Conceptualizing Women's Empowerment in Agrifood Systems Governance

A New Framework

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ABSTRACT

This paper develops a new framework to measure and track women's empowerment in governance of countries' agrifood systems. All too often, women's needs, priorities, and voices are missing from the policy process, even when women may be disproportionately affected by shocks or have distinct policy preferences. The Women's Empowerment in Agrifood Systems Governance (WEAGov) is an assessment framework to help countries and stakeholders measure the extent of inclusion and leadership of women in agrifood systems governance and to identify gaps and opportunities for improvement. WEAGov looks across three stages of the policy cycle: policy design, policy implementation, and policy evaluation. At each stage of the policy cycle, WEAGov asks three questions central to women's empowerment in governance: Are women *considered*? Are women *included?* And are women *influencing*? This paper describes the process of conceptualizing and developing the WEAGov assessment framework by drawing together evidence, experience, and lessons from the literature and from over 30 stakeholder consultations across several countries and sectors to develop a practical and theoretically grounded framework.

Keywords: governance; agrifood systems; women's empowerment; gender; assessment framework; assessment tool

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ACRONYMS

AFS	-	agrifood systems
GBV	-	gender-based violence
IFPRI	-	International Food Policy Research Institute
NGO	-	nongovernmental organization
SDG	-	Sustainable Development Goals
UN	-	United Nations
WEAI	-	Women's Empowerment in Agriculture Index
WEAGov	-	Women's Empowerment in Agrifood Systems Governance Assessment Framework

1 INTRODUCTION

Recent global shocks—including the COVID-19 pandemic, the Russia-Ukraine crisis, and soaring food, fuel, and fertilizer prices—have highlighted the need for countries to pursue innovative policy solutions to enhance the resilience and sustainability of their agrifood systems (AFS).[1] Too often, these kinds of crises, increasingly intensified by climate change, disproportionately affect women (FAO 2020; Kumar and Quisumbing 2013) and reveal the disconnect between the essential roles women play in AFS and their relative absence in governance processes that design and implement AFS-related policy solutions. Tackling both problems head on—effectively governing systems increasingly subject to shocks and a changing climate, while empowering women within governance processes—will be essential to securing resilient, sustainable, and inclusive food systems.

How can countries assess whether women are empowered within the policies and institutions that govern their AFS? We introduce a new assessment framework to help countries and stakeholders assess women's empowerment within AFS governance: the Women's Empowerment in Agrifood Systems Governance (WEAGov). The framework brings together evidence and experience from the literature and from over 30 stakeholder consultations across several countries and sectors to develop a practical and theoretically grounded framework. To strengthen the resilience of AFS and to further economic development, governments are actively developing and implementing new climate-smart agricultural development plans; sustainable food system strategies; national agricultural investment plans; sustainable livestock, forestry and fisheries policies; and more. WEAGov is designed to help governments and other key stakeholders to identify gaps in women's empowerment within the process of developing and implementing these kinds of national policies, strategies, and plans—and to identify opportunities for improvement. WEAGov is designed to measure and monitor governments' readiness in their gender-responsive and gender-transformative policy design and implementation. Although focused on national-level governmental policy processes, WEAGov considers the influence of a wide range of actors on these processes, including civil society organizations and private sector entities.

There are many existing measures and indexes to track gender equality and women's empowerment from the individual and firm levels up to the country and global levels.[2] There are also separate measurements focused broadly on the quality of governance, especially at the national level. There is, however, a lack of tractable measures and data to assess women's empowerment within national-level AFS governance. This is the gap WEAGov seeks to fill.

Filling this gap is important for at least three reasons. First, because governance creates or constrains opportunities and determines AFS services and their provision, it is crucial to understand women's roles in these decisions that will affect their lives and livelihoods. Second, although some well-developed methodologies assess women's empowerment within the agricultural sector at the individual and project levels, such as the Women's Empowerment in Agriculture Index (WEAI) family of tools (Alkire et al. 2013; Malapit et al. 2019), women's empowerment within the household or among economically focused groups may not necessarily translate into women's empowerment and participation in the public and policy spheres (Beath, Christia, and Enikolopov 2013; Bleck, Gottlieb, and Kosec 2021;

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[1] AFS have been defined by the High-Level Panel of Experts on Food Security and Nutrition as including "all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, distribution, preparation and consumption of food, and the outputs of these activities, including socio-economic and environmental outcomes" (HLPE 2017).

[2] See Appendixes A and B for a summary of the most relevant indexes, assessment tools or frameworks, and other measurements on gender equality, women's empowerment, governance, and/or AFS.

Ibrahim and Alkire 2007). Third, existing governance indexes like the World Bank's prominent Quality of Government Indicators that help map the governance space at that national level miss important variations by different sectors (for example, health, education, AFS) and do not consider women's empowerment within governance systems.

To understand whether women are empowered within AFS governance processes and institutions, therefore, requires a tailored measurement strategy focused on women's role in those processes. Specifically, we look at women's empowerment in AFS governance as the process of increasing capacity and opportunities for women to participate in and to influence AFS decision-making, realizing their own choices and goals. We focus on empowerment within AFS governance specifically, which may or may not be distinct from aspects that are empowering to women in other domains of life.

Taking stock of women's empowerment within AFS governance will be particularly important as countries consider policy reforms to address the effects of climate change and its pressures on both AFS governance and women's empowerment. Climate change poses key governance challenges, such as a need to resolve collective action dilemmas, address externalities of behaviors and activities of individual entities, and provide infrastructure and services that mitigate the effects of climate shocks and help societies strengthen their capacity to respond to shocks and stressors over the long term. Although women are disproportionately affected by the effects of climate change (Jost et al. 2016; Perez et al. 2015), research shows a significant lack of efforts to mainstream gender or incorporate gender-inclusive approaches in climate mitigation and adaptation policies (Alston 2013, 2014; Gonda 2019; Huyer 2016; Mohammed, Najjar and Bryan 2022; Morgan 2022; Perez et al. 2015;). These findings are consistent with many other policy areas in which women's voice in such decision-making processes and their political empowerment have been persistently muted across contexts (Percy et al. 2022; World Economic Forum 2022). The World Economic Forum's 2021 Global Gender Gap Report indicates that women's political empowerment has the largest gender gap of all four subindexes. It also has the widest variability among countries, with only 11 countries having closed more than 50% of their gap on this subindex (World Economic Forum 2022).

With the inclusion of gender equality as the fifth Sustainable Development Goal (SDG), women's empowerment is also a high priority among international donors, civil society organizations, and country governments, both as an end in itself and as the means of achieving other development goals. Addressing the gap between the important roles that women play as both producers and consumers in AFS and their limited access to agricultural inputs and opportunities is an essential step in order for governments to meet not only SDG5 but also SDGs focusing on zero hunger, decent work and economic growth, reduced poverty and inequalities, and climate action and life on land, among others (SDGs 1, 2, 8, 10, 13, and 15). Although women's empowerment within governance processes alone will not automatically and on its own meet the ambitious goals of the SDGs, UN Women (2018, 18) identifies strengthening the participation of women in the design, implementation, and monitoring of all policies and programs and "fostering the voices and visibility of women and girls" in national priorities as key to delivering on gender equality.

This paper is organized as follows. Section 2 describes the methodological approach undertaken to develop the conceptual framework[3] for WEAGov. This approach involved, first, reviewing existing tools at the nexus of gender, women's empowerment, governance, and AFS and, second, conducting

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[3] In this paper, we use the related terminologies "conceptual framework" and "assessment framework." The former involves concepts and their relationships, and is the focus of this paper. The latter, which can also be called an assessment tool, involves measurements, indicators, and detailed methodology to conduct an assessment; it will be the next step in the process of operationalizing the WEAGov.

interviews with key potential users of this conceptual framework and subsequent assessment framework/tool. Section 3 introduces and describes our conceptual framework for women's empowerment in AFS governance, grounding it in theoretical discussions and a literature review of AFS, governance, and women's empowerment. Section 3 additionally presents illustrative indicators to assess the extent of women's empowerment in AFS governance and policy processes at the national level and a discussion on the next steps to develop an assessment tool to operationalize the concepts in the framework and to pilot the assessment framework/tool in a number of countries. Finally, Section 4 concludes with a reflection on the contributions of the new assessment framework and the considerations for next steps to further develop, pilot, and strengthen WEAGov.

2   METHODOLOGICAL APPROACH

To develop WEAGov, we adopted a three-step approach. First, we reviewed the landscape of tools, indexes, and assessment frameworks at the nexus of gender, women's empowerment, AFS, and governance. This review revealed measurement gaps that need to be filled and allowed us to identify potential data sources and measurement approaches for a new assessment framework. Second, we conducted interviews with a wide range of experts and potential users of a new assessment framework on women's empowerment in AFS governance. We asked how practitioners would potentially use such a framework and sought feedback on what types of indexes, tools, and assessment frameworks they find most useful in general. Third, we conducted a multidisciplinary literature review on women's empowerment in governance, governance of AFS, and women's empowerment within AFS, including literature from sociology, economics, and political science, among other disciplines. We synthesized the results across these three efforts to develop WEAGov, introduced in Section 3. Sections 2.1 and 2.2 present the results of the review of existing tools and of stakeholder consultations in this section, and Section 2.3 discusses the literature review.

2.1 Review of tools at the nexus of AFS, women's empowerment, and governance

Recently, ElDidi, Kosec, and Meinzen-Dick (2021) undertook a comprehensive review of 69 tools and indexes that measure the nexus of gender in institutions and governance, with a thematic focus on AFS. They find a huge diversity in the underlying research questions guiding the tools as well as in the methodologies, spanning both quantitative and qualitative methods. However, they find that most available tools focus on community-level rather than national-level institutions or governance. They also find thematic gaps among the tools. For example, although tools exist at the intersection of gender and climate change, tools on these themes rarely address governance and institutions.

Building from this comprehensive review, we conducted a tailored search for available tools and indicators at this nexus at the national level, our primary area of focus. The existing tools and indexes can be categorized broadly into four types. We provide a summary of all of the tools that we reviewed in Appendix B.

National-level indexes with composite score and country rankings (first 7 rows in Appendix B). These indexes are often used as benchmarking tools to assess and compare status on gender equality and/or governance domains across countries. Available indexes look at gender equality or some aspects of governance or women's empowerment, but none looks at the intersection of gender, women's empowerment, governance, and AFS. Most of these indexes are large, resource-intensive initiatives with major infrastructure and data collection systems in place to collect and process data from more than 100 countries almost yearly (e.g., Women, Business, and the Law; Enabling the Business of Agriculture). One index is a one-time data collection through individual surveys in various countries (Gender Social Norm Index). Others combine expert surveys and existing data sets (e.g., Global Gender Gap). The rest combine existing global data sets (e.g., Gender Equity and Governance Index; Environment and Gender Index). A special case is the Women's Empowerment in Agriculture Index (WEAI; row 8 in Appendix B), which uses results from a population-based individual and household survey and can be aggregated at any level. Although most applications of WEAI have been at the project level, efforts are under way to integrate it in national statistical and data collection systems. Global data sets on gender are also made more accessible in recent years to enable better tracking on gender indicators at the national level. For example, the Minimum Set of Gender Indicators—an available database system with 52 quantitative indicators and 11 qualitative indicators covering national norms and laws on gender equality—was agreed upon by the United Nations Statistical Commission in 2013 as a guide for national production and international

compilation of gender statistics.[4] Nonetheless, global data sets on gender and women's empowerment in governance systems are scarce.

Assessment frameworks and tools with scoring at the national or subnational level (rows 9–14 in Appendix B). These frameworks and tools aim mainly at assessing and ultimately improving the strength of governance or policies at the national or subnational level. Not designed to compare and rank countries, they are participatory and learning-based approaches for engaging with diverse stakeholders in several stages of the assessment process (e.g., the World Bank's Land, Forest, and Landscape Governance Tools; International Union for Conservation of Nature's Natural Resources Governance Framework). They typically involve a desk review and compilation of available data and evidence to assist in the scoring, an expert panel or focus groups to review and discuss a series of questions and assign scores, and a subsequent validation workshop with a wider set of stakeholders. In some cases, a series of policy dialogues based on study results also follows.

Private sector–focused indexes based on voluntary gender reporting by companies. These indexes include Bloomberg's Gender Equality Index, which involves voluntary gender data reporting by 418 publicly traded companies in 45 countries, based on Bloomberg's standard gender reporting/scoring method and framework (row 15 in Appendix B). Other private sector–led indexes or tools (not included in Appendix B) are (1) gender checklists, gender equality indexes, or gender reviews based on a set of indicators used internally by financial institutions and programs (such as Financial Sector Deepening Africa) to evaluate companies for investment decisions;[5] (2) Root Capital's diagnostic gender tool, a checklist approach currently being used by 35 agribusiness clients; (3) the Gender Equity Index developed by the World Coffee Organization's Partnership for Gender Equity "Equal Origins," an online diagnostic tool for coffee and cocoa traders; and (4) Oxfam's Behind the Brands campaign that developed a scorecard that compares companies according to how well they are meeting sustainability commitments, one of which focuses on how well they support women's needs and promote gender equality.

Certification approaches include W+, the Women's Empowerment Standard (row 16 in Appendix B), a third-party international standard/certification that measures and rewards any type of project that empowers women. It provides a framework for designing and monitoring results within initiatives and generates W+ units—quantified and independently verified units of improvement in women's conditions from a baseline in one or more of six domains (time; leadership; food security; health; knowledge and education; and income and assets). Companies, public or private sector investors, and others can purchase these units with a guarantee that 20 percent of the payment will go directly to the women implementing the project (according to the stakeholder consultations).

Overall, across all four types of tools, we find that currently available indexes and tools at the national level cover one or two of the three themes—women's empowerment, governance, or AFS—but no existing index or tool covers the intersection of all three themes. Specifically, there are no existing tools that could be readily deployed to understand women's empowerment within AFS governance processes. The first two types of tools—cross-country indexes and assessment frameworks—are the most relevant methodologies for surveying national-level governance landscapes. We thus focused on these two types of tools in our consultations with stakeholders. However, certification approaches and voluntary reporting standards have generated valuable data on women's empowerment within the private sector and offer important information on legal and regulatory barriers to gender equality as well as incentives to improve women's status.

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[4] For more on these gender indicators, see https://gender-data-hub-2-undesa.hub.arcgis.com/.
[5] For more information on Financial Sector Deepening Africa, see https://fsdafrica.org/

2.2 Stakeholder consultations

We conducted stakeholder consultations with a wide range of experts and potential users of a new assessment framework, with the overall objectives of

- Gauging the interest and usefulness of a tool or index to measure and track women's empowerment in AFS governance;
- Learning from the experiences of developers and users of similar tools regarding who uses such tools and how they do so;
- Soliciting ideas from potential users as to what would be the key components of such a tool or index (priority or critical challenges and issues to capture); and
- Identifying existing data sources that could be leveraged.

We identified one set of stakeholders by reviewing similar tools and indexes in the literature that cover either women's empowerment, AFS, or governance; examining networks of authors with experience in developing and using various similar indexes or who have worked on gender and governance issues; and following up on suggestions given by those interviewed (i.e., snowball sampling) (see Appendix B for a full list of indexes and tools reviewed). These stakeholders included index developers, donor agency representatives, and academics (Table 1). Additionally, we identified country-level key informants from three target countries reflecting diverse AFS—India, Malawi, and Nigeria. These stakeholders included gender officers or focal points from within AFS- or gender-related ministries, AFS-related research institutes, nongovernmental organizations (NGOs), and women's organizations. Further description of the sample is presented in the following paragraphs.

We conducted a total of 23 interviews with 38 stakeholders in July and August 2022 (Table 1). Most interviews were conducted with one interviewee, but some were conducted in groups of two to six colleagues from the same organization.

Table 1. Participants in stakeholder consultations

Type of stakeholder	Number of stakeholders interviewed
Governmental stakeholders (India, Malawi, Nigeria)	9
Nongovernmental organizations (India, Malawi, Nigeria, international/headquarters)	8
Index developers	9
Private sector (representatives from impact investment firm and financial institutions)	7
Academics	2
Donor agency representatives	3
Total	**38**

Source: Stakeholder interviews

Of the 38 stakeholders consulted, 4 were based in Malawi, 6 in India (in addition to 2 developers of the India National SDG Gender Index and 2 donor representatives for a total of 10 Indian-based stakeholders), and 6 in Nigeria. National stakeholders from the public sector included those from AFS- or gender-related ministries and government research institutes. Index developers included stakeholders who had previously developed similar indexes, such as the Forest Governance Tool (Kishor and Rosenbaum 2012), the W+ tool (WOCAN 2019), and the Land Governance Assessment Framework (World Bank 2013). Private sector stakeholders included those representing an impact investment firm, a financial institution, and the International Finance Corporation of the World Bank Group. The two stakeholders from academia are experts on topics related to AFS or climate governance in one or more of the three target countries. Finally, stakeholders from global donor agencies and global and local NGOs were consulted, including those from the Food and Agriculture Organization of the United Nations, the Bill and Melinda Gates Foundation, Oxfam, UN Women, 3iE, and local NGOs in India, Malawi, and/or Nigeria.

Guiding questions for different types of interviewees (public sector, private sector, developers of similar indexes) were developed, pilot tested with several participants, and then revised following the pilot. The questions were emailed to the participants before the interview. The interactive discussions included many probing and follow-up questions based on the responses. All interviews were conducted remotely using Microsoft Teams or Zoom software and were recorded and transcribed. Each interview lasted between 45 and 75 minutes.

Overall, stakeholders were enthusiastic about a new tool to help show how countries are incorporating gender and women's empowerment data and measurements into AFS governance, though different stakeholders expressed different potential uses of such a tool. Donor representatives and other global actors indicated such a measurement framework would be essential to guide programming and policy making, whereas private sector stakeholders noted its potential to guide investments to address gaps in good governance. One private sector stakeholder said, *"[It would be] useful for helping to target investments [and] interventions."* A donor representative shared the intention to use this tool to inform both advocacy and programming, noting, "*I would like some advocacy, but it would also be used to inform programming.*" National policy makers, meanwhile, cited its potential value in informing program design and advocacy efforts with legislative branches.

Stakeholders emphasized that such a tool would be a strong value addition and is an area of key interest. For example, a donor representative from UN Women shared, "*A new [index] in governance will be very, very important, and useful to [us] to measure women's leadership, but also agency.*" A government official from Nigeria also shared, "*I think this new study/index is absolutely important for Nigeria. In the country, not just in the agricultural sector but cutting across all other sectors...to know where we are, where we want to be and where we are going.*" An academic expert noted, "*I think it has great value, not only in terms of the gender component, but in terms of actually setting the stage for what makes for good food system governance.*"

Stakeholders also reflected that such a framework could build upon existing knowledge and further advance the consideration of women's empowerment in AFS governance structures. Specifically, in recognition that women (and men) do not encompass a homogeneous group with identical needs, capacities, and strengths, stakeholders pointed to the opportunity that such a new framework could incorporate a wider lens to highlight both the breadth and the depth of women's empowerment across society. For example, a governance expert explained, "*The governance indices that I have looked at related to gender are quite thin. They're mainly looking at...counting the number of women in parliament and things like that, which is not adequate and doesn't get at questions of marginalized groups.*" Another stakeholder from the private sector shared, "*Such a tool should help make people less blind to invisible*

groups." Although no one assessment framework can fully capture the complexity of women's empowerment and issues of intersectionality, we try to look beyond just whether women are represented in the highest levels of political leadership and focus on interactions between civil society organizations and government, women's representation in policy implementation, and women's participation in providing input and feedback on policy ideas, among other issues, to get a fuller picture of women's empowerment, in line with these important recommendations.

Beyond overall demand for a tool at the nexus of women's empowerment, AFS, and governance, we drew three broad conclusions from these consultations that informed the development of the WEAGov. First, almost all respondents highlighted the importance of *who* is collecting any data, both for the validity of the information itself and to foster ownership. They highlighted the importance of looking at and building capacity of local actors to collect and analyze data and manage the consultative processes. Stakeholders also noted that the process of information collection and validation itself can be a useful exercise because it pushes individuals and entities working across the gender, women's empowerment, governance, and AFS nexus to come together to deliberate on indicators and scores. Gender Innovation Labs in both Ethiopia and Nigeria noted how starting the process of collecting gender-disaggregated data led to the development of gender strategies in the AFS, suggesting both that data collection efforts can surface important gender gaps and that the process of collecting the information can spur development of policies benefiting women.

Second, respondents reflected on the format, nature, and approach of the measurement and assessment that would be useful for their work and programming. They related the trade-offs they saw between different types of tools that already exist and how a new one may be used. Many in-country stakeholders interviewed were not aware of many of the indexes available, indicating limited reach and use of existing indexes. For those who were aware of some of these indexes, stakeholders expressed that some of the indexes are too aggregated and broad to be meaningful or useful for the stakeholders' purposes. However, stakeholders highlighted the value of an assessment tool and exercise that would guide and foster self-assessment, reflection, and learning for the country's key actors. As one local NGO representative said, "*Indexes hardly move the needle in fostering policy change, but what is needed is new data gathered and new evidence generated on what the key binding constraints on women's empowerment and are and what works and do not work in addressing and solving these constraints.*" A government officer added, "*[W]e need to know where we are as a country, what the gaps are and how to improve on them, and we need to monitor our progress over time. We need this type of self-assessment and self-evaluation.*"

The index developers interviewed reflected in detail on these trade-offs of measurements. According to them, although country-level indexes that cover broad issues like "quality of governance" or "gender equity" enable stakeholders to compare and rank countries with each other, they also require significant resources for data collection, management, and updated analysis and can be plagued by data availability issues across contexts that can bias comparisons. Often, indexes have to make trade-offs between measurement validity—how closely data represent the intended concept—and data availability both across countries and over time, utilizing measures with high availability even if they are imperfect or broad proxies for the concepts of interest. Because of these data limitations and availability, indicators and indexes are often aggregated too broadly, which limits their value as a diagnostic tool and their influence in advocating for the needed changes and reforms. Respondents also expressed a hesitancy about limited capacity of many governments to collect primary data for a new index, particularly because governments face new climate- and SDG-related reporting and a myriad of other relatively new data collection demands.

Assessment frameworks (sometimes called scorecards, checklists, or dashboards), by contrast, do not yield rankings that are readily comparable across countries. Instead, they provide a structured conceptual map and details about how concepts can be measured consistently. Examples include the World Bank's land and forest governance assessment frameworks. They have the benefit of identifying and filling data gaps while enabling in-country stakeholders to discuss, adjust, and validate measurements. These frameworks are detailed and fine-grained and can often much more closely measure concepts of interest in a context-specific way. Nevertheless, several stakeholders noted that it is difficult to deploy them across many countries or to directly compare results.

Third, stakeholders readily identified a long list of factors that they believe are relevant to the extent of women's empowerment in AFS governance, which we fully detail in Appendix C. These insights provided important contributions in developing the WEAGov conceptual framework, presented in Section 3.1. Appendix C also contains a full synthesis of the stakeholder consultations that shaped the conceptual framework being proposed and the assessment tool we started to develop. Key findings from these consultations are also integrated throughout the remainder of this paper.

Overall, stakeholder consultations significantly influenced both how we conceptualized WEAGov and the tools and measurements that we plan to develop going forward. Although cross-country indexes can be valuable, we aim instead to develop an assessment framework in which in-country experts have ownership over data collection and validation. These conversations also led us to consider how such an assessment framework could capture more of the breadth and depth of women's empowerment in AFS governance, while remaining feasible and implementable.

2.3 Literature review

After consulting with stakeholders and potential users and reviewing the existing suite of frameworks and tools at the national level, we conducted an extensive review of the literature to identify themes, trends, and best practices that promote gender equity in governance systems. This review contributes to the development of a conceptual framework by identifying the key indicators to measure, key processes to monitor, and the actors and policies relevant to promoting women's empowerment in AFS governance. Although we did not conduct a systematic evidence review, we reviewed and selected peer-reviewed studies that fit certain criteria and informed our conceptual framework to guide the selection of key indicators. We searched for literature across the following databases: Google Scholar, Taylor & Francis, ScienceDirect, and the IFPRI Library. The review included only studies published since 2010. Key search terms used to identify relevant studies included a composition of the following: AFS, governance, gender, agricultural value chains, women's empowerment, agency, health and well-being, social norms, access to resources, control over resources, participation, representation, decision-making, leadership, policy development, policies, policy enforcement, and education. In the end, this literature spanned many different disciplines, including sociology, political science, and economics.

We synthesized learnings, feedback, and evidence gathered from both the stakeholder consultations and the literature reviews to inform the development of the conceptual framework for WEAGov and to develop key illustrative indicators that can be used later to operationalize the framework. Throughout this paper, we present these synthesized learnings and findings that often reinforce each other to describe the key elements of WEAGov.

3 WEAGOV CONCEPTUAL FRAMEWORK

3.1 Overview of conceptual framework

Before developing methodologies and tools to measure women's empowerment in AFS governance, it is important to lay out how we conceptualize women's empowerment in AFS governance. WEAGov explicitly focuses on the development and implementation of national-level plans and strategies like agricultural policies, agricultural development plans, climate-sensitive agricultural development plans, nutrition plans, national gender strategies, and more. Although the specific plans and strategies most relevant for understanding the AFS landscape of course vary across countries, the focus is consistently on women's roles within these high-level, formal public policies that govern AFS in a given country.[6] WEAGov was constructed by combining insights from key informant interviews with existing academic literature on the key concepts of women's empowerment, AFS, and governance. In doing so, we distilled a 3 x 3 conceptual framework that addresses key issues raised repeatedly as core to women's empowerment within governance processes, introduced in Figure 1.

Figure 1. Process of women's empowerment in AFS governance
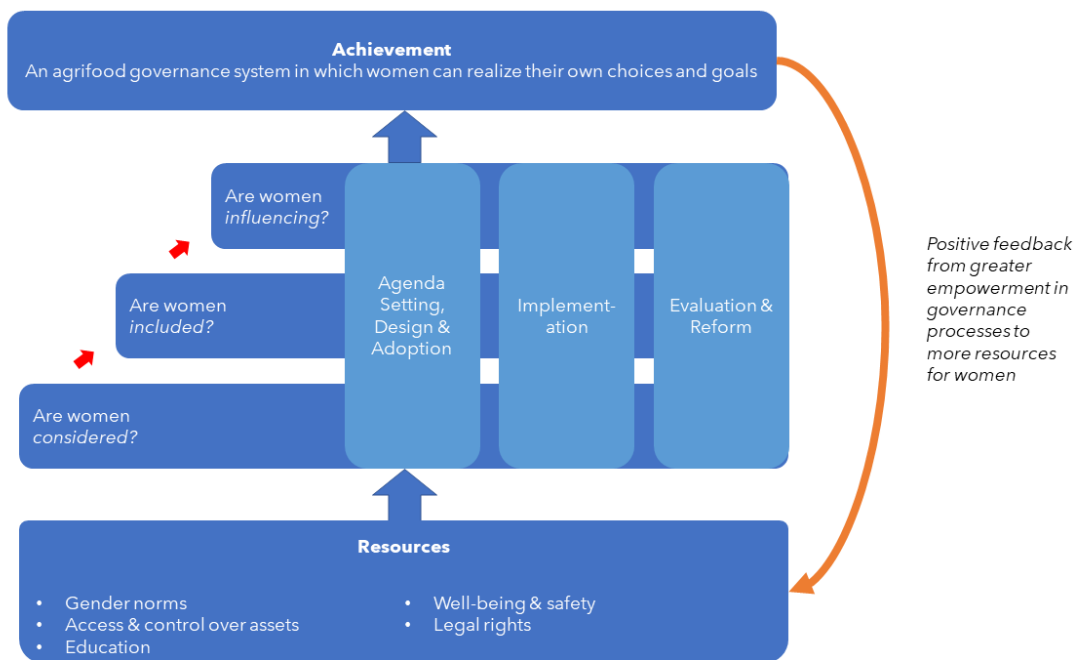
Source: Authors.

Figure 1 offers a heuristic tool to map the process of women's empowerment in AFS governance. Recognizing that women's social and economic contexts influence the extent to which they can fully and meaningfully participate in AFS governance, the bottom of the diagram lists many of the resources[7] for women's empowerment that were raised repeatedly both in our stakeholder consultations and in the academic literature. Women's "unequal rights to important resources, such as land, water, pasture, seeds,

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[6] We do not look at informal public policies, such as the implied norms that shape interactions between actors.

[7] These resources are broadly defined and can also be used interchangeably as initial conditions or enabling environment for women's consideration, inclusion, and influence in policy processes.

fertilizers, chemical inputs, technology and information, and extension and advisory services, reduce their potential to be productive, become empowered and make strategic decisions and act on those decisions, and realize their rights" (Njuki et al. 2022, 1). Numerous stakeholders also emphasized that restrictive gender norms or unequal caregiving responsibilities may limit women's willingness and ability to take advantage of formal opportunities to participate in political decision-making. For example, a stakeholder from Malawi reflected on factors that may hinder women's full participation, "*You know, women are doing quite a lot. But normally they are focusing on what is referred to as unpaid care work, [which] does not have a monetary value. But it takes a lot of their time from what could have been a productive week for them.*" Although women's empowerment in the private and economic spheres may not always translate to women's empowerment within the political sphere and vice versa (Beath, Christia, and Enikolopov 2013; Bleck, Gottlieb, and Kosec 2021), it is essential to acknowledge how women's social and economic conditions may further or limit their political engagement before attempting to map women's empowerment within governance processes. A local NGO representative said, *"Large value chains and enterprises often influence AFS governance the most. If women do not have land nor have inputs and capital, they cannot start enterprises or enter lucrative value chains, and if they are not in these lucrative value chains, how can one expect them to be part of the decisionmaking in AFS governance? Women need resources and opportunities to improve their market and value chain access and to improve their voice and influence in processes governing AFS."*

The middle of the diagram lays out the 3 x 3 conceptual framework for women's empowerment within AFS governance, the core of WEAGov. Following other work on governance (Fox and Reich 2013; Kaufman and Nelson 2004; Resnick et al. 2018), we look across three stages of the national policy cycle: the process of policy formulation, including agenda setting, policy design, and policy adoption; the process of policy implementation; and the process of evaluating policy and improving policy design and implementation.[8] At each stage of the policy cycle, WEAGov asks three questions central to the process of women's empowerment within AFS governance. First, are women *considered*? Second, are women *included?* Third, are women *influencing*? These questions emphasize the extent to which the needs and priorities of women are considered across the policy cycle, the extent to which women have opportunities for meaningful participation across the policy cycle, and, finally, the extent to which women are leading and influencing different aspects of the policy process, whether from inside the public sector or from civil society and the private sector. Although acknowledging that empowerment within governance can be a nonlinear process—for example, it may be a woman taking a leadership role within an agricultural agency who first prompts the formal consideration of women's needs in a national agricultural development plan—our framework visualizes these questions as steps in the process of women's empowerment within AFS governance.

Finally, the top of the diagram points to women's empowerment within AFS governance as the ultimate outcome of interest, which we define as *the process of increasing capacity and opportunities for women to participate in and to influence AFS decision-making, realizing their own choices and goals*. This definition captures three of the most prominent dimensions of women's empowerment from the literature: the ability to make choices, the ability to participate in a process, and the ability to exercise agency throughout the process by both defining goals and being significant actors within a process. In turn, the arrow on the right side of the figure emphasizes how greater empowerment of women within AFS governance may feed back into greater resources for empowerment within the food system.

Although the diagram points to an outcome—women's empowerment in AFS governance—empowerment is an ongoing process without a clear end stage (Mosedale 2005). Thus, there is not a

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[8] In theories of policy change, these may be broken up into five distinct stages of the policy cycle: agenda setting, design, adoption, implementation, and evaluation and reform. Because we are focused on understanding women's roles in the policy cycle, we simplify it to three stages to capture the before, during, and after periods of the policy cycle.

specific goalpost against which all countries would or should be assessed. Nonetheless, AFS governance systems in which women are exercising more meaningful voice and agency—for example, by contributing policy ideas and by leading policy implementation—do reflect greater levels of empowerment and would be reflected as such in future measurement exercises.

We are not presenting a new theory of women's empowerment in AFS and do not make assumptions about the causal relationship between concepts. For example, we do not assume that an AFS governance process that features more opportunities for women to participate will necessarily and on its own lead to better outcomes for women. Such outcomes depend on underlying social and economic conditions, initial resources for empowerment, shocks to AFS, and governance processes, among other factors. Rather, WEAGov is a framework to help organize inquiry into this complex and multidimensional topic.

For instance, Njuki et al. (2022) look at women's empowerment throughout AFS, beyond our narrower focus on governance processes, as depicted in Figure 2. Their diagram emphasizes how both structural gender inequalities and informal and formal individual- and systemic-level gender considerations feed into AFS, which in turn affects food systems outcomes, such as those diet or nutrition outcomes, gender equality and women's empowerment outcomes, economic and livelihood outcomes, and environmental outcomes. Our framework focuses on just one piece of this overall gendered AFS framework by zooming in on "policies and governance." As shown in Figure 1, the WEAGov conceptual framework focuses on women's voice and agency in national-level "policies and governance" processes, although it acknowledges the interplay of "policies and governance" on individual-, household-, and community-level women's agency; access to and control over resources; and gendered social norms. Our conceptual diagram in Figure 1 reinforces how policies and governance are themselves complex, multistep processes along which women's voice and agency may vary and that the processes are embedded in larger normative and structural conditions.

Figure 2. Gendered AFS Framework
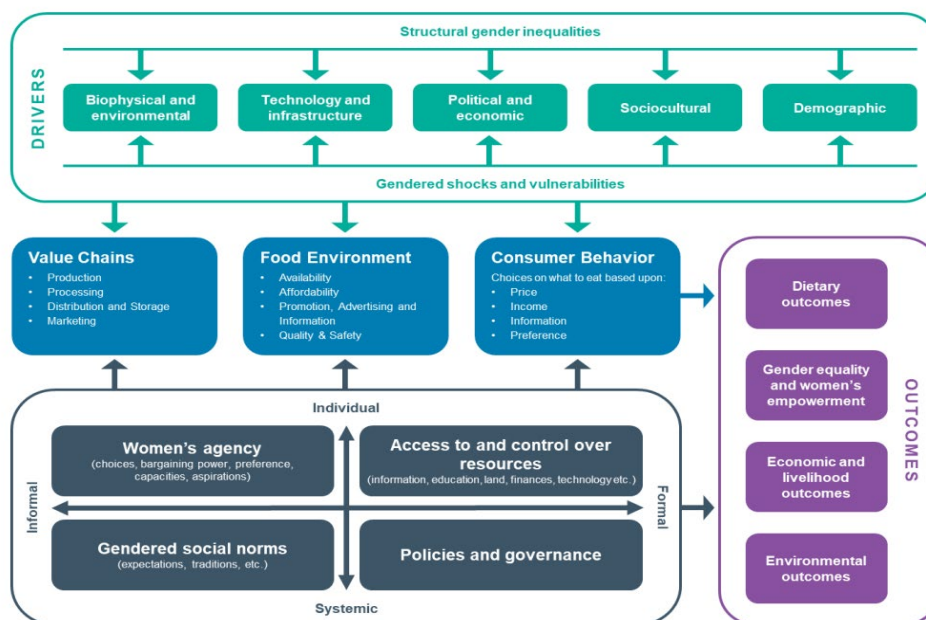
Source: Njuki et al. 2022.

The rest of this section continues to describe the WEAGov framework, going into more depth on issues around governance and women's empowerment, and offering more detail on how we operationalize these concepts in WEAGov. We then discuss how resources for empowerment may affect the extent to which women meaningfully participate in governance processes.

3.2 AFS governance

The term "governance" has been used to draw attention to the quality and effectiveness of public services, but no clear consensus has emerged on what it means or how to measure it.[9] One challenge is that governance can operate at many different levels of analysis.[10] Governance can operate at the national level and refer primarily to the process by which actors design and implement policies within a given set of formal and informal rules. Alternatively, governance can be analyzed within a specific domain, focusing on specific laws, regulations, and public policies and how they are implemented and enforced. Some analyze governance at the level of the community or of a particular firm or organization, focusing on the relationships between actors and how they jointly influence the behavior of a single group or entity.

Although each of these areas of focus offers an important way to understand and study governance, our focus is on governance as "the process through which state and non-state actors interact to design and implement policies within a given set of formal and informal rules that shape and are shaped by power" (World Bank 2017, 41). This definition emphasizes how actors interact to make policy choices and the government's ability subsequently to implement and to deliver the selected policies, or the procedural and capacity dimensions of governance (Fukuyama 2013). Although it considers the interactions and influence of both governmental and nongovernmental actors, it focuses on how these interactions shape the design and implementation of formal public policy.

An emphasis on both procedure and capacity is consistent with other approaches to describing and clarifying governance at the national level. In particular, the IFPRI Kaleidoscope Model distills the distinct steps of designing and implementing policies within a given set of institutions (Resnick et al. 2018). The Kaleidoscope Model identifies five distinct steps of the policy process, which we simplify to three key stages for WEAGov: (1) *before* a policy is adopted, (2) *during* policy implementation, and (3) evaluation and reform *after* policy implementation has occurred. Because policy processes are nonlinear and cyclical, policy evaluation often forms part of the policy design process and often only a thin line separates or distinguishes the different stages.

These stages could be used to map and describe any type of policy change, whether one that "tinkers" with existing policies or "transforms" them. Because AFS policy spans so many ministries and policy areas—including, agriculture, nutrition, land use, and more—WEAGov focuses on the development and implementation of national-level plans and strategies like agricultural development plans, climate-sensitive agricultural development, nutrition plans, and national gender strategies. WEAGov looks at women's empowerment within each of these stages:

- **Agenda setting, design, and adoption.** This stage of the policy process addresses why certain policy problems and dilemmas emerge as part of the policy dialogue, what solutions are proposed

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[9] See Appendix A for some of the governance frameworks used in the literature, particularly those related to environment or natural resources.

[10] ElDidi, Kosec, and Meinzen-Dick (2021) undertook a comprehensive review of 69 tools and indexes that measure the nexus of gender in institutions and governance, with a thematic focus on AFS. They find that most available tools focus on community-level rather than national-level institutions or governance.

and considered, and whether the policy solution is ultimately adopted. It is a key stage for understanding whether women's needs and priorities were considered as part of determining what policy problems need to be addressed, whether policy makers designed gender-sensitive approaches, who played a role in expressing and representing policy preferences, and whether women, including marginalized women, were consulted or led the policy dialogues, deliberations, and development.

- **Implementation.** Implementation refers to the delivery of the actual goods and services promised by the policy as well as the budgetary outlays necessary to fund the policy. Key questions at this stage include whether women lead within the agencies and ministries charged with implementation, whether women are represented among frontline service providers, and whether countries have adopted gender-responsive budgeting.

- **Evaluation and reform.** Finally, changing material conditions or information about whether the adopted policy is working in practice can spur consideration of policy reform. This phase involves collecting information about the outcomes that policies are intended to effect in a gender-disaggregated way and including gender-relevant considerations in any evaluation of policy effectiveness and including women in the evaluation processes.

3.3 Women's empowerment in AFS governance: Considering, including, and influencing

What does it mean to be "empowered" within governance? Women's empowerment is a multifaceted concept and is typically defined across several dimensions. There are several definitions of empowerment, but most definitions center around personal agency and the ability to make meaningful choices about one's own life. Kabeer (1999, 435) defines empowerment as "the process by which those who have been denied the ability to make strategic life choices acquire such an ability." Although empowerment might look different in different spheres of life—for example, economic empowerment would entail, at a minimum, the ability to make and act upon choices related to livelihoods and consumption—the concept of empowerment operates similarly. We focus on empowerment in the *political* sphere, or the ability to make and influence key AFS policy decisions.

Women's political empowerment is increasingly recognized as critical to modern states and markets. Researchers have identified links between women's empowerment and better outcomes for women and children (e.g., Chattopadhyay and Duflo 2004; Imai et al. 2014; Quisumbing, Sproule, et al. 2021; Swiss, Fallon, and Burgos 2012). The international community is also increasingly focused on gender equality and women's empowerment, particularly given their inclusion as one of the SDGs, and highlights strengthening the participation of women in the design, implementation, and monitoring of all policies and programs and as key to delivering on SDGs (UN Women 2018).

A focus on agency and choice within AFS governance processes involves understanding whether women are significant agents of change within AFS governance processes and whether they have opportunities to participate in politics in order to voice their preferences and to exercise choice. Rowlands (1997) conceptualizes power into three main types—power within, power to, and power with—laying a foundation for understanding the types of power people can leverage to strengthen their own empowerment. *Power within* is defined as "one's subjectivity, consciousness, and their sense of self-worth, self-awareness, self-knowledge and aspirations." *Power to* is defined as "one's access to and ability to use important resources (material, human, social) to employ greater control over key aspects of one's life and realize their own aspirations." Finally, *power with* is defined as "collaborative and collective power with others that occurs through mutual support, collaboration, and collective action to recognize and respect differences" (Rowlands 1997). Power is an essential cross-cutting dimension at each level (individual, household, community, subnational, national) because it can be and is expressed differently by each actor to influence the ways in which individuals can participate in and benefit from their participation in governance systems, and through this participation, realize their own choices and goals.

Thus, it is important to conceptualize the exercise of agency as multidimensional, involving a combination of opportunities to act individually and collectively in the public sphere as well as the material and intrinsic power to do so. Hannah et al. (2021) offer a useful framework (see Figure 3) to illustrate how participation in policy decisions can be interactive and active—that is, taking initiative and using voice to influence decisions—but can also be passive, consultative, activity-specific, or nominal. In the latter cases, women may be participating but not exercising meaningful choice. Thus, increased participation of women in governing bodies alone does not necessarily ensure the realization of outcomes for women. Other tools, such as the Women's Empowerment in Fisheries Index and its complementary qualitative tools, also acknowledge that measurements must assess the quality of women's participation, not just the fact of their participation, to understand how their voice and influence are considered and contribute through their participation to yield better outcomes for women (Kleiber et al. 2019). Even if women have a seat at the table, it does not necessarily mean that their voices are heard.

Figure 3. Participation versus representation in governance systems
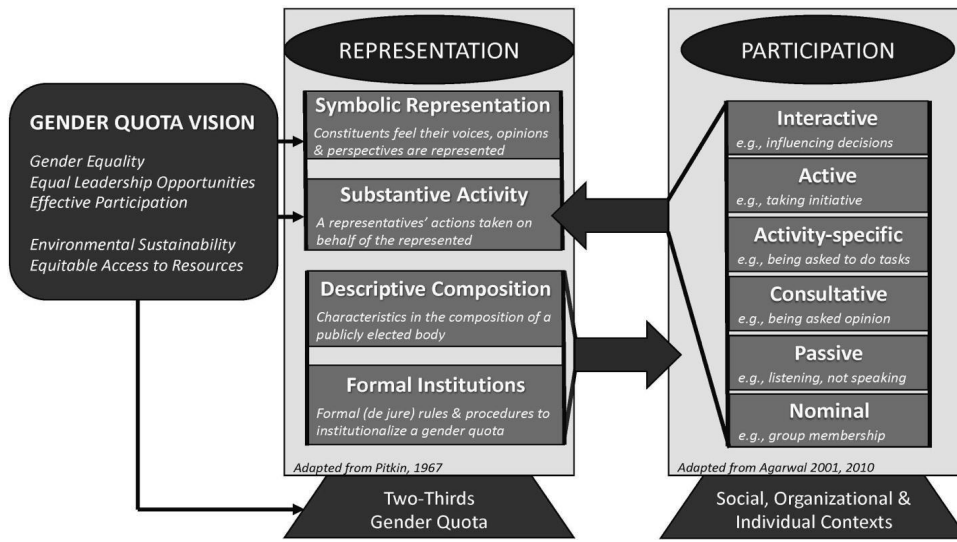
Source: Hannah et al. 2021.

The Reach, Benefit, Empower framework (Table 2) similarly highlights the gap between targeting women with development policies and ensuring that they are empowered with meaningful choice within those policies. The framework was developed in response to evidence that gender-focused development projects reached women but often failed to produce outcomes that benefit and empower them (Johnson et al. 2018). Adopting the Reach, Benefit, Empower framework for policy making acknowledges that project gains for women's empowerment can be sustainable only when policies are also designed to empower women, not just reach or benefit them (Quisumbing et al. 2019). Mangubhai and Lawless (2021) add a fourth category to capture transformational approaches increasingly being used by organizations. Their "transform" approaches aim to challenge underlying gender norms (both visible and invisible), structures, and power dynamics that create and reinforce inequalities.

Table 2. Reach, Benefit, Empower framework

	Objective
Reach	Engage women in activities, and track progress in terms of their participation.
Benefit	Track targeted outcomes of well-being (e.g., increase in income, nutritional benefits, health outcomes, etc.) and to ensure those outcomes are realized among women.
Empower	Strengthen women's ability to make strategic life choices and to put those choices into action to realize their own goals.

Source: Adapted from Quisumbing et al. 2019.

In a similar vein, the Tinker-Tailor-Transform assessment typology of Lawless et al. (2022) also offers a multistep framework to assess the intentions and impacts of gender investments and policies. To *tinker* is to attempt to repair something by working at the margins, often in an ad hoc manner. Tinkering strategies are those that are most often achieved with narrow measures of success, for instance increasing the number of women attending a meeting, and often rely on broad assumptions, like that men and women face the same barriers to participation and opportunity. To *tailor* means to alter something to suit a particular need or situation, recognizing differences between women and men and directly responding to these differences, but to working within existing norms and inequalities. To *transform* means to radically change form and function in ways that challenge and displace the underlying configurations of power that

perpetuate gender inequalities. Transformative strategies tackle root causes of gender inequalities (Lawless et al. 2022; McDougall et al., 2021).

Each of these frameworks highlights the differences between considering women's needs and priorities and their ability to exercise meaningful choice. At the same time, each acknowledges that it is more empowering to be involved in a process in some way that not to be involved at all and sets up a multistep way of thinking about the overall process of empowerment. Building from these insights, we adapt these broad ideas to the specific context of AFS governance by looking at three dimensions of women's choice and agency within AFS governance processes. In reality, each of the three dimensions themselves represents a spectrum, because there are degrees of considering, including, and influencing.

- **Are women considered?** Policies not specifically targeted or designed to meet the needs of either men or women are assumed to affect both sexes equally. Significant research has shown, however, that policies that fail to consider potentially different needs and conditions of men and women can end up reinforcing existing inequalities. By contrast, gender-sensitive policies do consider and try to account for potential differences between women and men, and to track key metrics and outcomes in a gender-disaggregated way. The first step of empowerment within AFS governance is determining whether women's needs and priorities are considered in policy deliberations and policy documents in the first place.

- **Are women included?** Here, we focus primarily on whether women actively participate in various governance processes and whether they have opportunities to bring their policy preferences to the political arena. In some cases, their participation could look like passive or nominal participation; when inclusion is higher and more meaningful, participation might be consultative—asking women for their feedback on a specific policy idea—or active—ensuring that women voice their policy ideas.

- **Are women influencing?** Being included, however, is not in and of itself sufficient for empowerment. The next step in the process of empowerment is the ability to act as key agents within the domain of AFS governance, including policy deliberations, implementation, and evaluations. Influencing of course does not mean that women's views would always prevail in a specific decision; instead, it means that, in a process of policy formulation, for example, women are voicing ideas in the agenda setting process, where problems and issues are identified.

Table 3 offers illustrative examples to show how these three questions can guide an analysis about a given policy. This analysis could involve, for example, looking at whether women's needs and priorities are being targeted and articulated in policy documents, whether gender-responsive budgeting has been adopted, the existence of quotas or reservation systems for women's participation or leadership, gender-sensitive training opportunities, and more.

Table 3. Applying the considered-included-influencing framework

	Are women considered?	*Are women included?*	*Are women influencing?*
Objectives	Gender-responsive policy	Inclusive governance; women's voice	Inclusive governance, women's agency, and gender-transformative policy and institutions
Strategies	Gender analysis and sex-disaggregated data and	Quota or reservation systems are in place to	Quota or reservation systems are in place to ensure

	evidence inform AFS policy deliberations and choices. Gender considerations are integrated into national AFS policy and strategy documents.	ensure greater participation of women. Women practitioners, service providers, and group members receive skills and capacity development and confidence-building training Policy consultations and awareness campaigns include women. Policy feedback systems are in place and include women.	leadership positions for women. Leadership training and mentorship program exist for women leaders. Gender-transformative approaches are in place to address normative and structural constraints for greater participation or leadership by women. Women policy makers, lawmakers, and leaders skills and capacity development and confidence-building training
Indicators	The legal policy document contains gender targets (e.g., requiring 35% of resources or inputs for women).	A certain proportion of different types of women, including those in marginalized groups, participate in AFS policy deliberations, implementation, and evaluation.	A certain proportion of different types of women, including those in marginalized groups, leads and influences AFS policy deliberations, implementation, and evaluation.

Source: Authors' elaborations from various studies and stakeholder consultations.

3.4 Resources for empowerment

Both the stakeholders that we consulted and potential users of the WEAGov assessment framework, as well as the literature on women's empowerment, emphasize the difficulty in understanding women's role in agrifood-related policy processes without considering the broader social and economic context for women in a particular location. We refer to this broader context in our framework as the resources for empowerment (seen at the bottom of Figure 1). What if, for example, countries put in place gender quotas for participation, but women are not voicing their opinion and ideas, even if at the table? What if women do voice their ideas and feedback, but policy makers do not respond to these ideas or meaningfully consider them? There can be significant gaps between policies on paper and policies in practice on these dimensions; when these gaps arise, it will be important to understand how women are embedded in social and economic structures that may either further or limit their meaningful participation.

Although WEAGov would not ultimately measure conditions for empowerment, we anticipate that these factors will often be essential for understanding why formal participation opportunities may not straightforwardly lead to greater meaningful participation and exercise of voice. In using the term "resources," we include the degree to which women can access and control key physical, financial, human, and intellectual resources that shape their ability to make strategic decisions and choices to advance their own goals throughout the empowerment process (Kabeer 1999). Their access to and control over resources are in turn affected by gendered social norms.

Amoak et al. (forthcoming) recently conducted a systematic evidence review to identify barriers to women's participation in climate-sensitive AFS governance. Specifically, they identify six broad classes of barriers: legal rights, norms, access to and control of assets, education, well-being, and safety. We use their evidence review to organize this section around which key barriers (or resources) affect women's ability to participate in and benefit from AFS governance, specifically. Although we cannot offer a comprehensive evidence review here, we think it is essential to include resources for empowerment in our conceptual framework to emphasize that policy processes are embedded within broader social and economic conditions. Our stakeholder consultations suggest that these issues will be raised frequently by potential users of WEAGov, so it will be helpful for potential users to explicitly address them.

Legal rights

First, the ability to use any resources for empowerment requires the absence of laws that directly discriminate against women and the existence and enforcement of laws that deliver and protect women's rights. Examples of the latter include protections of women's equal access to land, property, media, and information, or those that protect individuals from gender-based violence (GBV) or harassment. Although not exactly "resources for empowerment," legal rights can be an essential initial condition for the use of resources.

In the absence of such laws, women and men do not share equal protections to access, own, control, or realize similar rights to advance their own goals and strategic choices. For example, secure tenure rights are important for an individual's investment, economic growth, and livelihood; the equity of and availability of such rights for men and women and other diverse groups vary across political contexts and are shaped by institutional and cultural practices as well as social norms (Kosec and Resnick 2019; Kosec and Shemyakina 2019). Researchers on gender and land topics distinguish different rights related to land use—access to, control over, and ownership of the property (Meinzen-Dick et al. 2019)—but agree that women struggle to maintain tenure security (i.e., secure land rights) that is defined, long-term, enforceable, appropriately transferable, and legal and socially legitimate. It is widely acknowledged that women have fewer and less secure tenure rights compared to men worldwide, and strengthening this security requires addressing not only formal laws but also social norms and cultural and institutional practices that shape the extent to which formal laws are enforced and respected (Kosec et al. 2018; Slavchevska et al. 2021).

Even if such laws exist, failure to enforce them can equally hinder women's ability to realize their own rights. Eissler et al. (2021) observed that, despite the existence of formal gender equality and anti-discrimination laws in Benin, these laws may be poorly enforced by the authorities and do not align with normative practices towards GBV or harassment. For example, women working in agricultural value chains may not report incidences of sexual harassment in the workplace for fear of upsetting their husbands, suggesting women may feel a sense of responsibility for inviting the harassment. Pradhan, Meinzen-Dick, and Theis (2019) found that, in practice, women's joint and personal property rights differ from legal definitions in Nepal. Arowolo (2020) found that poor enforcement of existing antiharassment and GBV laws in Nigeria further perpetuates and, in some cases, effectively condones violence against women.

Norms

Gender norms are the "attitudes and informal 'rules' that govern behaviors considered to be appropriate, acceptable, or desirable for women and for men within a particular society" and are developed, shaped, and experienced differently across the world (Lawless et al. 2019, 348). With respect to AFS, gender norms influence and shape societal expectations regarding how men and women assume certain

responsibilities, spend their time, behave in relation to one another and within their community, and participate in decision-making processes, both within the household and the community. Although gender norms are generally considered slow-moving informal rules within societies, gender attitudes can also be sensitive to economic insecurity or perceptions about relative deprivation (Kosec et al. 2021).

Recent studies have examined how gender norms shape the ways in which men and women participate in agricultural value chains (Eissler et al. 2020a, 2020b; Eissler et al. 2021; Eissler et al. 2022; Quisumbing, Heckert, et al. 2021; Ragasa et al. 2021). Expectations around women's primary role as a caregiver who assumes all domestic tasks limit their time to spend on additional activities, such as participating in an agricultural training (Eissler et al. 2020b; Eissler et al. 2021) or in social events (Eissler et al. 2022). Additionally, women are expected to defer to their husbands' decision or preference, because men are normatively expected to serve as the primary decision-maker in certain cases. This expectation represents an additional barrier for women because it means they need to secure their husbands' permission before deviating from normatively expected activities, such as pursuing an income-generating opportunity or participating in political activities within the community.

Perceptions about which roles within a given value chain are "women's" versus "men's" work can also limit women's ability to strengthen their participation, access capacity-building opportunities, and benefit equally from their participation compared to men (Bosma et al. 2019). For example, Zumilah et al. (2013) find that, in aquaculture value chains in Malaysia, many men do not recognize or acknowledge their wives' contributions to "men's" tasks, such as cage and pond culture activities, even though women contribute significant labor to those activities.

Gender norms can also constrain women's freedom of movement, which affects their ability to participate in economic or social activities outside of the household. For example, when schools are located further away from their communities, girls are less likely to attend—but boys are not similarly constrained (Heckert, Myers, and Malapit 2020). Similarly, women in the Solomon Islands were more constrained than men in pursuing a broad range of livelihood activities because socially conditioned mobility restraints limit women's livelihoods options (Lawless et al. 2019).

Gender norms are an important consideration for participation in policy processes. If women face social sanctions for navigating certain public spaces, they may be unable to meaningfully engage in formal opportunities to participate in a policy process. Further, if women cannot publicly state their policy preferences, they will not be able to exert agency within policy processes. Accordingly, Robinson and Gottlieb (2021) find that more progressive norms about the role of women in society are linked with greater political participation by women.

Access to and control of assets

Access to and control over assets, including land, information, and technology, are critical components of enabling women's empowerment. Recent studies have demonstrated that, when women can access and control key assets such as land or income, they also can exert greater influence over household-level decision-making to put forth and realize their own choices and goals (Harari 2019). The literature has repeatedly shown, however, that women and other marginalized groups often have less access to and less control than men do over key resources that could be leveraged to facilitate the advancement of their own goals and choices.

Key resources such as digital connection and technologies are increasingly essential for enabling meaningful participation in both AFS and governance. Women, rural dwellers, and marginalized communities are less likely to have access to digital technologies and to be digitally connected, an essential resource to continue progress for advancing women's empowerment and equality, and for

facilitating their participation in governance systems and processes (Pawluczuk, Lee, and Gamundani 2021). Information and communication technology developments have been key to facilitating broader access to opportunities to participate in local governance processes and decision-making, as well as to share important information with a wider range of users. Recent studies have examined the role that information and communication technology tools—such as SMS push text messaging, smartphone applications, and expanded internet access—have played in connecting formerly disconnected populations; developing solutions to pressing environmental, social, and political issues; and promoting inclusive governance.

Women's ability to secure and control private savings accounts, particularly using digital tools and mobile banking options, can enable women's and household economic resilience, increase women's control over financial resources, and improve their participation in household decision-making (Karlan et al. 2016). Evidence indicates that women's financial inclusion through the delivery and use of key financial tools, including digital tools, such as cash transfers to women through mobile money and women's access to mobile savings accounts, also directly promotes women's economic empowerment (Aker et al. 2016; Field et al. 2016; Holloway, Niazi, and Rouse 2017; Prina 2015; Suri and Jack 2016).

Education

Access to education and women's educational attainment are also important resources for empowerment (Quisumbing, Meinzen-Dick, R., and Malapit 2019; Sell and Minot 2018). Women's educational attainment is linked to key behaviors that affect a woman's life, including age at first marriage, use of family planning methods, and ability to care for a child's health (Elo and Preston 1996). Recent evidence from 70 different countries demonstrates a positive association between women's educational attainment and women's influence in household decision-making on choices related to both financial and nonfinancial decisions, such as small and large household purchases and their own health care choices (Le and Nguyen 2020). Inequality in educational attainment between men and women, particularly spouses, has been linked to lower levels of women's empowerment and decision-making influence within the household (Meier zu Selhausen 2016). Women with more education are also less likely to be subjected to or accept forms of GBV (Cannonier and Mocan 2018; Erten and Keskin 2018; Freidman et al. 2016; Le and Nguyen 2020).

Education may help individuals to develop skills that are relevant to governance—for example, the ability to read, write, and speak in public and general knowledge about how to navigate group settings. Greater education may also foster greater interest in governance itself as well as a feeling of self-efficacy, both of which could spur participation. At a basic level, poor literacy is a significant barrier to participating in governance processes. Women's awareness and knowledge about rights, policies, laws, programs, and projects in AFS are critical components of their empowerment and exercise of voice.

Well-being and safety

Women's well-being, safety, and security—or freedom from violence—are additional key resources for empowerment. Women's well-being, including their health and nutritional status and control over their own health decisions, is a key enabler to advancing their empowerment in AFS. When women have control over their own health and reproductive health choices, they can better advance their own goals and make and act upon strategic decisions for their own lives. For example, when women can make decisions regarding their own reproductive health, they can decide how many children they want to have and engage in family planning methods (Edmeades et al. 2018). When women are empowered, they can influence, make, and act upon decisions at the household level related to their own health and nutrition, as well as that of their children, leading to better health and nutritional outcomes (Pratley 2016), and household dietary diversity (Malapit and Quisumbing 2015; Sinharoy et al. 2018). Women's involvement

and leadership in decision- and policy making processes in AFS governance can further lead to better nutritional and health outcomes for women and children (Besnier 2020; Pratley 2016).

Safety and security constraints resulting from various risks of violence also affect women's ability to participate in and benefit from AFS governance. During periods of political or physical conflicts, fears of physical violence, attacks, or kidnapping can deter women from participating in community groups or local activities, or from engaging in income-generating activities beyond the household (Bello and Abdullahi 2021). Other periods of shock or stress, such as during the Ebola outbreak or COVID-19 pandemic, can expose women and girls to higher risk of GBV compared to men, which, in addition to the physical and psychological impacts, can limit women's freedom of movement to participate in community-based activities or decision-making processes (FAO 2020; Onyango et al. 2019).

The risk and prevalence of GBV can limit women's full participation in AFS. Studies have shown that women in AFS experience various forms of GBV that negatively affect their ability to exercise agency and can result in negative outcomes (Henry and Adams 2019; Jacobs, Brahic, and Olaiya 2015; Meinzen-Dick et al. 2019). Women's exposure to the risk of GBV while working as agri-producers or processors can also hold negative repercussions for them within their own household because of perceptions that they may have "invited" the harassment (Eissler et al. 2021). Household members may restrict women's mobility to engage in such activities beyond the household because of the perceived or real risks of women's exposure to GBV (Hallman et al. 2015). Malapit et al. (2020) found that such perceived or real risks can limit women's own interests in pursuing agri-entrepreneurship opportunities.

3.5 Operationalizing the framework

Going forward, we plan to develop and pilot assessment tools to operationalize the conceptual framework introduced here. The assessment tools aim to measure WEAGov and help track and monitor progress over time. Table 4 provides an illustration of some the key indicators that could be used to operationalize the 3 x 3 conceptual framework and assess and monitor the process of women's empowerment in AFS governance. For example, at the policy design stage, examining whether gender analysis has informed AFS-related policy deliberations and policy options, versus seeing women in leadership roles in these processes, gives an indication of the degree of progress toward women's empowerment. These conceptual and illustrative indicators were developed using results and key insights from stakeholder consultations, as well as from existing tools and frameworks reviewed in Section 2.1. We elaborate on potential indicators for each dimension in Appendix D.

Table 4. Applying the WEAGov framework: Illustrative indicators to measure WEAGov

| Dimensions	Policy design	Policy implementation	Policy evaluation, learning, and reform
Are women *considered*?	Gender analysis is undertaken to inform AFS policy deliberations and policy options. Gender considerations are explicitly articulated in AFS policy and strategy documents.	Gender-responsive budgeting is undertaken. Budget is allotted for gender-specific actions and targets.	Sex-disaggregated data exist on key AFS indicators. Gender audits in key AFS agencies and organizations are regularly conducted.
Are women *included*?	Women are included in the AFS policy consultations and deliberations.	Women are active and skilled policy and program implementers and service providers.	Policy feedback systems are in place, and diverse types of women are using them.
Are women *influencing*?	Women lead the AFS policy deliberations and influence policy directions.	Women lead in ministries, agencies, and organizations charged with AFS policy implementation and service provision.	Women lead in monitoring and evaluating AFS policies and transform norms, organizational culture, and policy frameworks.

Source: Authors' elaboration based on various studies and stakeholder consultations.

We envision a set of quantitative indicators capturing data from publicly available national surveys, administrative or official data from government agencies, and data from content analysis of national agricultural policy and strategy documents. Examples of these indicators include budget allotted to agriculture, and the proportion that goes explicitly to gender or women issues; the proportion of women in parliament and women parliamentary representatives in agricultural committees; the proportion of women AFS ministers; the presence of sex-disaggregated data on key AFS and development outcomes; and the explicit articulation of gender considerations in AFS policy and strategy documents. For indicators for which data do not exist or are difficult to quantify, we envision utilizing expert surveys or key informant interviews, expert panel or focus group discussions, or scorecards or ratings by stakeholders (or a combination) to provide insights on the quality of women's participation, leadership, and influence in the policy processes. These indicators include the extent to which different types of women, including the marginalized groups, are consulted, are included, and have led or influenced policy deliberations and directions, which can be shown through Likert-scale ratings or scorecards by key stakeholders. These methods of scoring have been used by many governance assessment frameworks and tools, including the Forest Governance Tool, Land Governance Assessment Framework, Landscape Governance Assessment Tool, and Gender in Agricultural Policy Assessment Tool.

Figure 4 illustrates the processes to operationalize the WEAGov framework. As in other assessment frameworks and tools, the first step will be forming the national team to implement the assessment tool, followed by desk reviews to understand the context; compile and review the relevant national agricultural policies, strategies, and plans; and map the key actors involved in policy design, implementation, and evaluation within AFS. From these compilations, we will select a smaller set of

major AFS national policies and plans and track their design, implementation, and evaluation processes, and if and how women were considered, included, and influencing in those processes. A smaller set of major stakeholders and experts will be sampled to be surveyed, interviewed, or invited for expert panel or group discussions for their insights, data, and scoring. The last stages of the assessment process are stakeholder technical validation workshop and policy dialogue. The team and other interested stakeholders can repeat the same process after a few years to monitor the progress toward achieving women's empowerment in the AFS policy and governance processes.

Figure 4. Illustration of the WEAGov assessment process
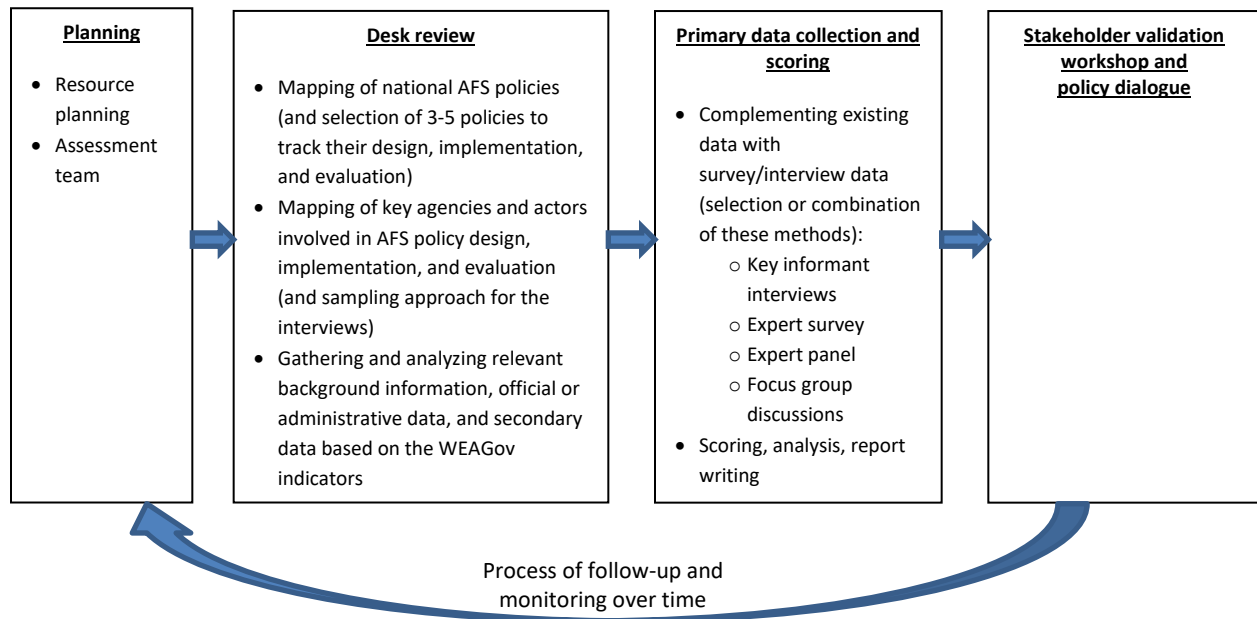
Source: Authors' elaboration.

The next step is to draft the methodological details and finalize the assessment tools, which will then be piloted in a few countries in 2023 and 2024. The conceptual framework and assessment tools will be iterated and adjusted based on the lessons from the pilots.

4 CONTRIBUTIONS AND CONCLUSIONS

Many international donors and country governments are highlighting the need to ensure that women's voices and needs are considered in AFS governance. We have found, however, that existing assessment frameworks and indexes are insufficient for measuring the extent of women's empowerment in agrifood systems governance and identifying gaps and opportunities for improvement. In this paper, we provide a new conceptual framework to help address this gap. This framework will be the basis for a new assessment tool to be developed and piloted going forward.

In the process of developing the framework, we conducted stakeholder consultations to determine if and how a new framework could meet the needs of a diverse range of potential users. We also reviewed, and synthesize in this paper, a highly fragmented and diverse set of literature covering the nexus of women's empowerment, agrifood systems, and governance. Finally, we explored a wide range of potential indicators that will get us closer to measuring and quantifying a country's status and readiness for a gender-responsive and transformative agrifood system.

As with the introduction of any conceptual framework, ensuring the usefulness and effectiveness of the WEAGov framework requires developing, piloting, and empirical investigation. We have made considerable progress and have provided a solid foundation for the next steps. Piloting the assessment tool in several different countries with diverse AFS will soon be under way. This pilot will allow us to learn how well it works across different contexts, and to refine and improve the measurement tools as needed. Future work in this area will also focus on refining and operationalizing the measurements and indicators through more in-depth engagement with national partners. In the future, we plan to provide a suite of tools that others can use to apply and test the WEAGov framework themselves to systematically advance knowledge across differing contexts in this area.

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APPENDIXES

Appendix A. Summary of relevant frameworks in assessing gender, women's empowerment, governance, and/or agrifood systems

	Short summary	Governance	Gender	Agrifood system
Biswas et al. (2019)	Unified "good governance framework" after synthesizing 22 existing governance frameworks. Framework consists of 13 criteria with 74 subcriteria to comprise the good governance framework that can be used to assess governance of public bodies broadly towards better practices for improving public service delivery and outcomes.	X		
IUCN (Springer et al. 2021)	Presents a rights-based Natural Resource Governance Framework of 10 defined, critical components of natural resource governance that were pilot-tested to understand natural resource governance for best conservation outcomes,	X		X (natural resources aspect only)
PROFOR (Forest Governance Tool)	An assessment framework and diagnostic tool to identify strengths and weaknesses of forest governance and determine areas of improvement for good forest governance practices. It is informed by 130 multiple choice questions to measure six common principles of good forest governance.	X		X (forest aspect only)
World Bank Accountability Framework (2003)	The framework distinguishes citizens/clients, politicians/policy makers, and service providers and puts the accountability relations between these actors as central to understanding how governance reforms can improve service provision. Citizens/clients can use two "routes of accountability" to get better services: long route and short route.	X		
Long and short route of accountability (World Bank and IFPRI 2009)	It adopts and expands the World Bank accountability framework to include the gender angle, differentiate national and local governments to represent decentralization efforts, and expand on the types of actors involved in the supply and demand of rural services	X	X	X (rural services)
Public Expenditure and Financial Accountability (PEFA) Framework and Assessment Tool, and Gender-Responsive Public	This framework and assessment tool includes seven key pillars and 10 associated steps to implement the tool to assess the status of a country's public financial management systems in meeting national-level priorities and goals. Based on this framework and tool, a targeted GRPFM framework was developed, inclusive of	X	X	

Financial Management (GRPFM) Framework and Climate-Responsive Public Financial Management (CRPFM) Framework	nine indicators, to measure the degree to which a country's public financial management systems address national objectives regarding the different needs of men and women, and intersectional subgroups, and promoting gender equality. The CRPFM is currently still in pilot phase but includes 14 indicators to assess the extent to which PFM systems are meeting national climate goals and priorities.			
Land Governance Assessment Framework (World Bank)	Building on the PEFA, this framework guides the measurement of cross-contextual landscape governance using five key thematic areas, with 21 land governance indicators and 80 dimensions to assess the quality of governance for landscapes.	X		X (land aspect only)
Kabeer (1999)	Defines women's empowerment as "one's ability to make and act upon strategic and meaningful choices and decisions related to one's life."		X	
Rowlands (1997)	Lays the foundation for understanding the three types of power as key components of empowerment: power within (intrinsic agency), power to (instrumental agency), and power with (collective agency).		X	
Johnson et al. (2018)	A framework to guide the assessment of development projects and policies focused on gender equality or women's empowerment that considers outcomes reaching women, benefiting women, or empowering women.		X	
Hannah et al. (2021)	Presents a conceptual framework to assess the model of representation versus participation in support of gender quota systems in governance systems.	X	X	
Njuki et al. (2022)	Presents a framework of gendered agrifood systems, building on HLPE (2017) and Gender at Work (n.d.), which drew from Rao and Kelleher (2005) who in turn adapted it from Wilber (1999).		X	X
Andrews, Pritchett, and Woolcock (2013)	This framework emphasizes local knowledge, experimentation, and iteration over implementing policies strictly as designed.	X		

Source: Compiled by the authors.

Appendix B. Relevant indexes and tools on gender, governance, and agrifood systems

	Index/tool	Gender	Governance	AFS	Pillars/domains	Data source	Composite index	Level of aggregation	Number of countries
1	Women, Business, and the Law (WBL) (World Bank)	X	X (laws only)		35 indicators in 8 domains: mobility, workplace, pay, marriage, parenthood, entrepreneurship, asset, pension	Firm/expert surveys (based on binary questions (yes/no) representing good practice	Yes (score, rank)	National level	190
2	Global Gender Gap (World Economic Forum, WEF)	X	X (political empowerment)		59 indicators in 4 domains: economic participation and opportunity, educational attainment, health and survival, and political empowerment	Existing global data sets and expert surveys	Yes (score, rank)	National level	146
3	Gender Equity and Governance Index (Global Governance Forum)	X	X		65 indicators in 5 domains: governance, education, work, entrepreneurship, and violence	Existing global datasets (roughly 60% of indicators from WBL)	Yes (score, rank)	National level	158
4	Environment and Gender Index (IUCN)	X	X (decisionmaking)	X (environment only)	27 indicators in 6 domains: livelihoods, ecosystem, gender-based rights and participation governance, gender-based education and assets; country-reported activities	Existing global data sets (uses both input and outcome indicators)	Yes (score, rank)	National level	72 (pilot in 2013; has not been updated)
5	Gender Social Norms Index (UNDP)	X	X (norms only)		7 indicators/statements in 4 domains: political empowerment, educational empowerment, economic empowerment, and physical integrity	Individual survey (global) (7 statements to be rated using 3-, 4-, or 10-point Likert scale)	Yes (score, rank)	National level	75
6	Enabling the Business of Agriculture (World Bank)	X (3 indicators)	X (laws only)	X	66 indicators in 8 domains: supplying seed, registering fertilizer, securing water, registering machinery, sustaining livestock, protecting plant health, trading food, and accessing finance	Firm/expert surveys; and adapting existing datasets (e.g., WBL)	Yes (score, rank)	National level	101
7	Worldwide Governance Index		X		6 domains of governance: voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, control of corruption	Expert surveys	Yes (score, rank)	National level	Over 200 countries
8	*WEAI family of tools (IFPRI)*	*X*		*X*	10 indicators (and 2 optional indicators): intrinsic agency (power within), instrumental agency (power to), and collective agency (power with).	*Individual and household surveys*	*Yes (score, no rank)*	*Any level (but mostly project-level to date)*	*Many countries, not nationally representative*
9	Land Governance Assessment Framework (World Bank)		X	X (land only)	From 80 (in 2013) to 116 indicators (in 2022) on land governance	Scoring by expert panel; stakeholder	No (score, A–D)	National level	>40

	Index/tool	Gender	Governance	AFS	Pillars/domains	Data source	Composite index	Level of aggregation	Number of countries
						validation and policy dialogues	Likert scale)		
10	Forest Governance Tool (World Bank)		X	X (forest only)	78 indicators in 3 domains (13 subdomains) on forest governance	Scoring by expert panel; stakeholder validation workshop	No (score, 5-point Likert scale)	National or state level	Few
11	Landscape Governance Tool (World Bank)		X	X (landscape only)	10 challenges on landscape governance identified in the literature review	Scoring by expert panel; stakeholder validation workshop	No (score, 5-point Likert scale)	National or state level	New index still to be piloted
12	Natural Resources Governance Framework (IUCN)		X	X (natural resources only)	Not clear from website	Expert panel, interviews, in-depth country assessments	No	Any level (national, local)	
13	Gender in Ag Policies Assessment Tool (GAPO) (FAO)	X	X (policies only)	X	Scoring by the assessment team (3-color scale: red, yellow, green)	Desk review; interviews; and in-country validation workshop	No (score, Likert scale)	National level	1 (piloted in Ghana in 2016)
14	Local governance assessment tools (family of tools including Good Governance barometer) (UNDP, USAID, Danish)		X		Various governance aspects including accountability, transparency, effectiveness, civic capacity, participation, sustainability, among others	Expert panel (0–100%; Likert scale)	No (score, 0–100%, per indicator)	Local government level	
15	Bloomberg's Gender Equality Index	X	X (leadership in agribusiness; policy, business practices)		84 indicators (+ 16 exploratory) in 5 domains: leadership and talent pipeline, equal pay and gender pay parity, inclusive culture, anti-sexual harassment policies, external brand	Voluntary gender reporting by companies based on Bloomberg's standard set of indicators and methodology	Yes (score, no rank)	Company level	418 companies in 45 countries (publishes only those that meet the threshold, indicating good practice)
16	W+ (WOCAN)	X		X	not clear (quantifies project's impact on 6 domains of women's empowerment)	Individual surveys (baseline and endline)	No	Project or company level	

Source: Compilation from various documents on these indexes and tools; interviews with index/tool developers. Other research and assessment tools at household or community levels are compiled in the review paper by Eldidi et al. (2021).

Appendix C. Synthesis of Findings from Stakeholder Consultations

Interviews were held with a wide range of experts and potential users of the approach and index proposed in this study. The objectives of these consultations were to

- Gauge the interest and usefulness of a tool or index to measure and track women's empowerment in agrifood system governance;
- Learn from the experiences of developers and users of similar indexes/tools regarding how they are being used and by whom;
- Solicit ideas from potential users as to what they feel are key components of such a tool or index (priority or critical challenges/issues to capture); and
- Identify existing data sources that could be incorporated into the metric.

Interviewees were identified through the identification of similar tools and indexes in the literature review, through the networks of team members with experience in developing and using various similar indexes, and following up on suggestions given by those interviewed. Country-level key informants were also targeted in a similar manner.

Guiding questions for different types of interviewees (public sector, private sector, developers of similar indexes, etc.) were developed, pilot tested, and revised. Teams or Zoom software was used, and the interviews were recorded and transcribed. This appendix synthesizes key findings from these consultations.

1. Usefulness of a national-level women's empowerment in agrifood governance index, for whom and for what?

Respondents were generally very receptive to, and often quite enthusiastic about, the idea of a national-level index showing how countries are doing in terms of policies, regulations, and norms (governance, broadly speaking), examined using a gender lens.

- *Development agencies/donors/philanthropists*. Respondents here felt such an index would be useful to identify where investments and interventions should be targeted, to provide baseline information to see progress over time, and to make cross-country comparisons.
- *Private sector*. Representatives of the private sector said it could be used to help identify lower-risk and responsible investments, to work with public sector and development agencies to develop blended finance instruments that "de-risk" their investments, for strategic planning purposes (e.g. how to diversify their investment portfolios), to help drive home the case for investment aimed at enhancing resilience of women in Supply Chains, and to inform results-based financing and impact-linked loans.
- *Government ministries/agencies*. Voices from this perspective reported that an index of this kind could help build/enhance awareness of how women in agriculture and the food system are affected differently and have different needs/gaps with respect to laws and policies (e.g., unpaid or informal labor, maternity leave, job security, women's rights), could be used for tracking progress, would be useful as a tool for gathering evidence and learning in engagement and advocacy efforts with policymakers/parliamentarians, and could be used to inform design of programs.

In general, some of the "pros" identified by multiple respondents included the following:
- It would be valuable to have access to such a data set.
- It could be important for highlighting/understanding good governance with a gender lens, for understanding who is doing what, and for identifying what are good practices.
- It should include guidance on how to use the information to provide the most benefits.

The "cons" identified included the following:
- If used for comparison across countries or businesses, one can expect to see pushback.
- Making such information "open access" will make many (firms or government agencies) nervous (particularly the private sector), because they will worry about potential negative consequences, leading to a possible initial loss of transparency (as they hide things).

2. Important components/indicators to consider for such an index

In relation to agrifood systems, some of the key governance challenges relating to gender and indicators that could potentially be tracked at a national level mentioned in the interviews included the following:

- Proportion of women in leadership/senior positions (e.g. in ag co-ops, ag agencies)
- Number of women on corporate boards of agrifood companies
- Proportion of rural women with bank accounts
- Number women reached by extension services
- Number women farmers accessing credit/finance
- Number women accessing markets
- Number women participating in informal ag labor
- Do key ministries/agencies have a gender focal point?
- Do key ministries/agencies have a gender-responsive budgeting mechanism in place?
- Education/literacy levels
- Number of media campaigns on agricultural women's/gender issues, and reach (e.g., number of tweets)

Other areas mentioned by respondents, although likely at a lower level (e.g., district or community) than national, include the following:

- Percent of agricultural credit requiring (male dominated) asset ownership as collateral
- Input use by sex (easier to track than access)
- Nutrition levels of female-headed vs. male-headed households
- Crop yields—men's and women's
- Time burden of women (e.g., collecting water, fuelwood)
- Unvalued homecare labor/time
- Women's access to and ability to pay for hired labor
- Trade-related—women's access to local, national, and international markets
- Agricultural women's access to information and communication technologies
- Women's participation in lower- vs. higher-value crops

- Proportion of agriculture- and food-related budgets allotted to gender-specific actions
- Percent of women involved in gender budgeting process of agricultural Ministries
- Number of targeted trainings/mentoring programs for agricultural women and women in food industries

3. Data considerations

The interviews highlighted trade-offs in relation to the degree of rigor in data collection that should be considered (high is good), taking into account the costs of data collection (high rigor is expensive). Most respondents supported the idea of using existing data if at all possible. Yet they also questioned whether sex-disaggregated information on many key components actually exists, and how hard it may be to collect. Experience from the Gender Innovation Lab in Ethiopia and Nigeria in similar work aiming to integrate gender into the agricultural policy landscape has led (after several years) to gender strategies for the agricultural sector, integrating Living Standards Measurement Surveys, WEAI, and other data. AGRA's similar (top-down) approach starting up in 11 countries attempts to get gender questions into national statistics/data collection.

Data sources mentioned by those interviewed included the following:

Data sources (national-level indexes/indicators/tools):
- United Nations High Commissioner for Refugees human rights reporting
- International Labor Organization data
- Food and Agriculture Organization of the United Nations—gender and land rights database
- Women's Business and Law Index
- SIGI [Write out full name?]
- Living Standards Measurement Survey
- WEAI for some countries
- SDG reporting
- World Bank Ease of Business index
- Food and Agriculture Organization of the United Nations—Gender in Agricultural Policies Assessment Tool

Frameworks:
- The Njuki et al. framework was suggested by several as a good starting point; it is unique in taking a food systems approach using a gender lens. It includes policy/governance considerations but does not focus solely on them.
- The Forest Governance framework (World Bank) is based on three pillars: laws/policies on paper, how people are involved, and how it works in practice. It takes a participatory scoring approach with stakeholder workshops, aimed at developing home-grown solutions. There are very useful lessons here on participatory scoring approaches in particular (see "Lessons from other index developers" below).
- The Landscape Governance framework (World Bank, in development and building on the Forest Governance framework and lesson) is based on 10 challenges, with 30 core indicators and supplementary indicators. It uses a scoring approach with experts, desk review, participatory validation, and trends. It is primarily aimed at being used

for monitoring and measuring change (donor-driven). There are good lessons here on practical ways to do scoring using both experts and diverse stakeholders (see "Lessons from other index developers" below).

4. Private sector viewpoints

Firms have their own tools aimed at ensuring that their programs and services reach and benefit women. Examples include the Gender Equity Index, an online diagnostic tool for coffee and cocoa traders developed by the World Coffee Organization's Partnership for Gender Equity, now Equal Origins. Another is Root Capital's checklist diagnostic gender tool currently being used by 35 agribusiness clients.

The focus of private sector firms is generally on increasing female participation (in workshops, trainings, etc.), as well as safety, literacy, and leadership/management (helping women "move up").

Companies like Root Capital are hiring gender specialists in multiple country offices to provide support for agribusiness firms to overcome gender disparities.

Several private sector respondents emphasized that who collects the data for this index or tool matters significantly and will determine whether it is scaleable and sustainable in the longer term. The incentives for a government or other agency to undertake the work need to be considered. For example, the World Bank can incentivize a government to collect new data because of the government's desire for associated loans and grants. Examples of indexes or scorecards comparing companies on meeting sustainability commitments that corporations pay attention to include Oxfam's Behind the Brands campaign. Another example mentioned by respondents was the World Bank's Ease of Doing Business Index. However, it was pointed out that a new index developed and used to compare countries or businesses will likely receive pushback from firms in particular, because they get nervous about potential negative consequences. When this happens, transparency is lost (they hide things they don't want seen). From the private sector perspective, firms may want to know how they are doing internally, but don't want to make this public.

5. Lessons from other index developers

Developers of similar national-level indexes raised the following factors and questions for consideration before designing a new one:
- Governments are now being asked to collect a lot of new data (e.g., climate-related) and may have limited capacity to collect additional data for such an index; there is value in analyzing what relevant data are already being collected.
- Its critical to identify what outcome is desired—tools and indexes are very different, for example, and achieve different aims.
- It is important to plan how data collection, analysis will be maintained over time.
- Who are you aiming to influence? That is, what Ministries? (Ministry of finance is the most powerful.)

- Will it involve digging out administrative data from many places, or will it rely on curated data?
- Connecting different existing data sources could be innovative (i.e., rather than collecting new data).
- Regarding the SDGs as a potential entry point: there are at least 300 SDG indicators, many of which have no data; the ones based on surveys are the most problematic; many of these indicators are much too crude (e.g., women's land rights based on ownership, leadership rather than agency).
- For IUCN's Gender and Environment Index, an exhaustive search of existing data conducted. It revealed that countries that have available data look much better on this Index than those that don't have such data.
- Leadership is a key factor at the national level (e.g., gender quotas); for food systems a focus on women's and agricultural cooperatives and associations would be a good starting point.

6. Country-level perspectives

Respondents from the three potential pilot countries (India, Malawi, and Nigeria) included government officials, NGO workers, local offices of international development agencies, and researchers. Key issues that came up in these discussions included the following:
- Who collects the information is important (what are the incentives?) and will likely require coordination between many agencies (e.g., gender and agriculture, water and land, etc.).
- Capacity building/training around the development and use of the index will be key.
- Such an index could be useful and used for advocacy work with policy makers/parliamentarians, for media campaigns, and to inform programming of development agencies and others.
- A concern was raised that international indexes aren't customized/appropriate and don't account for strong African cultural norms.
- A new framework and index will lead to better future data collection even if sufficient (gender-disaggregated) data don't currently exist.

For more details on interview findings by respondent type, a summary table is available upon request.

Appendix D. Conceptual and illustrative indicators for measuring WEAGov

Dimensions	Policy design	Policy implementation	Learning and adaptation
Are women *considered*?	Presence of gender policy in AFS or gender-specific activities or targets in key AFS or climate-related policies, strategies, and investment plans	Presence of gender-responsive budgeting process	Sex-disaggregated data on key AFS outcome indicators.
	Number of times head of state or high-level officials spoke publicly about women/gender issues in AFS, in the last 12 months	AFS budget	Sex-disaggregated data on key AFS outcome indicators communicated and used to inform policy development processes and policy documents
	Number of organizations/groups with focus on gender advocacy in AFS	Gender budget, as % of AFS budget	Gender audits conducted in key AFS ministries and other agencies (in the last 5 years)
	Measure of public/advocacy/media campaigns on women's/gender inequality issues in AFS	% AFS public administration staff receiving gender awareness/training in the last 2 years	
	Measure of enabling legal environment for women in agribusiness	Existence of women's training or development programs for entering AFS-related career path	
Are women *included*?	Broad-based policy dissemination/awareness campaign undertaken, and diverse types of women with access to information about AFS policies/projects/schemes	% women AFS service providers (agricultural researchers, agricultural education and training institutes; extension workers; land professionals; water development professionals)	Processes/mechanisms to provide feedback and to monitor and evaluate the AFS policies/projects/schemes, and whether diverse types of women and marginalized groups use these mechanisms.
	Number of AFS policy development and review processes in the last 10 years, and whether women were included in the consultation processes	% women in water resource management institutions; forest committees, fisheries committees, innovation platforms, farmer-based organizations, and cooperatives (by economic status)	Women providing feedback on AFS policies/projects/schemes
Are women *influencing*?	Number of AFS ministries; and % women members in interministerial committees for policy reviews or emerging AFS and climate related issues % parliamentary reps who are women	% women ministers (in AFS) % women in management and decision-making positions in relevant AFS public administration (ministry of agriculture (and fisheries, forestry, water development, and	Existence of office to monitor and/or coordinate gender strategies and outcomes across key AFS ministries and agencies Number of women leaders using sex-disaggregated data and evidence to advocate for women/gender issues in AFS

Dimensions	Policy design	Policy implementation	Learning and adaptation
		livestock if separate), ministry of environment, research institutes, ag education system	
	% women parliamentary reps on the agricultural committee in the main legislative body	% women from marginalized groups participating in publicly held offices (e.g., panchayat in India?)	
	Number of women who play a role in leading on AFS policy development, whether from government or civil society	% women leaders in water resource management institutions; forest committees, fisheries committees, innovation platforms, farmer-based organizations, and cooperatives (by economic status)	
		% women leaders in marketing boards, agribusiness coalitions/ networks/ committees (e.g., marketing bodies, Haat market and Aarti (across society) in India)	
		% women in committees governing market facilities	

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