to first identify some challenges facing global food security, and then some key elements that might support a successful food system. Argues that food security demands a cross-sector and cross-scale approach. Such an approach could come from institutional participation at the local level, boundary organisations, and governance arrangement that enable adaptation and resilience at multiple scales.</td>
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<tr>
<td>40</td>
<td>Mohamed Salih 2009</td>
<td>Not specified</td>
<td>Academic book chapter; narrative</td>
<td>None</td>
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<td>Analyses governance of food security in the 21st century. Argues that FS governance has been strongly affected by globalization and is entangled with other (security) domains. Food security governance has a low profile compared to other global governance debates, there is no 'good governance' regime in food security yet. Also includes food safety issues in food security governance. Food security governance is part of a broader context, and has linkages with food security should not be a periodic concern, but an integral part of the overall governance debate. The article pleads for guaranteeing democratic values in FS governance.</td>
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security whereby these institutions are viewed by citizens as legitimate, accountable, and transparent. No clear distinction between food security and food safety.

41 Orsini, Morin & Young 2013
Global | Not relevant | Academic article, editorial | None | Regime complexes | None
- Editorial of issue on regime complexes. Repeatedly refers to Margulis 2013. States that Margulis deals with a fragmented complex, demonstrating that fragmented complexes could be detrimental to governance outcomes. Problem solving is enhanced in a context of regime complexes, even if complex is fragmented, because the existence of a complex means that potential problems are likely to be sorted out.

42 Paarlberg 2002
National & global | Multiple | IFPRI discussion paper; narrative | None | None | None
- Argues that, even in an age of globalization, problems of hunger and food insecurity require a national, not a global focus. Although global initiatives should be supported, the main governance deficits are still at the national level. Global institutions cannot fill these gaps to full extent. National governments should be persuaded to deliver minimal public goods needed at the national level. Learns that:
  * FS governance is related to public good provision.
  * Debate about global governance response vs. localization.
  * Continuing centrality natione-states.
  * Concept of adequate governance for FS based on public goods provision. Institutions can be judged on this.
  * Contrary to view that food insecurity in developing countries is related to external forces it argues that most important forces tend to be local or national, rather than global.

43 Pereira & Ruysenaar 2012
National South Africa | Academic article; narrative | None | Adaptive governance; complex | Mainly refers to food governance, Tackling the complexity of FS requires a new form of adaptive governance. The paper provides a review of various approaches. It is necessary for the state to adapt its monocentric
Although paper exclusively deals with food security, conceptions of governance from a monocentric or politico-technical understanding of governance through to adaptive governance, which is grounded by a critique of the existing institutional structures responsible for FS in South Africa. The current strategy and departments are not sufficiently flexible or coordinated to deal with an issue as multi-scalar and multidisciplinary. Actions taken in the non-governmental sector signal the emergence of a new type of governance, hinting a changing governance structure including collaboration between diverse stakeholders. The state should adapt and get involved in these new forms of governance. Further:

*Poor governance exacerbates food insecurity because governments are unable to respond effectively to crises due to poor decision making, limited coordination, weak institutions, and scarce resources as well as the influence of neo-patrimonial politics.
*Despite increasing recognition of the need for adaptive governance, we still face the inst. Barriers that plagued earlier state-based responses to food insecurity, grounded in government’s culture.

Further:

Social progressiveness countries like Brazil as well as the FAO and other UN agencies strongly embrace and promote the idea of FS governance. One of the key conditions that must be met for attaining FS governance is the capacity to measure household FS. Without this information it is simply not possible to develop responsive, accountable, and transparent FS governance. The article argues that Experience-based FS Scales (EBFSS) have the potential to assist with evidence-based decision making from the national to the local level, and demonstrates this with the case of Brazil. Further:

*FS governance is a relatively new concept that builds upon the idea of good governance.
security governance is different from those being attempted in Europe and North America because it is government-driven. The program entails, inter alia, subsidized food sales, food and nutrition assistance, supply and regulation of food markets, support to urban agriculture and education for food consumption. Its legitimacy is derived from a consistent preoccupation with quality, thereby achieving trust in government’s efforts. Other success factors are the competence, expertise, and expediency of government officials as well as the participation of civil society. Its vulnerability lies on the vagaries of political changes. Although some of its features could be reproduced as market-based, decisive public intervention is essential.

| 46 | Rola 2013 | National Philippines Academic article; empirical Literature review Regime complexes | None | Analyzes the institutional and governance issues that confront agricultural development and food security in the Philippine uplands by examining the literature. Theoretical framework draws on Margulis 2011. Argues that the implementation of FS programs and projects in the Philippines has failed, and that best governance arrangements should be put in practice. These governance arrangements should go beyond single policies, and require understanding of institutional and governance structures and change processes. The paper identified and found out that critical institutional and governance issues have been influenced by Philippine laws, policies and programs. These issues include decentralization and multiplicity of agencies, under-investment, lack of institutional capabilities, weak collective action and security of tenure. | FS stakeholders should craft a Research Development and Extension agenda that directly support achievement of FS challenges by providing knowledge and tools to support a policy and inst. Environment to address a sustainable upland development. |
| 47 | Sahley et al. 2005 | National Malawi Assessment report Interviews None | None | Report of a governance and food security assessment of Malawi. Argues that poor governance is not the primary causal factor for food insecurity in Malawi, but can be considered a contributing factors, particularly regarding the limited capacity to implement effective policy and program responses to address vulnerability and meet development challenges. Food security is a politically charged policy issue in Malawi, but despite that, there remains | Donors need to recognize that their actions carry political and social consequences, and need to be sensitive to allowing government, private sector interests, and CS |
a lack of consensus on the proper course of action. Policy formulation has been ad hoc, and resulted in a plethora of policies and programs, sometimes disconnected from and contradictory to each other, spread over central government agencies. The lack of common cause has led to incoherent implementation. There is a lack of clear leadership in the FS policy arena. Given Malawi's traditional reliance on external funding, donors have a big influence. The twists and turns of policy formulation mirrors the ebb and flow of resources as well as international donor trends. Government does not have the capacity to implement policies. This has been filled up by donors, raising sustainability issues. Central level commitment to implementing decentralized local governance has been lacklustre.

| Seed et al. 2013 | State British Columbia, Canada | Academic article; empirical interviews, documents, observations | Community Food Security, Lang's food policy triangle, Ritchie & Spencer's categories of applied policy research, regulatory pluralism | None | Analyses the integration of food security policy into Public Health and examines the results within the context of historic and international trends and theoretical models of food policy, community FS, and applied policy research. While Public Health's lead role supported an increase in legitimacy for FS in BC, interviewees described a clash of cultures occurred partly as a result of Public Health's limited FS mandate and top down approach. Consequently civil society voice at the provincial level was marginalized. The paper proposed a new, emerging policy map. Further:
* Resolving FS is a clear example where solutions need to be sought at both centralized and decentralized levels.
* Inclusion/exclusion of stakeholders.
* Within a context of globalization, civil society has an increasing understanding and awareness of the impacts of broader, centralized decision on their personal and community FS. Shrinking governments may increasingly recognize the need to utilize CS capacity in offering programs to fulfill population needs.
* Illustrates that agendas are more salient than definitions in the design and implementation of FS initiatives. Further suggests that aligning FS agendas with
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<td>Thomson 2001</td>
<td>National</td>
<td>None</td>
<td>Academic article; narrative</td>
<td>Sustainable livelihoods</td>
<td>Argues that FS is now generally recognized as an issue of household access to food rather than national food production levels. This raises issues of how to address this at the policy level. Too often in the past, FS has been dealt with through project, mainly by FAO and WFP. Few attempts have been made to address household FS in national and international policies in a coherent matter. In developing countries the sub-national level has often been overlooked, capacity in departments/units has been lacking, and FS has been marginalized to the main sectoral concerns of ministries. A multi-sectoral, holistic approach is needed, which can only be realized by increasing the level of participation of the poor and food insecure in the policy process.</td>
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<td>Von Braun 2009</td>
<td>Global</td>
<td>Multiple</td>
<td>Academic article; narrative</td>
<td>None</td>
<td>Argues that establishing a global governance architecture for governing food, nutrition, and agriculture will be critical for addressing food insecurity. The current architecture has not been able to do this adequately. Global organizations addressing food, agriculture, and related health issues, all serve important functions, but collectively they may now require rethinking and adjustment to meet new and emerging challenges in a comprehensive fashion in the coming decades. The broad outlines of options for change in global governance and coordination of the agricultural system include three potentially complementary options for change: 1) to improve existing institutions and create an umbrella structure for food and agriculture, 2) to form an innovative government network, 3) to expand the current system to explicitly engage the new players in the global food system – the private sector and civil society, including large private foundations – together with national government in new or significantly</td>
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Agendas of other sectors may be helpful in forwarding FS issues. Attention to competing agendas is essential in understanding the key priorities of stakeholders, evaluating initiatives within a broader context, and understanding barriers to achieve FS.
reorganized international organizations and agreements.