Food Systems for Healthier Diets in Ethiopia:

Policies, Programmes and Anchoring for Scale

REPORT

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Executive summary

Ethiopia has high levels of undernutrition, at the same time overweight and obesity are rapidly increasing especially in urban settings. Nutrition related non-communicable diseases like high blood pressure, diabetes, cardiovascular diseases and some forms of cancer are also increasing. The multiple burdens of malnutrition experienced by Ethiopia calls for a food systems approach to direct food systems developments in a positive direction for nutrition and health outcomes.

This study used a mixed-methods research design to identify the main food system related stakeholders at national level, related narratives and power-relationships around current policies, practices, and regulations. It explored perceptions related to attitudes, skills and knowledge of key-policy actors on how the food system in Ethiopia is characterized including related governance dynamics for the desired developments.

Our study highlighted that the Ethiopian Food systems' related policy is considered as adequate and supportive of healthier diets. Most of the institutions and interviewees believe to have adequate skills and capacity related to food systems'. However, major challenges relate to the effective implementation of policies, rigorous supervision and monitoring, and suboptimal coordination among key actors. The priority food systems related issues identified are related to food production, access and affordability of foods, and nutrition. Food safety was also identified as key priority.

The study can inform food systems' related policies and programs of the country.

Contents

Abbreviations and acronyms

ADI	Actors, discourses, and interests
A4NH	Agriculture for Nutrition and Health
BASK	Beliefs, attitude, skills, and knowledge
BMGF	Bill and Melinda Gates Foundation
CGIAR	Consultative group for international agriculture research
CSO	Civic Society Organization
DFID	Department for International Development
MWCA	Ministry of Women and Children's Affairs
ECA	Ethiopian Conformity Assessment
EDHS	Ethiopian Demographic and Health Survey
EFDA	Ethiopian Food and Drug Authority
EPHI	Ethiopian Public Health Institute
FNP	Food and Nutrition Policy
GLOPAN	Global Panel for Agriculture and Nutrition
KII	Key informant interview
MoAg	Ministry of Agriculture
MoH	Ministry of Health
MOLSA	Ministry of labor and social affairs
MOTI	Ministry of Trade and Industry
MOWIE	Ministry of water, irrigation and electricity
NGO	Non-Governmental Organization
NNP	National Nutrition Programme
NNSAS	National nutrition-sensitive Agriculture strategy
UN	United Nations
UNICEF	United Nations Children's Fund

UNIDO   United Nations Industrial Development Organization

WFP   World Food Programme

WHO   World Health Organization

1. Introduction

Despite a remarkable progress in the last two decades, undernutrition in Ethiopia remains a significant public health problem. About 37% of children less than five years of age are stunted (EDHS, 2019), and micronutrient deficiencies including those of vitamin A, zinc, folate and calcium are highly prevalent (EPHI, 2016). At the same time, overweight/obesity is rapidly increasing, especially in urban settings where according to the most recent demographic and health survey, 21% of women of reproductive age in urban compared to only 4% in rural areas were overweight/obese. In line with these trends, nutrition-related non-communicable diseases like high blood pressure, diabetes, cardiovascular diseases and some forms of cancers are also increasing alarmingly, and along with the already high burden of communicable diseases, are further stretching the health system.

Both forms of malnutrition, undernutrition and overweight/obesity, have poor diets as a shared driver. The increasing recognition that poor diets are reflections of a dysfunctional (broken) food system, has led to the call to "fix" the food system to support healthy diets. Recent work by A4NH in collaboration with national partners described specific food systems research questions on which evidence is needed in Ethiopia to better characterize the Ethiopia food system at national and subnational levels; and hence, support the much needed food systems transformation (Gebru, et al., 2018). Recent development in the Ethiopian policy landscape recognizes the need to have a multi-sectoral and systemic approach to improve nutrition in the country. This is exemplified by the bold commitment to multi-sectoral approaches in policies like the National Nutrition Programme II, the Seqota Declaration, and the Food and Nutrition Policy.

To support such call, the present study aimed to explore perceptions among key informants on how current efforts are being perceived and being translated for implementation at the subnational level, providing a baseline against which to determine progress on food systems policies and implementation as time progresses.

2. Methods

2.1 study design and sampling

This study applied a mixed-methods design that included qualitative key informant interviews and semi-quantitative online surveys. The study was conducted at two levels: Federal (Addis Ababa), and Regional (Amhara region among the Seqota Declaration areas) levels. Participants were selected through convenience sampling, based on their level of engagement in the Ethiopian policy-making and in a way to represent various sectors. Key informant interviews (n= 51) representing various government institutions, non-government organizations (NGO's), UN agencies, academia and research organizations. Similarly, participants (n=100) representing various organizations responded to our online survey. The analyses of the survey was supported by a desk-review of food systems' relevant policies from Ethiopia.

2.2 Data Collection and Analysis

2.2.1 Desk review

The document review was conducted to map the current policy landscape of the country from a food system's perspective. Published or gray literature relevant to the study were also included. An online search of policy documents was done focusing on government websites. In addition, relevant cited policy documents and programmes in the reviewed documents were identified. The main criteria for inclusion in the document review were policy, programme/intervention documents or reports having objectives relevant to the food system on the key domains included in Figure 1. The documents were also included if they had objectives in line of the main goals of the Seqota Declaration process, the National Nutrition Programme, Food and Nutrition Policy, the strategic objectives of the NNSAS. The food system framework generated by Gebru, et al., (2018) together with the main goals of the Seqota Declaration and the strategic objectives of the NNSAS were used to develop the analytical framework for the document review. The coherence and alignment of policy instruments were assessed.

2.2.2 Key informant interviews (KII)

KIIs were conducted at national (n= 23) and regional (Amhara region) level (n=28) with informants representing different stakeholder organizations. Considering the outbreak of the pandemic, subsequent movement and gathering restriction, and the security situation in the Northern part of the country, the key informant interviews were restricted to the Amhara region.

The interviews were done telephonically, and when situations allowed, they were done in person following strict covid-19 prevention measures. The KIIs were conducted using an open-ended semi structured interview guide that was previously used in Vietnam and Nigeria. The interview guide was structured around the Actors – Narratives - Interest framework (Keeley & Scoones, 2003) that aimed to unpack and reveal the narratives, agenda setting and processes of current legislations, practices, regulations and policies around food system.
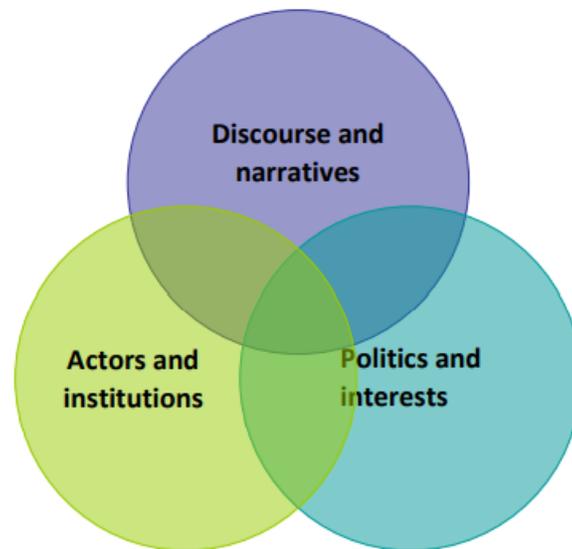
Fig 2.1 The actors, discourse, and interest (ADI) framework

- **Actors:** What different (groups of) actors relevant for food policy are present in Ethiopia and what are their practices and actions within the broader food system? This aimed to identify who are considered central to decisions and why?

- **Narratives:** what are the assumptions and prescriptions assumed by people when talking about food policy issues? This aimed to understand the extent to which concepts and values expressed through interviewees' narratives are aligned across the food system.

- **Interests:** What do different (groups of) actors believe and do about food system policy issues in light of their interests?

As a broad guiding list, the next figure summarizes the items and research questions from the Vietnam report to prompt interviewees to cover broad range of food system issues that are

identified. These questions will be adapted as needed based on the outcome of the document review.

Table 2.1. Analytical frame work for the key informant interviews and the online survey **(adopted from IDS)**

Analytical lens	Issues	Source of data
1. Policy narratives What is the policy narrative for food systems? How is it framed through science and evidence?	• What are the main issues related to food system? • What are the narratives/discourses behind them? • What are the influences of evidence (vs advocacy)?	Face-to-face interview + published literature.
2. Actors Who is involved and how are they connected?	• Who are the main actors/institutions involved in food system related issues? • What are the areas of coverage/divergence in the position of those actors?	Face-to-face interview + online survey
3. Policies and institutions What are the underlying power dynamics?	• Political priories and institutions' interests • Winner/losers of the current policies • Power on decision and agenda.	Face-t-face interviews + gray and published literature.

2.2.3 On-line survey

For the on-line survey, a semi-quantitative questionnaire focusing on the beliefs, attitude, skills, and knowledge (BASK) of the key-actors was administrated in relation to the main issues characterizing the food systems in Ethiopia. The questionnaire included questions on the following four domains: i) beliefs, ii) attitudes, iii) skills, and iv) knowledge. The questionnaire used a psychometric techniques using a semi-quantified Likert-scale system. The BASK questionnaire was used to complete the qualitative information collected through the face-to-face survey and provided a deeper insight into the beliefs, attitudes, skills, and knowledge of these key-actors. The details of the on-line survey questionnaire are provided in Annex.

2.3 Data analysis

Simple descriptive statistics including frequencies were used to analyze the semi-quantitative data generated through the on-line survey that used a Likert scale with a maximum of a score of seven. Differences in perceptions across different stakeholder groups were explored as well as differences

between national and sub-national level actors. For the key informant interviews, audio recordings were transcribed and analyzed using thematic analyses.

2.4 Ethical clearance

Prior to the implementation of the study, the protocol was ethically cleared by the Ethics committee of the Ethiopian Public Health Association and the International Food Policy Research Institute. Identified potential participants at national and regional state level were invited to participate in key informant interviews, and the interviews were only done after obtaining consent following a detailed explanation of the purpose and objectives of the research. The consent forms are presented in the Annex. All interviews were conducted as per the preferred language of the informant.

3. Results

3.1 Findings from the desk review

In total, 23 Government policies, programs, strategies, and development plans were reviewed for their content and coherence. Thirteen out of the 23 resource documents were found to be internally coherent (with in their contents) for the various domains of the food system (Table 3.1). Overall, the policy documents increasingly favored multi-sectoral approaches which cut across the various domains of the food system. In particular, NNP I&II, the Seqota Declaration, the National Nutrition Sensitive Agriculture Strategy, and the Food and Nutrition policy are aligned and map well to the various food systems' sub-domain. The Ethiopian policy landscape has evolved with time to become more holistic and multi-sectoral.

For example, the most recent Food and Nutrition Policy has seven interrelated objectives, which address the various domains of the food system.

Table 3.1 Mapping of the food and nutrition policy objectives with the food system

Food and nutrition policy objectives	Food system sub-domain
Ensure the availability and accessibility of adequate food to all Ethiopians at all times	Food supply and food environment
Improve the safety and quality of food throughout the value chain	Diet quality
Reduce food and nutrient losses along the value chain.	Food environment, food supply
Improve food and nutrition emergency risk management, preparedness and resilience systems.	Food supply

Improve food and nutrition literacy of all Ethiopians.	Consumer behavior
Improve accessibility, and quality of nutrition and nutrition smart health services at all stages of the life span in an equitable manner.	Food environment, consumer behavior
Improve consumption and utilization of a diversified and nutritious diet that ensures a citizen's optimal heath throughout their life cycle.	Consumer behavior, diet quality
Strengthen food and nutrition communication	Consumer behavior

Overall, the objectives and strategic directions of the Food and Nutrition policy of Ethiopia align with the GLOPAN conceptual framework linking diets to the food system.

The following approaches presented in the Food and Nutrition policy of Ethiopia can also help address various issues within the Ethiopian food system: (1) lifecycle approach which considers nutritional issues across the stages of life cycles and generations, (2) food as human right which stipulates that all Ethiopians have safe food in a sufficient quantity and quality at all times throughout their stages of lifecycle to satisfy their nutritional needs for optimal health, (3) Food-based approach which directs the implementation of nutrient-rich foods like those of livestock and fishery products processing and consumption, (4) Multi-sectoral integration, coordination, and linkage by creating supportive environment and feedback mechanism, (5) Nutrition specific and sensitive approaches by perusing that all sectors develop and implement nutrition specific and sensitive programs using the concept of "nutrition lens," (6) Farm to table approach which calls for the development of a comprehensive and integrated system along the food value chain in which the producer, processor, transporter, vendor, retailer and consumer all play a vital role in reducing food losses and ensuring food safety and quality. Finally, the Food and Nutrition policy of Ethiopia has also proposed the directions for human capacity building, gender responsiveness, and sustainable financing, monitoring and evaluation, and with explicitly indicated roles of various actors in the food systems chain of Ethiopia (FDRE, 2018).

Table 3.2: List of policies, programs, strategies, and development plans which have coherence with the GLOPAN food systems framework-2016 for drivers of food systems, in Ethiopia

Policy	Year developed /timeline	Food system domains			
		Food supply	Food environment	Consumer	Diet quality
National nutrition strategy	2008	• Ministry of Education, Agriculture, Water resource, women's affair, Finance and Economic development, and other partners with their respective roles to take in the food system, were involved in the development of NNP to implement the NNS.	• It was designed to apply Community Based Nutrition (CBN) to the community by creating linkage to food security, water and sanitation, productive safety net programs.	• Enhanced Outreach Strategy (EOS) with Targeted Supplementary Food (TSF) were its primary actions to the vulnerable group of population • Transitioning of EOS into HEP was also planned	• Micronutrient Interventions like universal salt iodization, control of vit-A, Iron and Zinc deficiencies were its primary focus
		In general, its focus was a comprehensive sector-wide approach, to improve coordination of nutrition-related activities implemented by other government ministries and relevant partner organizations and to create links across sectors. But: • The coordination mechanisms that are set out in the NNS were not fully functional There was a clear lack of linkage between nutrition and food security programs.			
National Nutrition program-I (NNP-I)	2008/9	• It clearly put the specific roles to be implemented by nutrition-sensitive sectors in its strategic objective-4 stating that to strengthen implementation of nutrition sensitive interventions across sectors	• Food security, water and sanitation, productive safety net programs have been implemented though not strongly linked to nutrition.	• Mainly, Health Extension Program (HEP) has been practiced at the grass-root level, especially for strategic objectives of one & two	• Its strategic objectives of one and two indicate on how to improve the nutritional status of women and adolescents, and all U-5 children
		Overall, it was the program developed to translates the strategies laid out in the NNS into program actions, though its visible implementation actions were more limited to only nutrition specific interventions			

Seqota declaration	2015	• 'Innovation around promotion of sustainable food systems (climate smart' stated as one of its key goals	• It plans as a key goal that, '100% access to adequate food all year round'	• It has also a key goal to 'Transformed smallholder productivity and income'	• 'Zero stunting in children less than 2 years' is indicated as one out the 8 key goals
		It focuses on delivering high impact nutrition specific and nutrition smart interventions across multiple sectors including health, agriculture, water, education and social protection, focusing on development of programs to build resilience to shocks in vulnerable communities. And its ultimate ambition is to end child under-nutrition by 2030 from Ethiopia.			
National Nutrition program-II (NNP-II)	2016	• It has strongly envisioned the specific roles to be implemented by nutrition-sensitive sectors in the food system in its strategic objective-4 such as by agriculture, social protection, and water and sanitation… • Urban agriculture is also promoted and supported as an initiative	• An initiative has been taken to have a year-round availability, access to and consumption of diversified and nutritious diets • And also, it has initiatives in integrating nutrition-sensitive interventions into agriculture programs (PSNP, AGP…)	• Promotion of market linkage for farm-products like fruits and vegetable has been initiated	• Its strategic objectives of one and two, indicates on how to improve the nutritional status of women and adolescents, and all U-5 children
		Generally, this was developed to sustain the achievements and to address the challenges of NNP-I, especially, to strengthen multi-sectoral nutrition coordination and capacity building.			
Food & Nutrition policy of Ethiopia (recent)	2018	• It has addressed the issue at its objectives 1, 4, & 5.	• It has addressed the issue at its objectives 1, 4, 5, & 6.	• It has addressed the issue at its objectives 1, & 7.	• It has addressed the issue at its objectives 2, 3, & 7.
Food and Nutrition Strategy (draft-5)	2019	Strategic directions and initiatives along with their respective strategic actions, key performance indicators, lead sectors and collaborative sectors are drafted for each the policy objectives/directions of tge food and nutrition policy of Ethiopia			
	2010/11 – 2014/15	• It state that improvement in the health status of people	• It has a plan of nutrition initiative for sustaining	• It plans that collaboration with the	It has also nutrition initiative for Essential

Health sector development plan-IV (HSDP-IV)		require the collective actions by a wide ranging actors outside the health sector such as agriculture, infrastructure, education, environmental protection, etc. and it shows specific roles for sectors in this development plan, for example, it states that collaboration with the Ministry of Agriculture on nutrition, prevention and control of communicable diseases.	the Enhanced Outreach Strategy, (EOS) with Targeted Supplementary Food, (TSF) and Transitioning of EOS into HEP	media in public health awareness creation and dissemination of health messages and information to the general public	Nutrition Actions/Integrated Infant and Young Feeding counseling services, and micronutrient Interventions
		The overall mission of this development plan is to reduce morbidity, mortality and disability and improve the health status of the Ethiopian people through providing and regulating a comprehensive package of preventive, curative and rehabilitative health services. Accordingly, it has set coherent initiatives and indicators in each respective sectors that meet the food systems framework.			
Agricultural growth program (AGP-II)	2015/16 - 2019/20	• It states that it has a focus on selected areas and value chains through sustainable approaches that enhance capacity of actors in development, in the cross-cutting issues particularly in gender, nutrition and climate smart agriculture	• It has also put as a direction that the program contributes to the higher-level goal of sustainable food security and agricultural transformation by developing untapped potential of well-endowed areas.	• It indicated that an increase in agricultural productivity and commercialization of small holder farmers is its target • It targets to empower women and youth in this development program	• Targets to have impact on the nutritional and health outcomes of households by contributing to the dietary diversity and consumption at HH level.
Nutrition-sensitive Agricultural Strategic Plan	2016	• its overall goal is stated as: contribute to the NNP II goal of reducing child and women under nutrition by increasing the quantity and quality of food available, accessible, and affordable and promoting utilization of diversified foods	• It has an objective of increasing the production and access to diverse, safe, and nutrient dense foods for all urban and rural	• It has an objective of protecting vulnerable populations using social transfer scheme or programs, pro poor food security interventions, and emergency food relief.	• It has also an objective of improving household consumption of nutritious, diverse, and safe food by all Ethiopians.

		for all Ethiopians by maximizing its impact on the food system	population of Ethiopia at all times.		
		Overall, this strategic plan is one of the exemplary internally coherent plans of Ministry of Agriculture that is accompanied by six strategic objectives which are designed to tackle the underlying causes of malnutrition in Ethiopia, along with the role of agriculture sector which is indicated in the NNP Strategic objective 4 and result 4.1 with appropriate initiatives.			
National Adolescent and youth health strategy	2016-2020	• It has a strategic initiative of improving nutrition by putting priority interventions, like from Promoting consumption of a balanced diet with emphasis on locally available nutritious and iron rich foods to mobilizing resources and collaborating with partners for school feeding.	• It has a priority intervention plan to provide supplementary feeding to prevent and treat under-nutrition	• It has a priority intervention planned on sensitizing the community on gender bias in food distribution in households	• It has set a priority intervention of Counseling services to emphasize nutritional needs of pregnant and lactating adolescents and youth
		Overall, the strategic framework states that it will provide comprehensive care to adolescents and youths via partnerships and inter-sectoral collaboration, focusing on the synergistic action with other sectors such as education, agriculture, youth organizations, social welfare, and media. However, the role of the agricultural sector is not addressed in this strategy			
National policy and strategy on disaster risk management	2013	• It has stated that disaster risk management is a cross cutting issue, and it shall be mainstreamed into development plans of government institutions and private sector organizations • It has a policy principle of giving attention to natural resource conservation and development and environmental protection.	• Provides physical access to relief food		• Ministry of health is put as a lead institution to manage food shortage induced malnutrition affecting children and mothers
		In general, it portrays disaster risk management as a cross-cutting issue that shall be mainstreamed into development plans of government institutions and private sector organizations. As a result, in the policy, ministries of agriculture, environmental and forestry, health, water, irrigation and energy, federal affairs, transport, mines, national defense, urban development and housing construction, and education, have been given their specific roles as lead institutions. This shows that this policy is made to be coherent in its design. Besides, this policy is mainstreamed in the food systems as indicated in the NNP-II in strategic objective-4 at result 4.7, stated as "nutrition-sensitive interventions in disaster risk management coordination commission strengthened" with its specific initiatives.			

National social protection policy of Ethiopia	2012	• It aims to increase the production capacity through provision of agricultural inputs	• It has a big focus area in the Food Security Programs through Productive Safety Net Program (PSNP), Household Asset Building Program (HABP), the Voluntary Resettlement Program and the Complementary Community Investment Program (CCI). • Indicates that there are government measures to stabilize food price inflation which includes subsidizing grain costs for low income households, reducing taxes on grains, and regulating grain export.	• There are also insurances to the communities (health, weather indexed crop, vehicle…) • It has a focus area of livelihood and employment schemes which aims at promotion of employment, particularly focusing on skills development, and continued investments in entrepreneurship and household enterprises	• Improving nutritional status of women and children via Enhanced Outreach Strategy/Targeted Supplementary Feeding program (EOS/TSF) • Working at school feeding support programs for students
	In general, this policy has a vision of seeing all Ethiopians enjoy social and economic wellbeing, security and social justice, and it has included domains of the food systems for better nutrition and health outcomes, in line with the NNP-II strategic-4, under result4.6 that states the specific roles for social protection as "social protection services for improved nutrition strengthened"				
National Environment policy	1997	• It has put as a key guiding principle that natural resource and environmental management activities shall be integrated		• It has a policy direction to promote off-farm and on-farm income generating program	• It has a plan to safeguard human and environmental

laterally across all sectors and vertically among all levels of organization. And as an example, the policy directions for soil husbandry and sustainable agriculture along the food systems chain is clearly defined in this policy • It has also planned to promote in drought-prone and low rainfall areas water conservation which is as important as physical soil conservation for more secure and increased biomass production, including crop production		which aim at the alleviation of poverty, especially, among women whether they have access to land or not and among men who have no access to land.	health by producing adequate regulation of agricultural (crop and livestock) chemicals; though it doesn't set possible targets to achieve them
Overall, this policy is a comprehensive environmental policy on natural resources and the environment designed with the specific policy direction roles of respective sectors of the government of Ethiopia, considering that natural resources are the foundation of the economy. Yet, targets to be met in the respective sectors are not presented in the policy.			

3.2 Findings from the online survey

3.2.1. Basic information about the respondent

One hundred one individuals working in ten different organizations participated in the online survey. All of the participants hold key positions in their respective institutions. The sample distribution by type of organization is presented in figure 3.1. Not surprisingly, the majority of respondents were from Government institutions (43%), followed by national and international NGO's (24%), and University/research institutes (17 %). All together, these three sectors represented 83% of the participants.
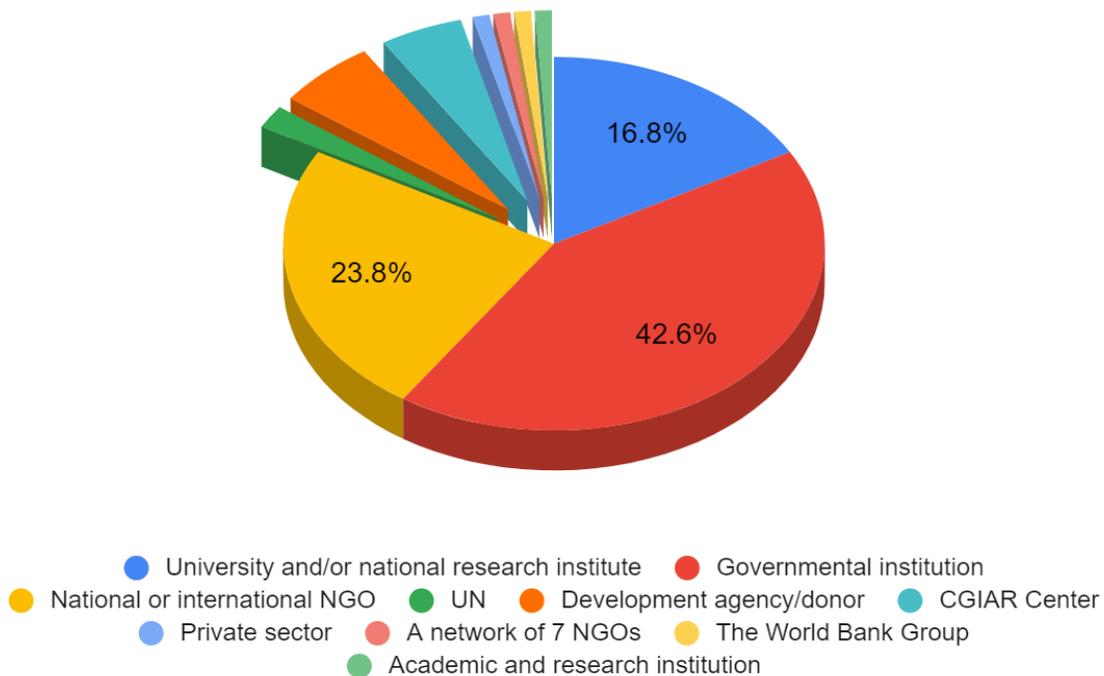

Figure 3.1 Types of institution/organization that participated in the online survey

3.2.2 General knowledge on, and engagement, in the food system debates

The self-assessed level of engagement and knowledge of participants in relation to the food system agenda revealed that the knowledge of the participants' and that of their institutions were above average (considering 4 as a midpoint[1]). Participants' self-assessed knowledge was slightly higher than their institutions, partly confirming their high level positions in their institutions. The level of knowledge and understanding about food systems was good and above for most of the participants (76.2%). Around 20% of the individuals graded their level of knowledge and understanding as 7 (exceptional). When we look at level of knowledge and understanding within their institution, the score was good in 19.8%, very good in 23.8% and excellent in 23.8% of the participants. Not a single participant self-assessed its organization's knowledge as poor.

Engagement in food systems debates was the highest for overall discussions on food systems, than policy components related to climate, food safety, urbanization, etc. Engagement in trade, agrobiodiversity, and urbanization discussions was also limited.

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[1] the Likert-scale system used for the semi-quantitative analysis was a 7-level scale (from 1 to 7), meaning that 4 is the mid-range value.
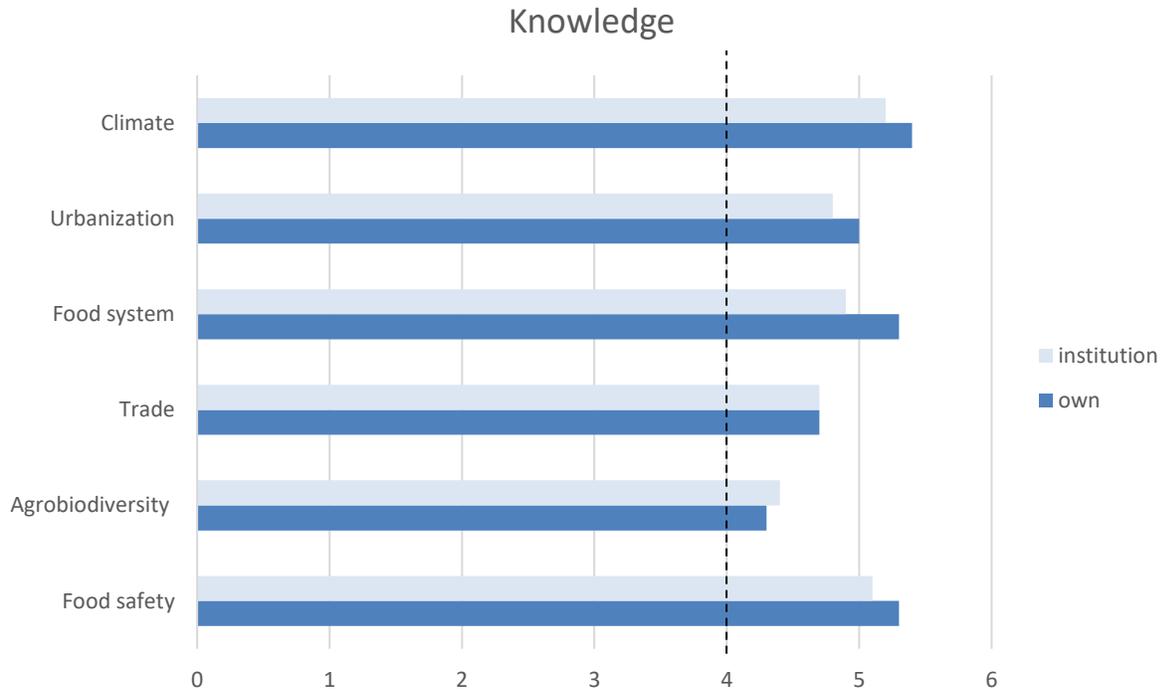
Knowledge

Fig.3.2A. Level of technical knowledge of the respondents

level of engagment/involvment
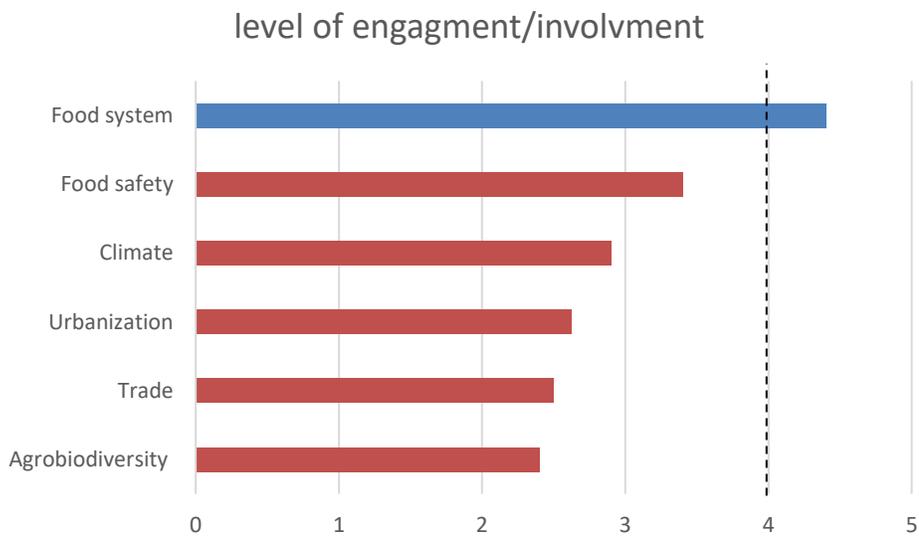
Fig 3.2 B Level of engagement of the respondents in relation to food systems

3.2.3 Do decision-makers consider that they comprehend the food systems?

The different actors that participated in the survey perceived themselves and their institution as having relatively good capacity and technical ability to deal with issues related to the food system. The various types of institutions rated their capacity as above average, which is in line with the findings above related to knowledge of the actors. In contrast, the level of collaboration among actors was rated low. This was supported by suggestions from the participants that despite the realization of the need for multi-sectoral action, the level of collaboration was suboptimal.
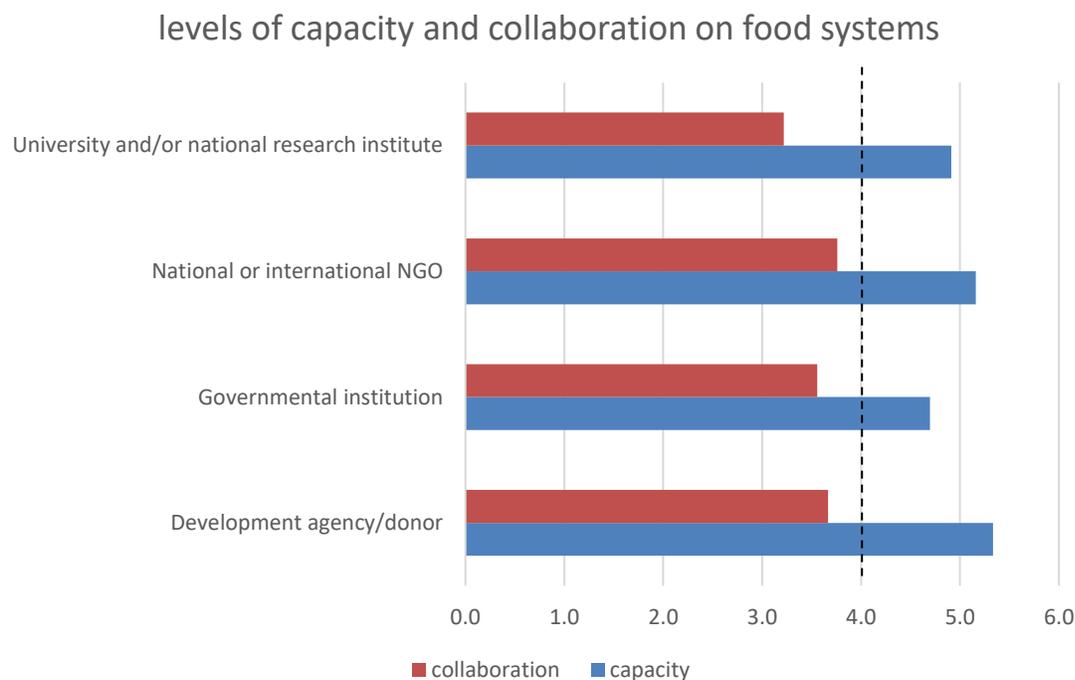

Fig 3.3 Self-assessed technical skills/capacity and collaboration of actors

3.2.4 Is the food system policy agenda in Ethiopia supporting a healthy diet?

Given the interest to shape food systems towards healthier outcomes, a set of questions were asked to participants to evaluate whether the Ethiopian food system policy agenda supports healthy diet. Overall, the participants considered that the policy agenda supports healthier diets (mean rating 4.4), and believed the right activities are being practiced to steer food systems towards healthier

diets (4.4), a finding further confirmed by the satisfaction expressed regarding the technical capacity of institutions. However, participants also indicated that there is room for improvement in terms of the adequacy of the policies, consumers' and policy maker's awareness about healthy diets. Besides, food safety and accessibility of healthy diets for the urban poor were considered suboptimal.

How health-sensitive is the food system environment in Ethiopia?
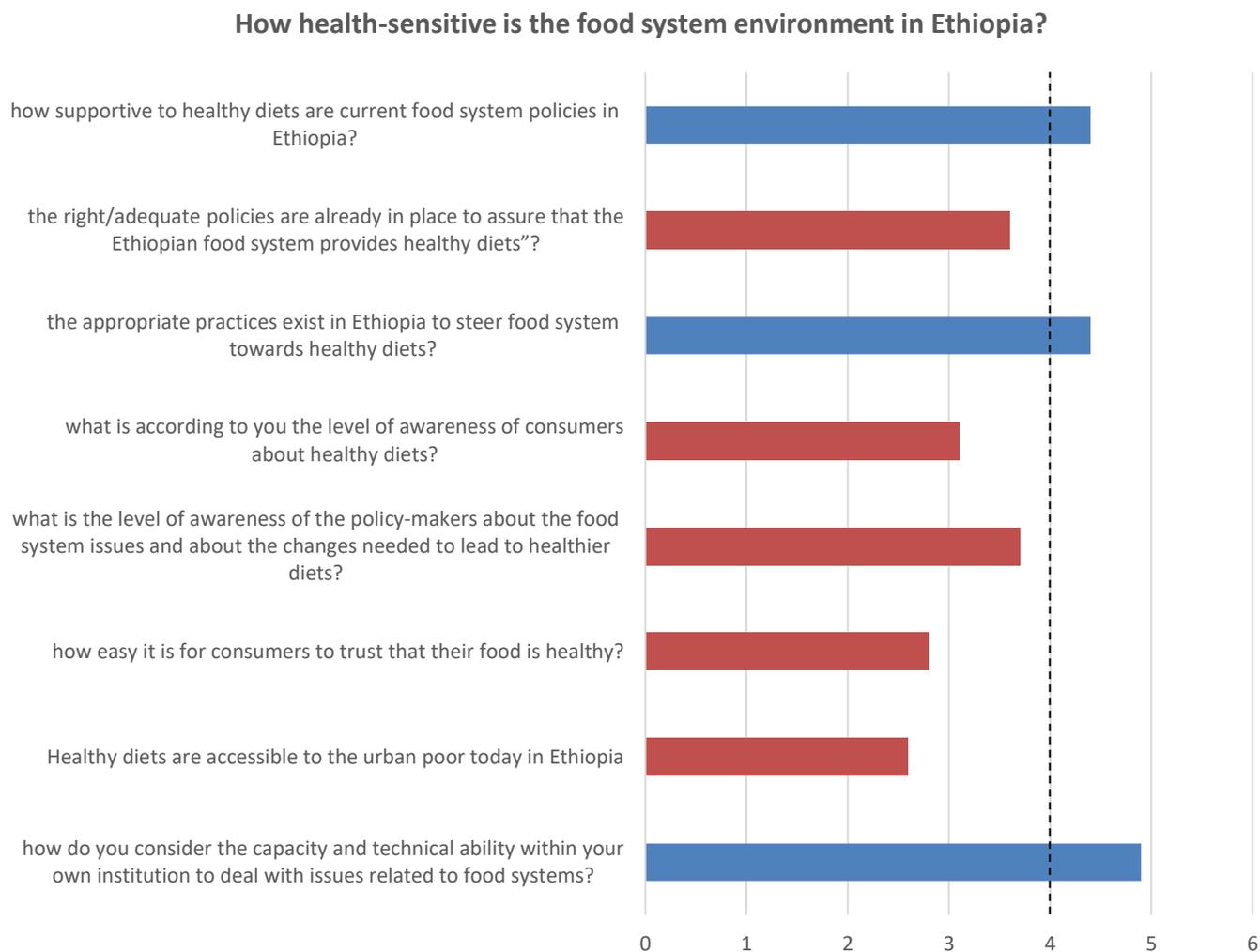
Fig 3.4 Heath sensitivity of the food system

3.2.5 Evidence-based versus lobbying?

Policy decisions can be evidence-based, but also may be influenced by advocacy and lobbying. In recent years, evidence-based decision making has been promoted in Ethiopia, but understanding the perception of actors around policy-making in Ethiopia is critical to assess if

such promotions have bare fruits. Almost all types of organizations rated high the notion that the policy making process was evidence-based. The least rating was from academia, even that rating (3.9) was close to the midpoint. While the rating on the role of advocacy was lower that the midpoint for all actors, donors and development agencies rated the role of advocacy as relatively high (4.9). In line with the perception that the policy process is evidence based, most actors believed that the policy match the reality on the ground, except perhaps academia/research organizations that rated this slightly lower than the midpoint (3.8).
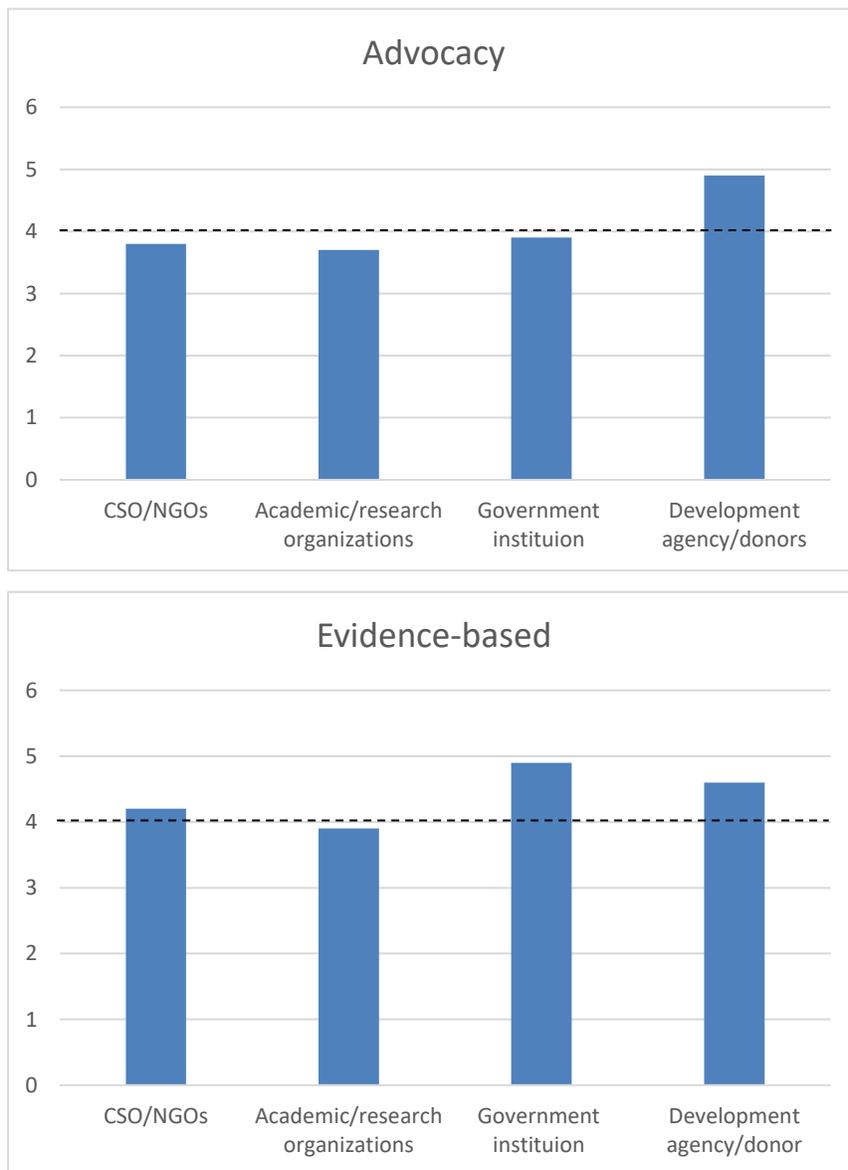
Fig 3.5 the role of evidence versus advocacy in Ethiopian food systems policy making

3.2.6 What drives the policy agenda in Ethiopia in relation to food systems?

Understanding which food systems-related issues are prioritized is critical to understand what is perceived as the main food systems driver leading to unhealthy outcomes. Food production (31%), food access and consumption (30%), and nutrition (16%) were the top priorities identified by the actors. Food safety and water quality (8%) and food processing and distribution (7%) were also identified as important.

Priority food system issue

Nutrition, Dietary Diversity, Food Safety and Hygienic environment 1%

poor diet quality due limited access to better quality diets 1%

Environmental health 2%

Sociopolitical context 3%

Food loss and inorganic waste 3%

Food processing and distribution 7%

Food safety and water quality 8%

Nutrition 14%

Food access and consumption 30%

Food production 31%

Fig 3.6 Priority food system challenge in Ethiopia

3.3 Key informant interviews

The data for the key informant interview was generated using questionnaires structured around the 'Actors – Discourses – Interest' (ADI) framework (Keeley & Scoones 1999; IDS 2006). Adopting the ADI framework, we aimed to identify the main actors, the different narratives and the power relationships shaping food systems related policies. As identified during the brainstorming with food system relevant experts, but also as identified by the prioritization of food system's related issues by decision makers, we focused on two policies for the ADI process. The first is the most recent food and nutrition policy that included the top three priorities (i) food production, ii) food access and consumption, and iii) nutrition). Despite, the absence of a stand-alone food safety policy, a food safety policy is under development, and the second discussion was held on food safety.

3.3.1 Food and nutrition policy

3.3.1.1 Policy actors related to food and nutrition

Twenty three different key policy actors were mentioned during the face-to-face interviews. These key policy actors are listed in **Table 3.3.** Majority the key influencing actors mentioned were from the central governments and civil society/NGOs. High number of individual actors were also listed. However, to keep the anonymity of the individuals, their organizations or the sector they represent is presented instead.

Table 3.3 Key policy actors mentioned by the respondents in relation to Food and Nutrition policy

Key policy actors	Type of institutions
Ministry of Health (MoH)	Government
Ethiopian Public Health Institute (EPHI)	Government
Ministry of Education (MoE)	Government
Ministry of Women Affairs (MOWA)	Government
Ministry of Agriculture (MoAg)	Government
Ministry of Labor and Social Affairs (MOLSA)	Government
Ethiopian Revenue and Customs Authority (ERCA)	Government
Ministry of women and children affair	Government
Jimma University	Government/Academia
Ministry of trade and industry	Government
UNICEF	UN agency
Save the children	Civil society/NGOs
Bill and Melinda Gates foundation	Donor

WHO	UN agency
WFP	UN agency
AGP	Civil society/NGOs
GTN	Civil society/NGOs
GIZ	Civil society/NGOs
Ethiopian nutrition leaders network	Civil society

3.3.1.2 Policy narrative discourse

Food production and productivity was perceived to have increased in terms of quantity, but was considered insufficient to meet the growing demand of the Ethiopian population. Some of the identified challenges related to "poor pre- and post-harvest loss management, shortage of transport accessibility…". The increase in production was perceived to have not been accompanied by equally important aspects like food diversity, safety, availability, accessibility, and affordability. Participants also mentioned suboptimal coordination among sectors as part of problem: *"lack of collaboration and integration among multi-sector, and poor and weak market accessibility and systems."* Majority of the interviewees suggested that, sustainably improving the healthiness of Ethiopians' diet, requires the Government to bring "different sectors to collaborate, integrate, and coordinate among themselves." To achieve this, participants suggested that the government should advocate intensively as well as promote, and create awareness about healthy diet, but also engage important stakeholders such as religious and community leaders.

Some participants also alluded that part of the insufficiency of production is related to the traditional form of agriculture practiced in Ethiopia: "traditional agriculture, and poor and traditional pre-and post-harvest management is part of the problem". This was believed to lead to food safety issues and poor diversification, as well as insufficient food production. In order to change the food production system, interviewees suggested the need for "positive social-behaviour change communication that should be developed to increase awareness regarding dietary diversity". Besides, participants called for "coordinated efforts between the different sectors through multi-sectorial collaboration." The importance of appointing committed, responsible, accountable, dedicated and, innovative leaders was highlighted by participants. Altogether, participants expect the bulk of the activities to be implemented by the Government; hence, the Government is regarded as the major and most important actor.

Both political and technical fixes were proposed by the interviewees. Among political suggestions included the greater need for coordination, regulatory agencies that monitor the implementation of the existing policies, aligning government structures to enable more effective implementation of policies, as well as assign committed leadership for effective implementation. There is a great hope that the creation of the now suggested Food and Nutrition Agency will address some of the accountability issues by making all ministries equally accountable. Technical suggestions included the increased use of advanced agricultural technologies, more effective supportive supervision, and evidence generation through applied research. More effective behavioural change communication through health and agriculture extension workers as well as religious leaders was also suggested.

3.3.1.3 Champions, power, interest, and influence

The food and nutrition policy, building on learnings from the national nutrition program, was very inclusive and allowed each Government sector to contribute to its formulation. Consequently, all ministries participated in the formulation. However, not all ministries have the capacity needed or some like health and agriculture are closer to food and nutrition issues in Ethiopia, leading to varying level of engagement among the sectors involved. Actors having a great role in the formulation of the national food and nutrition policy were the Ministry of Health, Ministry of Agriculture, Ministry of Education, Ministry of women and child affairs, and Academia/research organizations. Individual efforts and commitments were also identified as playing a very critical role in the food and nutrition policy development. However, no private sector was mentioned, suggesting the little engagement of the private sector in the food and nutrition policy process, but it was indicated that the private sector has a great role to play in the implementation of the policy.

Among the list of the central government, Ministry of Health and Ministry of Agriculture were mentioned as powerful policy influencers. The responses of the interviewees regarding national food and nutrition policy and food systems were analyzed and "mapped" out in figure 3.7. The policy agenda around national food and nutrition policy seems to be influenced mainly by the Government (central), but civic societies/NGOs and UN agencies also pay critical role in supporting the process.
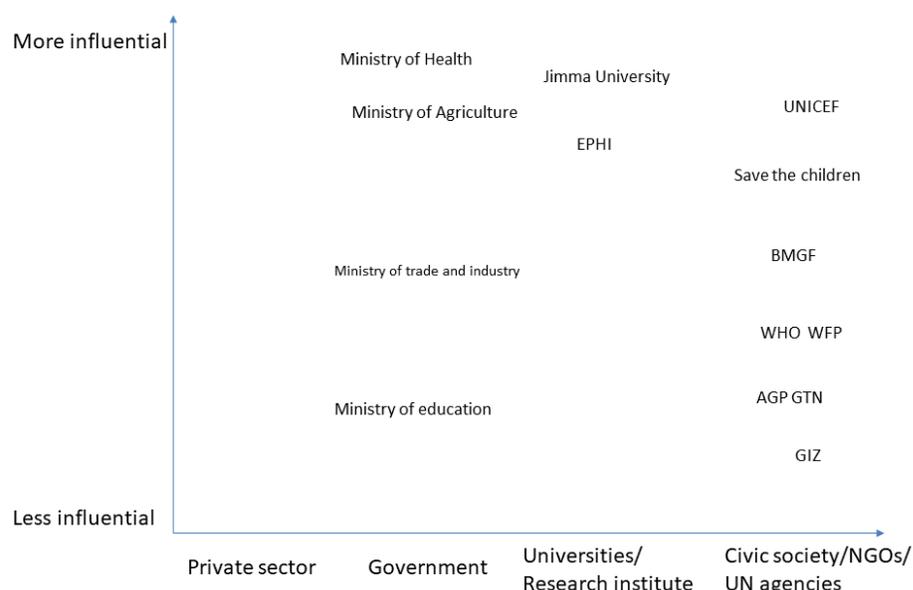
Fig. 3.7 Map of key-actors and their respective levels of influence as perceived by the respondents in relation to food and nutrition policy

3.3.2   Food safety policy

3.3.2.1 Policy actors related to food safety

Eleven different key policy actors were mentioned during the key informant interviews. These key policy actors are listed in **Table 3.4.** All of these key influencing actors were from the governments (central) or development partners and donors.

Table 3.4 Key policy actors mentioned by the respondents in relation to food safety policy

Key policy actors	Type of institutions
Ministry of trade and industry (MoTI)	Government
Department for International Development (DFID)	Donor
Bill and Melinda Gates Foundation (BMGF)	Donor
World Food Program (WFP)	UN agency
United Nations industrial development organization (UNIDO)	UN agency
Ethiopian public health institute (EPHI)	Government
Ethiopian food and drug authority (EFDA)	Government
Ethiopian Standards Agency	Government
Ethiopian Conformity Assessment (ECA)	Government
Ministry of health (MoH)	Government
Ministry of Agriculture	Government

3.3.2.2 Policy narrative discourse

While many have mentioned that the problem of food safety is a key challenge, some have indicated their reservations and considered the issue of food safety as an issue that is considered only after food availability and access is secured. Besides, the limited consumer awareness, the limitations in closely monitoring and implementing policies and regulations were mentioned as key bottlenecks. A number of food safety challenges were identified by the actors. These included, food adulteration, aflatoxin contamination, heavy metal contamination, pesticide residues due to excessive and inappropriate use of agrochemicals, poor post-harvest management, lack of traceability, poor labeling regulation and implementation, and the sale of expired items.

3.3.2.3 Champions, power, interest, and influence

The MoH and the various institutions that report to it were found key in formulating food safety related policies and regulations. The primary actor regarding food safety policies was the Government. The EFDA, ESA, ECA, EPHI, MoAg, and MOTI were actively involved in preparing the food safety strategy and guideline. The MoH was also active in raising awareness about food safety related issues like the health risk posed by unsafe foods as well as the social and economic consequences. The role of the private sector in supporting the ministry was highlighted as ensuring production of food that is safe. In addition, EPHI and MoAg were identified as key stakeholders.
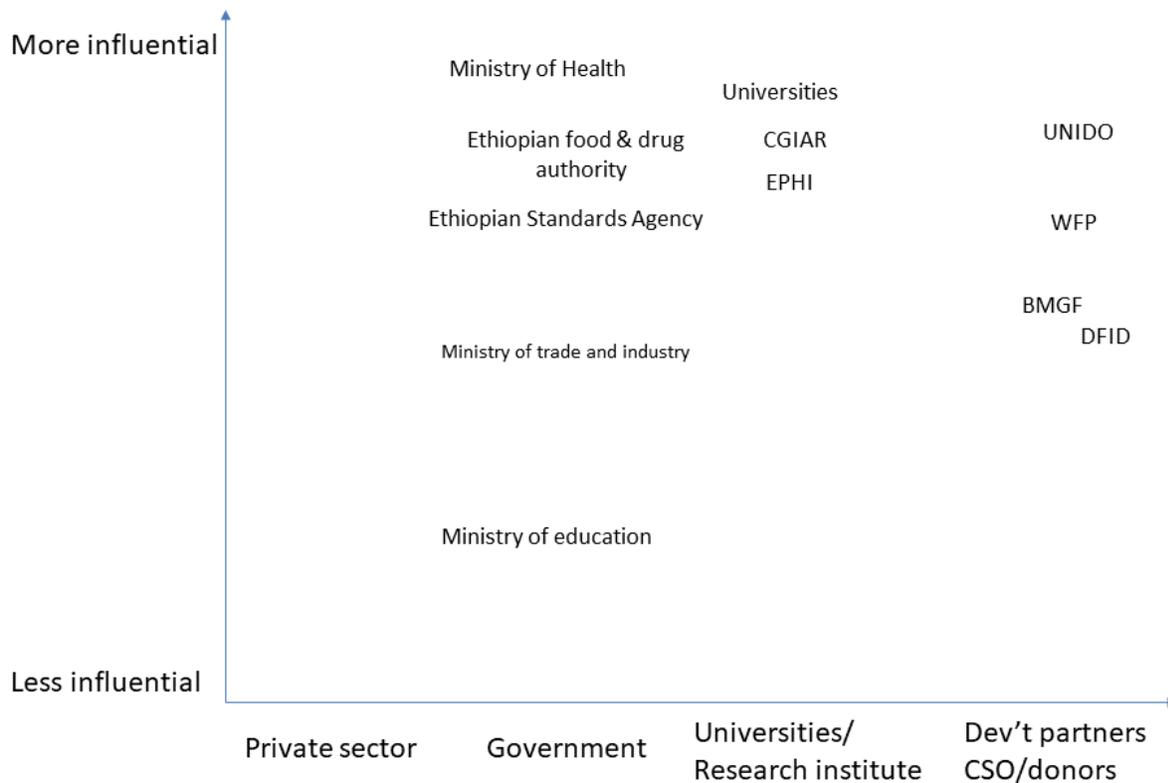
Fig 3.8 Map of key-actors and their respective levels of influence as perceived by the respondents in relation to food safety policy

3.3.3   Seqota declaration

Many of the points raised in the national interviews also applied to the Seqota Declaration program. However, below we present few points that were specific to the Seqota Declaration.

3.3.3.1 Actors related to Seqota Declaration implementation

The Seqota Declaration being a flagship program of initiated and implemented by the Ethiopian Government, has engaged about nine sector ministries in its implementation. The following key actors were identified during the key informant interviews. These key policy actors are listed in **Table 3.5.** All of these key influencing actors were from the governments (central) or development partners and donors.

Table 3.5 Key actors mentioned by the respondents in relation to Seqota Declaration programme

Key policy actors	Type of institutions
Ministry of Health(MoH)	Government
Ministry of Agriculture (MoAg)	Government
Ministry of Finance	Government
Ministry of Trade	Government
Ministry of Women and children's affair	Government
Ministry of Labor and Social Affairs	Government
Ministry of Water, irrigation and electricity	Government
Ministry of Transport and Logistics	Government
Universities	Academia
Ethiopian Public Health Institute	Government
BigWin philanthropy	Donor
African Development Bank	Donor
Bill and Melinda Gates Foundation	Donor
UNICEF	UN agency
WFP	UN agency
FAO	UN agency
Save the children	Development partners
World Vision	Development partners
Concern	Development partners
Alive and thrive	Development partners

3.3.3.2 Policy narrative discourse

Almost all the Seqota declaration interviewees mentioned that the food security condition of the country has improved, a few also mentioned that the improvements must be sustained. Some concerns were also raised regarding some farmers considered "model" and getting agricultural inputs and machineries, but remaining food insecure.

Many of key informants from both Seqota declaration program and other groups agreed that Ethiopia has well-structured, organized, feasible and comprehensive food security/nutrition policy. They stated that it follows a multi-sectorial approach and emphasised in addressing food insecurity and nutrition challenges. It was also stated that it encourages and promotes the engagement of different private sectors like credit association, services providers, and insurance companies. However, a key challenge is the implementation gap: *"the policy is not properly and effectively*

implemented as result of lack of commitment, accountability, clear job description, and sense of ownership by some sectors, knowledge and skill gaps about the policy." In addition to this, *"when the policy was formulated, it did not consider the grass root stakeholders and the resources locally available and accessible.*" Besides, a great extent of work was done in making the various agriculture sub-sectors nutrition-sensitive by following the nutrition-sensitive agriculture strategy.

Representative from the Gojjam area highlighted the need to understand and adapt to geographical differences, but also address trade-offs between quantity and quality of food production. To illustrate this geographical variability the case of western and eastern Gojjam was presented. The participant stated that in western Gojjam, there is a surplus production but little diversity; whereas, in eastern Gojjam, the production is insufficient in quantity but the quality and diversity of produces was reported to be superior. Part of this difference was explained as being a reflection of the loss of soil fertility, soil acidity, traditional tilling and poor pre- and post-harvest management. The orientation towards cash crops leading to cluster farming (mono-cropping) is also identified as limiting diversity of food produced.

The stakeholder proposed technical and political solutions to the identified challenges. Among the technical solutions proposed by the regional and woreda representatives included:

- the construction of watershed and irrigation canal to increase production
- providing intensive capacity building for agriculture and health extension workers about healthy diet
- encourage, facilitate, and enhance agroindustry and production of bio-fortified products
- enhance and facilitate waste disposal systems
- effectively manage pre- and post-harvest processes to minimize losses
- Intensively discuss with religious and community leaders about healthy diets and social-behaviours associated with feeding cultures and practices
- Support and train farmers on agricultural technologies

Among the political solutions proposed include:

- enhance natural resources conservation and afforestation
- more intensive monitoring and support for effective implementation
- creating mechanisms of appointing skillful and committed local leadership

- evidence-generation to inform and context-adapt policies
- better accountability by creating the Food and Nutrition Agency

4 Limitations

The present study aimed to identify actors, discourse, and interests around food systems-related policies and programs. Consequently, the findings presented represent the knowledge, understanding and opinion of the interviewed actors; hence, may not be complete. In light of the security situation, the locust invasion and the COVID-19 pandemic, the interviewing period was extended, leading to some recent developments being reflected in the findings. The security situation in Tigray did not allow us to interview Sekota Declaration personnel in Tigray. We, however, managed to interview national, and Amhara regional-and district-level personnel. Food system actors in Ethiopia are mainly from the Agriculture and Health sectors, leading to limited reflections on trade, urbanization, and climate policies.

5 Concluding remarks

Our study highlighted that the Ethiopian Food systems' related policy is considered as adequate and supportive of healthier diets. Most of the institutions and interviewees believe to have adequate skills and capacity related to food systems'. However, major challenges relate to the effective implementation of policies, rigorous supervision and monitoring, and suboptimal coordination among key actors. The priority food systems related issue identified are related to food production, access and affordability of foods, and nutrition. Food safety was also identified as key priority. The food and nutrition policy was considered as the most relevant food systems' related policy and was considered to be inclusive, comprehensive, and multi-sectoral. The initiative to create a food and nutrition agency is awaited and perceived to be a game-changing solution for the accountability challenges witnessed due to parallel structures.

6   References

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Annex: Information sheet and consent form

A. Information sheet

Food System for Healthier Diets in Ethiopia: Policies Programs and Anchoring for Scale.
Food system policy baseline study in Ethiopia

1. **Background on this research**

   Ethiopian government has demonstrated greater commitment to combat malnutrition through developing national nutrition sensitive agriculture strategy and mainstreaming nutrition in to major flagship development programs and in preservice education curricula. The A4NH food systems approach is a new concept, whose uptake among targeted audiences in the focus countries. This project will take snapshot of the policy land scape of the country to understand the major actors, barriers and opportunities for anchoring the food system approach.

2. **Purpose of the research**

   The purpose of this project is to foster understanding on the gaps and barriers for implementing food system approach across sectors, actors-types and across administrative scales in the country in general and Seqota Declaration in particular.

3. **Methods, procedures**

   We will collect data using different methods including interviews and group discussions. The information we collect will be used to better understand the food system in Ethiopia and in the two woredas Kolla Temben and Seqota. Semi-quantitative online survey will also be conducted to identify perceptions, knowledge, attitude and skill of key policy actors in Ethiopia. Finally, another interview will also be conducted with in the *Seqota* declaration program implementation areas involving the *Federal, Regional, Zonal, and Woreda* level Program Delivery Units (PDU) and its affiliates to take snapshot of the Seqota Declaration process with food system lens.

   You have been identified as a key informant and we will ask you questions about your perceptions on the food system policy and implementation situation in Ethiopia.

4. **Risks**

   This research project has no inherent risks, side effects or discomforts involved.

5. **Benefits**

   This project will help to identify entry points to promote the food system approach in the policy and implementation efforts to ensure healthier and sustainable diets in the country.

   The project will also inform the development of the National Nutrition Sensitive Agriculture Implementation Modality Manual that will be developed by A4NH led by IFPRI, EU, PAO-FIRST and MoA.

6. **Voluntary participation**

   Your participation in this interview is completely voluntary and you may refuse to participate before the interview begins, discontinue at any time, or skip any if the questions that may make you feel uncomfortable, with no affect or penalty or loss of benefits to you. When we have put together the information, we have gathered, we will ask if you can participate in a validation workshop so that we

can share with you how we have used the information that we gathered. We will ask your permission again separately for the workshop.

7. **Request for information and confidentiality**
   You can ask questions concerning this project or interview; both before agreeing to be interviewed and during the course of the interview or after (see required contact information below). The information obtained in this interview will be kept confidential and only be used to take snapshot of the food system policy landscape of the country. Any information shared by you that you do not wish to be included will not be included.

8. **Use of the information and the recording devices**
   The information that will be collected will only be used to meet the objectives of this project. All audio tapes, transcripts, photographs and questionnaires which will be used to capture data will be kept at locked facilities at the principal investigator's office in Addis Ababa Ethiopia until all analytical work and reporting have been concluded after which they will be destroyed following IRB ethical requirements. Any information shared by you that you do not wish to be included in the manual will not be included**.**

9. **Copy of the signed and dated consent form**
   We will provide you with a copy of this signed consent form and we will also keep a copy.

10. **Contact information**

Research Team

Dr. Kaleab Baye   M +251-91-189-0489   Kalabbaye@gmail.com

11. **Additional contact information**
    If necessary, the subject may contact the following for concerns or complaints.

    IRB in Ethiopia: Ethiopian Public Health Association

    Institutional Review Board (IFPRI IRB)
    Attn: Dr Eduardo Maruyama
    2033 K Street, N.W.
    Washington, DC 20006
    E-mail: ifpri-irb@cgiar.org

6.2 Consent form
Before we start the interview, we seek your consent for participation. Is everyone ready? May we start now?

I, the undersigned have read the consent and agreed to contribute data for this study. Name of participant: _____ Signature. _____ Date: _____	I, the undersigned have read the consent and agreed to be video/audio taped or photographed for this study. Name of participant: _____ Signature. _____ Date: _____

Annex B: Interview guide for face to face interview of the policy baseline study.

The Policy baseline study will consist of three steps, namely: 1) a brainstorming session with key informants on broadly-defined food systems, 2) face to face interviews on priority topics of food systems, 3) online survey on priority topics of food systems. In the following sections we specify the respective protocols.

1. Aim

This session is intended to work with key informants each with a recognized and different (among them) expertise on food system at National level. The idea is to identify key issues on activities, drivers, outcomes and priorities for moving National food systems towards sustainable outcomes.

2. Opening presentation

At the outset, the moderator will explain the purpose of the study and also the purpose of the brainstorming session to inform the building of a policy baseline pertaining to the theme of food systems for healthier diets. The information gathered during the session will be treated anonymously and will inform the design of a face-to-face and an online interview instruments to recollect the opinion and knowledge of experts from each of the priority fields identified. Then, the immediate purpose of the brainstorming session is to review the range of issues relevant and list at least 5 broad topics that are key for National Food Systems to achieve desired nutrition outcomes (e.g. education, climate change, public health, environmental sustainability, etc.).

This implies aligning participants' knowledge on what are food systems for healthier diets, what is defined as a broad priority topic, etc. and brainstorming using questions like these from the example used in Bangladesh:

Questions
How do you evaluate the current food security situation of the country? **(1)** - Improved or worsened
How do you evaluate food security policy over time? **(2)**
How do you evaluate food production in terms of quantity? **(3)** - Increased or decreased - Sufficient to feed the Ethiopian population
How do you evaluate the dietary quality of Ethiopians? **(4)** - Diet diversity - Energy and nutrient adequacy - Food safety
What is to be done to improve the dietary diversity of Ethiopians? **(5)** - The role of the current nutrition interventions in this regard - What needs to be changed in the food production system to ensure dietary diversity - Land usage/management Vs. production change needed
What is a healthy diet? **(6)** - For you - For Ethiopians

What can be done to sustainably improve the healthiness of Ethiopians' diet? **(7)**   -   Government role   -   NGO's role   -   Private sector role
Effect of Covid-19 pandemic on the food systems? **(8)**
Effect of the locust invasion on the food system? **(9)**

Given the results from the brainstorming, what are key broadly defined topics for National Food Systems? The following questions were asked for policies chosen by the respondents.

Actors and networks

- *Who are the key policy actors (in the government and outside) which have a say in the policy agenda? At which level?*

Sense of the "dynamics" around the agenda setting:

- *Are there some specific persons/institutions who can be considered as a champion (e.g. prime minister, minister of health, some private entrepreneurs, etc.) (pushing the agenda) –or is it the result of a combination/interactions of actors / institutions?*

- *Why and how are they considered as the champion?*

- *Are there some 'groups' or networks of actors who are closer/converge/share the same view? What are the issues having the same view? Why do they share the same view? Are there any meetings/discussions? How do they come to the same view?*

Homogeneity/ disparity in the positions of those different actors around the issue:

- *Do you see different actors to have different / conflicting views / interpretations about this issue? Is there some disagreement between different actors (maybe the civil society organizations have a slightly different view) about the cause of the problem?*

- *If yes, what kind of different/conflicting views/interpretation are there? Example? What leads to the differences? When do the differences occur? Which effects do the differences create?*

- *Are there any disagreements among the actors about approaches to address this issue? If yes, what are they and how do they occur?*

Narrative

- *According to you what is / are the cause(s) of the problem? What is the nature of the problem? What are the main challenges that Ethiopia is facing in relation to food and nutrition security? Why Ethiopia is in this situation?*

- *What approaches should be used to address the issues?*

- *Which tools or instruments should be put in place to address the issue? How can we resolve this issue? Which actors should be leading this?*

- *Do you think that the way the problem has been handled is appropriate? What would you do differently? What do you think should be the solutions?*

Power – influence

- *Are there any specific groups or actors that are benefiting from new policies? - If yes, which specific groups or actors get the most benefits? What are the benefits? Describe, please!*
- *Are there some groups that are being negatively affected (e.g. in terms of food access for the poor for instance)? What are the negative effects? Which specific groups or actors will be influenced?*
- *Who/which group/actor(s) has been pushing for new policies to be formulated? Who has driven the discussion? Was there some pressure from the media, or the public opinion? What exactly is that?*
- *In contrast are there some groups which have been (or are still are) arguing against the way the issue is currently handled? Who are these groups?*

Annex C Online survey

A. <u>Basic information about the respondent:</u>

A. Please, provide basic information about yourself!
Institution/organization: _____
Current position: _____

What type of institution/organization is it?

☐ Governmental institution
☐ National or international NGO
☐ University and/or national research institute
☐ Civil Society organization (farmers, consumers, women, etc.)
☐ CGIAR Center
☐ Private sector
☐ Development agency / donor
☐ Other (please specify): _____

Gender?

☐ Male
☐ Female

What has been the main focus of your work in the last two years? *(You can choose more than one option)*

☐ Nutrition
☐ Agriculture
☐ Development/poverty alleviation
☐ Health
☐ Trade
☐ Climate change
☐ Urban development/planning
☐ Service industry
☐ Other (please specify): _____

For each priority topic identified in the brainstorming session
Ask key informants about: -

Who are key actors, why are they considered so?

What dynamics is there around the policy agenda (networks, alliances, conflicts, etc?

What are dominant narratives (problems, solutions, approaches, champions, etc)?

Who are the powerful actors stewarding these narratives?

Who are possible champions in the specific topic that is engaged with activities relevant for food systems and nutrition, why are they considered a key link to food and nutrition?

Annex C. On-line survey questionnaire for policy base line study

Food system for Healthier Diets in Ethiopia: Policies Programs and Anchoring for Scale.

A. Please, provide basic information about yourself!

    Institution/organization: _____

    Current position: _____

What type of institution/organization is it?

- ☐ Governmental institution
- ☐ National or international NGO
- ☐ University and/or national research institute
- ☐ Civil Society organization (farmers, consumers, women, etc.)
- ☐ CGIAR Center
- ☐ Private sector
- ☐ Development agency / donor
- ☐ Other (please specify): _____

What is your gender?

- ☐ Male
- ☐ Female

What has been the main focus of your work in the last two years? *(You can choose more than one option)*

- ☐ Nutrition
- ☐ Agriculture
- ☐ Development/poverty alleviation
- ☐ Health
- ☐ Trade
- ☐ Climate change
- ☐ Urban development/planning
- ☐ Service industry
- ☐ Other (please specify): _____

B. Generic Questions

1. On a scale from 1 = nothing, to 7 = a great deal, what has been your level of involvement in food system discussions and debates in Ethiopia in the last 12 months?
2. On a scale from 1 = nothing, to 7 = a great deal, what has been the level of your institution's involvement in food system discussions and debates in Ethiopia in the last 12 months?
3. On a scale from 1 = very poor to 7 = very good, what is your own level of knowledge and understanding about food systems?
4. On a scale from 1 = very poor, to 7 = very good, what do you think the level of knowledge and understanding is about food systems within your own institution (i.e. among your colleagues)?

5. According to you what is the No. 1 issue in Ethiopia when it comes to food system?
   - ☐ Environmental health
   - ☐ Food loss and inorganic waste
   - ☐ Food safety and water quality

☐ Food production
☐ Food processing and distribution
☐ Food access and consumption
☐ Sociopolitical context
☐ Nutrition
☐ Others: _____

6. On a scale from 1 = very low to 7 = very strong, how would you evaluate the level of collaboration among the different governmental organizations to deal with issues related to food systems?

7. On a scale from 1 = not supportive at all, to 7 = very supportive, according to you, how supportive to healthy diets are current food system policies in Ethiopia? Could you provide us with a concrete example (in few words) justifying your response?

8. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on food system in Ethiopia shaped and influenced by science and evidence?

9. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on food systems in Ethiopia shaped and influenced by advocacy and lobbying (by private and/or public actors)?

10. On a scale from 1 = not close to the reality to 7 = very close to the reality, according to you, to what extent is the current policy agenda on food system in Ethiopia reflecting the reality on the ground?

11. On a scale from 1 = not environment-sensitive at all to 7 = very environment-sensitive, according to you, how sensitive to environmental issues is the overall food system policy context in Ethiopia? Could you provide us with a concrete example (in few words) justifying your response?

12. On a scale from 1 = do not agree at all, to 7 = fully agree where do you place yourself with the following statement: "The right/adequate policies are already in place to assure that the Ethiopian food system provides healthy diets"?

13. On a scale from 1 = not active at all, to 7 = very active, according to you, how active are NGOs and Civil Society Organizations in relation to food system issues in Ethiopia?

14. On a scale from 1 = do not agree at all, to 7 = fully agree, where do you place yourself with the following statement: "The appropriate practices exist in Ethiopia to steer food system towards healthy diets"? Please provide some examples of type of appropriate practices and who is promoting these.

15. On a scale from 1 = very low, to 7 = very high, how do you consider the capacity and technical ability within your own institution to deal with issues related to food systems?

16. On a scale from 1 = do not agree at all, to 7 = fully agree where do you place yourself with the following statement: "Healthy diets are accessible to the **urban poor** today in Ethiopia"?

17. On a scale from 1 = not easy at all, to 7 = very easy, how easy it is for consumers to trust that their food is healthy?

18. On a scale from 1 = not aware at all, to 7 = fully aware, according to you, what is the level of awareness of the policy-makers about the food system issues and about the changes needed to lead to healthier diets?

19. On a scale from 1 = not aware at all, to 7 = very aware, what is according to you the level of awareness of consumers about healthy diets?

C1. Specific questions for urbanization
1. From 1 = very poorly to 7 = very well managed, how would you rate the current situation about urban development in Ethiopia? Can you justify in a 2-line sentence your answer?

2. On a scale from 1 = nothing, to 7 = a great deal, what has been the level of your involvement in the consideration/discussion of urbanization directly or indirectly related to food systems in Ethiopia in the last 12 months? Please specify one of the issues that were considered/discussed.

3. On a scale from 1 = very poor to 7 = very good, what is **your own level** of knowledge about the relationship between urbanization and food systems and diets in Ethiopia?

4. On a scale from 1 = very poor to 7 = very good, what is the level of knowledge and understanding **within your institution** about the relationship between urbanization and food systems and diets in Ethiopia?

5. On a scale from 1 = not supportive at all to 7 = very supportive, according to you, how supportive to a healthy diet are current urban development policies in Ethiopia? Please provide us with a concrete example (in few words) justifying your response.

6. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on urbanization in Ethiopia shaped and influenced by science and evidence.

7. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on urbanization in Ethiopia shaped and influenced by advocacy and lobbying (by private and/or public actors)?

8. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding of urban residents about urban development planning in Ethiopia?

C2. Specific questions for climate change
1. From 1 = very poorly to 7 = very well managed, how would you rate the current situation about climate change in Ethiopia? Can you justify in a 2-line sentence your answer?

2. On a scale from 1 = nothing, to 7 = a great deal, what has been the level of your involvement in climate change consideration/discussion in Ethiopia in the last 12 months? Please specify one of the issues that were considered/discussed!

3. On a scale from 1 = very poor to 7 = very good, what is **your own level** of knowledge about climate change issues affecting food systems in Ethiopia?

4. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding **within your institution** on climate change issues affecting food system in Ethiopia?

5. On a scale from 1 = not supportive at all to 7 = very supportive, according to you, how supportive to food system issues are current climate change-related policies in Ethiopia? Please provide us with a concrete example (in few words) justifying your response!

6. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on climate change in Ethiopia shaped and influenced by science and evidence?

7. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on climate change in Ethiopia shaped and influenced by advocacy and lobbying (by private and/or public actors)?

8. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding of people about climate change issues and their potential effect on food systems in Ethiopia?

C3. Specific questions for food safety
1. From 1 = very poorly to 7 = very well managed, how would you rate the current situation about food safety in Ethiopia? Can you justify in a 2-line sentence your answer?

2. On a scale from 1 = nothing, to 7 = a great deal, what has been the level of your involvement in food safety consideration/discussion in Ethiopia in the last 12 months? Please specify one of the issues that were considered/discussed

3. On a scale from 1 = very poor to 7 = very good, what is **your own level** of knowledge about food safety issues leading to healthy diets in Ethiopia?

4. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding **within your institution** on food safety issues leading to healthy diets in Ethiopia?

5. On a scale from 1 = not supportive at all to 7 = very supportive, according to you, how supportive to a healthy diet are current food safety-related policies in Ethiopia? Please provide us with a concrete example (in few words) justifying your response!

6. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on food safety in Ethiopia shaped and influenced by science and evidence?

7. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on food safety in Ethiopia shaped and influenced by advocacy and lobbying (by private and/or public actors)?

8. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding of consumers about food safety issues in Ethiopia?

C4. Specific questions for trade
1. From 1 = very poorly to 7 = very well managed, how would you rate the current situation about food trade in Ethiopia? Can you justify in a 2-line sentence your answer?

2. On a scale from 1 = nothing, to 7 = a great deal, what has been the level of your involvement in trade consideration/discussion directly or indirectly related to food systems in Ethiopia in the last 12 months? Please specify one of the issues that were considered/discussed!

3. On a scale from 1 = very poor to 7 = very good, what is **your own level** of knowledge about relationship between trade issues, food systems, and healthy diets in Ethiopia?

4. On a scale from 1 = very poor to 7 = very good, what is the level of knowledge and understanding **within your institution** about the relationship between trade issues, food systems, and healthy diets in Ethiopia?
5. On a scale from 1 = not supportive at all to 7 = very supportive, according to you, how supportive to a healthy diet are current trade policies in Ethiopia? Please provide us with a concrete example (in few words) justifying your response!

6. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on trade in Ethiopia shaped and influenced by science and evidence?

7. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on trade in Ethiopia shaped and influenced by advocacy and lobbying (by private and/or public actors)?

8. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding of consumers about domestic and international trade situation in Ethiopia?

C5. Specific questions for agrobiodiversity
1. From 1 = very poorly to 7 = very well managed, how would you rate the current situation about agrobiodiversity management/conservation in Ethiopia? Can you justify in a 2-line sentence your answer?

2. On a scale from 1 = nothing, to 7 = a great deal, what has been the level of your involvement in agrobiodiversity consideration/discussion in Ethiopia in the last 12 months? Please specify one of the issues that were considered/discussed!

3. On a scale from 1 = very poor to 7 = very good, what is **your own level of** knowledge about agrobiodiversity issues in relation to healthy diets in Ethiopia?

4. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding **within your institution** on agrobiodiversity issues in relation to healthy diets in Ethiopia?

5. On a scale from 1 = not supportive at all to 7 = very supportive, according to you, how supportive to a healthy diet are current agrobiodiversity-related policies in Ethiopia? Please provide us with a concrete example (in few words) justifying your response!

6. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on agrobiodiversity in Ethiopia shaped and influenced by science and evidence?

7. On a scale from 1 = not influenced at all, to 7 = strongly influenced, according to you, to what extent is the current policy agenda on agrobiodiversity in Ethiopia shaped and influenced by advocacy and lobbying (by private and/or public actors)?
8. On a scale from 1 = very poor to 7 = very good, according to you, what is the level of knowledge and understanding of consumers about values of traditional crop varieties and native animal breeds in Ethiopia?

Annex D Summary of findings

D.1 Discussion with National level policy actors

Questions	Answers	Illustrative quotes
How do you evaluate the current food security situation of the country? **(1)** - Improved or worsened	Although strong efforts were exerted by the Government and its partners and that this has led to improvements in food security, most participants believed that the food security is not achieved yet. This was exemplified by the number of individuals still dependent on food aid. Also the fact that diets remain energy-dense with little diversity, the unaffordability and unavailability of nutrient-rich foods were also mentioned.	"We were only working to meet the energy demand of the population." "If there were no struggle to achieve food security, the whole population may become totally dependent on food aid." "We cannot secure our food by farming for 3 months and resting for 6 months."
How do you evaluate food security policy over time? **(2)**	- Participants mentioned that the Government's focus in the past was on production and productivity, but this has evolved with time. The policies were reported to have focused little on quality and safety, and had little mention of consumption and marketing. - Production was not linked to consumption and marketing - The current policy was perceived as better than the previous one. To illustrate the example of cluster farming of wheat was mentioned - Our current food and nutrition policy gives more emphasis to food security when compared to previous national nutrition programs. - We come thus far and there were lots of changes observed, but we understood the policy will not bring the overall expected change and started a reform around our agriculture policy.	"Even if we did not work on it yet, the current policy is perfect in so many ways." "One of the targets for the current policy is nutrient-dense foods for all and it should be affordable." "One of the reform is towards public investment-driven growth"
How do you evaluate food production in terms of quantity? **(3)** - Increased or decreased - Sufficient to feed the Ethiopian population	- The quantity of food produced is still not sufficient to feed the whole population - Although food production has increased, the population has also grown - There is also a substantial post-harvest loss that needs to be addressed	"Even if the production increases, it is not sufficient to feed the whole population."
How do you evaluate the dietary quality of Ethiopians? **(4)**		

- Diet diversity - Energy and nutrient adequacy - Food safety	- Dietary diversity is very low as production is focused on staples and productivity and less on diversity and quality, thus energy intake may be sufficient in some parts of the country, but nutrient adequacy is poor - Knowledge of the importance of diet diversity has increased, but enabling conditions like accessibility and availability are limiting - Food safety is a serious problem as agrochemicals are inappropriately used - Urban agriculture that aimed to increase access to vegetables in urban areas is confronted by food safety concerns due to chemical run-offs into the rivers used to grow the vegetables - Aflatoxin, heavy metal, and pesticide contamination is a critical food safety concern in Ethiopia and requires more attention	"Even the impact of aflatoxin on the export market is visible." "diversifying our diets is considered important by many, but the producing staples is much more easier than producing horticultural crops" "the unavailability of cold-chain and post-harvest management like processing hinders the production of nutrient-dense foods that are also perishable"
What is to be done to improve the dietary diversity of Ethiopians? **(5)** - The role of the current nutrition interventions in this regard - What needs to be changed in the food production system to ensure dietary diversity - Land usage/management Vs. production change needed	- Because of the land ownership problem, private sectors do not engage in food production, and processing as much as needed. - We should not only focus on the production of cereal-based foods. We have to start producing perishable foods, fruits, and vegetables. - We have to educate and create awareness among the families and farmers about effective land use. - Agricultural practices that will not harm the land have to be practiced. Small scale production including urban production should be promoted. - Revising land use policy to allow the wise use of our land in a way that it does not harm our future (e.g., land degradation, water usage, and climate).	"Our land management is poor... If it was good, we could have harvest fruits and vegetables at least four times a year. We have to work in this area." "Creating off-farm opportunities for those farmers who have small farming land or creating other opportunities is needed."
What is a healthy diet? **(6)** - For you - For Ethiopians	**For the interviewee** - A diet which comes from different food groups and contains fruits and vegetables, allowing the population to meet carbohydrates, protein, fat, vitamins and minerals. **Perspective of the population**	"The community defines healthy diet as it fits their consumption pattern."

	- Tasty foods and foods which come from the supermarket are considered to be healthy - There are different messages adopted by the community when it comes to healthy diet, but most of them are wrong. Eating meat most of the time is considered as healthy	"People get difficulties in understanding a healthy diet. Some individuals consider eating meat frequently is part of a healthy diet."
What can be done to sustainably improve the healthiness of Ethiopians' diet? **(7)** - Government role - NGO's role - Private sector role	All stakeholders, from individuals to organizations, are responsible to improve the healthiness of the diet. - The government should take the leading role, especially, the agriculture sector. - The private sector should engage in production rather than in importing different foods. - NGOs should help the implementation by the government in areas of the latest technology and capacity building. A resilient system should be created to improve sustainability. The government should: - Create awareness about healthy diet and the consequence of consuming an unhealthy diet. - Avail healthy foods and restrict consumption of unhealthy foods. - Import substitution - Create the linkage between producers and consumers Government (agricultural sector) should increase production and productivity. - Not only cereals but also all the food groups (including fruits and vegetables); continue the promising start of making agriculture nutrition-sensitive - Create access for those individuals who do not have food. - We have to build/strengthen our food processing capacity to reduce post-harvest loss	"In this regard, the government should take the leading or coordination role (overall lead)." "NGO/CSOs should think about how they can support the Government." "NGOs should help the government in providing technologies helpful in production, processing, and preserving foods."
Effect of Covid-19 pandemic on the food systems? **(8)**	Due to the Covid-19 movement restriction, people did not get enough and diversified foods. At the beginning of the infection when movement was restricted from Addis Ababa to the regions and vice versa, the food supply was disrupted. This has affected the production and the distribution, but this has changed immediately after movement restrictions were lifted	"There were also restrictions on foods from the place of production to different areas; hence, affecting the food system." "the effect of covid-19 was short-lived, what affected more is the inflation due to market manipulation"
Effect of the locust invasion on the food system? **(9)**	The locust invasion affected the food security of areas where the invasion happened, as a result many have to rely on emergency food aid, but the real impact is yet to be determined	"Locust invasion affected the Eastern *Zones'* food production and consumption at the household levels."

D.2 Interviews with Seqota Declaration implementers

Questions	Answers	Illustrative quotes
How do you evaluate the current food security situation of the country/region/district? **(1)** - Improved or worsened	The government is working to maintain the food security situation of the country by promoting production and productivity. Overall, the food security situation of the country is improving but much more needs to be done. Before food security in Beyyada *Woreda* was challenging. But, now a day supply and demand is becoming toward a balance. But still there is a challenge due to natural disasters and metrological conditions. Demand seem to be higher that supply demand is very high. The food security of our community is poor.	"The improvement is huge and it is supported by using technologies" "Among the 32 *kebeles* found in our *Woreda*, 20 of them are dependent on food aid."
How do you evaluate food security policy over time? **(2)**	We do have a policy that brings a great change. The problem is the implementation. There is a change across the years in the food security policy. The current food and nutrition policy identified many gaps and worked on them to have a comprehensive and inclusive policy. There is a clear move towards nutrition-sensitive agriculture. The Seqota Declaration, for example, aims to secure 100% access to food, zero post-harvest loss, increase income of small holder farmers, and promote climate smart-infrastructure. Efforts in this regard are making changes; hence, improving food and nutrition security.	"There are challenges to executing the policy, like raw materials, budget, but this is a Government owned program illustrating the commitment of the Ethiopian Government to eradicate malnutrition."
How do you evaluate food production in terms of quantity? **(3)** - Increased or decreased - Sufficient to feed the Ethiopian population	The production of food is improved but not sufficient to feed the population. Certain crops are produced in enormous amounts, while fruits and vegetable production remains small. The quantity of food production in Beyyada *Woreda* is increased and sufficient to feed most of the community members.	"The production of food in North Gonder - Tselamit *Wereda* is not enough to feed the population sufficiently."

How do you evaluate the dietary quality of Ethiopians in the Seqota declaration areas? (4) - Diet diversity - Energy and nutrient adequacy - Food safety	Currently, the dietary diversity of the population is not fulfilled. Among pregnant and children under two years, the diet diversity score is very low. The community in Beyyada *Woreda* is producing the same type of food types that they were producing before. They are not diversified and nutrient-dense. Dietary diversity is somewhat good in North Gonder - Tselamit *Wereda*, but it needs close follow-up and supervision. There is enough production of mono-cropping. The diet in our community is not diversified. Cultural and behavioral issues are also a challenge; for example, in areas where fish is available, the community is still not consuming them. Similarly, vegetables are also not consumed even when they are available. The issue of food safety is a huge challenge for our community and it needs to be also put on the table for discussion.	"Due to different reasons, nutrient-dense crops are not coming as necessary. This year, we are going to try it." "Water is available in different parts of the community. Using this water, household members try their best to grow vegetables and keep their diet diversified." "Production is market-oriented which favor onion production than other more nutrient-dense vegetables and fruits that are necessary for a healthy diet." " although fish is available in areas around the Tekeze river, the community call fish "rats of the sea"; hence, discouraging consumption"
What is to be done to improve the dietary diversity of Ethiopians? (5) - The role of the current nutrition interventions in this regard - What needs to be changed in the food production system to ensure dietary diversity - Land usage/management Vs. production change needed	- Improving the household level of production productivity by modernizing the agriculture sector through the support of agricultural inputs (poultry, goats, seeds, etc) - Provide training for farmers through farmers training center (seed multiplication center) - Providing irrigation infrastructures to allow year round production - Access to food, especially nutrient-dense foods, to those extremely vulnerable through fresh food vouchers integrated into the social protection (PSNP) - Due to farmer's land scarcity, they are producing few crops. To improve the dietary diversity, we have to produce both the usual food groups our community is producing but also the nutrient-dense ones. - The government and NGOs should work closely with our community to improve dietary diversity. - The Seqota declaration program also work to increase job opportunities but also empower women. - Promotion of poultry and goat milk production, but also planting of year-round fruiting trees are promoted	"We have no the strength to tell them to produce other food groups with such scarce land." "Our community members are ready to change, but they need support from the government and NGOs." "As part of the Seqota declaration program, we are promoting biofortified crops like orange-fleshed sweet potato, but also crops like quinoa, and beans…" "we provide energy-saving stoves to allow caregivers have more time spent on collecting firewood to now be used to care for their children, reduce energy expenditure.."
What is a healthy diet? (6) - For you - For Ethiopians	**For the interviewee** - Eating from different groups in a balanced way. It includes consumption of fruits and vegetables and restriction of salt, sugar, and fat. - It is the consumption of different food groups in a balanced way.	"A healthy diet means consuming four and above food groups"

	- Eating from different groups of food in a balanced way.
	For the population
	  ▪ Eating meat most frequently and supermarket foods are considered as healthy diets.
	  ▪ Most of the community members do not have any idea about it.
	  ▪ The population thinks that eating meat frequently is a healthy diet.
	  ▪ They considered energy-dense foods as healthy	

What can be done to sustainably improve the healthiness of Ethiopians' diet? **(7)**
- Government role
- NGO's role
- Private sector role
	- The government sectors, NGOs should work together and establish training centers in different places and provide training for the farmers.
	  ▪ Training on every technology necessary for them, and from food production to consumption.
	The government and NGOs should support the community members of our *Woreda* by;
	  ▪ Improving the farming style,
	  ▪ Introducing the technologies and
	  ▪ Using our land and water efficiently
	  ▪ Introducing different technologies,
	  ▪ By giving knowledge and capacity-building training related to farming, harvesting, and consumption.
	
	Government should coordinate all the activities and continue to take the lead
	
	NGOs should provide technical support
	
	Private sectors are and should engage in different activities, from hygiene sanitation to food production, and processing.
		"Without working in collaboration, we fail to bring the change we want"
		
		"what is hindering effective multisectoral collaboration is related to accountability"
		
		"Since the environment is challenging for agriculture, the government and NGOs should help us in implementing agroforestry and animal production."

Effect of Covid-19 pandemic on the food systems? **(8)**	- Covid-19 caused a lot of problems in Beyyada *Wereda* regarding the food systems. Especially those individuals with a limited economic income suffered a lot. - Especially related to the accessibility of raw materials and food products. - Regarding the effect of covid-19 on the food system, our community is not affected as such. Rather, other issues like the current internal conflict affected the community more than the covid-19 pandemic. - Industrial foods are very high in price due to the pandemic.	"The Covid-19 impact is visible on supplies that are imported, which is related to the global supply chain disruption, but local inflation that is rather related to market manipulations was more severe that the effect of Covid-19.."
Effect of the locust invasion on the food system? **(9)**	Locust invasion affected the Eastern *Zones'* food production and consumption at the household levels. The locust invasion did not cause many problems in our community.	

	In our *Woreda,* the locust invasion only affected one of our communities and to a lesser extent.	