Agroecology TPP

TRANSITIONS

Holistic performance measurement for food systems transformation

Scoping the potential of holistic assessment for supporting agroecological transitions

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Final report

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The scoping study activities in Ghana and Burkina Faso were conducted with additional collaboration and support from the TRANSITIONS Metrics project, funded by the European Union (EU) through the International Fund for Agricultural Development (IFAD) under the Agroecological Transitions Program for Building Resilient and Inclusive Agricultural and Food Systems (TRANSITIONS).

Both projects contribute to the Transformative Partnership Platform on Agroecology (Agroecology TPP) and its overarching mandate to foster transitions to more sustainable agricultural and food systems by accelerating and coordinating the actions of a wide range of institutions already engaged in agroecology across scales, locations and contexts.

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Abbreviations and acronyms

CIFOR-ICRAF	Center for International Forestry Research – World Agroforestry
EU	European Union
GESI	Gender, Equity, and Social Inclusion
HLPE	High Level Panel of Experts on Food Security and Nutrition
ICARDA	International Center for Agricultural Research in the Dry Areas
IDRC	International Development Research Centre
IFAD	International Fund for Agricultural Development
MELIA	Monitoring, Evaluation, Learning and Impact Assessment
NGO	Non-Governmental Organization
TAPE	Tool for Agroecology Performance Evaluation

Executive summary

In response to urgent environmental and social challenges, there is a growing recognition that food systems must undergo a transformation towards greater resilience, sustainability, and inclusivity. Agroecology has emerged as a key approach for enabling such transformation. However, a significant challenge to scaling agroecology lies in the difficulty of measuring its performance in ways that allow for fair comparisons with alternatives. Common approaches to evaluating agrifood systems often fail to account for the multifunctionality of agrifood systems, overlooking the environmental and social benefits of agroecology and the negative externalities of conventionally intensified systems.

Given this context, a more holistic and inclusive approach to measurement is needed to ensure that policymakers, donors, development actors, and farmers can make informed decisions about investing in agroecology or alternative agricultural systems. To that end, this study draws on desk reviews, stakeholder interviews, and multistakeholder workshops in Burkina Faso, Ghana, and Tunisia to identify common barriers and opportunities for assessing agroecological performance. It explores how investing in more holistic assessment tools and approaches can help support agroecological transitions in West Africa and globally.

Key findings include the need to harmonize metrics across organizations while allowing for context-specific adaptations; the importance of embracing a plurality of definitions and frameworks for agroecology; and the necessity of strengthening capacity and developing practical guidance on developing and designing holistic metrics and assessments. The study also highlights significant gaps, particularly in assessing social dimensions such as equity and social values. Addressing such gaps is essential for making fair comparisons between agroecological and conventionally intensified systems. There is thus a need for robust tools and metrics, as well as for gender-sensitive approaches that go beyond simply measuring women's participation in projects to track their agency in decision-making and economic activities.

The study identified lack of coordination and collaboration among key actors – governments, businesses, researchers, and non-governmental organizations (NGOs) – as a key challenge that hinders the full potential of agroecological transitions. Strengthening research-user linkages, promoting knowledge sharing, and fostering cross-sectoral collaboration are essential steps. Financial constraints were also frequently cited as a barrier to comprehensive assessment of agrifood systems. In Ghana and Burkina Faso, the study identified many stakeholders working on agroecology, but few funders identified focused on this area. In response, the study calls for greater collaboration among donors and more strategic investments to ensure agroecology's role in transforming food systems.

Overall, the study underscores the importance of a holistic, collaborative, and well-resourced approach to measuring the performance of agrifood systems. Addressing these gaps will enable stakeholders to make more informed decisions and support the transformation of food systems towards greater resilience, sustainability, and inclusivity.

1 Introduction

Urgent environmental and social challenges – including climate change, biodiversity loss, malnutrition, and inequality – demand a holistic transformation of food and agricultural (agrifood) systems. Agroecology is increasingly recognized as a key approach to transforming food systems, making them more resilient, equitable, and sustainable. However, a major challenge to scaling agroecology is the difficulty of measuring its performance in a way that allows fair comparisons with conventionally intensified agriculture and alternative approaches.

Evaluations of agrifood systems commonly measure a narrow set of metrics, focused on productivity and economic returns. Yet, such approaches fail to consider the multifunctionality of agrifood systems. They also overlook the potential environmental and social benefits of agroecology and the negative externalities of conventionally intensified systems. What is needed are ways to measure the performance of different agrifood system approaches holistically. This would enable policymakers, donors, development actors, and farmers to make informed decisions regarding their investment in agroecology or alternative approaches.

Drawing on desk reviews, stakeholder interviews, and multistakeholder workshops were conducted in the focus countries: Burkina Faso, Ghana, and Tunisia.[1] This scoping study had two aims: first, it sought to identify and synthesize common barriers and opportunities for assessing agrifood systems performance; second, it explored how investing in the development of more holistic assessment can support agroecological transitions in West Africa and globally.

Specifically, it aimed to:

- Identify key actors supporting agroecological transformation in the region and potential partnerships for advancing the field of agroecology.
- Evaluate their experiences, interests, and needs regarding holistic assessment of agrifood systems and agroecology and identify common barriers and opportunities.
- Review existing metrics and assessment approaches, highlighting priority areas for future research and development.

1 Detailed results from the stakeholder interviews and workshops are included in the Annexes.

2 Methodology

To identify barriers and opportunities for holistic assessment and areas for future research and investment, the study employed a similar methodology across the three focus countries. This comprised an initial desk review and stakeholder mapping exercise, semi-structured interviews with key actors, and multistakeholder engagement workshops.

2.1 Desk reviews and stakeholder mapping

For each of the focus countries, the desk reviews comprised stakeholder mapping and a project documentation review. This aimed to identify key players in the agroecology space, their goals and objectives, what types of agroecological practices they employ, and their potential interest in holistic assessment of agrifood systems performance. The stakeholder mapping was then used to identify interviewees (2.2. Stakeholder interviews) and relevant participants for future engagement workshops (2.3. Engagement workshops).

In Ghana, to identify agroecology-focused actors and projects in the country, the desk review leveraged on previous stakeholder mapping by CIFOR-ICRAF under the EU-funded and IFAD-managed TRANSITIONS Metric project, and through consultation with the Ghana focal point for the Coalition on Agroecology. The review identified 39 stakeholders from which to sample for interviews (Annex 3). In Burkina Faso, the review built upon several existing mapping efforts in the country. It identified 52 stakeholders from which to sample for the interviews (Annex 4). In Tunisia, the review took a different approach, conducting a detailed literature review. It examined the status of agroecology-related policy and initiatives, as well as past use of tools and approaches for measuring the performance of agroecology. This review built on past work under the OneCGIAR Initiative on Agroecology. Stakeholders for interviews in Tunisia were identified through ongoing agroecology- focused projects led by ICARDA at the time (Annex 5).

2.2 Stakeholder interviews

The interviews sought to understand what metrics different stakeholders are using, what they would like to measure but struggle to measure, and how future investments could help address these challenges. An interview guide from the CIFOR-ICRAF-led TRANSITIONS Metrics project was adapted for the study and used in all three focus countries. This guide was made available in both English (Annex 1) and translated to French (Annex 2). Specific sections of the interview guide aimed to:

- Collect basic information about each actor, including the name of the institution, the nature of its activities, and the agroecological projects they are engaged in.
- Identify the metrics and indicators used in their agroecological projects to measure success or monitor progress. This includes tools, methodologies, and challenges associated with evaluating performance.
- Highlight gaps or shortcomings in the existing metrics within these projects and explore opportunities for collaboration to develop more holistic and inclusive assessment tools.
- Identify areas for improvement, and propose ways in which actors and stakeholders can work together to enhance the effectiveness of agroecological metrics, ensuring more comprehensive project evaluation and better alignment with agroecological principles.

Table 1. Number of stakeholders interviewed in each of the focus countries

Stakeholder type	Ghana	Burkina Faso	Tunisia
Producers	-	2	-
Government	2	1	2
NGOs	7	5	4
Academia	-	2	1
Private sector	1	-	-
Service providers	-	10	-
Donor	1	-	-
Total	**11**	**20**	**7**

The interview guide included questions related to whether and how organizations are approaching the measurement of Gender, Equality, and Social Inclusion (GESI) in their work. A total of 38 interviews were conducted (Table 1). In all three countries, interviewees were purposefully sampled from the stakeholder mapping (2.1. Desk reviews and stakeholder mapping) and efforts were made to interview a diversity of stakeholder types (see Annex 6, 7, and 8 for details of interviewees). Data from the interviews were analysed using a thematic approach. This focused on key aspects such as the use of metrics to evaluate food and agricultural performance, project-specific outcomes, and gaps in current assessment methods.

2.3 Engagement workshops

In-person multistakeholder workshops were held in each of the three countries. These workshops sought to bring together actors to present and exchange on the interview results. They also discussed their interest in metrics and performance evaluation and where future work on holistic metrics and assessments could help advance agroecology.

The workshops followed a similar structure in each of the three countries. They provided a forum for exploring and discussing each country's agroecological transition pathways; definitions of agroecology; current metrics and tools used by stakeholders; gaps in current measurement approaches; and opportunities for scaling holistic metrics and assessment approaches for measuring the agroecological performance of agrifood systems.

The workshops also validated findings from the desk review and interviews. In Burkina Faso and Ghana, the workshops were co-organized and funded by the EC-IFAD TRANSITIONS Metrics project. In Tunisia, the workshop was undertaken in collaboration with the OneCGIAR Initiative on Agroecology. In Ghana and Burkina Faso, efforts were made to invite actors from different sectors and areas of the food system: production, processing, distribution, and consumption. See Annex 3 and Annex 4 for details of the institutions/organizations that participated in the workshops in Ghana and Burkina Faso, and Annex 5 for those in Tunisia.

Table 2. Details of the in-person engagement workshops in each of the focus countries

Country	Venue	Dates	Number of participants		
			Male	Female	Total
Ghana	Accra	17–18 July 2024	25	8	**33**
Burkina Faso	Ouagadougou	30–31 July 2024	21	8	**29**
Tunisia	Tunis	21 June 2024	15	13	**28**

3 Country-specific case studies

The following sections outline the main findings from the desk review, interviews, and workshop in each of the focus countries and summarize the main country-specific findings.

3.1 Ghana

3.1.1 Desk review and stakeholder mapping

The desk review identified 39 agroecology-focused actors and projects working in Ghana (Annex 3). A rapid review of websites and project documents and descriptions revealed a clear interest and push towards agroecology as a food production approach in Ghana. Various donors and government ministries state their commitment to investing in agroecology, yet, based on the documentation reviewed, fail to provide details on the specifics of what practices and approaches fall under agroecology. Initiatives by NGOs and development partners, on the other hand, provided greater detail about their agroecology practices. Nevertheless, details on whether and how projects and organizations may be measuring the performance of agrifood systems and agroecology was absent.

3.1.2 Stakeholder interviews

In Ghana, 11 interviews were held with stakeholders working across programming; management; research; and Monitoring, Evaluation, Learning, and Impact Assessment (MELIA) (see Annex 6 for interviewee details). Key findings and insights from the interviews are noted below.

- Use of existing assessment frameworks and tools: None of the stakeholders interviewed reported using an existing framework or tool to measure agroecology performance. Most commonly, they used project-specific monitoring and evaluation protocols for baseline, midline, and endline data collection. These protocols primarily relied on surveys and biophysical measurements (e.g., crop/tree productivity). Given that these projects are typically externally funded and vary in their goals and objectives, organizations used multiple different protocols and instruments. This variation reportedly made it difficult to compare performance across projects and portfolios.
- Gender equality and social inclusion: All interviewees emphasized gender as a priority, but only one used a widely used measure – the International Food Policy Research Institute's (IFPRI) Women's Empowerment in Agriculture Index (WEAI) – to track performance within their projects. Five respondents measured the participation of women in local leadership roles, while eight relied on participation metrics (e.g., number of men and women involved). These interviewees, however, expressed a desire to measure more meaningful indicators related to women's agency in decision making, income use, and application of extension knowledge.
- Impact stories: Several interviewees relied on the sharing of farmer and community experiences to track progress in their projects. This method involved limited quantitative measurement and documentation; instead, success stories are shared in casual settings such as farmer field days and are used to spread knowledge among local farmers and households.

- Post-project assessments: Stakeholders noted a lack of thorough post-project assessments. This limited the ability of institutions to evaluate the effectiveness of different programmes or interventions and assess how efficiently the project used its resources. They said that neglect of project operations to budget for and prioritize post-evaluations was the main reason for lack of post-project assessments.
- Capacity building and co-learning: Long-term capacity building for stakeholders in how to measure and monitor the performance of agrifood systems, with a focus on experience sharing and co-learning, was highlighted as essential for supporting future agroecological transitions. This included the need for innovative and user-sensitive tools, such as mobile applications, to enhance measurements and monitoring across the agricultural value chain. This was seen as particularly important given the low literacy levels in rural areas.
- Operationalizing policy and scaling agroecology: Interviewees called for more research to understand how to operationalize policy components that are key to scaling agroecology in an effective manner. They also stressed the importance of advocacy for holistic metrics to promote widespread adoption and use of these measures.

3.1.3 Engagement workshop

In Ghana, a two-day workshop brought together a diverse group of actors from the food system, including representation from production, processing, transportation, and consumption (Annex 3). During the workshop, participants were asked to identify which of the High Level Panel of Experts (HLPE) 13 principles of agroecology they are measuring, what is not being measured and why, and how these gaps could be addressed. The main discussion points and findings are noted below.

- Coordination in approaches: Workshop participants expressed a strong interest in learning more about holistic approaches to measurement. Due to project funding requirements, many organizations used multiple tools and approaches to measure the same indicator, making it difficult to compare performance across projects and within institutions. Donors often determined metrics, with each donor providing a different set. Participants emphasized the need for better coordination of programmes and initiatives to ensure consistency in what is being measured.
- Overlooked principles of agroecology: During the workshop, the 13 HLPE principles guided discussions on what people would like to measure but find challenging. Principles 9 (social values and diets), 10 (fairness), 11 (land and resource governance), and 12 (connectivity), were all identified as challenging to measure due to a lack of (or awareness of) suitable tools and metrics for doing so. The workshop also identified challenges with measuring principles 1 (recycling) and 6 (synergy) due to the complexity of tracking and measuring these processes. It was also mentioned that aspects such as carbon sequestration require specialist knowledge and need contextual indicators and carbon standard adjustments to local conditions.
- Cross-sector collaboration: Participants stressed the importance of focusing on food system components beyond production, such as infrastructure, storage, transportation, and the enabling policy environment for agroecology. Despite their direct impact on production and consumption, the processing and distribution components were reported to have received less attention in terms of capacity building, training, and funding. A holistic perspective, connecting all parts of the food system, was deemed critical, with a call for stronger collaboration across these sectors.
- Research dissemination and communication: Lack of dissemination and communication of research outputs was identified as a significant gap. Participants emphasized the need to create and maintain platforms for sharing and leveraging each other's work. Strengthening research-user linkages and fostering collaboration among stakeholders working on similar metrics w considered essential. Participants left the workshop with a shared understanding that they are not competitors but partners and must build on existing work. Information sharing was seen as a crucial element, and the workshop identified the need to establish a research network for best practices in agroecology and methods and tools for measuring performance.
- Capacity development: Workshop participants called for increased capacity development in holistic assessment to enable comparisons of interventions across projects. Additionally, they emphasized the need for capacity building among farmers, especially regarding the use of tools and metrics for agroecological assessments. They also stressed the importance of co-creation and farmer participation in holistic assessment of system performance.

- Funding for measuring performance: Participants highlighted the importance of fostering collaboration between government, business, and development partners to address emerging research and financing needs. It was also suggested that NGOs should be encouraged to adapt their budgets and plans to incorporate identified metrics and expand the tools used for tracking progress.

3.2 Burkina Faso

3.2.1 Desk review and stakeholder mapping

Extensive work has already been conducted on mapping stakeholders working on agroecology in Burkina Faso. We identified five previous mapping efforts between 2013 and 2023. Details of these past efforts are detailed in Table 3 and informed the stakeholder mapping for this study (Annex 4). Our stakeholder mapping built on the list developed in the report of the Plateau-Central et du Centre-Ouest au Burkina Faso (PIVA). This report was identified as the most exhaustive of the five past mapping efforts. Different stakeholder groups will likely have differing interests and experiences when it comes to measuring agrifood systems performance. Consequently, we selected five stakeholders from the PIVA list across five different categories from which to identify interviewees (3.2.2. Stakeholder Interviews), ensuring a minimum of 3 and a maximum of 17 stakeholders per category.

Table 3. Five previous stakeholder mapping efforts conducted on agroecology in Burkina Faso

Type of work	Detail of the work done	Year
Research work (communications in Congress)	Bertrand Sajaloli et al. Acteurs et réseaux d'agroécologie au Burkina Faso : De l'expérience locale à la structuration d'une alternative collective : un agroécologisme des pauvres? Nouvelles formes d'agriculture pratiques ordinaires, débats publics et critique sociale, Institut National de la Recherche Agronomique, Département Sciences pour l'Action et le Développement, Nov 2013, Dijon, France. https://hal.science/hal-02130034	2013
BOOST AE: Collaborative platform	Collaborative platform to enable knowledge sharing and bring together agroecology players worldwide. A list of stakeholders (483) and projects (325) in Burkina Faso can be accessed through the Boost AE platform in French (https://www.boost-ae.net/fr/2/108/global.html) or English (https://www.boost-ae.net/en/2/108/global.html).	2021
Mapping by Association Nourrir Sans Détruire (ANSD)	Referent: Abdoulaye Semdé.	2022
Work within the FAIR-Sahel project	2 study sites: West (43 stakeholders identified) and North (57 stakeholders identified). Most NGOs; 100 platforms and networks of actors identified (predominantly in the North) Referent: Yasmina TEGA, Institute of Environment and Agricultural Research (INERA), Ouagadougou, Burkina Faso.	2022
CGIAR Initiative on Agroecology WP4: Mapping of stakeholders involved in agroecology in Burkina Faso	A synthesis work building on three existing mappings by other projects: PIVA,[a] Biovision,[b] and FAIR & TAFS reports. Referent: Claire Dedieu, CIRAD, UMR Moisa.	2023

a Répertoire des acteurs agroécologiques au niveau national, Rapport final, mars 2022. Réalisé par le Laboratoire d'études rurales sur l'environnement et le développement économique et social (LERE/DES) dans le cadre du Projet d'Intensification et de Vulgarisation des pratiques Agroécologiques dans les régions du Plateau-Central et du Centre-Ouest au Burkina Faso (PIVA/BF).
b Cartographie des initiatives et stratégies des acteurs de l'agroécologie au Burkina-Faso, Rapport d'étude, avril 2022. Réalisée par M. Noel ZANKONE, commanditée par Biovision et Centre Ecologique Albert Schweitzer Suisse (CEAS).

3.2.2 Stakeholder interviews

In Burkina Faso, 20 interviews were conducted with stakeholders from various sectors, including NGOs, government agencies, universities, and service providers (Annex 7). The interviews provided valuable insights into the current focus of organizations and the challenges in measuring agrifood system performance. Key findings from the interviews are described below.

- Focus on agricultural production: Most of the organizations interviewed (9 of 20) did not distinguish between their agricultural activities and those specifically related to agroecology. Agricultural production constituted between 60% to100% of their activities, while livestock activities received much less focus, accounting for 2% to 35% of activities across stakeholders.
- Agroecology definition: FAO's 10 elements (FAO 2018) are the most promoted framing concept to define agroecology by interviewees from different categories (i.e., service providers, NGOs, government, university). The overall concept of agroecology is often promoted without specifying any principles or framework. Interviewees mentioned that they did not promote specific theoretical concepts but rather their own understanding of agroecology. They called it a holistic farming approach that respects biodiversity and focuses on production without causing harm to the environment and human health. The interviewed stakeholders did not refer to the 13 agroecology principles from the HLPE.
- Scale of focus: Interviewees defined the way their activities related to agroecology. They distinguished between activities related to practices (i.e., at the agroecosystem scale, HLPE principles 1-7) and those related to socioeconomic aspects (i.e., food system scale, HLPE principles 8-13). Most of the activities mentioned related to agroecological practices that focused on the scale of the agroecosystem, relating to the HLPE principles 1 to 7. Fewer activities (in numbers and in the number of organizations implementing them) related to socioeconomic aspects of agroecology and focused on a broader scale of the food system.
- Participation in agroecology platforms: One-third of the organizations interviewed (6 of 20) reported being part of Burkina Faso's agroecology platform, the Conseil National de l'Agriculture Biologique au Burkina Faso (CNABio). Broadening participation in CNABio to include other actors – including those beyond the production sector of the food system – was recommended to create a more comprehensive dialogue on agroecology.

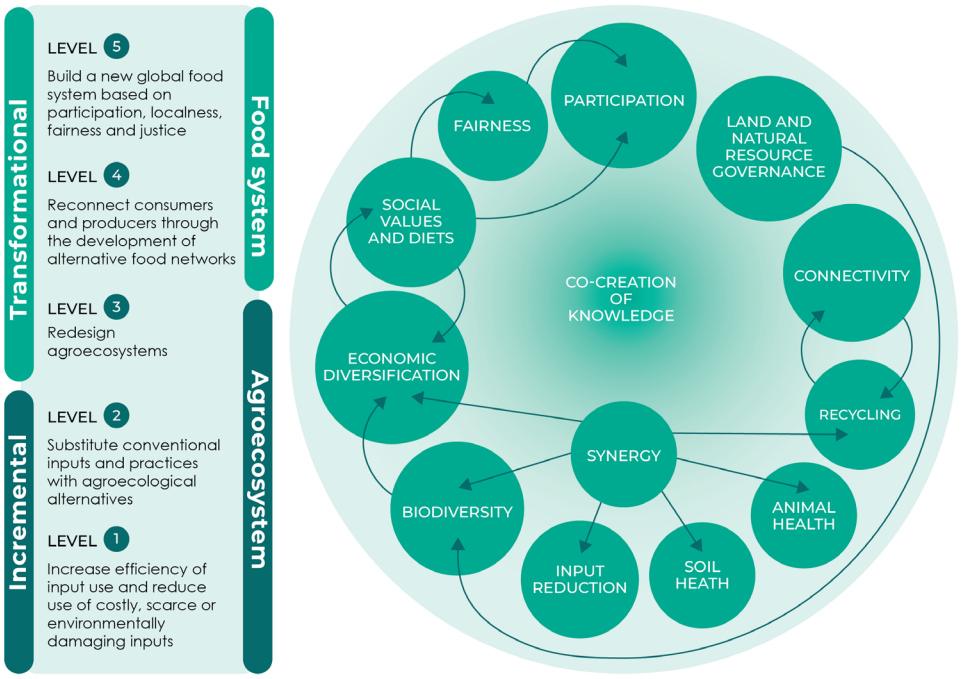

Figure 1. Transition towards sustainable food systems related to HLPE 13 principles

- Assessment objectives: The primary aim of most organizations was to assess the impacts of their activities (14 of 20). Several organizations also aimed at characterizing agricultural systems and monitoring performance. For instance, the government representative reported plans to use FAO's Tool for Agroecology Performance Evaluation (TAPE) tool to evaluate the progress of the agroecological transition in Burkina Faso.
- Systemic perspective: 18 of 20 interviewees confirmed using a systemic perspective when measuring performance. This approach varied but typically involved considering interactions between different farming systems, such as agriculture, livestock, and poultry, since the same stakeholders often carry out these activities.
- Methods and tools: Different organizations used different methods and tools for assessment. Only one mentioned using a tool they had developed themselves – an "agroecologization self-assessment tool," which included elements like soil health, biodiversity, and crop varieties, each scored subjectively by the implementing centre. The variety of tools used by other organizations underscored the diversity of approaches to measuring agroecology performance.
- Current focus of the metrics used: What is being measured varied a lot between the different organizations (Table 4). Most of the metrics used relate to production performance (e.g., yield) and economic performance (e.g., income). Fewer metrics focus on social elements, health, and environmental performance.
- Gender and social inclusion: The interviews revealed that most organizations include gender-related aspects in their assessments. Only two out of all the interviewees did not mobilize any gender-related metrics. Measurements included: the level of participation of women in decision arenas and activities; the existence of a gender quota; the inclusion of gender-specific activities; access to employment opportunities; women's access to land; and activities, techniques, and practices specifically adopted/done by women.

Table 4. Metrics used by interviewees for agroecological practice evaluation in Burkina Faso

Related topics	What is being measured (number of interviewees mentioning that they use related metrics)
Climate data	Rainfall and other climate data (2)
Production performance	Yield and production (11)
	Soil fertility (1)
	Mortality rate of planted crops (1)
	Pest attacks (1)
	Production length (1)
Economic performance	Income (5)
	Trade-related elements (2)
	Related to transformation units (1)
	Product price (1)
	Cost-benefit analysis (1)
Social elements	Behaviour (1)
	Factors influencing adoption of some practices (1)
	Level of satisfaction of the farmers (1)
Health and nutrition	Nutritional quality (2)
	Dietary habits (1)
Environmental performance	Environmental impact (1)

3.2.3 Engagement workshop

The two-day workshop brought together stakeholders from the food system (Annex 4). Although efforts were made to invite actors from all parts of the food system (i.e., production, transformation, consumption, and distribution), most participants worked on production-related activities (>85%). Fewer focused on transformation- and distribution-related activities and very few focused on consumption-related activities. During the workshop, participants were asked to identify which of the HLPE's 13 principles of agroecology they are measuring, what is not being measured, and why, as well as how these gaps could be addressed. The main discussion points and findings are summarized below.

- Different definitions of agroecology: Participants raised the issue of how to define agroecology, especially the multiplicity of concepts, definitions, and their overlap, which creates a lot of confusion. The absence of one single and simple definition seems to make it difficult to be understood by those working in the field (in particular, simple terms in local languages).
- National-level data and coordination: Participants raised a need for national-level data on the contribution of agroecology, including the quantities of products, the areas under cultivation, and the actors involved. They also emphasized the lack of coordination between different entities (ministries, research institutions, NGOs, etc.) working on agroecology.
- Tools and frameworks: Participants suggested sharing experiences between organizations on the use of different assessment tools could help support better monitoring of agrifood system performance. They also stated that the government promotes the use of TAPE contextualized with the Permanent Agricultural Survey (EPA). Although a guide for this has been developed, its implementation is not yet fully in effect.
- Measurement gaps: Gaps at the food system scale relate particularly to the HLPE principles 9 (social values and diets) and 8 (equity). For these two principles, stakeholders lack knowledge and tools to allow a proper measurement. At the agroecosystem scale, the HLPE principles 1 (recycling) and 2 (reducing inputs) were mentioned as particularly problematic to measure. Regarding "recycling", the absence of suitable tools, staff training, and tracking processes make it difficult to fully assess efforts. Other principles, such as connectivity, synergies, and governance of natural resources, also lack suitable measurement tools, while soil health assessments are hindered by financial and technical constraints. Across all these principles, stakeholders emphasized the need for simplified, co-created tools to facilitate more comprehensive and accessible agroecological monitoring. Addressing these gaps will be crucial for tracking agroecological transitions effectively.

3.3 Tunisia

3.3.1 Desk review and stakeholder mapping

The desk review in Tunisia focused on agroecology-related policies, initiatives, and the use of tools to measure agroecological performance. This review built on previous work under the OneCGIAR Initiative on Agroecology and offered insights into the status of agroecology in Tunisia over the past two decades.

Tunisian policies on sustainable development and agroecology transition: Agricultural and environmental policies in Tunisia were reviewed for how well various agricultural and development policies aligned with the HLPE 13 principles of agroecology. Using a framework developed by Alary et al. (2023), each principle was evaluated to determine whether current policies address it. Figure 2 provides an overview of the primary principles addressed by national policies over the last 15 years (see Annex 9 for table of policies reviewed). The results of this analysis highlighted greater attention to principles such as input reduction, soil health biodiversity, and economic diversification compared to principles relating to fairness, animal health, and social values and diets.

Inventory of agroecology-related initiatives in Tunisia (1999–2023): Lestrelin and Jaouadi (2023) inventoried 26 agroecology-related initiatives, spanning 20 years from 1999 to 2023. The authors reviewed a wide range of sources, including project documents, evaluation reports, scientific papers,

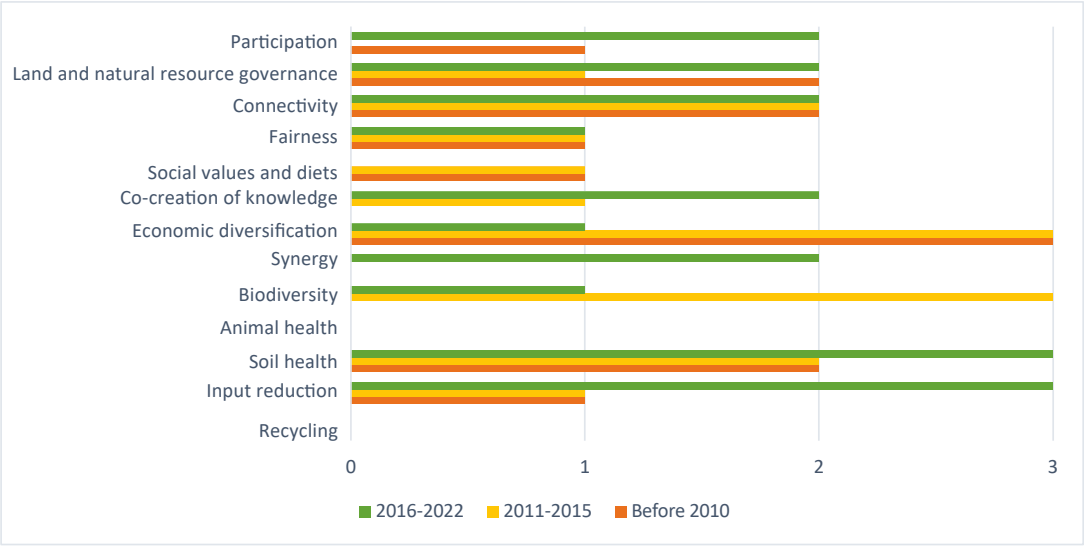

Figure 2. Number of national policies reviewed that considered each of the agroecological principles for the three periods

Note: Three programmes before 2010 (dark orange), five programmes for 2011–2015 (light orange), and three programmes for 2016–2022 (green) (adapted from Alary et al. 2023).

and organizational websites, using 31 information sources. Of the 26 initiatives, only 5 explicitly mentioned agroecology as a primary intervention. Most initiatives addressed related concepts, such as conservation agriculture, sustainable agricultural and agrifood systems, agroforestry, and organic agriculture. The most commonly addressed agroecological principles included recycling, input reduction, and soil health (addressed by 100% of the initiatives), followed by biodiversity (92%), synergy (85%), and economic diversification (85%). On the other hand, connectivity was addressed the least (8%), followed by animal health (23%). Notably, half of the initiatives referenced at least 10 of the 13 agroecological principles, and one initiative covered all 13 principles.

Tools and approaches for measuring agroecological performance: From our review, the use of agroecological performance tools in Tunisia remains limited. While research projects have employed the Holistic Localized Performance Assessment (HOLPA) tool (Jones et al. 2024) and Business Agroecology Criteria Tool (B-ACT), such as the OneCGIAR Agroecology Initiative, their broader adoption has been minimal. Additionally, a student's final-year project at the Higher School of Agriculture of Mograne used the TAPE methodology to assess the performance of family farms.

- HOLPA Tool: This tool was developed as part of the OneCGIAR Transformative Agroecology Initiative, the HOLPA Tool focuses on creating simplified and robust indicators relevant to both local and global food system sustainability challenges (Jones et al. 2024).
- Business Agroecology Criteria Tool (B-ACT): Used by ICARDA to assess the agroecological performance of olive growers in the Kef region, this tool showed high overall performance among farmers but revealed lower adherence to principles focused on resilience and social equity (Rihab et al. 2024).
- TAPE Tool: A study assessing family farms in the Sbikha delegation using the TAPE methodology found that only 41% were making progress towards agroecological transition, indicating a need for further adoption of agroecological practices (Lajnef 2024).

Key metrics used by national agricultural institutions: Despite growing interest in agroecology, Tunisia lacks a clear strategy for agroecological transition within its national agricultural policies. National agricultural institutions continue to use generic metrics such as the number of trainings, hectares of degraded land rehabilitated, and number of fodder shrubs planted, which do not fully capture the principles of agroecology. Table 5 highlights the limited integration of agroecological metrics by national agricultural institutions.

Table 5. Overview of the metrics employed by leading national agricultural institutions that incorporate agroecological principles

Principles	OEP	DGACTA	ONH	CTAB	ODESYPANO	CRDA	AVFA	OC	OTD
Recycling	None	None	None	None	None	Quantity of by-products produced (leaves, trunks, etc.) by delegation	None	None	Quantity of by-products used (metric tons)
Input reduction/ replacement	Number of cactus plants planted per year	None	None	None	None	None	None	None	None
Soil health	None	Soil fertility, carbon, K, P	None	organic contribution rate	Restored land (ha)	Degraded land by delegation (ha)	None	None	None
Animal health	Mortality rate, calving interval, GMQ (g/l) Fertility rate	None	None	None	Mortality rate, fertility rate, reform rate,	Mortality rate by delegation	None	None	Fertility rate
Biodiversity	Number of the fodder shrubs planted per year	None	None	None	Number of acacia and sulla planted	Number of shrubs planted by delegation	None	None	Number of shrubs planted; rotation rate
Synergy	None	None	None	None	None	None	None	None	Number of animal (heads)/ number of land (ha)
Economic diversification	None		Market share of exported olive oil	Number of niche market (organic market)	None	None	None	Quantity of certified seeds	Number of new products (OTD brand)
Co-creation of knowledge	None	None	None	None	None	Number of farmer associations created	Number of trainings, technical support, workshops	None	Number of trainings
Social values and diets	None	None	None	Number of labelled products	None	None	None	Number of certified procedures	Number of organic products
Fairness	None	None	None	None	None	None	None	None	None
Connectivity	None	None	Number of fairs, number of olive oil labels	None	None	None	None	None	None
Land and natural resource governance	None	Number of hectares of degraded land	None	None	None	None	None	None	None
Participation	Number of events to promote agroecological practices	None	Number of events to promote organic olive oil	Number of events to promote organic farming system	Number of events to promote water and soil conservation	None	Number of events to promote agroecological practices	Number of events to promote the seed quality	Number of meetings with decision makers

Source: Own elaboration 2024.

3.3.2 Stakeholder interviews

In Tunisia, seven interviews were conducted with stakeholders from NGOs, research institutes, government development organizations, and international organizations (Annex 8). The main findings for each category are noted below.

- Focus on biophysical indicators: Across stakeholder groups, there was a focus on environmental indicators, such as soil organic matter content, soil erosion rates, water retention capacity, crop yields, and biodiversity. These indicators provide valuable insights into the environmental aspects of agroecological systems. However, they often overlook critical social and economic dimensions, such as farmer participation, equity, and market access. This narrow focus can lead to an incomplete understanding of agroecological performance, particularly when scaling these practices for broader adoption. Nevertheless, NGOs did include more social-related metrics such as the growth of organic market participation, knowledge diffusion in organic farming and agroecological techniques, and adoption rates of introduced species compared to other actor groups. Expanding project scopes to include socioeconomic indicators, enhancing financial incentives for farmers, and scaling up activities are necessary to ensure sustainability.
- Gender: Gender-sensitive approaches are also needed, as gender participation gaps remain, particularly in reaching rural women.
- Spatial limitations: Many projects are confined to small pilot regions, which hinders scalability and reduces the generalizability of results. This makes it difficult to assess the broader impacts of agroecology across diverse regions and farming systems in Tunisia. A more comprehensive approach, incorporating socioeconomic indicators and larger-scale trials, is needed to provide a fuller picture of agroecology's potential and ensure sustainability and scalability.

3.3.3 Engagement workshop

In Tunisia, the workshop was organized in two sessions and involved partners and stakeholders involved in the OneCGIAR Initiative on Agroecology (Annex 5). The first session aimed to share the main results derived from the desk review and interviews with participants. The second session aimed to identify key indicators for assessing agroecological transitions within mixed crop-livestock systems in Tunisia and which could be used in a pilot assessment. For the second session, the group defined the main priorities of an agroecological transition in the mixed crop-livestock system of rainfed zone in Tunisia and co-identified indicators to pilot and assess the transition. The main discussion points and findings from these two sessions are summarized below.

- Importance of shared vision: Participants said that having the support and engagement of key decision makers is crucial for the development of an effective assessment approach and framework. Further, the selection of metrics and design of an assessment needs to be built on a desired and shared vision of the agriculture and food systems' changes. Only these prerequisites can support development of an adapted and holistic approach to monitoring and assessment of the changes.
- Shared definition of agroecology: The second session involved the development of a shared definition of agroecology for the mixed crop-livestock system in the rainfed zone of Tunisia. The agreed group definition was:
  "*Agroecology is an approach to accompany the change of territories with diverse farming systems in view to ensure a sustainable food system (with safe and sufficient food), maintain soil fertility, and preserve the natural resources*."
- Indicators for mixed crop-livestock system in Tunisia: Participants identified a list of relevant indicators that can help monitor and assess the development of an agroecological transition based on their own definition (Annex 8).
- Labelling and certification for agroecological products: Product labelling, such as geographical indicators or nutrition-related labels (e.g., NutriScore), could incentivize agroecological practices and raise consumer awareness. However, such systems are not yet adapted to the Tunisian context, which could be an opportunity for advancing agroecological adoption.

- Limited socioeconomic integration: Socioeconomic factors such as poverty reduction and equitable resource access are often neglected in agroecological evaluations. Despite agroecology's potential to address these issues, many projects fail to incorporate these aspects into their indicators, limiting stakeholder recognition of its full potential.
- Weak coordination among actors: Stakeholders, including research institutes, NGOs, and international bodies, often work in isolation, leading to duplication of efforts and fragmented data. This lack of coordination hampers the development of a unified agroecological movement in Tunisia, limiting resource mobilization, knowledge sharing, and policy influence.
- Challenges in policy support: Despite growing interest, agroecology has yet to be fully integrated into national policies. While some training initiatives exist, like those by AVFA-Centre de Formation RIMEL, these efforts are not widely adopted by national extension services, limiting their overall impact. Stronger institutional support is needed for system-wide transformation.
- Need for food system approach: Critical issues like food storage, processing, and social equity are often overlooked in discussions about agroecology. Addressing these gaps is essential for a full agroecological transition, ensuring benefits are fairly distributed among all actors, particularly small-scale farmers and marginalized groups.
- Integration of local knowledge with scientific research: The role of local knowledge in agroecology remains underexplored. Bridging the gap between scientific research and traditional farming practices through farmer networks, participatory workshops, and digital platforms could enhance knowledge exchange and co-learning.
- Revisiting strategic foresight for agricultural policy: Tunisia lacks a coherent political strategy for agroecology. Revisiting foresight analyses from the 2010s, such as the IMPACT model, could provide a foundation for developing a national agroecological strategy that balances productivity, sustainability, and resilience. Adjusting these models to current contexts would help address Tunisia's food security and climate challenges.

4 Emerging trends across the three countries

The following sections synthesize findings from across the three countries, highlighting commonalities and emerging themes in relation to the main aims of the scoping study: 1) Identify key actors supporting agroecological transformation in the region and potential partnerships for advancing the field of agroecology; 2) Evaluate their experiences, interests, and needs regarding holistic assessment of agrifood systems and agroecology and identify common barriers and opportunities; and 3) Review existing metrics and assessment approaches, highlighting priority areas for future research and development. Table 6 summarizes commonly raised challenges and needs in relation to measuring the agroecological performance of agrifood systems across the three focus countries.

4.1 Interests, needs, and existing metrics and approaches

Across the three countries, two main interests in holistic metrics and assessment were identified. First, NGOs and researchers were primarily interested in measuring the impact of their projects and interventions. Second, there was a need to characterize and assess agroecological transitions, along with national-level data on the contribution of agroecology. This second type of assessment was of particular interest to government and national-level government actors.

Table 6. Commonly raised challenges and needs in relation to measuring the agroecological performance of agrifood systems across the three focus countries

	Ghana	Burkina Faso	Tunisia
Limited use of existing frameworks and tools	x	x	x
Principles of social values and diets, fairness, and gender often overlooked	x	x	x
Need for stronger collaboration across sectors and food systems	x	x	x
Challenges with influencing policy and need for agroecology-specific policies	x	x	x
Need for platforms for sharing and leveraging each other's work	x	x	x
Lack of dissemination and communication of research outputs	x	x	
Need for capacity building on holistic measurement	x	x	
Need to harmonize approaches to ensure consistency/comparability	x	x	
Principles of recycling and synergy often overlooked due to complexity	x	x	
Plurality of definitions of agroecology and the need for a shared vision		x	x
Importance of co-creation and farmer participation in holistic assessment	x		x
Need for labelling and certification for agroecological products	x		x
Lack of funding for holistic assessment and post-evaluations	x		
Limited integration of agroecological metrics by national agricultural institutions			x
Many assessments confined to small pilot regions, hindering generalizability			x

In all three countries, existing use of tools designed for measuring agroecology and its performance was limited. In Ghana, stakeholders primarily employed project-specific monitoring and evaluation frameworks, with no mention of specific tools or metrics for measuring agroecological performance. While stakeholders in Tunisia mentioned use of tools such as HOLPA and B-ACT tools in research projects, such as the OneCGIAR Agroecology Initiative, the broader adoption of such tools is minimal. Actors in both Tunisia and Burkina Faso mentioned the TAPE tool. In Burkina Faso, government representatives showed interest in using TAPE to evaluate progress of the agroecological transition in the country. This interest in the use of TAPE could reflect its development and promotion by FAO and having a certain level of validity and recognition.

The current metrics used across all three case study countries show a bias towards environmental and economic aspects, with less focus on the social dimensions of agrifood system performance. Aspects such as social values, fairness, land, and resource governance were reported to be challenging to measure. While stakeholders expressed interest in measuring such aspects, a lack of (or awareness of) suitable metrics and tools was seen as a barrier. They also noted aspects such as connectivity, recycling, and synergies as challenging to measure due to their complexity, and an absence of suitable tools and technical expertise. Tunisia differed slightly to the other two cases with actors focusing on environmental indicators, such as soil health and biodiversity. Assessments often excluded socioeconomic dimensions like equity and market access, leading to an incomplete understanding of agroecological performance.

Gender and social inclusion were also identified as a gap across the three country case studies. In Ghana and Burkina Faso, actors are collecting data on gender. However, this was primarily focused on numbers of women engaged and participating in initiatives rather than deeper, more meaningful indicators such as women's agency and empowerment. That said, there is a clear desire to collect such data in the future. Similarly in Tunisia, stakeholders identified reaching rural women through initiatives as a gap and recognized the need for gender-responsive approaches.

4.2 Barriers and opportunities

Tunisia and Burkina Faso raised the lack of a clear and unified definition of agroecology as a barrier to the measurement of agroecology and its performance and ultimately its promotion and scaling. While there is growing momentum and commitment to agroecology, the absence of a shared understanding of approaches and practices was believed to create challenges for both measurement and implementation. Burkina Faso used the FAO 10 elements of agroecology as the most common framing. Even so, there was huge diversity in how actors defined agroecology. Those working directly with farmers also raised the issue of communicating agroecology in simple ways and in local languages. This observation reflects a wider discussion on how to frame and present agroecology and its complexity. All three cases identified actors working towards and contributing to agroecology transitions yet who do not explicitly use the term 'agroecology'. Efforts should be made to ensure such actors are still engaged in networks and platforms that aim to support agroecological transitions and are not excluded from such discussions.

All three case studies raised fragmented advocacy efforts and limited integration of agroecology with national policy. While Ghana and Burkina Faso noted efforts to develop national-level agroecology strategies, there is a need for a more coordinated approach to influencing policy. For instance, in Ghana, workshop participants noted that different groups working on agroecology had approached government ministries to promote agroecology but that more united and coordinated efforts would be more effective.

Similarly, in Tunisia, it was noted that stakeholders, including research institutes, NGOs, and international bodies, often work in isolation, leading to duplication of efforts and fragmented data. This lack of coordination hampers the development of a unified agroecological movement in the

country, limiting resource mobilization, knowledge sharing, and policy influence. In Ghana, NGOs and development actors raised the issue that, given that projects are typically externally funded and vary in their goals and objectives, they are often required to use multiple different protocols and instruments to measure impact. This variation makes it challenging to compare performance across projects and portfolios. (Actors in Burkina Faso also mentioned the diversity of approaches used across and within organizations, yet it is unclear if this was perceived as a barrier).

In Tunisia, a more detailed policy mapping looked at which HLPE principles current agricultural policies address. This analysis highlighted greater attention to principles such as input reduction, soil health biodiversity, and economic diversification compared to principles relating to fairness, animal health, and social values and diets. Such mapping provides useful insights into where policies are needed to strengthen and support agroecology. Ghana and Burkina Faso could do similar mapping to help guide future policy development and advocacy.

Actors in Ghana and Burkina Faso raised the need for capacity building on tools and approaches for holistic assessment, as well as dissemination and knowledge sharing between actors and organizations. It was identified that researchers often hold more knowledge of metrics and tools, and need to share it with other actors interested in measuring performance, such as NGOs and civil society groups. In Burkina Faso, participants also emphasized the need for simplified, co-created tools to facilitate more comprehensive and accessible agroecological monitoring.

4.3 Key actors and potential partnerships

Desk reviews and stakeholder mapping identified an extensive list of actors working on agroecology across Ghana, Burkina Faso, and Tunisia. These actors include networks and platforms with the explicit aim of promoting agroecology. In Ghana, these were identified as largely grassroots, civil society groups such as the Ghana Agroecology Movement and Food Sovereignty Ghana. In Burkina Faso, the Conseil National de Agriculture Biologique (CNABio) is one of the main platforms for agroecology in the country.

All three countries focus on the production side of food systems. Our stakeholder mapping identified many actors working on promoting agroecology at the farm and production scale and less in the areas of processing, distribution, and consumption. Working with and expanding the membership of existing agroecology networks and platforms to include other system actors involved in processing, distribution, and consumption (not just production) could help ensure a more systemic approach to agroecological transitions.

All three countries also expressed the need for greater coordination between actors working on agroecology. In Ghana, participants noted coordination is particularly important to influence policy. In the current situation, multiple groups promoting agroecology all approach government ministries. This risks confusion and calls for a more unified and coordinated approach. Similarly, it was recognised in Tunisia that research institutes, NGOs, and international bodies often work in isolation, leading to duplication of efforts and fragmented data. This lack of coordination hampers the development of a unified agroecological movement in Tunisia, limiting resource mobilization, knowledge sharing, and policy influence.

5 Discussion and recommendations

5.1 Recommendations for future research and investment

The following section discusses the main research needs and gaps identified in our study, highlighting where IDRC and other organizations can make impactful investments towards transforming food systems.

5.1.1 Harmonize metrics while allowing for context-specific adaptations

Projects and programmes are typically externally funded and vary in their goals and objectives. Consequently, organizations working in agroecology-related research and development reported using multiple different metrics and approaches (often dictated by donors) to measuring the performance of agrifood systems, even within the same organization. This variation in approach makes it challenging to compare performance across projects and portfolios. A coordinated approach is therefore needed to harmonise metrics within organizations while allowing for context-specific adaptations.

5.1.2 Embrace a plurality of definitions and frameworks

A common finding across the country case studies is the importance of a clear vision and definition of agroecology when developing metrics, assessment tools and frameworks. The multiplicity of concepts, definitions, and their overlap can create a lot of confusion. This plurality of definitions and what agroecology means to different actors is a challenge for developing a globally applicable standardized set of metrics for agroecology. It also hinders the communication of agroecology in simple terms and in local languages. It is unlikely that one assessment framework will work for everyone, everywhere. Instead, guidance is needed on how to design and develop tailored holistic systems assessment for measuring the performance of agrifood systems.

5.1.3 Strengthen capacity and develop guidance

One key challenge in holistic assessments of agrifood systems is a lack of skills and expertise in certain areas. There is strong demand for training and practical guidance on holistic assessments and best practices. This includes developing simple, easy-to-use metrics and tools to assist farmers in monitoring their systems effectively.

5.1.4 Develop metrics and tools for the 'hard to measure'

Our study highlights a gap in measuring social-related metrics and other dimensions of agrifood system performance. Measurement gaps at the food-system scale particularly relate to HLPE principles 9 (social values and diets) and 8 (equity). Connectivity, synergy, and recycling are also difficult to measure due to their complexity. The main reasons for these challenges include a lack of awareness of their importance and a lack of knowledge and tools to properly measure them. Despite the potential of agroecology to address these issues, many projects fail to incorporate such aspects into their indicators, limiting stakeholders' recognition of agroecology's full potential. Overlooking these aspects in assessments

limits fair comparisons between agroecological and conventional systems. Efforts are needed to develop appropriate metrics and tools for these dimensions of performance, particularly qualitative approaches that capture the perspectives and views of actors within agrifood systems.

5.2 Gender equality and social inclusion

The importance of including GESI in agrifood system assessments was widely recognized. However, many organizations struggle to move beyond simply measuring women's participation in projects and activities. More robust metrics, such as IFPRI's WEAI, are needed to track performance within projects. Many stakeholders expressed a desire to measure more meaningful indicators related to women's agency in decision making, income use, and application of extension knowledge. There is a clear need for easily integrated metrics to measure these aspects effectively.

5.3 Participation, governance, and co-producing knowledge

There is clear recognition of the need for a food systems approach that goes beyond production and consumption to include processing and distribution. Participants noted the importance of expanding the focus to cover the full spectrum of the food system, including transportation, storage, processing, and distribution.

Additionally, a lack of coordination and collaboration among international bodies, often working in isolation, was identified as a major barrier. This leads to duplication of efforts and fragmented data, hindering development of a unified agroecological movement. It also limits resource mobilization, knowledge sharing, and policy influence. A diversity of actors is needed to fill the gaps identified in this study. Future initiatives should encourage cross and parallel collaborations between governments, businesses, and development partners across the food system to address emerging research and financing needs.

Further, there is a clear need to intensify research-user linkages to promote agroecological metrics. Many actors, especially researchers, are already collecting relevant data, but communication and dissemination are lacking. While agroecology platforms do exist in all three countries, further work is needed to promote and create platforms for sharing knowledge and leveraging each other's efforts. A major gap remains in research dissemination and communication, and there is a need for more coordinated action and collaboration.

All three countries raised the need for and importance of a coherent political strategy for agroecology. They are all working towards national agroecological strategies (see ActionAid Ghana, 2019). Such policies could be a key entry point for more coordinated efforts towards monitoring and measuring agroecology at the national level.

5.4 Funding and research ecosystem

Lack of financial resources for comprehensive, robust assessments is a challenge to holistic assessment for actors across the three countries. Lack of financial means was frequently cited as a reason for not being able to measure the agroecological principles actors wanted to measure. Funding for such activities is needed to enable organizations to adapt their budgets and plans to incorporate the metrics and expand their tracking tools.

In Ghana, the government was identified as major funder of agriculture to increase production, employment, and commercialization. Other key funders include Global Affairs Canada, the World Bank, German public donors, USAID, Green Climate Fund, Agence Française de Développement (AFD), and the European Union (EU). Collaboration between donors to leverage efforts on the ground is non-

existent, resulting in duplicated efforts and missed opportunities to scale interventions for larger food system impact.

In Burkina Faso, this study highlighted the numerous (more than 300) and broad range of stakeholders in the field of agroecology. Yet NGOs are the predominant stakeholders in agroecology while few funders are devoted to it. Moreover, the agroecological platform (CNABio) seems to be missing some key stakeholders to ensure its leading and fostering role in food system transformation. Recommendations from workshop participants defined clear stakeholders, especially researchers, universities, producers, and NGOs. The identification of these stakeholders highlights the participants' wish to foster change and build up a solid network to ensure a deep transformation. The country would benefit from building on this momentum.

5.5 Linkages with the 13 principles

The HLPE's 13 principles were used as a central framework for analysing interviews and structuring the engagement workshops. In Ghana and Burkina Faso, participants mapped what they currently measure and what they would like to measure to these 13 principles. Data from the interviews were also mapped to the principles. The least measured agroecological principles were equity, social values, connectivity, recycling, and synergies. This was due mainly to their complexity and lack of appropriate metrics, tools, and knowledge.

5.6 Food systems transformation

Our research highlights the urgent need for harmonizing agroecological metrics while allowing for context-specific adaptations. Our findings emphasize the importance of a clear and pluralistic definition of agroecology to support development of tailored assessment tools that go beyond one-size-fits-all approaches. Furthermore, the research shows a critical gap in measuring social dimensions, such as equity and social values, which are essential for making fair comparisons between agroecological and conventional systems. Strengthening capacity, developing tools to assess hard-to-measure principles, and fostering gender-sensitive approaches are necessary for creating more inclusive and sustainable food systems. Additionally, the lack of coordination and collaboration among stakeholders – government, businesses, NGOs, and international bodies –hinders the full potential of agroecological transitions. Addressing these gaps through a more holistic, collaborative, and well-resourced approach would allow policymakers, donors, development actors, and farmers to make more informed decisions regarding their investment in agroecology or alternative approaches. In addition, this could help support the transformation of food systems towards resilience, sustainability, and inclusivity.

5.7 Partnering in research on food system performance metrics

Based on the insights from this scoping report, there is growing interest and momentum around agroecology in each of the three countries. However, there seems to be more progress in Burkina Faso and Tunisia than in Ghana. We found agroecology actors had already been mapped extensively in Burkina Faso and to a lesser extent in Tunisia. We are unaware of any such efforts for Ghana. Further, in Ghana, no interviewees mentioned the use of dedicated tools for measuring agroecology and its performance, while limited use of tools such as TAPE were mentioned in Burkina Faso and Tunisia. There also appear to be established national-level platforms on agroecology in Burkina Faso (e.g., CNABio) and Tunisia. Nevertheless, our engagement workshop in Ghana highlighted the large interest among actors to kickstart a bigger push towards agroecology in the country. This would involve establishment of a community of practice and more coordinated efforts to influence policy. In Annex 11, 12 and 13, we outline proposed organizations identified, as well as places to collaborate on advancing agroecology and addressing the gaps identified in this study.

6 Conclusion

Despite its potential, scaling agroecology requires addressing significant challenges in measuring its performance fairly and comprehensively, particularly in comparison to conventional systems. Through desk reviews, stakeholder interviews, and workshops in Burkina Faso, Ghana, and Tunisia, this study has identified key barriers and opportunities for advancing holistic assessment approaches. The findings emphasize the need for harmonized yet context-sensitive metrics and strengthened capacity for designing effective holistic assessments. Addressing gaps and challenges in assessing social dimensions, such as equity and agency, will be crucial to ensure fair and comprehensive evaluations. Additionally, promoting collaboration among governments, businesses, researchers, NGOs, and donors is essential to overcome financial and structural barriers that hinder agroecological transitions. To move forward, donors and development actors must invest in developing tools and guidance, fostering multistakeholder collaboration, and supporting innovative approaches that account for the multifunctionality of agrifood systems. This study provides an initial assessment of priority efforts for future investment needed to support agroecological transitions through more holistic metrics and assessments of agrifood system performance.

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Annexes

Annex 1. Stakeholder interview guide in English

Key Informant Interview Guide 2024

Holistic Performance Measurement for Food Systems Transformation

Informed Consent

Measuring and monitoring the performance of food and agricultural systems is common, but do we really capture what matters? Do the metrics and tools we use capture what we intend to collect information about, or are there better alternatives?

This scoping study, titled “Holistic Performance Measurement for Food Systems Transformation”, is funded by the International Development Research Centre (IDRC). It seeks to understand how developing holistic metrics and assessment tools could support the transition to sustainable food and agricultural systems and to identify priority areas for future research and investment.

We aim to engage with stakeholders who actively collect data on the performance of food and agricultural systems or who are interested in doing so. We wish to understand what metrics they currently use, what they would like to measure, what metrics they would prefer but struggle to measure, and how future investments by IDRC could help address these challenges.

In the context of this stakeholder engagement, we would like to interview you as a representative of the organization you work with. The interview consists of three sections:

1. Background Institutional information
2. Current usage of agricultural metrics to measure the performance of an agroecology system
3. Challenges, gaps, and opportunities in using metrics.

The interview is likely to take about 45 minutes to one hour.

The information you provide during this interview will be used solely for research purposes and may be included in our research findings. Rest assured that the identities of participants will remain confidential. Are you willing to give your consent to participate in the interview and allow us to record it?

PART 1: Institutional information

1. What is the name of the institution you work for (henceforth referred to as “your institution/ institution”)?

2. Which institutional category does your organization belong to?

   Multiple choices are possible.

   - ☐ Donor
   - ☐ International organization
   - ☐ Non-governmental organization
   - ☐ Government body or representative
   - ☐ Research organization
   - ☐ Multistakeholder organization
   - ☐ Private sector organization
   - ☐ Any other (please specify)

3. What is the geographical scope within which you operate?

   Multiple choices are possible.

   - ☐ Local/subnational (Please give details).....
   - ☐ National (Please give details) .....
   - ☐ Regional/supranational (Please give details) .....
   - ☐ International (Please give details) .....

4. Within which category does your position fall in your organization?

   Multiple choices are possible.

   - ☐ Programming
   - ☐ Management
   - ☐ Monitoring, Evaluation, Learning, Impact Assessment (MELIA)
   - ☐ Research
   - ☐ Other (Please specify)

5. a. Are there specific programme(s) or project(s) that you predominantly work with or are aware of (and that can serve as a main reference point for your answers to the following questions on measuring/monitoring the sustainability and performance of agrifood systems)? *(If there are no programmes/projects, please proceed to the next question).*

   ☐ Yes ☐ No

   b. If yes, please proceed to the following questions about project/programme 1:

Name/ description	Timelines (from which year to which year)
Funding source(s)	Location
Main objective	Partners (if applicable)

   You can add as many projects/programmes as are relevant (also beyond the three included here):

   b. If yes, please proceed to the following questions about project/programme 2:

Name/ description	Timelines (from which year to which year)
Funding source(s)	Location
Main objective	Partners (if applicable)

   b. If yes, please proceed to the following questions about project/programme 3:

Name/ description	Timelines (from which year to which year)
Funding source(s)	Location
Main objective	Partners (if applicable)

6. In the context of the mentioned project (s)/programme(s), (if applicable; otherwise, in general), which specific domains or aspects of food and agricultural systems are you interested in?

   Free text answer:

7. Can you please describe or name the main framing concept(s) or conceptual framework(s) that you use in this work?

   Free text answer:

PART 2: Current use of agricultural metrics

1. Do you measure and/or use data about the specific domains or aspects of food and agricultural systems (see Section A, Question 6) that you are interested in?

   - [ ] Measure
   - [ ] Use data
   - [ ] No

2. If yes, what specific aspects of food and agricultural performance do you measure and/or use data that others have collected?

   Free text answer:

3. WHY do you measure/use the data?

   Multiple choices are possible.

   - [ ] Characterization
   - [ ] Monitoring change
   - [ ] Assessing impact
   - [ ] Informing management
   - [ ] Other (Please specify)

4. a. If yes, for what purpose do you measure and/or use the data?

   Multiple choices are possible.

   - [ ] Monitoring of effects of own operations on targeted areas/domains/aspects for adaptive implementation management (inward-facing)
   - [ ] Monitoring and assessment of own operations on targeted areas/domains/aspects for reporting (outward-facing)
   - [ ] Monitoring and assessment of targeted areas/domains/aspects for knowledge generation and sharing (outward-facing)
   - [ ] Other (Please specify)

   b. If yes, how are the data typically reported?

   Free text answer:

5. To help us understand better which kinds of things you measure, what are the food and agricultural performance metrics that you use – both those for which your organization collects the data, and those for which you use data collected by others.

Add as many rows as relevant and necessary in the table on the next page.

Enter the name of the specific metric you use.	HOW are the data collected / obtained? (Tools, methods) Multiple choices are possible.	At what scale are the data collected? Multiple choices are possible.	At what level in your theory of change or results frameworks is the metric used? Multiple choices are possible.	How EFFECTIVE is the specific metric in measuring the intended performance indicator? (Does it do what it is supposed to do).	WHEN are data collected? (Timing, frequency) Multiple choices are possible.	WHO collects the data? (Who has responsibility?) Multiple choices are possible.	Any additional information? (i.e., Resources required, logistics, efficiency, etc.).
1.	1] Household survey 2] Measurement 3] Participant observation 4] FGD 5] Key informant interviews 6] Other (specify)	1] Plot/field 2] Household/ farm 3] Landscape 4] Food system 5] Other (specify)	1] Activity 2] Output 3] Outcome 4] Impact 5] Other (specify)	1] Very effective 2] Moderately effective 3] Neutral 4] Moderately ineffective 5] Very ineffective	1] Baseline + endline 2] Periodic (specify) 3] Once-off 4] Other (specify)	1] Self-assessment 2] MEL staff 3] Research staff 4] Other (specify)	
2.	1] Household survey 2] Measurement 3] Participant observation 4] FGD 5] Key informant interviews 6] Other (specify)	1] Plot/field 2] Household/ farm 3] Landscape 4] Food system 5] Other (specify)	1] Activity 2] Output 3] Outcome 4] Impact 5] Other (specify)	1] Very effective 2] Moderately effective 3] Neutral 4] Moderately ineffective 5] Very ineffective	1] Baseline + endline 2] Periodic (specify) 3] Once-off 4] Other (specify)	1] Self-assessment 2] MEL staff 3] Research staff 4] Other (specify)	
3.	1] Household survey 2] Measurement 3] Participant observation 4] FGD 5] Key informant interviews 6] Other (specify)	1] Plot/field 2] Household/ farm 3] Landscape 4] Food system 5] Other (specify)	1] Activity 2] Output 3] Outcome 4] Impact 5] Other (specify)	1] Very effective 2] Moderately effective 3] Neutral 4] Moderately ineffective 5] Very ineffective	1] Baseline + endline 2] Periodic (specify) 3] Once-off 4] Other (specify)	1] Self-assessment 2] MEL staff 3] Research staff\ 4] Other (specify)	
4.	1] Household survey 2] Measurement 3] Participant observation 4] FGD 5] Key informant interviews 6] Other (specify)	1] Plot/field 2] Household/ farm 3] Landscape 4] Food system 5] Other (specify)	1] Activity 2] Output 3] Outcome 4] Impact 5] Other (specify)	1] Very effective 2] Moderately effective 3] Neutral 4] Moderately ineffective 5] Very ineffective	1] Baseline + endline 2] Periodic (specify) 3] Once-off 4] Other (specify)	1] Self-assessment 2] MEL staff 3] Research staff 4] Other (specify)	

6. a. While we asked about specific metrics, would you say that your organization applies a systemic lens to performance evaluation?

   If yes, please proceed to sub-section b of this question.

   - [ ] Yes
   - [ ] No
   - [ ] Not sure

   b. If yes, please provide more details on the application of a systemic lens to performance evaluation within your organization.

   Free text answer:

PART 3: Metrics gaps and opportunities for future investment

1. a. We started the conversation about specific metrics (Section B) with a question about the specific domains or aspects of food and agricultural systems that you are interested in (Section A, Question 6). Are there any elements or areas related to the food and agricultural domains or aspects of interest to you that you struggle to measure and/or find existing data about?

   If yes, please proceed to sub-section b of this question.

   - [ ] Yes
   - [ ] No
   - [ ] Not sure

   b. If yes, please describe what you would like to be able to monitor more effectively (in other words: what do you care about but struggle to measure and/or find relevant data about)?

   Free text answer:

2. a. Are you aware of specific metric(s) or tools that you would be interested in adopting?

   If yes, please proceed to sub-section b of this question.

   - [ ] Yes
   - [ ] No

   b. If yes, please specify it/them and whether you have tried any of them.

You can add as many metrics (and rows to the table) as required.

Metric/tool name and description	Have you used the metric/ tool before?	
	Yes	No

3. a. Do you anticipate any challenge(s) in measuring/using these and/or other alternative metrics/ tools that you would be interested in?

   If yes, please proceed to section b and c of this question.

   ☐ Yes

   ☐ No

   b. If yes, what challenge(s) do you experience/anticipate in adapting the metrics or tools that you are currently using?

   Free text answer:

   c. In your opinion, how do you think the above challenge(s) can best be addressed?

   Free text answer:

4. WHO or WHAT influences which metrics and tools are being used in your organization and/or your specific programme/project (i.e., donors, partners, policies, agendas, etc.)?

   Free text answer:

5. Would you personally be interested in learning about and contributing to discussing more holistic metrics and tools?

   ☐ Very interested

   ☐ Rather interested

   ☐ Not interested

   ☐ Not sure

6. a. Are there specific aspect(s) of the development and use of holistic metrics or tools you would be interested in discussing further?

   If yes, please proceed to section b of this question.

   ☐ Yes

   ☐ No

   b. If yes, please mention the specific aspect (s) of the holistic metrics development you would be interested in.

   Free text answer:

7. Are you aware of other people – in and beyond your institution – or specific opportunities who might be interested in being involved in further discussions on agricultural performance metrics as well?

   Free text answer:

Close out

Thank you for participating in this interview! Based on the outcomes of this initial stakeholder consultation, there may be future opportunities to participate in further discussions on the holistic measurement of agrifood systems performance.

If possible, we would appreciate it if you could provide us with any relevant materials regarding the metrics you use, the tools used for data collection, and the outcomes generated.

Annex 2. Guide d'entretien avec les parties prenantes

Guide d'entretien avec les informateurs clés -2024

Mesure holistique des performances pour la transformation des systèmes alimentaires

Consentement éclairé

Mesurer et suivre la performance des systèmes alimentaires et agricoles sont des pratiques courantes. Toutefois, mesurons-nous réellement ce qui compte ? Les indicateurs et les outils que nous utilisons reflètent-ils fidèlement les aspects que nous souhaitons évaluer, ou existe-t-il de meilleures alternatives ?

Cette étude de cadrage, intitulée « Mesure holistique des performances pour la transformation des systèmes alimentaires », est financée par le Centre de recherches pour le développement international (CRDI). Elle vise à comprendre comment le développement de cadres mesures et d'outils d'évaluation holistiques pourrait soutenir la transition vers des systèmes alimentaires et agricoles durables, et à identifier les domaines prioritaires pour la recherche et les investissements futurs, notamment au Burkina Faso.

Notre objectif est de collaborer avec les parties prenantes qui collectent activement des données sur les performances des systèmes alimentaires et agricoles, ou qui souhaitent le faire. Nous souhaitons comprendre quels indicateurs sont actuellement utilisés , quels aspects ils aimeraient pouvoir mesurer, quelles dimensions sont jugées importantes mais restent difficiles à évaluer, , et comment les investissements futurs du CRDI pourraient contribuer à relever ces défis.

Dans le cadre de cette étude, nous souhaiterions vous interviewer en tant que représentant votre organisation. L'entretien est structuré en trois parties :

1. Informations institutionnelles
2. Utilisation actuelle des mesures agricoles
3. Lacunes en matière de mesures et priorités pour les recherches et les investissements futurs.

L'entretien durera entre 45 minutes et une heure.

Les informations que vous fournissez lors de cet entretien seront utilisées uniquement à des fins de recherche et pourront être incluses dans nos résultats de recherche. Soyez assuré(e) que l'identité des participants restera confidentielle. Êtes-vous disposer à donner votre consentement pour participer à l'entretien et à en autoriser l'enregistrement ?

Acceptez-vous de participer à cet entretien ?

☐ Oui ☐ Non

PARTIE 1 : Informations institutionnelles

1. Quel est le nom de votre institution (désignée ci-après par l'expression « votre institution ») ?

2. À quelle catégorie institutionnelle votre organisation appartient-elle ?

   Plusieurs choix sont possibles.

   - ☐ Bailleur de fonds
   - ☐ Organisation internationale
   - ☐ Organisation Non gouvernementale (ONG)
   - ☐ Organisme ou représentant gouvernemental
   - ☐ Organisation de recherche
   - ☐ Organisation multi-acteurs
   - ☐ Organisation du secteur Privé
   - ☐ Autre (à préciser)

3. À quelle échelle votre organisation intervient-elle ?

   Plusieurs choix sont possibles.

   - ☐ Locale/infranationale (veuillez préciser) .....
   - ☐ Nationale (veuillez préciser) .....
   - ☐ Régionale/supranationale (veuillez préciser) .....
   - ☐ Internationale (veuillez préciser) .....

4. Dans quelle catégorie se situe votre poste dans votre organisation ?

   Plusieurs choix sont possibles.

   - ☐ Programmation
   - ☐ Gestion
   - ☐ Suivi, évaluation, apprentissage, évaluation d'impact (MELIA)
   - ☐ Recherche
   - ☐ Autre (à préciser)

5. a. Existe-t-il des programmes ou des projets spécifiques avec lesquels vous travaillez ou en connaissez-vous, qui peuvent servir de référence principale pour vos réponses aux questions suivantes sur la mesure/le suivi de la durabilité et de la performance des systèmes agroalimentaires) ? *(Si la réponse est « Non », veuillez passer à la question 6).*

☐ Oui ☐ Non

5. b1. Si oui, veuillez fournir les informations suivantes pour le projet/ programme 1 :

Nom/description	Période de mise en œuvre (de l' année... à l'année...)
Source(s) de financement	Localisation
Objectif principal	Partenaires (le cas échéant)

5. b2. Si oui, veuillez fournir les informations suivantes pour le projet/ programme 2 :

Nom/description	Période de mise en œuvre (de l' année... à l'année...)
Source(s) de financement	Localisation
Objectif principal	Partenaires (le cas échéant)

5. b3. Si oui, veuillez fournir les informations suivantes pour le projet/ programme 3 :

Nom/description	Période de mise en œuvre (de l' année... à l'année...)
Source(s) de financement	Localisation
Objectif principal	Partenaires (le cas échéant)

5. b4. Si oui, veuillez fournir les informations suivantes pour le projet/ programme 4 :

Nom/description	Période de mise en œuvre (de l' année... à l'année...)
Source(s) de financement	Localisation
Objectif principal	Partenaires (le cas échéant)

5. b5. Si oui, veuillez fournir les informations suivantes pour le projet/ programme 5 :

Nom/description	Période de mise en œuvre (de l' année... à l'année...)
Source(s) de financement	Localisation
Objectif principal	Partenaires (le cas échéant)

6. Dans le cadre du (des) projet(s)/ programme (s) mentionné(s), (ou de manière générale), quels sont les domaines ou les aspects spécifiques des systèmes alimentaires et agricoles vous intéressent le plus ?

Réponse en texte libre :

7. Pouvez-vous décrire ou nommer le (s) principal(aux) concepts de cadrage ou (cadres conceptuels ou théoriques) que vous utilisez dans vos travaux ?

(Donner des exemples si l'interviewé a des difficultés à comprendre : Par exemple les 10 éléments de l'agroécologie de la FAO ou les 13 principes du HLPE, ou l'agriculture intelligente face au climat, ou la résilience...)

Réponse en texte libre :

8. Pouvez-vous estimer à quels pourcentages vos activités sont-elles liées aux domaines suivants?

   ☐ Agriculture ( ) %

   ☐ Agroforesterie ( ) %

   ☐ Agroécologie ( ) %

   ☐ Élevage ( ) %

9. Pouvez-vous estimez comment vos activités sont liées à l'agroécologie ? Décrivez brièvement ce qui, selon vous relève de l'agroécologie dans vos activités (si l'interviewé ne comprend pas, donner des exemples : les pratiques au-delà de la parcelle, les aspects socio-économiques, les approches participatives etc.)?

   Réponse en texte libre

10. Veuillez citer 10 pratiques et approches que vous mettez en œuvre et qui selon vous sont les plus agroécologiques. Cela peut concerner des aspects agronomiques, environnementaux, sociaux et économiques, au niveau de la parcelle, de la ferme ou au-delà de votre territoire ou de votre pays.

    Préciser si elles concernent l'agroforesterie (RNA, plantation d'arbres, haies vives, etc.)

Pratiques, techniques ou approches agroécologiques	Forces	Faiblesses

11. Connaissez-vous l'existence de la plateforme agroécologique du Burkina Faso ?

    ☐ Oui ☐ Non

12. Votre institution est-elle membre de la plateforme agroécologique du Burkina Faso ?

    ☐ Oui ☐ Non

    Si oui, quel est le rôle de votre institution au sein de la plateforme?

PARTIE 2 : Utilisation actuelle des mesures pour l'évaluation ou le suivi des performances des pratiques agricoles ou agroécologiques

1. Mesurez-vous et/ou utilisez-vous des données liées aux domaines ou aspects spécifiques des systèmes alimentaires et agricoles (voir Section A, Question 6) qui vous intéressent ?

   ☐ Mesure

   ☐ Utilisation de données

   ☐ Non

2. Si oui, Quels aspects spécifiques de la performance alimentaire et agricole mesurez-vous et/ou utilisez-vous les données collectées par d'autres?

   Réponse en texte libre : .....

3. POURQUOI mesurez-vous/utilisez-vous les données ?

   Plusieurs choix sont possibles.

   - ☐ Caractérisation
   - ☐ Suivi du changement
   - ☐ Évaluation de l›impact
   - ☐ Orientation stratégique/ aide à la décision
   - ☐ Autre (à préciser)

4. a. Si oui, dans quel but mesurez-vous et/ou utilisez-vous les données ?

   Plusieurs choix sont possibles.

   - ☐ Suivi des effets de nos opérations pour une gestion adaptative (usage interne)
   - ☐ Suivi et évaluation de nos opérations pour les rapports d'activités (communication externe)
   - ☐ Suivi et évaluation pour la génération et le partage de connaissances (diffusion externe)
   - ☐ Autre (à préciser)

   b. Si oui, comment les données sont-elles généralement collectées et rapportées ?

   Réponse en texte libre : .....

5. Afin de mieux comprendre quels types de paramètres ou de variables vous mesurez, veuillez indiquer les indicateurs de performance alimentaire et agricole que votre organisation utilise. Cela inclut à la fois les indicateurs pour lesquels vous collectez directement les données et ceux pour lesquels vous utilisez des données collectées par d'autres.

Veuillez remplir le tableau ci-dessous en ajoutant autant de lignes que nécessaire.

Pratiques et techniques, approches innovantes	**Entrez le nom de la variable spécifique que vous utilisez**	**COMMENT les données sont-elles collectées/ obtenues ? (Outils, méthodes) Plusieurs choix sont possibles**	**A quelle échelle les données sont-elles collectées ? Plusieurs choix sont possibles**	**À quel niveau de votre théorie du changement ou de vos cadres de résultats la mesure est-elle utilisée ? Plusieurs choix possibles**	**Dans quelle mesure la mesure spécifique est-elle EFFICACE pour mesurer l'indicateur de performance prévu ? (Est-ce qu'il fait ce qu'il est censé faire)**	**QUAND les données sont-elles collectées ? (Durée, fréquence) Plusieurs choix sont possibles**	**QUI collecte les données ? (Qui a la responsabilité) Plusieurs choix sont possibles**	**Veuillez donner toutes informations supplémentaires ! (ressources requises, logistique, efficacité, etc.)**
1	1	1] Enquête auprès des ménages	1] Parcelle/ champ 2] Ménage/ ferme 3] Paysage 4] Système alimentaire 5] Autre (préciser)	1] Activité 2] Sortie 3] Résultat 4]Impacts 5] Autre (préciser)	1] Très efficace 2] Modérément efficace 3] Neutre 4] Modérément inefficace 5] Très inefficace	1] Ligne de base + ligne finale 2] Périodique (préciser) 3] Une fois 4] Autre (préciser)	1] Auto-évaluation 2] Personnel de la MEL 3] Personnel de recherche 4] Autre (préciser)	
		2] Mesure (poids, volume...)	1] Parcelle/ champ 2] Ménage/ ferme 3] Paysage 4] Système alimentaire 5] Autre (préciser)	1] Activité 2] Sortie 3] Résultat 4]Impacts 5] Autre (préciser)	1] Très efficace 2] Modérément efficace 3] Neutre 4] Modérément inefficace 5] Très inefficace	1] Ligne de base + ligne finale 2] Périodique (préciser) 3] Une fois 4] Autre (préciser)	1] Auto-évaluation 2] Personnel de la MEL 3] Personnel de recherche 4] Autre (préciser)	
		3]Observation participante	1] Parcelle/ champ 2] Ménage/ ferme 3] Paysage 4] Système alimentaire 5] Autre (préciser)	1] Activité 2] Sortie 3] Résultat 4]Impacts 5] Autre (préciser)	1] Très efficace 2] Modérément efficace 3] Neutre 4] Modérément inefficace 5] Très inefficace	1] Ligne de base + ligne finale 2] Périodique (préciser) 3] Une fois 4] Autre (préciser)	1] Auto-évaluation 2] Personnel de la MEL 3] Personnel de recherche 4] Autre (préciser)	

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Pratiques et techniques, approches innovantes	Entrez le nom de la variable spécifique que vous utilisez	COMMENT les données sont-elles collectées/ obtenues ? (Outils, méthodes) Plusieurs choix sont possibles	A quelle échelle les données sont-elles collectées ? Plusieurs choix sont possibles	À quel niveau de votre théorie du changement ou de vos cadres de résultats la mesure est-elle utilisée ? Plusieurs choix possibles	Dans quelle mesure la mesure spécifique est-elle EFFICACE pour mesurer l'indicateur de performance prévu ? (Est-ce qu'il fait ce qu'il est censé faire)	QUAND les données sont-elles collectées ? (Durée, fréquence) Plusieurs choix sont possibles	QUI collecte les données ? (Qui a la responsabilité) Plusieurs choix sont possibles	Veuillez donner toutes informations supplémentaires ! (ressources requises, logistique, efficacité, etc.)
		4] Discussion de groupe	1] Parcelle/ champ 2] Ménage/ ferme 3] Paysage 4] Système alimentaire 5] Autre (préciser)	1] Activité 2] Sortie 3] Résultat 4]Impacts 5] Autre (préciser)	1] Très efficace 2] Modérément efficace 3] Neutre 4] Modérément inefficace 5] Très inefficace	1] Ligne de base + ligne finale 2] Périodique (préciser) 3] Une fois 4] Autre (préciser)	1] Auto-évaluation 2] Personnel de la MEL 3] Personnel de recherche 4] Autre (préciser)	
		5] Entretiens avec des informateurs clés	1] Parcelle/ champ 2] Ménage/ ferme 3] Paysage 4] Système alimentaire 5] Autre (préciser)	1] Activité 2] Sortie 3] Résultat 4]Impacts 5] Autre (préciser)	1] Très efficace 2] Modérément efficace 3] Neutre 4] Modérément inefficace 5] Très inefficace	1] Ligne de base + ligne finale 2] Périodique (préciser) 3] Une fois 4] Autre (préciser)	1] Auto-évaluation 2] Personnel de la MEL 3] Personnel de recherche 4] Autre (préciser)	
		6] Autre (préciser)	1] Parcelle/ champ 2] Ménage/ ferme 3] Paysage 4] Système alimentaire 5] Autre (préciser)	1] Activité 2] Sortie 3] Résultat 4]Impacts 5] Autre (préciser)	1] Très efficace 2] Modérément efficace 3] Neutre 4] Modérément inefficace 5] Très inefficace	1] Ligne de base + ligne finale 2] Périodique (préciser) 3] Une fois 4] Autre (préciser)	1] Auto-évaluation 2] Personnel de la MEL 3] Personnel de recherche 4] Autre (préciser)	

Ajoutez des lignes si nécessaire

6. a. Evaluez-vous des aspects liés au genre (y compris l'intégration des minorités) ?

   ☐ Oui ☐ Non

   b. Si oui, quelles sont les données que vous évaluez ou collectez ?

7. Pourriez-vous nous indiquer les outils ou méthodes que vous utilisez actuellement pour suivre et évaluer vos activités ?

8. Utilisez-vous des méthodes et outils que vous avez-vous-même développé ? Si oui pouvez-vous nous fournir des informations sur ce que vous avez développé ?

9. a. Au regard des questions précédentes sur des mesures spécifiques, diriez-vous que votre organisation applique une approche systémique dans l'évaluation des performances ? (Nous entendons par approche systémique, une prise en compte de l'ensemble des interactions et parties intégrantes du système évalué.)

   Si Oui, veuillez passer à la sous-section b de cette question.

   ☐ Oui

   ☐ Non

   ☐ Pas certain

   b. Si oui, pouvez-vous expliquer comment cette approche systémique est intégrée dans vos processus d'évaluation ? Comment votre organisation s'assure-t-elle que cette vision est effectivement mise en œuvre ?

Réponse en texte libre :

PARTIE 3 : Mesures, lacunes et opportunités pour les investissements futurs

1. a. Nous avons commencé la conversation sur les mesures spécifiques (Section B) avec une question sur les domaines spécifiques, ou aspects concernant les systèmes alimentaires et agricoles qui vous intéressent (Section A, Question 6). Y a-t-il des éléments ou des domaines liés à l'alimentation, l'agriculture, l'élevage, l'agroforesterie ou l'agroécologie ou des aspects qui vous intéressent sur lesquels vous éprouvez des difficultés à collecter des données et/ou à accéder à des données existantes ?

   Si Oui, veuillez passer à la sous-section b de cette question.

   ☐ Oui

   ☐ Non

   ☐ Pas certain

b. Si oui, veuillez décrire ce que vous aimeriez pouvoir mesurer et suivre plus efficacement (en d'autres termes : qu'est-ce qui vous intéresse mais sur lequel vous avez du mal à mesurer et/ou à trouver des données pertinentes) ?

Argumentez votre réponse:

2. a. Connaissez-vous des mesures (approches, variables) ou des outils spécifiques que vous seriez intéressé à adopter ?

Si Oui, veuillez passer à la sous-section b de cette question.

☐ Oui

☐ Non

b. Si oui, veuillez les nommer et préciser si vous les avez déjà testés.

Ajouter autant de lignes que nécessaire.

Nom et description de la mesure (ou approche) /ou outil	**Avez-vous déjà utilisé la mesure (ou approche) /ou l'outil ?**	
	Oui	**Non**

3. a. Prévoyez-vous des défis liés à ces mesures (approches ou outils) /à leur utilisation et/ou d'autres mesures ou outils alternatifs qui vous intéresseraient ?

Si oui, veuillez passer aux sections b et c de cette question.

☐ Oui

☐ Non

b. Si oui, quel(s) défi(s) rencontrez-vous/(ou prévoyez-vous rencontrer) dans l'adaptation des mesures ou des outils que vous utilisez actuellement ?

Argumentez votre réponse :

c. À votre avis, quelle serait la meilleure solution pour relever les défis ci-dessus ?

Argumentez votre réponse :

4. Dites-nous qu'est ce qui influence le plus les mesures (ou approches) et les outils utilisés dans votre organisation et/ou votre programme /projet spécifique (est-ce les bailleurs de fonds , les partenaires, les politiques, les agendas, etc.) ?

   Argumentez votre réponse :

5. Seriez-vous personnellement intéressé à en savoir plus et à contribuer à la discussion sur le développement des mesures (approches) et outils plus holistiques ?

   - ☐ Très intéressé
   - ☐ Plutôt intéressé
   - ☐ Pas intéressé
   - ☐ Pas certain

6. a. Y a-t-il un ou plusieurs aspects spécifiques du développement et de l'utilisation de mesures (approches) ou d'outils holistiques dont vous souhaiteriez discuter davantage ?

   Si oui, veuillez passer à la section b de cette question.

   - ☐ Oui
   - ☐ Non

   b. Si oui, veuillez mentionner le ou les aspects spécifiques du développement de mesures (approches) holistiques qui vous intéresseraient.

   Argumentez votre réponse :

7. Connaissez-vous d'autres personnes – au sein et en dehors de votre institution – ou des initiatives spécifiques qui pourraient également être intéressées à participer à de nouvelles discussions sur les mesures de performance agricole ?

   Argumentez votre réponse :

Fin de l'interview

Merci d'avoir participé à cette interview ! Sur la base des résultats de cette première consultation des parties prenantes, il pourrait y avoir des opportunités futures de participer à d'autres discussions sur les mesures ou approches holistiques pour l'évaluation de la performance des systèmes agroalimentaires et agricoles.

Si possible, nous apprécierions que vous nous fournissiez tout document pertinent concernant les mesures (ou approches) que vous utilisez, les outils utilisés pour la collecte de données et les résultats générés.

Annex 3. Stakeholders mapped in Ghana

No	Category	Stakeholder
1	Donor	European Union-EU-FAO Food Security Response in Northern Ghana
2	Donor	Global Affairs Canada
3	Donor	ActionAid
4	Donor	United States Agency for International Development
5	Donor	World Food Programme
6	Government Ministries	Ministry of Food and Agriculture*
7	Government Ministries	Ministry of Environment Science, Technology and Innovation
8	Government Ministries	Ministry of Land and Forestry
9	Public	Forestry Commission
10	Public	Environmental Protection Agency
11	Public	Department of Agriculture
12	Public	Ghana Cocoa Board
13	Research	Council for Scientific and Industrial Research
14	Research	Cocoa Research Institute of Ghana
15	Academia	Technical University, Bolgatanga*
16	Academia	University for Development Studies
17	Academia	University of Cape Coast
18	Academia	University of Ghana*
19	Academia	Kwame Nkrumah University of Science and Technology*
20	Development Partners	Farm Radio International*
21	Development Partners	A Rocha Ghana
22	Development Partners	Centre for Indigenous Knowledge and Organizational Development*
23	Development Partners	Christian Relief Service*
24	Development Partners	Rainforest Alliance
25	Development Partners	World Vision Ghana*
26	Development Partners	ActionAid
27	Development Partners	Trax Ghana
28	Development Partners	Groundswell International
29	Civil Society	Food Sovereignty Ghana*
30	Civil Society	Ghana Agroecology Movement*
31	Civil Society	Peasant Farmers Associations of Ghana*
32	Civil Society	CSOs platform on SDGs (2, 12, 13, 15)
33	Projects/Initiatives	Ghana Shea Landscape Emission Reductions Project
34	NGO	Offinso Fine Flavour Cocoa Farmers Cooperatives and Marketing Society Limited
35	NGO	Offinso Partners in Sustainable Development
36	NGO	Obrobibini Peace Complex (Up Education)
37	NGO	Ghana Permaculture Institute,
38	NGO	Abrono Organic Farming Project*
39	NGO	Center for Ecological Agriculture and Sustainable Livelihoods
40	Research	Crop Research Institute*
41	Projects/Initiatives	Savana Agricultural Research Institute of Ghana*

Note: Those noted with an asterisk (*) also attended the stakeholder workshop.

Table A.1 Additional stakeholders that attended the stakeholder workshop in Ghana that did not appear in the stakeholder mapping

No	Category	Stakeholder
1	INGO	UN Habitat
2	Research	International Institute of Tropical Agriculture (IITA)
3	Academia	Bangor University
4	Business/production	Nestle
5	Business/Supply chain	Farmerline
6	INGO	Farm Radio
7	Public	National Food Buffer Stock Company (NAFCO)
8	Business/Production	B'diet
9	Projects/Initiatives	Feed the Future
10	Research	Forest Research Institute Ghana
11	Projects/Initiatives	Policy Link
12	Business/Input supply	Nangai Initiative for Sustainable Agricultural Development (NISAD)
13	Business/Organic production	Organic Green
14	INGO	Winrock International Accelerated Dissemination of Soil Improvement Practices Project
15	Public	Ghana Commodity Exchange
16	Public	School feeding programme
17	NGO	Savannah Women Integrated Development Agency
18	Research	Crop Research Institute
19	Projects/Initiatives	Savana Agricultural Research Institute of Ghana

Annex 4. Stakeholders mapped in Burkina Faso

No	Category	Stakeholder
1	Civil society, NGOs	Association Paysanne en Action (APA)
2	Civil society, NGOs	Confédération Paysanne du Faso (CPF)
3	Civil society, NGOs	Conseil National de l'Agriculture Biologique (CNABio)*
4	Civil society, NGOs	Fédération des Sociétés Coopératives des Professionnels Agricoles du Burkina (FESCOPA-B)
5	Civil society, NGOs	Fédération Nationale des Organisations Paysannes (FENOP)
6	Civil society, NGOs	Comité Ouest Africain des Semence Paysannes (COASP)
7	Production sector	Ferme Agro Ecologique Guiriko*
8	Civil society, NGOs	Ferme De Goema (Association inter-villages Tenkeega de Goèma)
9	Production sector	Ferme GUIRIKO
10	Production sector	Ferme Napoko*
11	Production sector	Ferme Pilote de BARGA
12	Service provider	Centre Agro Ecologique et d'Innovation du Houet (CAEI)*
13	Research Institution	Centre de coopération internationale en recherche agronomique pour le développement (CIRAD)
14	INGO	Centre d'Etudes et d'Expérimentations Economiques et Sociales de l'Afrique de l'Ouest (CESAO-AI)
15	Academia	Université Joseph KI-ZERBO (UJKZ)*
16	Academia	Université Nazi Boni (UNB)/Sustain Sahel
17	Research institution	Institut de l'Environnement et de Recherches Agricoles (INERA)*
18	Government institution (Technical training)	Institut de Formation en Élevage et Santé Animale (IFESA)*
19	Research institution	Inst. of Environment and Agricultural Research (INERA)
20	Service provider	Bureau d'Etude et d'Appui Conseil en Agroécologie (BEACA)
21	Production sector	AGRO Burkina
22	Civil society, NGOs	RESEAU MARP
23	Civil society, NGOs	Réseau Burkinabè des initiatives agroécologiques (RBIA)
24	Civil society, NGOs	Secrétariat Permanent des ONG (SPONG)
25	INGO	Agro et Vétérinaire Sans Frontière (AVSF)
26	Civil society, NGOs	Association Centre Ecologique Albert Schweitzer du Burkina Faso (CEAS Burkina)
27	Production	Association Diobass Agro-écologie
28	Civil society, NGOs	Action pour la promotion des initiatives locales (APIL)
29	Civil society, NGOs	ONG TREEAID
30	Civil society, NGOs	Association pour la Promotion d'une Agriculture Durable (APAD)
31	Civil society, NGOs	Association pour la Recherche et la Formation en Agroécologie (ARFA)
32	Civil society, NGOs	Biovision
33	Civil society, NGOs	HELVETAS
34	Civil society, NGOs	Collectif Citoyen pour l'Agroécologie (CCAE)
35	Civil society, NGOs	Association pour le Développement des Techniques Agro-Ecologiques (ADTAE)
36	Civil society, NGOs	Association pour la promotion de l'Agro foresterie du Burkina Faso (APAF)*
37	Civil society, NGOs	SOS Faim-Burkina

continue to the next page

Annex 4. Continued

No	Category	Stakeholder
38	Civil society, NGOs	Terre et Humanisme
39	Policymakers	Direction de la Vulgarisation et de la Recherche- Développement (DVRD)
40	Policymakers	Direction du Développement des Productions Agricoles (DDPA)/MARAH*
41	Policymakers	Direction générale de la promotion de l'économie rurale (DGPER)
42	Policymakers	Direction Générale de la Protection des Végétaux (DGPV)
43	Policymakers	Direction Générale de l'Economie Verte et du Changement Climatique (DGEVCC)*
44	Policymakers	Direction Générale des Espaces et Aménagements Pastoraux (DGEAP)
45	Policymakers	Direction Générale des Etudes et des Statistiques Sectorielles /Ministère de l'Environnement, de l'Energie, de l'Eau et de l'Assainissement (DGESS/MEEEA)
46	Policymakers	Direction Générale du Foncier, de la formation et de l'Organisation du Monde Rural (DGFOMR)
47	Policymakers	Direction Régionale de l'Agriculture, des Aménagements Hydro-Agricoles et de la Mécanisation du Plateau Central
48	Policymakers	Secrétariat Permanent de la Coordination des Politiques Sectorielles Agricoles (SP-CPSA)
49	Donors	Agence Française de Développement/Burkina Faso (AFD/Burkina)
50	Donors	Fondation pour l'Agriculture et la Ruralité dans le Monde (FARM)
51	Donors	Fondation Sainte Chantal
52	Donors	FAO-Burkina Faso*

Note: Those noted with an asterisk (*) also attended the stakeholder workshop.

Table A2. Additional stakeholders that attended the stakeholder workshop in Burkina Faso that did not appear in the stakeholder mapping:

No	Category	Denomination
1	Service provider	Group BIOFANDA Innovation (GBI)
2	Research institution	Institut de Recherche en Sciences de la Santé (IRSS)
3	Production sector	Centre de permaculture LAWATAN
4	Policymaker	Direction Générale de la Production agricole (DGPA)/MARAH
5	Service provider	Société de Promotion, de marketing et de Communication (SOPROMAC), Bobo Dioulasso
6	Civil society, NGOs	Coordination Nationale des Jeunes en Agro-Business du Burkina Faso (CONAJA-BF), Bobo
7	Civil society, NGOs	BIOPROTECT, Bobo
8	Production sector	Coopérative Teel Taaba, Kombissiri
9	Civil society, NGOs	Coordination Régionale des Jeunes pour l'Environnement et le Climat (COREJEC-HB), Bobo
10	Service provider	Eco Viim, Bobo
11	Production sector	Ferme FIDELYS, Bobo
12	Donor	FAO-Burkina Faso
13	Policymaker	Direction Générale de l'Économie Verte et du Changement Climatique (DGEVCC)/Ministère

continue to the next page

Table A2. Continued

No	Category	Denomination
14	Civil society, NGOs	Association pour promotion de l'Agroforesterie du Burkina Faso (APAF)
15	Research institution	Institut de l'Environnement et de Recherches Agricoles (INERA)/DEF, Ouagadougou
16	Service provider	Institut de Formation en Elevage et Santé Animale (IFESA), Bobo
17	Academia	Université Joseph KI-ZERBO (UJKZ)
18	Production sector	Ferme Napoko
19	Production sector, NGO	AZN-Ferme Pilote de Guiè, membre du réseau Wégoubri, le Bocage Sahélien
20	Service provider	Centre Agro Ecologique et d'Innovation du Houet (CAEI)
21	Production sector	Ferme Agro Ecologique Guiriko
22	Civil society, NGOs	Conseil National de Agriculture Biologique (CNABio)
23	Research institution	CIFOR-ICRAF

Annex 5. Stakeholders mapped in Tunisia

Category	Stakeholder	Policy label (major roles)	Role
Government agencies	AFA AVFA CRDA CTV, DGACTA, EDA, GF, MARHP, MDCI MEDD, ODESYPANO, OEP	Policy design Policy implementation	Responsible for formulating agroecology policies and regulations and engaging other actors to support agroecological transition. Provide necessary resources to ensure compliance and implementation.
Farmers and farming Communities	Farmers, FO, UTAP	Policy implementation	Key actors in implementing agroecology on the ground with a high scaling potential.
Research and academic institutions	IRESA, INRAT INRGREF INGC	Policy guidance or advisory	Provide scientific evidence and disseminate the knowledge.
Civil society	ATAE ATP LACT	Policy lobbying Policy implementation	Advocate for agroecology, raise awareness about its benefits. Support farmers and communities.
International organizations and donors	AFD/ EU GIZ ICARDA FAO/FAD	Policy guidance	Provide funding, technical assistance, and expertise. Pilot projects to promote agroecology.
Consumers and consumer associations	Consumers	Policy implementation	Creating demand for agroecological products.
Private sector	Agrochemical companies, agroindustry, eco-shops, investors, forage seeds companies, milk processing companies.	Policy implementation Policy lobbying	Investing in sustainable and agroecological practices. Aligning their strategies with agroecology goals and adopting them in their supply chains.
Media and communication channels	Local radio, social media, TV	Policy lobbying	Raising awareness about agroecology.
Financial institutions	Banks, microfinancing	Policy implementation	Provide access to credit and investment. Support sustainable agricultural projects.
Local authorities	CDL CRD	Policy implementation Policy design	Align their land-use planning and zoning regulations with agroecological policies.

Note: Please see table on following page for full names of acronyms.

Source: Ouerghemmi et al. 2023.

Table A3. Acronyms and full names

Acronym	Name	Type
AFA	Agence Foncière Agricole	National agricultural support, Ministry of Agriculture
AFD	Agence Française de Développement	International agency for development
APIA	Agence de promotion des investissements agricoles	National agricultural support, Ministry of Agriculture
ATAE	Association Tunisienne d'Agriculture Environnementale	National association
ATP	Association Tunisienne de Permaculture	National association
AVFA	Agence de Vulgarisation et Formation Agricoles	National agricultural support, Ministry of Agriculture
CGIAR	Consultative Group on International Agricultural Research	International research
CIRAD	Centre de coopération internationale en recherche agronomique pour le développement	International research
COTUGRAIN	Société privée de production de semences	Private sector
CRDA	Commissariat régional au développement agricole	Regional agricultural support, Ministry of Agriculture
CTV	Centre technique de vulgarisation	Local agricultural support, Ministry of Agriculture
DGACTA	Direction Générale de l'Aménagement et de la Conservation des Terres Agricoles	National agricultural support, Ministry of Agriculture
EDA		
ESAK	Ecole Supérieure Agricole du Kef	Public education & research
FO	Farm organization (SMSA, GDA)	Farm association
GDA Sers	Groupement de développement agricole	Producer organization
GF	Direction générale des forêts	National agricultural support, Ministry of Agriculture
GIFfruit	Groupement interprofessionnel des fruits	Interprofession
GIVlait	Groupement interprofessionnel des Viandes et du lait	Interprofession
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit	International agency for development
ICARDA	International Center for Agricultural Research in the Dry Areas	International research
INGC	Institut national des grandes cultures	Public research institute
INRAT	Institut Nationale de Recherche Agronomique en Tunisie	Public research institute
INRGREF	Institut National de la Recherche en Génie Rural, Eaux et Forêts	Public research institute
IO	Institut de l'Olivier	Public research institute
IRA	Institut de Régions Arides	Public research institute
IRESA	Institution de la Recherche et de l'Enseignement Supérieur Agricoles	Public research institute
LACT	Association les Amis de CAPTE (Collectif d'Acteurs pour la Plantation et la Transition Environnementale)	National association

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Table A3. Continued

Acronym	Name	Type
MARHP	Ministère de l'Agriculture, des Ressources Hydrauliques et de la Pêche	Ministry
MDCI	Ministère du Développement, de l'Investissement et de la Coopération Internationale	Ministry
MEDD	Ministère de l'Environnement et du Développement Durable	Ministry
Museum lab	Association du patrimoine culturel	National association
ODESYPANO	Office de développement Sylvopastoral du Nord Ouest	Public development institute
OEP	Office of livestock and pasture	Public development institute
ONH	Office national de l'huile	Public development institute
SMSAs	Sociétés mutuelles de services agricoles	Producer organization
UTAP	Union Tunisienne de l'Agriculture et de la Pêche	Syndical institute

Table A4. Stakeholders that attended the stakeholder workshop in Tunisia

No	Category	Stakeholder
1	Research	Tunisian National Research Institute for Agriculture (INRAT) (agronomy, socioeconomics and livestock research)
2	Research	IO (Olive Institute) – work on sustainable intensification and agroecology transition of olive-based systems
3	Civil society with few connections in the field with farmers and farmers cooperatives	LACT Association les Amis de CAPTE (Collectif d'Acteurs pour la Plantation et la Transition Environnementale)
4	Government agency	GIL (Groupement interprofessionnel des légumes)
5	Public	CRDA KEF (Commissariat Régional de Développement Agricole – gouvernorat du Kef)
6	Interprofession	CERLAIT
7	Development agency	ODESY PANO (Office de Développement Sylvopastoral du Nord Ouest)
8	Civil society	Association Tunisienne d'Agriculture Environnementale (ATAE)

Annex 6. Stakeholders interviewed in Ghana

Category	Organisation
Donor	Global Affairs Canada
Local NGOs	Ghana Permaculture Institute (GPI)
	Abrono Organic Farming Project (Abofa)
	Centre for Indigenous Knowledge and Organizational Development (CIKOD)
International NGOs	World Vision Ghana (WVG)
	Catholic Relief Service (CRS)
	WINROCK Ghana
	Farm Radio
Research and Academia	Technical University, Bolga
Government	Department of Agriculture
Business	Organic Green

Annex 7. Stakeholders interviewed in Burkina Faso

No	Category	Stakeholder
1	Research institution	Institut de l'Environnement et de Recherches Agricoles (INERA)/DEF, Ouagadougou
2	Academia	Université Joseph KI-ZERBO (UJKZ), Ouagadougou
3	Service provider	Bureau d'Etudes et d'Appui Conseil en Agroécologie (BEACA), Ouagadougou
4	Service provider	Centre d'Initiative pour le Développement Solidaire (CIDS), Ouagadougou
5	Production sector	Centre Agroécologique Guiriko (Bobo)
6	Production sector	Ferme FIDELYS, Bobo
7	Production sector	Centre de Permaculture LAWATAN, Bobo
8	Production sector	Centre WANGARI MATAYE de Banflagouè, Bobo
9	Production sector	Coopérative Teel Taaba , Kombissiri
10	Service provider	Société de Promotion, de marketing et de communication (SOPROMAC), Bobo
11	Civil society, NGOs	BIOPROTECT, Bobo
12	Service provider	Centre Agroécologique et d'Innovation du Houet (CAEI), Bobo
13	Service provider	Institut de Formation en Elevage et Santé Animale (IFESA), Bobo
14	Service provider	Group BIOFANDA Innovation, Bobo
15	Service provider	Eco Viim, Bobo
16	Civil society, NGOs	Association pour la Promotion de l'Agroforesterie (APAF), Ouagadougou
17	Civil society, NGOs	Coordination Nationale des Jeunes en Agro-Business du Burkina Faso (CONAJA-BF), Bobo
18	Civil society, NGOs	Coordination Régionale des Jeunes pour l'Environnement et le Climat (COREJEC-HB), Bobo
19	Production sector	Ferme Napoko, Loumbila
20	Policy maker	Direction du Développement des Productions Agricoles (DDPA)/MARAH

Annex 8. Stakeholders interviewed in Tunisia

No	Category	Institution/Organism Name
1	NGOs	National Union of Organic Operators (Unobio) Collectif d'Acteurs pour la Plantation et la Transition Environnementale (CAPTE) Association Tunisienne d'Agriculture Environnementale (ATAE)
2	Research Institutes	Institut National Agronomique de Tunisie (INAT)
3	Government development organizations	Direction Générale des Forêts - National Park of Ichkeul (DGF-Echkeul) AVFA-Centre de Formation RIMEL
4	International organizations	Union Internationale pour la Conservation de la Nature (UICN)

Annex 9. HLPE agroecology principles mapped to national policies in Tunisia

Review	Year	Recycling	Input reduction	Soil health	Animal health	Biodiversity	Synergy	Economic diversification	Cocreation of knowledge	Social values and diets	Fairness	Connectivity	Land and natural resource governance	Participation
National strategy for adaptation to climate change for the agricultural sector	2007													
National strategy for adaptation to climate change for the agricultural sector	2010													
A label 'Bio Tunisia' has been established under the promulgation of Decree No. 2010-1547 of 21 June 2010	2010													
Livre Blanc' as a new regional development strategy in Tunisia	2011													
National Strategy for Sustainable Development (NSSD) (ME, 2014)	2014													
First biannual report to UNFCCC (UNFCCC, 2014).	2014													
A strategy for the development of the organic agriculture sector has been elaborated for the five-year plan 2015-2020.	2015													
Country's INDC	2015													
Five-year economic and social development plan for the period 2016-2020	2016													
2050 global strategic framework for the new Agricultural Land Conservation and Conservation Strategy (ACTA)	2017													
Agricultural research priorities for horizon 2030 had been set up by IRESA	2018													

Annex 10. Indicators for mixed crop-livestock system in Tunisia

Domains	Challenges	Impacts	Indicators
Climate change	Adaptation to drought	Adaptation through: "Rentability/ preservation trade-offs for agroecological production"	Carbon balance EWU Water Carbon footprint Ecosystem services counting
Management & preservation of resources	Loss of biodiversity & fertility	Rational management of NR Local resource use Resource management model Resource preservation Environmental protection Water preservation	Soil fertility Soil microorganisms Soil analysis Land-use change analysis Habitat fragmentation Biodiversity index Indication on species WUE (Water use efficiency) Veterinary expenses Percentage of animals vaccinated Water quality Chemicals use (intensity) Energy use quantity
Sustainability	Bad agricultural practices	Based on economic value for enhancing living conditions	Percentage of label production on total production (value + quantity) AE products prices Capture consumers' preferences Number of local partners engaged in direct marketing Farmer revenue Land-Use Efficiency
Research & knowledge management	Extension method gaps; gap on methods and model; support to research; issues of training at all levels; local knowledge integration	Extension service awareness of farmers; tools for awareness and knowledge dissemination	Percentage of adopters Number of sensitized actors Number of spots on media Number of trainings Number of meetings Number of integrated local knowledge Number of agreements research-development - NGO Living Labs Number of field days
Organization	Actors identification and implication; participation	Engagement; `grouping/associations	Actors' participation Short circuit Implication of rural women
Legislation and political	No regulations & legislations No political interest and involvement Low institutionalized coordination No strategic thinking/ vision No political frame Political instability	Public strategy implementation for actors' organization (2)	Topics discussed in parliamentary session FO performing indicators Number of trained policymakers Number of regulations Taxes Number of public projects for AE Number of laws fostering AE

Annex 11. Potential partnerships in Ghana

Topic	Name(s)	Potential role/partnership
Developing metrics and tools for measuring AE	Council for Scientific and Industrial Research (FORIG/ CRI/SRI); Kwame Nkrumah University of Science and Technology; University of Ghana; Bolgatanga Technical University	Existing structures expertise, knowledge, funding and farmer/stakeholder networks from developing, demonstrating and scaling metrics that AE could leverage.
Influencing AE policy	Ministry of Food and Agriculture	Mandate of ensuring sustainable food production, the expert portfolio to lead and access to related ministries for influencing process.
Building/strengthening networks and platforms on AE	Ghana Agroecology Movement; Food Sovereignty Ghana; Peasant Farmers Associations of Ghana; Coalition on Agroecology	Advocating for AE on different platforms, engaging stakeholders for buy in and piloting innovation.
Dissemination of knowledge and information on AE and measurement	Farm Radio	Extensive network of collaborating institutions/ project and reach locally to develop capacity of AE (training) and share information.
Taking a more food systems approach	Ghana Commodity exchange; Buffer Stock	Hosts data on market trends (supply and demand) and can influence and inform public on AE as a niche market and premium pricing for AE products.
Funding AE research	Research/academia/public	These institutions depending on scope of research can attract funding for AE research.

Annex 12. Potential partnerships in Burkina Faso

Topic	Name(s)	Potential role/partnership
Developing metrics and tools for measuring AE	Institut de l'Environnement et de Recherches Agricoles (INERA)/DEF, Ouagadougou Université Joseph KI-ZERBO (UJKZ) CIFOR-ICRAF	These institutions are willing to engage in developing tools and methods for their research activity evaluation and for strengthening farmers' capacity. The main activities include training and field experiments. Therefore, based on acquired experience by interviewed researchers (at least 10 years) on agroecology, we would recommend them to IDRC in terms of collaboration or partnership (strengthening capacity agroecology data collection, funding opportunity, and equipment for measuring agroecology).
Influencing AE policy	Ministère de l'Agriculture et des Ressources animales et halieutiques (MARAH) Ministère de l'Environnement, de l'Eau et de l'Assainissement (MEEA)	These institutions are responsible for making decisions or promoting law and regulations in agroecology. Therefore, IDRC could establish partnership in terms of supporting the implementation of holistic and innovative approaches, tools, and regulations. This needs technical and technological support to address sustainable management of the food systems in Burkina Faso.
Building/ strengthening networks and platforms on AE	Institut de Formation en Elevage et Santé Animale (IFESA), Bobo Group BIOFANDA Innovation	These organizations have been dealing with many stakeholders on agroecology through training of young people, supporting farmers for implementing agroecological practices, developing market channels for agroecological products, etc. These mentioned reasons allow us to recommend them for partnership with IDRC to reinforce networks and platforms development. Recommendations include their training on networking in agroecology, funding opportunities, etc.
Dissemination of knowledge and information on AE and measurement	Conseil National de Agriculture Biologique (CNABio) Centre Agro Ecologique et d'Innovation du Houet (CAEI) Coordination Régionale des Jeunes pour l'Environnement et le Climat (COREJEC-HB), Bobo	The main activities being implemented by these organizations include mostly sensitization of the farmers and population on the negative effect of mineral fertilizers, pesticides and other chemicals used in agriculture, performing advocacy, etc. They have several organization members working in agroecology and could then potentially contribute to knowledge, techniques and technologies sharing with huge impacts. Recommendations include development of partnership on strengthening capacity building on measurement, funding, application of agroecological practice in field schools' approach, and scaling up innovations such as holistic evaluation metrics.
Taking a more food systems approach	MARAH	This ministry in charge of agriculture and animal production is the main decision maker and regulations that would favour the development of food systems. IDRC could collaborate with them by funding various projects for scaling up agroecological practices and promoting the use of holistic evaluation metrics of agroecological practices.
Funding AE research	FAO	IDRC could establish a partnership with FAO-Burkina Faso in term of funding joint projects in agroecology and developing more holistic measurement tools through research.

Annex 13. Potential partnerships in Tunisia

Topic	Name(s)	Potential role/partnership
Developing metrics and tools for measuring AE	IRESA, INRAT, INRGREF, ICARDA, etc.	Experience through research and development project; experience with the TAPE and HOLPA approaches.
Influencing AE policy	OEP, IRESA, DGF, DGACTA, Civil society associations?	Well connected with policy makers.
Building/strengthening networks and platforms on AE	LACT /ATAE	Well connected to the agroecology association in Tunisia.
Dissemination of knowledge and information on AE and measurement	ESA-kef	Module of training on AE.
Taking a more food systems approach	Private sector	Quite few examples of private sector enterprises can be listed for future partnerships on agroecology in different production systems.
Funding AE research	GIZ, AFD	Donors who have few running projects and program on agroecology in country with whom coordination and co-investment can be beneficial and impactful.

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The Agroecology TPP Working Papers contain preliminary or advanced research results on agroecology issues that need to be published in a timely manner to inform and promote discussion. This content has been internally reviewed but has not undergone external peer review.

This study highlights the need for more holistic approaches to measuring agrifood system performance in order to fairly assess agroecology alongside alternative approaches. Drawing on reviews, interviews, and workshops held in Burkina Faso, Ghana, and Tunisia, it identifies barriers and opportunities for measuring and advancing agroecological transitions. Key findings stress the need for harmonized yet context-sensitive metrics, stronger capacity and guidance, and attention to often-overlooked social dimensions such as equity and agency. The study calls for greater coordination among governments, researchers, NGOs, and funders, as well as more strategic investments, to ensure that agroecology can play its full role in transforming food systems towards resilience, sustainability, and inclusivity.

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International Development Research Centre
Centre de recherches pour le développement international
Canada

CIFOR
World Agroforestry
ICARDA

About the Agroecology TPP

The Agroecology TPP convenes a broad group of scientists, practitioners and policymakers working together to accelerate agroecological transitions. Since its official launch on 3 June 2021, the TPP has begun addressing knowledge gaps across eight domains that will support various institutions and advocacy groups in key decision-making processes. Its online COMMUNITIES are open to all, providing spaces for members to co-create knowledge, share insights and experiences on various agroecological themes, building collaborative networks with local communities and research bodies to drive agroecological progress for food systems transformation.