



Food and Agriculture Organization
of the United Nations

Comprehensive assessment of national extension and advisory service systems

An operational guide

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Abstract

The Food and Agricultural Organization of the United Nations (FAO) promotes pluralistic, market-oriented and demand-driven extension and advisory services (EAS), which broker knowledge and innovation, facilitate networks, empower rural producers, promote gender equality, engage youth in agriculture, promote sustainable practices and effectively use modern tools and technologies including digital tools and information and communication technologies (ICTs), to unleash agricultural innovation. This guide aims to capture the status of the EAS system in a given country in light of these system characteristics. It makes use of a flexible methodology based on a set of core principles, along with advice and tools to be tailored to the country context.

EAS play a central role in facilitating agricultural innovation among smallholder farmers and other actors in the agrifood system, which leads to positive changes in terms of food security, livelihoods and environmental sustainability. However, they require adequate funding, capacities and an enabling environment (including policies) to effectively perform this important role. Comprehensive analysis of and evidence to support EAS from a systems perspective are required to target funding and bring about EAS institutional and policy reforms. This guide was thus designed to generate relevant, exhaustive and targeted data and evidence, on the basis of a participatory and inclusive assessment process.

The assessment consists of three main phases: preparation, implementation and consolidation. Country (or sub-national) ownership of the assessment process is established during the preparation phase in order to foster a locally-led and appropriate result. The implementation phase consists of targeted and in-depth data collection in the three main component areas: country context (framing conditions), the client perspective, and system analysis (functions, structure and enabling factors). The findings are analysed and validated by relevant stakeholders and disseminated in the final consolidation phase. The report then makes a series of concrete recommendations which can be used for action planning to support informed investment and policy decision-making in EAS systems.



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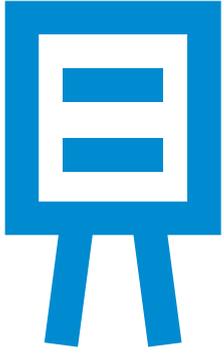
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Abbreviations

AgGDP	agricultural gross domestic product
AIS	agricultural innovation system
CBOs	community-based organizations
CRISP	Centre for Research on Science and Innovation Policy
CSOs	civil society organizations
EAS	extension and advisory services
FAO	Food and Agriculture Organization of the United Nations
FGD	focus group discussions
FIBL	<i>Das Forschungsinstitut für biologischen Landbau</i> (The Research Institute of Organic Agriculture)
GDP	gross domestic product
GFRAS	Global Forum for Rural Advisory Services
ICTs	information and communication technologies
IFPRI	International Food Policy Research Institute
MoA	Ministry of Agriculture
MEL	monitoring, evaluation and learning
NGO	non-governmental organization
OINR	Research and Extension Unit at FAO
PO	producer organization
PPP	public-private partnership
RAS	rural advisory services
RELASER	<i>Red Latinoamericana de Extensión Rural</i> (Latin American Network of Rural Extension Services)
SDG	Sustainable Development Goal
SMS	short message service
SWOT	strengths, weaknesses, opportunities, threats
TAP	Tropical Agriculture Platform
UFAAS	Uganda Forum for Agricultural Advisory Services
UN	United Nations



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Introduction

The world is facing unprecedented global challenges that affect the sustainability of food and agriculture systems, and thus the livelihoods of millions of smallholder farmers worldwide (FAO *et al.*, 2021). The achievement of the Sustainable Development Goals (SDGs) depends on the inclusion of smallholder farmers in sustainable agrifood systems – including women, youth and other disadvantaged groups that are harder to reach – and the enhancement of their ability to access, adapt and apply relevant knowledge on their farms to sustainably cope with those challenges, in particular climate change. It is estimated there are more than 608 million farms in the world, of which 84 percent are small farms of less than 2 ha. Rough estimates also indicate that more than 90 percent of total farms are family farms occupying around 70–80 percent of farmland and producing about 80 percent of the world’s food in value terms (Lowder, Sánchez and Bertini, 2019). Paradoxically, smallholder family farmers are often poor and food-insecure, suffering from low productivity, persistent food insecurity and malnutrition, and therefore more vulnerable to food price crises, natural resource depletion, changing and uncertain markets, environmental degradation, climate change, rural poverty, and inequalities that directly impact the agriculture sector and rural development (FAO, 2014; IFAD, 2013). Moreover, women play a crucial role in smallholder farming systems, although they often face additional challenges in accessing resources, including services, accurate information and markets. Smallholder family farmers are also often hardest-hit by the impacts of natural disasters, pest and disease outbreaks, and pandemics like COVID-19.

EAS are essential to transforming the agrifood sector towards more sustainable food and nutrition secure systems, especially in times of such unprecedented challenge. Their contribution is critical to enhancing the capacities of farmers – in particular smallholder family farmers – to access a wide range of knowledge, and obtain the inputs and services they need to enhance their farm productivity and household income, while also strengthening their resilience to climate change (Danso-Abbeam, Ehiakpor and Aidoo, 2018; FAO, 2015; FAO, 2018). Seen from a broader perspective, EAS systems are

embedded in and constitute an essential component of the larger agricultural innovation system (AIS). The AIS is defined by the FAO as a network of actors (including EAS actors, such as providers and clients), together with supporting institutions and policies in the agricultural and related sectors, which brings existing or new products, processes and forms of organization into social and economic use. This process of introducing new ideas or products into practice in agriculture (that is, agricultural innovation) is a key overall function of EAS within the greater AIS and is vital in helping family farmers overcome the complex and interrelated issues they face today (FAO, 2020).

However, the overall lack of access to appropriate EAS, especially among smallholder farmers, is cause for serious concern. Evidence suggests that more than 75 percent of family farmers worldwide have no reliable access to EAS, and in fact in most developing countries this figure is estimated at around 95 percent (FAO, 2014). Enhancing access to pluralistic EAS is therefore critical to supporting smallholder family farmers, thus requiring enhanced investments, appropriate policies, and relevant EAS interventions responsive to the demands of farmers and public-private-producer partnerships in support of EAS. For EAS to effectively support producers to innovate and overcome the challenges they face, more human and financial resources are needed. Despite this, public investment and commitment towards extension services have decreased significantly in many countries (GFRAS, 2012b).

Roseboom (2004) noted that the level of investments in extension should account for at least one percent of AgGDP to bring the actual growth of the agricultural sector closer to its potential. A more recent analysis by Blum and Szonyi (2014) concluded that the level of investment in EAS in many developing countries should even be two percent or more of AgGDP in order to meet food security goals. However, in reality, most developing countries invest much less than one percent. EAS in many countries thus remain weak and donor-dependent, with the limited funds available going mainly to pay salaries, leaving little for operational costs. Projectization is another problem, whereby donors, NGOs or the private sector focus on particular areas or topics in EAS, while holistic services are often neglected or are provided by a weak public service (Davis and Franzel, 2018).

In many cases, this phenomenon of low or unsustainable investment in EAS has meant that public extension is virtually non-existent, and lacks sufficient resources to provide adequate support to rural producers, resulting in fewer opportunities to strengthen capacities and skills, and the total absence of incentives. This gap has been partially filled by new non-state actors providing EAS, such as NGOs, private companies engaged in agribusiness and input suppliers, producer organizations (POs), and independent consultants, amongst others. These new actors bring enormous value to the EAS system



in terms of coverage and outreach thematically as well as geographically in addressing diverse needs of the producers. However, coordination between diverse providers of EAS often remains a prominent challenge.

Modern, pluralistic EAS include both public and private advisors and advisory organizations, producer organizations (POs), research institutions, academia, NGOs, input suppliers, agri-entrepreneurs and lead farmers etc., who provide information, knowledge and services, and facilitate innovation in areas related to crop production, livestock, aquaculture, forest management, fisheries, biodiversity, climate, nutrition, production standards, soil and seed quality, pest and disaster risk management, farm management, mechanization, marketing, entrepreneurship, digitalization, and agrifood related areas. However, despite the rich variety of services often offered, the above-mentioned problem of limited coordination among multiple stakeholders, prevalent in most countries, may leave gaps in service delivery and coverage, thus occasionally jeopardizing the effectiveness and inclusiveness of the whole system.

Despite these issues and the trend of low investment in EAS, policy makers around the world increasingly realize the importance of EAS in achieving the SDGs and have thus called for reform of their EAS towards a well-coordinated, demand-driven and market-oriented system (IFPRI, 2021). However, very little information is available on the enabling environment, performance and outcomes required to effectively target investments and realign policies for strengthening EAS. A comprehensive assessment of national systems has thus become a necessary precondition to strengthening EAS.

In line with its mandate, FAO's Research and Extension Unit has developed this guide for comprehensive assessment of national EAS systems, designed to generate evidence for informed policy and investment decisions through the identification of gaps and entry points for improving and reforming EAS, and thus provide recommendations for systemic change. This EAS assessment provides a comprehensive overview of national EAS in the context of pluralistic systems: with services provided by various actors (public, private, NGO, and so on) on a broad set of topics such as production, marketing, logistics, organization of groups, the facilitation of linkages, nutrition, and livelihoods in general. As the outputs of this EAS assessment methodology are mostly qualitative, FAO's Research and Extension Unit has developed an indicator framework (Sulaiman V, R. *et al.*, 2022) to complement this information with metrics,¹ together with the EAS- Yardstick (EAS-Y) scoring tool to provide a numeric illustration of the performance and outcomes of EAS systems. Together with the indicator framework, EAS-Y scoring tool and comprehensive EAS assessment methodology, we hope to generate a more nuanced assessment of

¹ A set of numbers that provides information about a particular process or activity.

A decorative blue header bar at the top of the page contains a series of white icons. From left to right, the icons include a magnifying glass, a document with a checkmark, a person, a gear, a document with a checkmark, a person, a gear, a document with a checkmark, a person, a gear, a document with a checkmark, a person, a gear, a document with a checkmark, and a person.

EAS systems that uses concrete evidence to inform policy making, advocacy, decision-making, and investment plans, and thus reflects the complex reality of EAS systems.

This guide is organized as follows: Section 2 below starts with the rationale for the assessment of EAS, outlines the assessment objectives and target audience of this guide and discusses its unique features. The assessment framework, including any operational considerations involved in implementation, are presented in Section 3. Detailed discussion of the three proposed steps of the assessment methodology is provided in Section 4, while Section 5 offers a brief conclusion.

2

Rationale for the assessment

Amid a resurgence of interest, many countries are currently undertaking reforms in their national EAS, also taking into consideration the increasingly pluralistic nature of the services. To be successful, the reform process should ideally be guided by an appropriate and comprehensive assessment that analyses the national EAS system from a multidimensional and interdisciplinary perspective. This is crucial for making informed policy and investment decisions designed to strengthen or reform EAS.

Other reasons that may drive national EAS reform processes and thereby also benefit from comprehensive assessment include:

- the ongoing general transformation of AIS, of which EAS are an integral part;
- policy or regulatory changes in the agricultural sector affecting EAS;
- development projects in food and agriculture with a focus on strengthening the EAS system;
- assessment and strengthening of national farmer support systems to facilitate multi-stakeholder collaboration (UNDP, 2020); and
- the need for concrete evidence related to performance on country indicators of the SDGs, especially where EAS are contributing, in particular SDG 1 (No Poverty), 2 (Zero Hunger), 5 (Gender Equality), 10 (Reduced Inequalities) and 13 (Climate Action).

Assessment is the process of collecting, reviewing and using data (both qualitative and quantitative) for the purpose of appraising a project, programme or system, which includes identifying potential areas for ongoing improvement. Conducted appropriately, it is a formative process (Surbhi, 2017; OECD, 1998). This guide proposes an assessment approach which facilitates a collective learning and improvement process which empowers the stakeholders through their participation.



2.1 Objective

This assessment guide illustrates a methodology to promote evidence-based and informed decision-making through a comprehensive national EAS assessment with the overall objective to improve national EAS. While the assessment can be conducted for various purposes, three aspirational objectives have driven the development of this guide:

- To support evidence-based and informed policy and investment decision-making for strengthening EAS and to assist decision-makers in gaining an in-depth understanding of the current status, performance, progress, and gaps of the EAS system, while providing the support needed to enhance its effectiveness.
- To inform, reform or plan actions to facilitate and guide successfully the transition of EAS to a market-oriented, demand-driven and better coordinated system that contributes effectively to the national AIS and thus supports progress towards national agricultural and rural development, improved food and nutrition security and ultimately the achievement of the SDGs.
- To strengthen capacities at country level for assessing the national EAS system through a participatory and country-owned process, which actively involves key stakeholders in order to foster collective learning and capacity development.

2.2 Target audience

This guide is designed to assist primarily:

- **policy and investment decision makers** to plan the transformative reform process, realign priorities and better target investments, policy and capacity development efforts;
- **development agencies, international financial institutions, donors and investors**, to design, implement, and evaluate projects and programmes related to the agriculture and food sector which involve EAS;
- **national EAS actors** including public extension, producer organizations, private advisors, and so on to identify capacity needs and gaps in service delivery in order to strengthen service provision and increase impact;
- **designated national experts, managers and practitioners of EAS** (both state and non-state actors), who will conduct and adapt the assessment process at country level.

2.3 What is unique about this guide?

Several methodologies exist to assess EAS. Initially the focus was on collecting data on extension through worldwide surveys. These include surveys by the University of Illinois in 1975 and 1980 (Swanson and Rassi, 1981), FAO in 1988-1989, the International Food Policy Research Institute (IFPRI) and the Global Forum for Rural Advisory Services (GFRAS) in 2009-2012 (Swanson and Davis, 2014). However, no narrative reports have been produced to accompany and contextualize the analysis of the data collected over the years (Davis and Alex, 2020). Most efforts focused on collecting data on extension staff numbers and qualifications from public sector extension organizations and treated EAS as a mechanism to disseminate new technologies. Moreover, they tended to prioritize production-oriented outcomes and impacts, and ignored social and environmental variables.

The GFRAS study in 2012 (Worldwide Extension Study) collected information on pluralistic extension services, especially data on human and financial resources, clients served and primary methods used (Swanson and Davis, 2014). While data from these studies allowed for some comparison across countries, a common framework to enable cross-country comparison has been lacking. In general, very few national level diagnostic assessments have been produced, and many of them have focused on the evaluation of specific extension projects or approaches such as the training and visit (T&V) system or farmer field schools (FFS) rather than examining whole EAS systems at country or regional (sub-national) levels. The numerous qualitative studies on EAS have often been *ad hoc* individual case studies (GFRAS, 2012) looking at part of the system or the results of specific interventions (Sulaiman and Reddy, 2014) and/or project outcomes (Davis *et al.*, 2012).

In 2005, FAO developed a framework to review the present rural and agricultural extension systems of developing countries, with the principal objective of reforming them on the basis of the many normative principles and lessons that have been drawn from worldwide extension experiences and observations (Qamar, 2005). This was followed by a World Bank publication illustrating procedures for assessing, transforming and evaluating extension systems (Swanson and Rajalahti, 2010). The publication also outlined some of the basic data required in order to identify and assess key policy issues, as well as resource and institutional constraints, within existing extension organizations. In 2009, Birner *et al.* published their framework for analysing and designing pluralistic extension systems. This “best fit” framework articulated the need to examine three main design elements of EAS namely, governance structure, capacity and management and advisory methods – which was in turn further refined by Faure *et al.* in 2016. The Developing Local Extension Capacities (DLEC) programme used the “best fit” framework as adapted by



Faure *et al.* (2016) to appraise the pluralistic extension systems of ten countries using a combination of desk reviews, in-depth interviews, surveys and site visits (Davis and Franzel, 2018).

This guide builds on existing efforts while offering a unique and innovative approach which aims to overcome the current shortcomings in assessing EAS systems at the national level through the use of complementary qualitative and quantitative approaches. The added value of this guide is that it explicitly includes the new EAS functions, mechanisms, and actors, as well as broader outcomes of the system as a whole.

Systems perspective – The guide looks at EAS as a pluralistic system in its totality, examining its collective capacity and performance, including the overall governance and relationships among different actors involved in EAS delivery (public, private, NGO and producer organizations, and so on) that together contribute to broader outcomes and development goals. The guide also carefully analyses interactions both among EAS actors and with other players in the agrifood system and broader AIS within the existing enabling environment in which they operate. Such a systems perspective approach to the comprehensive assessment of EAS has often been lacking.

Furthermore, this guide looks at how EAS depend on and add value to other players in the AIS and agrifood system (for instance, providing feedback to researchers, ensuring sustainability of food production, addressing policy concerns, human capital development, among others). It thus takes into account the perspectives of other actors in the AIS, their perceptions of EAS performance, the response to their demands and the nature of collaboration between them and EAS actors. This is particularly important considering that innovation and the new challenges in agriculture require collaboration among different actors in the diverse domains of the agrifood system (Hall *et al.*, 2003; Leeuwis and Van den Ban, 2004; Klerkx, Van Mierlo and Leeuwis., 2012; Faure *et al.*, 2016; Sulaiman and Davis, 2012; Blum, Cofini and Sulaiman, 2020).

Considering intangible, abstract and qualitative outcomes – Many assessments focus on the ‘quantifiable’ and tangible results of extension, such as numbers of people trained, technology adoption, yield increases, or compare the costs of interventions with the benefits brought by new technologies (Faure *et al.*, 2016). However, when it comes to the desired long-term impacts of extension, such as sustained yield increases, it is very difficult to directly attribute such impacts to extension (Birner *et al.*, 2009; Feder Willett and Zijp, 2001). Such impacts depend on numerous exogenous factors, such as meteorological events, timely access and application of inputs and credit, agroecological conditions, and so on. Placing emphasis solely on the attribution of tangible impacts such as technology adoption or yields to extension can thus be misleading.



A paradigm shift is needed with regard to how EAS are assessed and their performance measured. While quantitative measurements are important, at times they can be misleading as they fail to capture the role of extension and advisory services in building human and social capital. EAS providers are often the closest and most trusted institutional partners to smallholders and family farmers, and thus play a critical role in guiding and empowering rural producers. The “real impact” of extension lies primarily in the way it influences how producers behave, their attitudes and mindsets toward change, and their capacity to proactively look for solutions to improve their farming and livelihoods, which can lead to a chain of socio-economic impacts. However, measuring such changes in human and social capital is not easy and is thus often omitted. Although changes in farmers’ capacities should be considered a major outcome of EAS according to Faure *et al.* (2016), this important aspect is hardly ever evaluated as policy makers and donors are often more interested in the quantifiable improvement of livelihoods than in improving farmers’ capacities. This EAS assessment guide aims to capture these intangible and qualitative yet vital elements of EAS in relation to the social and human capital development of rural producers and communities (Knook *et al.*, 2018).

Unique entry point to assessment focusing on client experience – Many assessment methodologies applied until now begin by mapping actors and relevant stakeholders. However, smallholders and family farmers seek support, information and services through a number of formal and informal mechanisms and pathways based on their accessibility, affordability, availability, and relevance. On the surface, it is not always clear what the main support and services needed are and who is providing them. Starting an assessment with the typical question – *Who are the EAS stakeholders?* – to identify key actors may thus run the risk of overlooking those actors who are not traditionally perceived as EAS providers, especially in the context of pluralistic service provision, where services may be provided by farmers themselves, input dealers, agribusiness companies, self-help groups, cooperatives, producer organizations, universities, research institutes, NGOs, donor-funded projects, private consultants, and social entrepreneurs.

This guide thus proposes a methodology whereby the assessment identifies key functions and types of services already provided to, and still required by, producers and other EAS clients to overcome the challenges they face. The assessment starts by obtaining the perspective of producers and other EAS clients on their primary sources of information and advice, the nature of their providers, the perceived quality of services they receive and the advice and information they still lack. This new entry point helps identify the true sources of EAS and also the further functions needed and solicited by EAS clients. Later in the assessment process, the relevant actors are then mapped out based on information received from EAS clients, and a select number of key EAS provider organizations are assessed in greater detail. Moreover, gaps can be identified early on in the process by



obtaining the clients' perspective on EAS services that are needed but have not yet been provided. This approach not only identifies gaps in service provision but also helps pinpoint those actors whose roles are often not recognized in traditional stakeholder mapping.

Flexible and adaptive methodology with core principles – Context matters. EAS can vary in terms of model, approach, and structure (Davis and Heemskerk, 2012; Davis and Sulaiman, 2016; Blum, Cofini and Sulaiman, 2020) due to the diversity of contexts such as varying farm types, socio-economic status of clients, the rural infrastructure and more. This is not a case of “one size fits all”. The assessment of such diverse systems must therefore be flexible and adaptable. This guide identifies a set of core principles to guide the assessment process, while providing a flexible approach to the heterogeneous contexts in which EAS operate.

2.4 Expected output of the assessment

The overall objective of the assessment, as indicated in Section 2.1., is to document the current status of the national EAS system in the context of a pluralistic, market-oriented and demand-driven EAS system, and generate evidence on the functions and performance of the system. This is a decision support tool for evidence-based and informed investments, policies, and reform plans to strengthen EAS and enhance their capacity, in order to unleash the innovation potential of rural producers, make the agricultural sector more sustainable and reduce rural poverty.

Expected outputs of the assessment include:

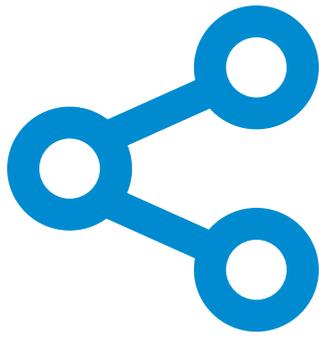
- A comprehensive overview of the current status of the national EAS system with both qualitative and quantitative data on their characteristics, performance and capacity.
- A set of recommendations and entry points for strengthening and reforming the national EAS system.

Depending on the specific needs and demands of each country, the EAS assessment can be carried out to benchmark/set a baseline and/or identify actions and entry points for reform planning, investment decisions and policy decision-making.

2.5 Risks and limitations

As EAS systems are diverse and complex by nature, their assessment can be quite challenging. Due to the complexity and associated challenges, few attempts to systematically assess EAS have been made in the past. This guide endeavours to embrace all of these challenges and adopts a comprehensive approach to addressing them through the multi-dimensional assessment process of a national EAS system, in the context of pluralistic, market-oriented and demand-driven EAS. However, like any other tools and approaches, this guide is also subject to certain limitations and risks:

- Country ownership of the process is key. However, ensuring the full engagement of actors in the assessment processes (data collection) may be challenging due to questions of workload, lack of interest or reluctance to undertake unpaid assignments. It is thus important to foster their commitment through incentives and identify different ways to involve national actors (advisory roles).
- The availability of accurate and reliable data and information is one of the biggest limitations. Decentralization may pose some challenges in data collection, as information and data are often no longer channelled through one central agency but through multiple local entities with no clear ownership or data standards (ALINE, 2019). Systemic data on EAS are unavailable in most cases. Data must thus be gathered at organizational level, which risks a lack of transparency and distortion of information for multiple reasons including cultural, political, and financial.
- Cultural norms, government restrictions (for example due to the global COVID-19 pandemic) or security situations may cause potential limitations or delays in data collection. Adaptation and sensitivity to the local context are critical and should be considered from the outset, during the preparation phase.
- Finally, the lack of capacity at country level to carry out assessments is one of the major risks in many countries. Preparing a team of people (for example representatives of key actors) and providing relevant training on the assessment methodology will enhance the assessment process and results.



3

Structure and process

As stated at the outset, this guide aims to capture the status of the EAS system in a given country and offers a flexible methodology based on a set of core principles, in tandem with advice and tools to be tailored to the country context.

The core principles for developing national ownership and ensuring quality results are as follows:

- analysis of EAS in the broader context of the AIS;
- alignment with national goals and priorities for the agriculture and food sector and rural development;
- national leadership of the process to create trust and ensure ownership of results by the national government and other stakeholders;
- involvement of relevant actors through multi-stakeholder, inclusive and participatory processes and approaches;
- use of a formative, flexible and non-judgmental approach conducive to learning and improvement; and
- regular iterative reflection and learning during the entire process and cross-checking of information with diverse sources and stakeholders to capture different perspectives.

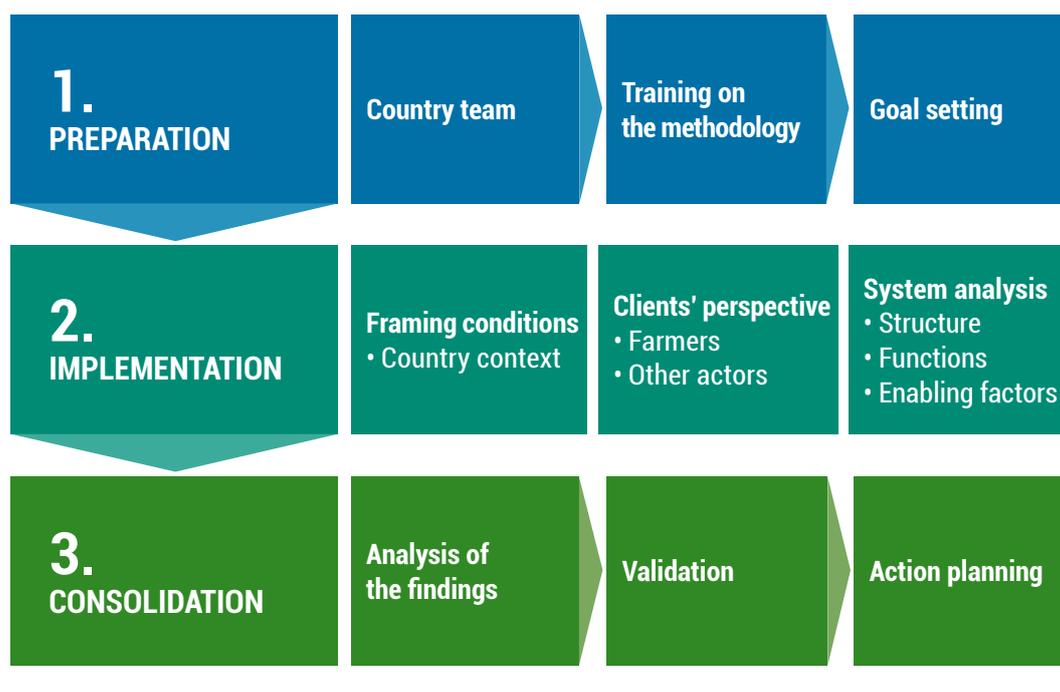
The assessment framework and methodology is not a prescriptive “one-size-fits-all” approach to be followed in a lockstep manner, but offers a range of tools and methods that are adaptable to different contexts enabling decision makers in different countries to design their own assessment plans according to their goals and needs.

3.1 Assessment framework

The assessment framework consists of three phases:

1. **Preparation:** whereby the basis for galvanizing country ownership is established through the formation of a country assessment team and/or advisory group, the definition of the scope of the assessment, and the identification of the country priorities for the agrifood system against which the EAS are to be assessed.
2. **Implementation:** whereby the actual assessment takes place through a variety of means such as key informant interviews, stakeholder engagement meetings, secondary review of existing information and policies, and more. This phase has three components that address different dimensions of the system properties and performance:
 - a. the macro-level country context and its implications for EAS;
 - b. clients' perspectives on EAS and performance in relation to their demands; and
 - c. system properties and analysis, including the structural, functional, and enabling environment.
3. **Consolidation:** whereby the findings are analyzed from a systems perspective and consolidated holistically into the assessment report to be validated by key stakeholders and disseminated widely. It generates set of recommendations to strengthen the national EAS system.

FIGURE 1. Comprehensive EAS assessment framework



3.2 Operational considerations

While the EAS assessment framework (Figure 1) provides a logical order for the assessment process, with the three main phases generally following a set sequence, some components of the implementation and consolidation phases may take place in parallel without a prescribed order. In this way, the guide offers a flexible approach which can be adapted at country level based on the national context and other practical and operational considerations.

The EAS assessment guide has been pilot-tested in six countries: Ecuador, India (state of Odisha), Madagascar, Tunisia, Uganda and Ukraine. Moreover, the methodology has been applied or is currently being applied in five further countries (Azerbaijan, Kyrgyzstan, Liberia, Tajikistan and Uzbekistan). The lessons learned from the six countries where the pilot-testing took place are integrated in the guide.

In Section 4 of this guide, each component is further elaborated with concepts, rationale, checklist(s) of the key aspects, recommended tool(s) for data collection, and tips for analysis. Furthermore, the Annexes provide useful tabular tools which can be used to gather, analyze and present the key findings. They also contain examples of outlines/templates for semi-structured interviews and focus group discussions with different stakeholders. These are not prescriptive but designed to help steer the discussion – the proposed questions should be adapted to the context and scope of the assessment.

Duration of assessment: On average, the assessment process takes approximately 3–6 months (depending on the country size, agroclimatic diversity, level of diversification of the agricultural sector, scope of the assessment and resources available). This estimate is based on cases where 1–2 paid experts facilitated the process, supported by a 4–8 person country team (representatives of different stakeholders) that provided advice on a voluntary basis. Table 1 outlines an indicative plan of key milestones to illustrate the recommended sequence and estimated duration of activities. This should be adapted to a country context and scope of the assessment.

TABLE 1. Example timeline for conducting the EAS assessment

Activity	1st month	2nd month	3rd month	4th month	5th month
Recruit consultants					
Galvanize support of national stakeholders and the government					
Establish country team					
Provide training on the methodology					
Hold initial stakeholder workshop					
Collect data					
Conduct iterative reflection and data analysis					
Prepare the assessment report					
Validate results and recommendations					
Adjust and finalize report after validation					
Disseminate results and recommendations					

Budget: The size of budget needed to carry out the assessment will vary by country, depending on the coverage, level of diversification, geography, and scope of the study. But in each context, the following items (among others) should be adequately resourced in order to ensure completion of quality assessment:

- dedicated national expert(s) working full time (1–2); and if necessary, an external expert to provide technical support and further guidance and coaching;
- training for the country assessment team (one training at the beginning: 2–3 days in person or 4–5 half-days virtually);
- multi-stakeholder workshops (at least two: one at the beginning and another at the end);
- a few smaller stakeholder consultations at local level and focus group discussions for data collection (number will depend on the scope and context of the assessment);
- field visits (at least two, depending on the country context and scope of the study); and
- in some cases, allowances and reward for members of the country team and enumerators (in case of large-scale surveys).

4

The assessment process

4.1 Preparation phase: creating national ownership and priority setting

FIGURE 2. Overview of the preparation phase



The preparation phase cements the foundation for the assessment: creating country ownership, establishing a national team, identifying the scope and priorities for the assessment and developing capacity at country level to carry out the assessment. The assessment can be conducted in the context of a project or programme, government reform processes, and/or a study. In all cases, it is critically important that government and EAS actors are committed and actively involved in the process from the preparation to the implementation and consolidation phases.

The assessment should not be seen as an external evaluation. Building trust and developing a common purpose for assessment are essential for creating ownership and engagement among the government and other national stakeholders (both state and non-state) through increased relevance. This will also facilitate endorsement of the assessment findings and good use of the results into concrete actions. Moreover, national leadership and participation will also result in strengthened capacities for undertaking such assessments in the future and increase the possibility of integrating the



assessment into regular national EAS system performance measurement mechanisms and monitoring, evaluation and learning (MEL).

The role of EAS can vary depending on the country context, agrifood sector priorities, and different mechanisms in place, as well as demand from rural producers. Identifying the scope and objectives of the assessment in line with national priorities is therefore important and should involve consultation with the government and relevant stakeholders. This will foster national commitment and stakeholder engagement in the process, not only increasing the relevance of the findings, but also facilitating the more efficient use of available resources.

EXPECTED OUTPUTS

National commitment and ownership of the assessment are generated by gaining support and active engagement of key stakeholders, including decision-makers. The specific outputs of the preparation phase include:

- a. EAS decision makers express support for participation in the initiative (through the formal nomination of a focal point, participation in the advisory team and/or other meetings, and so on);
- b. a trained national assessment team is put in place with well-defined roles and agreed terms of work, timeline and resources for completing the assessment; and
- c. the identified scope and objective of the assessment are aligned with national goals and priorities.

4.1.1 Ensuring national ownership by setting up a country team

The process must be driven by key stakeholders in the country where the assessment is conducted. It is therefore key to involve them from the beginning. As the country team is responsible for the implementation and results of the assessment, the selection of the team members is critical. In this regard, higher managers and decision makers play a key role in facilitating the process of identifying and nominating the right candidates for the country assessment team. The country team should include representatives from key national stakeholders (and not only hired consultants) such as:

- public extension agency/department/Ministry of Agriculture (MoA);
- main producer organization(s) at national level;
- main private sector actor(s) engaged in EAS; and
- main NGOs/donor-funded projects engaged in EAS.

Ideally, country team members have strong expertise in EAS as well as skills related to data collection, qualitative and quantitative data analysis, and evaluation methods. Depending on the situation, purpose, mechanisms in place and available time and resources, each country team may be set up differently, play different roles and participate in the assessment process to a different extent. Country teams can adopt one of two formats:

- *Operational team*: leading data collection processes and operational activities such as field trips, interviews, analysis and writing of the report. The team should include 1-2 paid expert(s) to lead the process.
- *Operational and advisory team*: as above but with the addition of an advisory team involved to a limited extent in the implementation phase. The latter provides guidance and supervision to the operational team, which should update them regularly.

In all cases, it is preferable to work with existing mechanisms such as committees, task forces, country forums, or panels related to agriculture, or EAS.

Observations from field testing and implementation:

The assessment processes in India (Odisha), Uganda and Ecuador highlighted the critical value of having advisory groups that represent a wide range of stakeholders. This enabled national/sub-national dialogues on EAS at the highest-level involving decision makers, promoted buy-in among key national actors, assisted in defining the assessment scope, facilitated the identification of relevant stakeholders and helped in the organization of national workshops.

In all three countries, some resources were needed in addition to the operational cost to facilitate participation of the country teams such as honorariums or some other form of compensation for their time.



Tips for establishing the country team:

- While the guide recommends a team approach, it is beneficial to designate a team leader who is highly engaged and coordinates the process.
- Supervisors/employers of the operational team members must be informed and agree to authorize the delegation of their staff to the assessment.
- Country team size can vary depending on the context, degree of involvement, size of country and scope of assessment. If there are 1–2 full time paid expert(s) at the national level, an additional 3–5 members might be required to undertake the assessment in a country the size of Ecuador, for example.
- The advisory team may take different forms, but should be an inclusive group representing all relevant stakeholders, including organizations representing producers, women, minorities, and so on.

4.1.2 Capacity of the country team

The capacity of the country operational team to carry out the assessment and their ability to achieve expected outputs is fundamental. The country teams – both operational and advisory – need to develop a good understanding of the assessment approaches and the rationale from both a conceptual and methodological point of view.

Although this guide provides a framework, outline, steps and tools to use in designing and implementing the assessment, ensuring necessary capacity is present within the assessment team at country level is the first step for successful implementation. Including capacity development activities such as the training of country teams on assessment methodology in the initial design stage is thus advised.

The duration of such a training may vary from 2–5 days, depending on the capacities of the team and the mode of delivery (for example virtual training might take longer than in-person workshops). It can be conducted by an EAS expert who is familiar with the methodology and has used it in various contexts.

The training should consist of both conceptual and practical elements of the assessment, including:

- EAS global trends, approaches, diversity of service providers and service provision;
- assessment framework and the importance of the building blocks and components;
- methodology: data collection and related tools including logic and key steps;
- data analysis and interpretation and related tools; and
- report writing and the communication of results.

To capture all the nuances of EAS, the training should include a focus on how to appropriately ask questions and interview respondents, to ensure the assessment covers services beyond traditional emphasis on increasing agricultural productivity and providers beyond the regular EAS actors. However, much of the learning will also happen “on the job” during the assessment process.



Tips for the training of the country team:

- Knowledge of the background of team members and their capacities prior to the training will help to tailor the training to their needs. A short online survey may be used for this.
 - Simulation of interviews, role play and focus group discussions are useful to familiarize team members with the nature and rationale of the key questions, along with ways of asking and eliciting relevant information in a neutral, unbiased way.
 - In case of large-scale surveys, it is also important to consider the time and resources needed to select and train technical personnel, such as enumerators etc.
-

4.1.3 Defining the scope aligned with overarching national priorities

Defining the scope of the assessment in line with country context, government priorities and stakeholders' demands – including rural producers – is essential to ensuring the relevancy of the assessment results to higher national goals. The design and scope of the EAS assessment will of course vary by country – the assessment process will look quite different for a small island developing country exposed to the effects of climate change versus a landlocked low-income country torn by conflict, or a middle-income country targeting export markets. It is therefore of the utmost importance to understand the country context, government priorities and demand for EAS. In this regard, a clear understanding of overarching national priorities will help identify where and how EAS can contribute.

The process of defining the scope for the assessment in alignment with national government priorities begins with the identification of these overarching priorities. This can be determined through a consultative discussion with the government and other key stakeholders. During this process, it is important to acknowledge and consider the different priorities of various stakeholders (for example those of the private sector, government or producer organizations). It is crucial to explore the views of different actors, including the most marginalized, in defining a common priority direction with which the assessment will be aligned. In cases where the EAS assessment is being implemented in the framework of a project, policy formulation process or a request from a donor, the overarching goal and priority for EAS assessment will be predetermined.

The following guiding questions may be helpful in defining an overarching national priority with which the EAS assessment can be aligned.

- What are the governmental/national priorities for the agricultural and rural development sector?
- What are needs and demands of rural producers?
- What are the needs and demands of various agricultural value chain stakeholders?
- Are there any particular requirements and/or priorities related to the country's situation, for example severe water scarcity or unstable political situation, which undermine trust and relations among the stakeholders?

The national priority can be defined through the following activities:

- Review relevant national policies and action plans for agricultural (and rural development) sector, food security, poverty reduction, and socio-economic development, and so on.
- Consult relevant government entities such as the Ministry of Agriculture (MoA), which develop and prioritize agrifood sector policies and strategies.

- 
- Consult other relevant actors in the agrifood system, rural producers, and EAS providers to understand their priorities and goals.
 - Review other relevant documents, grey literature, study reports, and so on if needed.

National EAS systems can be extremely complex and attempts to assess all parts of the system are unrealistic. Once the country team and the national priorities are identified, the scope of the assessment must be aligned with the identified priorities. This can be thematic (what to assess), geographic (where to assess), or in terms of feasibility (how much to assess). Thematically, it can define the sector(s) (for example organic horticulture, community forestry or small ruminant livestock). Geographically, it can identify coverage and areas to include in the assessment (for example districts and territories). In terms of feasibility, it is essential to determine how much can be assessed (e.g. how many field visits can be made, what resources are available, and so on). If available resources for the assessment are limited, the representativeness of the data may be compromised and the results may thus be misleading.

Unfortunately, the resources to carry out full, statistically representative assessments on country EAS systems are rarely available and it is likely that compromises will have to be made. In this case, it is important to pick either a region/district that is diverse enough to be more or less representative of the rest of the country, or a few districts with different agroecological and socio-economic features.

One of the important characteristics to consider in defining the scope of the assessment is *diversity* in terms of types of providers (for example state and non-state; formal and informal), types of services and topics covered, as well as among their clients – in particular producers, in terms of their size, age, gender, production practices, level of commercialization, and socio-economic background. The inclusion of youth, female producers, migrants or refugees, indigenous peoples and other vulnerable groups in the assessment is important.

4.2 Implementation phase

This is where data collection takes place and consists of the following three major components.

FIGURE 3. Overview of the implementation phase



Understanding the country context at the beginning of the assessment is vital. An appreciation of the clients' perspective before analysing the EAS system also helps to identify bottlenecks, gaps and tensions to be considered throughout the implementation phase. However, data collection for the three components and their subcomponents can sometimes take place simultaneously and findings can overlap as they are interdependent in many cases. For instance, interviews with EAS clients will certainly also address and include aspects of systems analysis (such as functions and services and identifying key EAS stakeholders) and may also inform EAS system framing conditions.

Indeed, essential information on the same topic may emerge from different sources and at various stages of the assessment. It is therefore important to also consider the following during the implementation phase of the assessment:

- *Document and cluster data*: by different topics/components as they come from desk reviews, interviews, stakeholder workshops, field observations and so on. The tables proposed in different sections of this guide can be helpful tools for this.
- *Reexamine important topics from different perspectives*: ask the same or similar questions and discuss the topics with different actors (for example public, private and NGO providers of EAS, agricultural research actors, other actors along the agricultural value chain) especially including the EAS clients' perspective.
- *Cross-cutting issues*: should be assessed and analysed in all components and subcomponents. This includes issues such as the role of gender and consideration and inclusion of other marginalized groups (the poor, minorities, and so on). Further cross-cutting issues will be context-dependent.

4.2.1 Framing conditions: understanding the country context

One of the first priorities is to gain an in-depth understanding of the country context. This includes its political and the regulatory framework influencing extension and the agricultural sector and agroecological conditions, the existing infrastructure, and the country's economic, social, cultural and demographic situation, especially in the rural areas.

Understanding the country's context and framing conditions under which EAS operate is key to identifying challenges and opportunities for the EAS system, as well as the functions required to effectively support rural producers and contribute to achieving national priorities. This step is therefore related to aligning the assessment to the national priorities described earlier.

EXPECTED OUTPUT

A descriptive analysis of the nature of the agriculture and food system, socio-economic situation, policy and regulatory framework, cultural norms, and supporting infrastructure of the country and how they influence the agriculture sector's performance and rural communities in general, as well as EAS.

Data collection approaches:

- review of secondary data sources published by the Ministry/Department of Statistics, MoA, Ministry of Planning or the National Planning Board, national agricultural economics /policy research centres, and so on;
- statistics and census data from national institutes and World Bank, FAO and (for statistics on ICTs) from the International Telecommunication Union (ITU) and similar;
- research reports, websites, studies conducted by international and national NGOs or institutes, POs, similar assessments or any other documents that shed light on the country context;
- key informant interviews; and
- direct observations and experience.

Detailed guidance (including guiding questions, potential indicators and more) on the information needed for the framing conditions in order to understand the country context is presented in Annex 1.

Much of this contextual information may not be directly related to extension but indeed influences EAS and shapes the conditions under which providers operate. For instance, levels of literacy and socio-cultural diversity and norms among the rural population

are vital aspects to consider with regard to appropriate extension methods, while the status of the road network has a pivotal impact on EAS delivery. In terms of policy and regulations, it is not only those directly related to agriculture that enable or constrain EAS performance and capacity.

For example:

- Education and vocational training are closely linked to EAS, and even overlap (for example when technical institutes or universities train farmers). Related policies/strategies will therefore have an important impact on EAS in terms of delivery, but also in terms of ensuring the adequate skill development opportunities for EAS providers and clients.
- Regulations concerning freedom of association may facilitate or constrain producers' organizational opportunities, thus impacting one of the most important EAS functions (mobilizing demand and empowering producers) and their clients' capacity to formulate their demands. Moreover, as POs often act as EAS providers, regulations in this regard may also have a direct impact on EAS delivery.

As mentioned earlier, all aspects of the country context, from agro-ecological conditions to the macro-economic situation and political stability, either indirectly or directly influence EAS. This exercise should therefore not be limited to a mere review of the country's characteristics but rather accompanied by an in-depth analysis of that influence – both on individual EAS stakeholders and the EAS system at large. However, while analysis should be thorough, this subcomponent of the assessment should not be overly detailed but rather serve to highlight the main country characteristics which influence EAS and their clients.

4.2.2 Assessing the clients' perspective

Although rural producers are seen as EAS partners and in some cases also as EAS providers (for example POs, farmer leaders), for the purposes of this guide they are referred to as 'clients'. This also extends to agrifood processors and other actors along agrifood chains who are primarily EAS users. The impact of EAS depends on the way they address clients' demands as well as the kind of relationships that EAS providers have with their clients. Assessment of clients' perspectives thus sets out to understand the main needs and demands of EAS clients, as well as their perceptions on EAS delivery.

Although this section is called "assessing the clients' perspective", most of the following sections will in effect also include this perspective, since this is not a stand-alone issue but rather involves a cross-cutting perspective on diverse aspects of the EAS system. Consequently, this section outlines ways of sampling clients and important considerations when interviewing them. Alongside this EAS assessment, in particular with regard to capturing the clients' perspective, we recommend use of the EAS-Y

scoring tool, (Module B of the scoring tool consists of an in depth EAS client survey,) if resources are available to do so (FAO, 2022).

Furthermore, the assessment should foster the active participation of clients in the assessment process – not only for data collection purposes, but also so that their inputs may influence the process. This should be considered when selecting issues/areas to assess and the assessment process can be adapted accordingly if required. This would also highlight the accountability of the assessment for farmers and other EAS clients.

EXPECTED OUTPUTS

- a. Map of the clients' characteristics, their needs and demands;
- b. description of the clients' perspective on the effect of EAS on their production, market access, and income; and
- c. description of the clients' perspective of the impact of EAS on their technical and functional capacities, including behaviour and mindset change.

PROCESS

Selecting primary client samples

Rural producers are heterogeneous in terms of farm size, production type, socio-economic status and so on. It is often easier to reach members of POs, those who are richer and/or have a higher education, better social status or live closer to urban centres. By contrast, the most disadvantaged community members such as women, youth, minorities, the poor, landless and the disabled are usually the hardest to reach, but it is nevertheless essential to include their perspective.

When sampling, it is crucial to include:

- different geographical areas and agroecological zones;
- different production systems (staple crops, livestock, fisheries, agroforestry and so on) and type of enterprises (food production, processing);
- different socio-economic backgrounds;
- ethnic/religious/national status;
- equal representation of men and women;
- young and older farmers;
- farm size (small-medium-large holders);
- the landless; and
- those in proximity to urban centres as well as those in remote areas.

**Tips for selecting a sample of EAS clients:**

- It is essential to start with an analysis of the socio-economic and cultural fabric of the context under assessment. This information can be gleaned through a review of country frame conditions.
 - When using intermediaries (such as a PO or other service provider) in the selection of producers and other EAS clients, avoid potential risk of selecting the best performing individual, who is not necessarily representative or has an interest in giving only positive feedback on the EAS provider(s).
 - It is also important to interview those who are not or barely reached by public extension or any kind of EAS providers. This will shed light on the limitations of EAS coverage.
-

Data collection approaches:

Depending on the size of the sample and its geographical dispersion, as well as on the time and resources available, information can be gathered through surveys, FGDs, semi-structured interviews, and so on.

Bear in mind that the diversity of rural producers and existing inequalities among them often translate into unequal power dynamics within a community and thus within any group invited to a workshop, interview or focus group discussion (FGD). More vulnerable groups and individuals may either not attend the interview; their voices might be drowned out by more outspoken interviewees or stifled by their fear of describing their problems in front of others. Efforts should thus be made, where possible, to work around these issues, for example by facilitating separate FGDs or interviews with more marginalized groups or individuals to ensure that their perspectives are captured. As mentioned earlier, the client perspective is included throughout almost all blocks of the assessment. This is therefore not a stand-alone block but an exercise offering up key insights on multiple aspects of the system, clients and providers. See Annex 2 for a selection of guiding questions and considerations to support assessment of the clients' perspective.

Once data have been collected, the information must be disaggregated by gender, age, income/farm size, sector, geographic areas, ethnic/religious minority and so on to capture the differences in perceptions, needs between diverse groups.

It is also important to take note of the general situation:

- the main agroecological characteristics of the area;
- main agricultural activities;
- prevailing wealth/farm size status;
- demographic composition in the area/community;
- literacy levels; and
- access to markets and motorable roads, electricity, IT infrastructure.



Tips for conducting the FGDs/interviews/workshops:

- Create conditions in which everyone can speak freely. This may imply:
 - separate groups or interviews for different gender/ethnic, religious, age groups, ideally avoiding the presence of technicians, extensionists, PO leaders or others who may have an influence on how interviewees respond;
 - the use of tailored means of communication, for example in local languages and using visuals (drawings), making language easy to understand and avoiding technical terms and jargon;
 - a skilled facilitator able to manage group dynamics and ensure equal participation.
 - Explain the aim of the assessment and this particular exercise. Explain the process and how the findings will be used, that they are confidential and that sharing information will not harm the participants. Inform interviewees/participants that the answers they provide will influence the assessment's next steps.
 - The questions proposed in the checklist in Annex 2 represent a checklist of information to gather. It is important to use open-ended questions to stimulate the discussion and obtain more input.
 - Using concrete examples or real-life scenarios is useful to better illustrate your question. For example, instead of asking: *What is the decision-making process in your cooperative/household?* Instead ask: *who decides when and what inputs to buy?*
-

Integrating a gender-sensitive approach

Gender and socio-economic status are very important factors determining EAS access and relevance; therefore crucial to consider during assessment. Rural women have very specific needs and challenges but are often disadvantaged in this respect. This is due to a variety of factors.

- Social norms which often prevent women from interacting with male EAS workers (coupled with the issue of too few female workers) or travelling alone to the location of a training or meeting hosted by EAS providers, in some countries.
- A common perception that EAS provided to a male member of a household (often the household head) will also be shared with and benefit the women in the household. However, this is often not the case. One of the reasons is gender-based division of labour: women are often engaged in different activities than men, and the advice received by their husbands, brothers and so on may be simply not relevant to them.
- Women are often excluded from interactions with EAS, they cannot express their needs and ask for specific advice that are more relevant to their tasks and responsibilities.
- Women usually engage in farm work in addition to being in charge of household work, and are thus typically more time-poor than men. The timing and location of training and other EAS offerings are often difficult for women to accommodate. Thus they

may face significant logistical barriers in accessing EAS (lack of transport or care facilities for children, and so on).

- EAS materials are often gender-blind and fail to take women's diverse roles, issues and demands into consideration. Women often have lower literacy levels and greater difficulty accessing ICT, although this is seldom factored into the design of EAS materials.
- Rural women also have more difficulties in accessing finance, rendering certain technologies/inputs beyond their reach. Similarly, they often have little or no access to land and consequently engage in agricultural activities which are not land-intensive. But EAS adapted to these specific needs (for example on land tenure or off-farm activities) are often absent.
- Heterogeneity within women must not be ignored.



Tips for gaining women's perspectives in the assessment:

- To obtain insights into women's situations, they need to be specifically invited and able to come to the interview (location, timing, transport).
- Women-only discussion groups may need to be organized and have a female facilitator.

For more information please see:

- 1) The Gender and Rural Advisory Services Assessment Tool (Petrics *et al.*, 2018)
 - 2) Gender in Extension and Advisory Services: Issues around gender in rural livelihoods: Module 12, The New Extensionist Learning Kit [GFRAS] (Sullivan and Russo, 2016)
-

4.2.3 Systems analysis

Adopting a systems perspective is crucial to the assessment of EAS, as EAS actors must not be seen as a set of individual unrelated elements but rather as a system with a collective capacity. This is particularly important if we consider that EAS need to deliver numerous services, which cannot be accommodated by one single provider but rather require the collective and diversified capacity of the whole EAS system.

Taking a systems approach means assessing:

- functions/services: comprehensive approach to what are the required functions to address challenges to improve productivity, access to input and output markets, and improve food security and livelihoods;
- the EAS system structure with its multiple actors, linkages and interactions; and
- factors which enable the system to work effectively as a whole, especially the mechanisms for coordination, investments and the role of supporting institutions.

FIGURE 4. EAS systems analysis

SYSTEM ANALYSIS		
FUNCTIONS	STRUCTURE	ENABLING FACTORS
<ul style="list-style-type: none"> • Various functions and services • Delivery methods • Individual skills 	<ul style="list-style-type: none"> • Diverse service providers • Linkages and collaboration • Human resources 	<ul style="list-style-type: none"> • Governance • Coordination • Funding and investments • Support institutions

While this analysis adopts a holistic systems approach, information about individual elements of the system (single providers and their functions, capacities and so on) is important to understand diversity among actors in the system.

Suggested tools for use during systems analysis:

Two potentially very useful analytical tools which can be used during multiple stages of the assessment are SWOT analysis and problem trees. These simple and easy-to-use tools can assist the assessment team and the EAS stakeholder participants in a workshop or FGD to structure their thinking around relevant issues. The resources listed below provide guidelines on how to use these tools.

- 1) Capacity-focused Problem Tree – Tool Factsheet (TAP, 2017)
- 2) SWOT analysis tool in FAO’s Learning Module on *Organization Analysis and Development* (p. 132, Rocchigiani and Herbel, 2013)

4.2.3.1 Functions

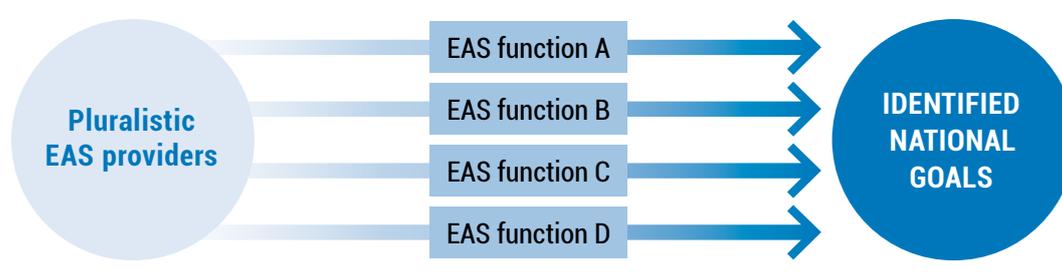
The modern challenges faced by the agricultural sector and global trends require EAS to assume a wide range of new roles and provide new services to effectively support rural producers in overcoming these challenges and adapting innovatively to changing conditions. These functions are numerous and relate to diverse topics, such as empowering producers, linking them to markets, supporting climate change adaptation, knowledge brokering, linking to other actors in the agrifood system, business skills development (see the detailed but by no means exhaustive list in Annex 3). It is of vital importance that the assessment analyses these diverse roles and services rather than only production-related advice.

While the exact definitions of “service”, “function”, “advice” differ, these terms are used interchangeably in this guide to refer to any service needed by the farming population and wider agricultural stakeholders. It is, however, important to keep in mind that services such as advice, training, information, problem-solving, advocacy, linking are “intangible”,

as opposed to “tangible” services such as inputs or credit provision (although the latter is often accompanied by advice).

As explained earlier, the required EAS functions may vary depending on the context of the country and its national goals. The assessment should thus identify the required EAS functions and their current levels and quality of provision, the advisory methods used and the existing and needed capacities to perform these needed functions. This will in turn shed light on whether and how EAS contribute to the achievement of national goals and to what extent they meet clients’ demands.

FIGURE 5. Identification of required EAS functions to achieve national goals



EXPECTED OUTPUTS

- a. Identification of services that are needed to effectively contribute to the achievement of the goals identified during the preparation phase;
- b. analysis of the services that are available (how, where, for whom) as well as missing or inadequate services/functions;
- c. overview of required and existing skills necessary for providers to deliver the needed services, as well as opportunities for capacity development; and
- d. in-depth analysis of the root causes of any gaps identified.

Data collection approaches:

- workshop with stakeholders to generate an initial idea of the required and available/lacking functions and services;
- interviews and FGD with various types of EAS stakeholders: experts, providers, as well as clients, to deepen the understanding of what is needed and available/lacking on the ground;
- identification of other important functions through the analysis of the identified goals and the country context;
- review of the mission statements of service provider organizations, as well as reports of their activities, together with the clients’ perspective;

- 
- participatory observations;
 - interviews with institutions/organizational departments providing trainings to EAS workers, as well as review of their curricula; and
 - organizational assessment for skills at different levels (field workers, middle and senior staff) of the assessed organizations.

PROCESS

The information about functions that are required and available or lacking, as well as the reasons for any gaps, will probably emerge in piecemeal form at different stages of the data collection.

Having identified the required functions and services, assessment of their availability is crucial. In many cases, the availability of services is not uniform for everyone or everywhere. Marketing services, for example, are sometimes only available for cash crops, while technical advice in the context of contract farming is often provided only in relation to the contracted crop. Moreover, some districts may have several NGOs providing multiple services, while other areas remain uncovered – this is usually due to a lack of coordination among providers, or some groups being ignored by service providers, for example women, or the poor if the service is only provided for a fee (or there are hidden costs), the illiterate or semi-literate, or those who speak only the local language.

The clients' perspective is thus of vital importance in this exercise and it is essential to interview different types of rural producers who may have had very different experiences with EAS, and to disaggregate the information obtained to capture these different perspectives. In some cases, this can also serve to cross-check provider claims against client realities. As shown by some assessments, the goals stated by providers do not always reflect the reality of many EAS clients. Here again, the use of FAO's EAS-Y scoring tool can serve to complement the data collected for this subcomponent of the assessment – in particular Module B of the tool which evaluates perceived EAS outcomes among clients.

This exercise will then be complemented by insights from other components of the assessment, including issues at systemic, organizational and individual levels, to explore the reasons for identified gaps and potential solutions. Are the services missing because providers do not have the right skills to perform them? If they lack the right skills, is it because the relevant training opportunities are lacking? Or is this service not considered important/profitable? The table provided in Annex 3 may be helpful in data collection as it provides a structured format for identifying services, providers and the clients served, as well as area of coverage.

A wide array of advisory methods exist for delivering EAS services. Every method has its own advantages and disadvantages. To address many of the new challenges and meet the special needs and interests of different producer groups, EAS need to use a broad range of such methods. This exercise is intended to assess the types of methods used. A table to provide some initial structure and ideas on data collection which providers use them, for which clients, and so on is provided in Annex 4.



Considerations and tips for identifying needed functions:

- Remind your interlocutors that the assessment includes services that are beyond traditional extension services focusing on production. Intangible services such as advice on finance, market information, logistical support, mobilizing producers into groups, and strengthening their soft skills.
- Use of ICT in EAS has great potential but is not a silver bullet. Inquire about how it is used, how the messages are packaged and tailored to different needs (vs. generic advice for all), whether providers have skills to use ICTs properly and whether some clients face difficulties in accessing ICT-based services because of the digital divide.

To fulfil the required functions – both those already being performed and those that are lacking – EAS providers need appropriate capacities and skills, including functional capacities, such as facilitating, networking, conflict management skills. Furthermore, technical knowledge has also evolved and EAS workers need to be up-to-date with the latest and most innovative climate-sensitive practices and ICT (see the detailed but by no means exhaustive list in Annex 5).

Unfortunately, many of these capacities are frequently unavailable since the EAS system and its actors are often not in a position (in terms of human and financial resources) to take on these new functions, or even to perform the existing ones adequately. One reason for this is the scarcity and/or irrelevance of available training opportunities, or a reluctance or lack of time and resources to assume new duties.

This assessment will provide key insights into the capacities needed for EAS providers to perform the required functions well, the overall level of existing capacities, and the constraints faced by EAS workers in acquiring and applying them.



Considerations for assessing individual skills:

- Provide a safe space to discuss: either through anonymous surveys or individual interviews with a guarantee of confidentiality and non-judgment.
 - Similarly, clients are unlikely to speak about the capacities of their providers in their presence, especially if they sometimes depend on them (for example providers from PO or contract farming). Here too, confidentiality is key.
-

GUIDING QUESTIONS FOR THE DATA COLLECTION

- What are the services/functions required and solicited by the various types of producers, as well as other actors in the agrifood system (please provide details on the specific services/functions)?
- What services are available? Where? For whom (agricultural sub-sectors, value chains, women, youth, those in remote locations, and other vulnerable groups)?
- How are they delivered and what are the advantages and disadvantages of different methods for different topics and clients (including ICT, FFS, gender-sensitive materials, demonstration, rural radio, group training)?
- How can various types of clients access different types of services? What, if any, are the eligibility criteria, costs, distance issues?
- How are services tailored to the needs of different producers? What is the perception of the services received (effective, adequate and satisfactory)?
- What are the most popular/requested services?
- Do the services offered yield results in terms of increased productivity, increased incomes and resilience, better natural resource management, strengthened capacities of producers?
- What are the challenges in providing these services?
- What are the strengths in terms of current service provision?
- What are the reasons for the various types of gaps in the service provision?
- What advisory methods are used to provide the varied services?
- What capacities are required to perform different functions well? (Including technical and functional role – see Annexes 3 and 5)
- What capacities are considered lacking or insufficient in EAS providers by the clients and providers (as well as other EAS stakeholders)?
- Are the capacities considered insufficient present but underdeveloped or simply absent?
- How does the perception of providers' capacities differ among different clients – value chain actor, commercial producers, small holders as well as women, youth, and so on?
- What are the relationships between different types of clients and providers (in terms of trust, being treated as equal)?
- What are the reasons for any capacity gaps?
- What training opportunities exist for different providers and types of staff? How are they aligned with identified needs and are these opportunities easily accessible? (See Annex 6)
- What mechanisms exist at national and organizational levels to assess the capacity gaps? Are clients or EAS providers asked to provide feedback on these? (See Annex 7)

4.2.3.2 Structure

The structure of the EAS system in any given country can be very complex, as understanding of what constitutes “extension” has evolved to include a broad set of advisory services, while new actors have also emerged within the EAS landscape. Indeed, extension and advisory services are nowadays performed by multiple actors who are often not directly associated with the traditional meaning of “extension.”

Those can be (but are not limited to):

- private sector companies: agribusinesses, agri-input dealers, and so on;
- private consultancy firms and individual consultants;
- companies using contract farming schemes;
- NGOs and civil society organizations (CSOs);
- donor-funded projects;
- universities and other educational institutes;
- research institutes, centres and demonstration sites;
- POs and cooperatives;
- lead farmers;
- community and self-help groups;
- church organizations;
- social entrepreneurs;
- social media pages/profiles and online platforms; and
- radio and TV programmes and many others.

In addition, a multitude of actors operates within the broader AIS, including actors with a double role – as both providers and clients of EAS at the same time. It is thus important to map out the roles and collaborations between diverse actors in EAS and in the broader agrifood system to better understand the bigger picture of complex interactions between actors.

Examples of interactions among EAS providers and other actors in the agrifood system to be considered

In some countries, EAS providers meet more or less regularly as part of the country forum promoted by the Global Forum for Rural Advisory Services (GFRAS) and its regional networks. Governments sometimes organize formal consultations among EAS providers, especially when a new policy or programme is to be launched. Collaboration between different EAS actors often happens informally at field level during events such as seminars or trainings and when key personnel know each other from previous interactions. The internet also provides a new platform for bi- or multilateral sharing.

This exchange can sometimes take the form of a service: in some countries NGOs are hired by the public and private sector to help mobilize farmers and/or with other activities in which they are specialized. Staff from different EAS providers may also attend capacity development programmes offered by other EAS providers as trainers or trainees. Meanwhile, other actors in the agrifood system depend on and benefit from EAS, for example researchers who get feedback from EAS providers on the applicability of their technologies, policy makers who need information on current issues in rural areas, market actors who need EAS to link them to producers and access agricultural products in high demand, and input dealers who obtain information on how to better respond to producers' demands and so on. In this way, some EAS providers and/or other actors in the agrifood system depend on and benefit from EAS as clients, in addition to the primary clients, who are producers.

EXPECTED OUTPUTS

- a. Overview of who performs different EAS functions, where and for whom;
- b. overview of linkages, interactions and incentives for collaboration (formal and informal) among EAS actors and with other actors in the agrifood system, and their effectiveness; and
- c. detailed organizational assessment of selected EAS providers.

PROCESS

Mapping EAS stakeholders

Traditional stakeholder mapping (*Who is doing what?*) may run the risk of leaving out those actors who usually are not associated with extension even though they provide *de facto* extension and advisory services to producers. It may also fail to accurately depict rural producers' behaviour when it comes to their seeking advice, which may often be through informal channels – thus missing an opportunity to tap into existing networks.

For this reason, the methodology proposed here does not begin with the typical question – *who are the EAS stakeholders in the country?* – as this could narrow the frame to include

only those actors normally associated with EAS. The first questions to ask are rather: *To whom/where do producers turn when they need advice? Who in the country is providing training/advice on business and entrepreneurship (and all other important topics)?* It will thus be possible to capture those who may otherwise fall through the cracks of traditional stakeholder mapping, including informal advisors and “anonymous” sources who provide information through the internet or social media.

Data collection approaches:

Answers to some of these questions might be available from reports of previous assessments or research studies (research papers, review reports, and so on). But for up-to-date and detailed information, further inquiries must also involve:

- managers of different departments of the Ministry of Agriculture and other relevant Ministries and research institutes;
- well-known extension providers (public and non-public);
- producers and their organizations and cooperatives;
- youth, women and indigenous peoples and other vulnerable groups and minorities, as well as their organizations;
- managers of international and local projects and NGOs relevant to EAS;
- known EAS experts; and
- representatives of major organizations providing inputs, credit, value chain services, and so on.

GUIDING QUESTIONS FOR THE DATA COLLECTION

- What are the most common sources of information, services and advice for various types of rural producers (including women, youth, the poor and other vulnerable groups)?
- What are the names/types of providers and different types of advice/services they offer?
- What is the geographical coverage of those providers and who are the clients they serve?

Note that this mapping is also partially covered in the tables proposed in the section about functions and services (especially Annex 3). This is because the analysis is iterative and various types of information will be often collected at the same time. Having one table can thus be helpful in systematizing information. Nonetheless, dedicated in-depth mapping of the actors remains essential.

Analysing linkages and collaborations

This exercise requires in-depth analysis and the information obtained will likely be complemented and adjusted throughout the implementation phase. It is therefore advisable to start the process with a group of key stakeholders in a workshop at the start of the implementation phase, if possible. The information from different sources then needs to be collated in order to depict the complete system of interactions and collaborations.

Data collection approaches:

- multi-stakeholder workshops;
- interviews and FGDs with EAS managers and field workers from different organizations, as well as with other actors in the agrifood system;
- review of organizations' activity plans and documents such as contracts, MoUs and so on. (although these will not reveal informal linkages);
- organizational assessment (see below); and
- participatory observations.

GUIDING CONSIDERATIONS AND QUESTIONS FOR THE DATA COLLECTION

- ▶ Existing collaborations/joint activities with other EAS providers and/or other actors in the agrifood system, including informal exchanges between workers;
- ▶ nature and purpose of these linkages/collaborations? (e.g. formal, informal, stable, occasional, training provision, joint implementation, technical support);
- ▶ events where EAS and other actors in the agrifood system have come together e.g. new policy formulation, seminars, trainings;
- ▶ importance and benefits of these interactions as perceived by the stakeholders;
- ▶ social and cultural norms and trust influencing the interactions;
- ▶ incentives to collaborate (e.g. joint financial mechanisms, regulatory framework facilitating/registering contracts and partnerships, benefits);
- ▶ perceived benefits of collaboration (e.g. improved service quality, mutual services and assistance, access to knowledge and information, access to new clients);
- ▶ perceived challenges (formal or informal) in collaborating (e.g. lack of will to collaborate, lack of trust, socio-cultural norms, competition, lack of time and resources, negative experience, lack of knowledge of other actors, communication barriers (language, lack of ICTs or roads), inadequate policies and regulations);
- ▶ potential also to use a short structured survey gathering (e.g. the following key information: a) collaboration between which organizations (names)? b) purpose and nature of the collaboration (e.g. MoUs, service contract for joint services, information collaboration) c) level of satisfaction with the collaboration (e.g. high, medium, low) d) constraints to the collaboration).

It is crucial to pay particular attention to linkages with research – a key element of EAS. While many other partnerships and interactions can sometimes be occasional or informal, it is essential that the linkage with research is strong, structured and frequent.

This information could also be collected and analysed by examining the nature of collaboration in each particular domain. For further information on this, see Annex 8.



Further resources for analysing linkages and collaborations:

The following three resources can be used (among others) to complement the assessment of linkages and collaborations in the EAS system. They can be used during a workshop FGD and can be very helpful by providing a structure for analysis, which can be adapted to the context and to include further questions/considerations for this EAS assessment.

- 1) A simple approach to stakeholder mapping provided by FAO (FAO, n.d.).
- 2) Tool factsheet: social network analysis (TAP, 2017b); and
- 3) Net-Map as a tool for research and strategic network planning (Schiffer and Waale, 2008).

Country experience

In Madagascar an exercise based on social network analysis was proposed during the national stakeholder workshop at the beginning of the assessment. Participants identified various EAS providers and wrote their names on several flipchart sheets put together. They then discussed who was collaborating with whom and how, and drew arrows connecting the corresponding providers' names. For strong linkages, a thick arrow was used, and a dotted line for weak collaborations (referring to the status quo rather than the ideal situation). Use of arrows also showed if the linkages were uni- or bi-directional. The organizations with most linkages were then identified. This offered a mere first glance at a complex system of interactions, but the discussion very quickly shed light on the main issues and areas for further inquiry.

Organizational assessment

Although it will probably be impossible to assess all EAS organizations in a given system, several of the most important provider organizations should be assessed in more detail. The goal is to assess the organizational performance and capacities of a representative sample of EAS actors. Selected organizations should be representative of the types of providers present in the country (public, private, POs, NGOs, and so on), and ideally represent the main services required and clients served, as well as sub-sectors and geographical areas.

Having this information from 10–15 such organizations should be sufficient to provide an accurate picture of the challenges and opportunities in achieving an effective EAS system in a country. However, the exact number will depend on the size of the country and the complexity of the EAS system, as well as on the time and resources available for the assessment.



A representative sample of EAS actors can be selected based on the stakeholder mapping, as well as on the inputs collected through different interviews and discussions conducted during the assessment, and the country context review. The criteria of selection should:

- include all different major types of EAS providers present in the country (public, private, NGOs, POs) as far as possible. In particular, it is advisable to always include public EAS; and
- represent a balanced geographic coverage (national, wealthier vs. poorer regions, different agroecological zones).

Data collection approaches:

- Interviews with staff: if possible, all categories of workers should be interviewed, but this is sometimes impossible due to the organization's size or time and available resources. It is therefore crucial to select the right group of people who perform different tasks and represent different categories: senior and middle managers, field workers, female workers, workers belonging to ethnic/religious minorities, and so on. A list of guiding questions for collecting information from EAS providers is provided in Annex 9.
- Survey/questionnaires for staff (preferable when dealing with many larger organizations);
- Review of key organizational documents:
 - mission/vision statement;
 - activity reports;
 - financial reports;
 - MEL reports; and
 - business plans (where available).
- Secondary data: any relevant studies which include organizational assessment and provide information about the selected organizations.

Detailed tables that could be used for organizational assessment to generate information on areas of intervention and their level of inclusiveness are provided in Annexes 10 and 11 respectively.

GUIDING QUESTIONS FOR THE DATA COLLECTION

- Type and size of organization, its legal status, mandate, declared and actual activities, type and approx. number of clients served, geographical area of activities, delivery modes;
- management style and planning;
- funding (where does funding come from, how much of the budget goes into operational extension activities, challenges related to funding and resource mobilization strategy, clients' participation, cost sharing arrangements, etc.);
- MEL (how is it done, participation of clients and acting upon the feedback);
- collaboration and linkages with other organizations (see the previous section);
- human resources: composition (profile and entry qualifications, gender, age, distribution among the positions);
- individual capacities and skills of the staff (at managerial and field level) and ways of improving them (see also section on skills);
- time allocation of staff (how much goes into operational extension activities and how much into other activities, e.g. administration, distribution of subsidies);
- available equipment and infrastructure (cars, motorbikes, telephones, fuel and telephone, allowances, computers, internet, training space, demonstration plots) and their quality;
- main challenges for the organization;
- main challenges for the individual workers, especially female staff (working conditions, promotion opportunities, maternity);
- performance evaluation and motivation of the staff (promotion opportunities, salary, workload, how their performance is evaluated);
- please make use of Annex 9 for interviews with individual staff/management.



Tips for organizational assessment:

- The managers and staff involved need to agree with it and understand that it is non-judgmental, and as such is not intended to discredit the organization or individual workers. Otherwise, the assessment may be perceived as an externally imposed audit/test and interviewees may be reluctant to provide information.
 - As mentioned for other subcomponents of the implementation phase in this Guide: confidentiality is of the utmost importance. It is therefore recommended to use tools such as one-on-one interviews, anonymous surveys, and so on where appropriate. The findings and the report also need to maintain this confidentiality, not to reveal the names of the interviewees or sensitive data such as financial details (this can be mentioned in the general analysis not associated with a specific organization).
 - Even when confidentiality is ensured, some organizations may still refuse to provide some data. This is often the case when it comes to finances. It is recommended to provide at least approximate figures or reply to more general questions, but remember that organizations have no obligations to disclose any data. It is thus better to have less information than unreliable information.
-



Gender in organizational assessment

Remember that women may be disadvantaged not only as EAS clients but also as EAS workers, which in turn may cause further difficulties with rural women's access. During organizational assessment it is thus key to inquire about:

- numbers of female staff but also their distribution among different posts and tasks: field workers, admin, middle and senior managers, and so on;
 - measures such as maternity leave, care facilities for children, equal pay for equal work, equal access to in-service training and career opportunities;
 - opportunities for recruitment of female workers: are women encouraged to undertake agricultural/extensionist studies, courses?;
 - motivation and career possibilities, participation in the decision-making at different levels;
 - organizational culture and social norms regarding gender in the working environment, perception of working women, as well as in interactions with clients (whether male clients take them seriously and so on); and
 - security in the field and during travel.
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4.2.3.3 Internal enabling factors

This subcomponent addresses the factors that enable or constrain the collective capacity and performance of EAS as a system. They are referred to here as internal enabling factors because they are considered internal to the system (and thus more narrow and specific to EAS than the country context and wider environment), and as such they play a key role in enabling or impeding the system in its endeavour to deliver the required services.

This includes:

- governance and decision-making processes, as well as accountability towards clients;
- coordination, without which pluralistic EAS providers would just be a myriad of coexisting actors devoid of functional linkages;
- funding mechanisms and investments which determine system performance and capacity not only in terms of resources, but also in relation to how the funding is used and whether its source influences the objectives and functions of EAS; and
- support institutions which facilitate EAS and support access to knowledge and information.

These factors are crucial if all the elements of the system (structure) are to work together to perform its multiple functions.

EXPECTED OUTPUTS

Understanding of the collective capacity of the EAS system in terms of:

- a. how it is governed and coordinated;
- b. how it is financed and whether financing is sustainable; and
- c. how it should be supported to perform well.

EAS system governance

Governance at all levels is defined by the processes through which public and private actors articulate their interests, frame and prioritize issues and make, implement, monitor and enforce decisions.

The type of governance influences the management style of EAS which in turn impacts on its accountability towards clients. Accountability towards clients is considered strong if they have a say in the design of the services, can provide feedback and monitor the response to that feedback. However, this kind of strong accountability to EAS clients is often lacking as decision-making makes little room for the opinions or participation of producers.

Furthermore, it is important to investigate how decision-making related to system governance is distributed across the country (decentralized vs centralized systems). It is often believed that decentralization brings decision-making closer to farmers and gives them more influence over extension processes. However, many extension organizations have a rigid hierarchical and bureaucratic structure based on centralized planning, with limited accountability to clients.

Data collection approaches:

- Interviews with MoA, country EAS forum, local authorities, public EAS agencies, management of EAS providers of diverse types at national and local level, POs.
- Some important information may also come from reviewing the policies and status of the public EAS agencies and the EAS country forum. However, these documents will only provide information about what EAS are to be provided and how. Interviews are necessary to verify this and obtain greater insight into the practical functioning of EAS governance.

GUIDANCE ON INFORMATION AND DATA COLLECTION 

- Institutional set-up, mandate and expected roles of the bodies relevant to EAS at central and local level, level of (de)centralization;
- role of public sector;
- decision-making processes;
- participation of stakeholders in decision-making, including representatives of small informal organizations and producers (e.g. private sector, NGOs, POs, donors);
- social and cultural norms that influence decision-making and hierarchy;
- MEL of the activities of multiple EAS providers (at system level);
- clients' participation in MEL;
- feedback and action upon/learning from results.

Coordination

In the complex EAS system, it is key to ensure that efforts are coordinated and complementary in order to contribute towards common goals, albeit through different modalities. Coordination facilitates flow of information, exchange of experiences and collective learning. Lack of coordination may result in gaps in and duplication of services, inefficient distribution of resources, and lack of quality control, generally hampering producers' access to relevant advice.

The pluralistic EAS system may be coordinated by a country forum, platform, inter-agency committee, or any other mechanism which allows different actors to come together and harmonize their efforts, exchange information and knowledge, as well as find entry points for collaboration. Such a mechanism can be formal or informal, but should allow for regular interactions and be inclusive of all the key EAS actors and producers' representatives.

Another important way to enhance coordination is to set clear standards or certification/accreditation schemes for providers. While diversity of services is essential and each provider should be free to decide which ones to offer and how, it is also critical to establish quality standards regarding both the content (for example promotion of sustainable practices, preventing misinformation caused by incompetence or the desire to boost provider profits) and delivery (e.g. ineffective means such as difficult-to-understand publications or reliance on ICT where telephones/computers are scarce). These standards should also ensure that all different activities work together for the achievement of the national goals.

Note that some of the issues explored here are similar to those addressed in the section *Analysing linkages and collaborations* (p. 38). In fact, the two areas are related and much of this information will likely overlap. However, while in that section the goal is to collect information on how EAS organizations interact and partner among themselves and with other actors in the agrifood system, which can adopt bi- or multilateral forms, the focus in this section is on a more overarching mechanism enabling all actors and stakeholders to come together, coordinate at system level and exchange information.

Data collection approaches:

- The information needed will most likely be collected through key informant interviews, especially with the MoA, country EAS forum (where applicable) and management of the main EAS organizations. For the local level, information may be provided by the local authorities and EAS providers.
- Some important information may also come from the status review (terms of reference, mandate) of the public EAS agencies, the country forum or an official coordination mechanism if applicable. However, these documents will only provide information about what *should* be in place; interviews are needed to verify this and obtain more insights into the practical functioning of EAS coordination.

GUIDANCE ON INFORMATION AND DATA COLLECTION

- Mechanism(s)/space (formal or informal) for interaction and coordination, (e.g. online platform, coordination committee, inter-sectoral working group, network/extension country forum, certification scheme, official standard for service provision);
- participation of stakeholders, including representatives of small informal organizations and producers, NGOs, private sector, donors;
- information, knowledge and experience sharing process;
- coordination among different EAS providers at the local, national and regional level;
- benefits/incentives and limitations of this mechanism, as perceived by stakeholders (including intangible considerations, such as trust);
- presence, quality and application of standards/certification schemes for pluralistic EAS providers.

Funding mechanism and investments

EAS face a number of financial challenges in many countries. These include limited support for agriculture in general and to EAS in particular, project-based financing which affects sustainability, insufficient operational funds for delivery and poor financial management, with most funds becoming available only at the end of the financial year.

A wide variety of options for the financing of EAS exist beyond conventional public funding and public delivery mechanisms. This includes public-private partnerships, outsourcing and sub-contracting, or client participation, whether they pay for themselves or are subsidized by the state or development programmes, for example through vouchers.

It is also important to consider that funding may affect not only the performance of EAS, but also their priorities. For instance, donor-dependency may result in the prioritization of specific areas over national goals, while advice funded by producers of pesticides, for example, may be oriented towards marketing their products rather than considering environmental sustainability.

Another aspect of EAS funding is the allocation of financial resources. A large share of the budget is often used for administration and salaries, with little left for EAS operational activities. In many countries, the budget and workforce of public extension may also be occupied with activities such as delivering fertilizer and administering seed subsidy programmes, or similar activities.

The key is thus to understand different forms of financing, quantity and share of funding from different sources and issues in terms of questions of access and use by EAS.

Data collection approaches:

- Interviews with the key informants, especially from MoA and the government, bodies responsible for EAS, Ministry of Planning and Finance, donors, management of the EAS providers, and so on.
- Organizational assessments (in this case the information will refer to the financing of the assessed organizations, but this information will also provide insights into the big picture of EAS funding at the system level).
- Review of the financial documents of EAS providers (if made available by the organizations – some relevant documents related to large organizations or international donors' projects can be also found online).

GUIDANCE ON INFORMATION AND DATA COLLECTION 

- Main sources of funding/investments for the EAS system (see Annex 12) (e.g. public, private sector, donors, clients' participation);
- main funding modalities for the EAS system and related challenges and limitations (e.g. public funding with public delivery vs. public funding with private delivery, cost sharing, cost recovery for instance levying user charges, private delivery financed through marketing margins);
- major challenges related to EAS funding (e.g. sustainability, insufficiency of funds, fluctuations, dependency on donors, lack of freedom in allocating resources);
- existence and quality of long-term vision/strategy for mobilizing resources for EAS;
- potential to use a structured survey format asking respondents to rate key issues in EAS funding such as quantity available for operational activities, timing, sustainability and so on on a scale from e.g. inadequate, to adequate and more than adequate.

Support institutions

EAS require support in diverse areas:

- research (new technologies and varieties, technical problem-solving, as well as training);
- capacity development (see e.g. Annexes 5 and 6);
- phytosanitary and veterinary services (technical problem-solving and training for EAS);
- rural, agricultural and economic data provision (usually national statistical institutes);
- meteorological services (weather forecast and climate information);
- telecommunication and ICT services and more.

As the institutions which can provide such support can also benefit from EAS, the relationship may be reciprocal. For instance, EAS need new technologies and backstopping from research institutions but can also provide researchers with direct input on the problems that farmers face, along with feedback on the performance of technologies introduced in the field. Sometimes, the very same support institutions may also provide extension services, for example veterinarians who not only treat animals but also advise farmers on treatment, feeding, breeding practices or a meteorological institute which provides weather information directly to farmers through, e.g. SMS.

Data collection approaches:

- key informant interviews with diverse EAS providers (managers and field workers);
- stakeholder mapping (see also *Analysing linkages and collaborations* on page 38); and
- mapping of EAS providers' interactions, including linkages with support institutions and so on.

GUIDANCE ON INFORMATION AND DATA COLLECTION

- ▶ Interactions with research and mechanisms to facilitate it;
- ▶ EAS providers must access up-to-date content for their advice (e.g. statistical data, meteorological, climate related and price information, information on new service providers, products, alerts about pests and diseases). Is it timely, free and accurate? Which support institutions provide this information?
- ▶ EAS backstopping on specific issues (e.g. plant or animal diseases, natural resources, climate issues, food safety requirements);
- ▶ documentation of good practices and lessons learned;
- ▶ EAS providers need access to ICT/logistics/credit;
- ▶ strengths and limitations related to support institutions.

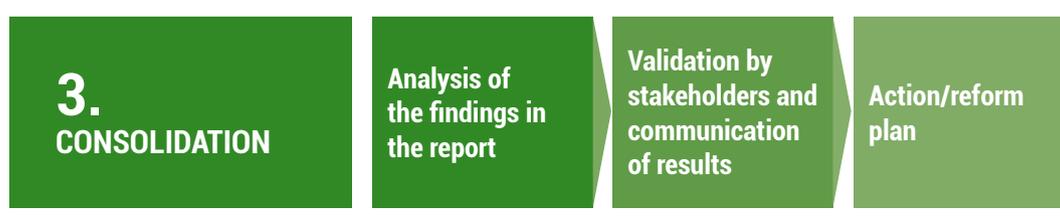
 **Tips for assessing internal enabling factors:**

- Much of the information related to decision-making, hierarchy, trust and finances is sensitive. It is thus important to keep the importance of confidentiality and anonymity in mind when organizing interviews, surveys and/or FGDs (for example one-on-one interviews and/or anonymous surveys should be preferred here).
 - There is very little available data related to investments made in EAS, and this becomes even more complicated if we consider diverse investment needs and the multiple funding sources of various EAS service providers. While some databases provide extension specific data (for example OECD-DAC has data on official development assistance (ODA) specifically for agricultural extension), extension is often lumped together with general funding for agricultural support, research and development (for instance FAOSTAT, the statistics on public expenditures for economic development (SPEED) by IFPRI, data from the International Monetary Fund (IMF), indicators from the OECD). However, the implementation of this EAS assessment could be an opportunity to institutionalize the collection of data on investments in EAS. See also FAO's *indicator framework for national extension and advisory service systems* for more detailed information and guidance on this.
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4.3 Consolidation

Consolidation is the final stage of the assessment and consists of the three stages laid out in Figure 6.

FIGURE 6. Overview of the consolidation phase



EXPECTED OUTPUTS

- a. Comprehensive assessment report complete with evidence-based recommendations;
- b. results of the assessment validated by key stakeholders; and
- c. results of the assessment and the report disseminated widely to all concerned stakeholders.

4.3.1 Analysis of the findings in the report

The assessment report is the main output of the assessment process and its quality will depend heavily on the process of analysis and the interpretation of the findings. The report should contain:

- a description of the main characteristics of the country and its EAS;
- an in-depth description of the findings, in particular the bottlenecks and challenges and their underlying causes and possible consequences, as well as strengths and opportunities; and
- a set of recommendations.

As indicated in the implementation phase, much of the analysis should be carried out during the data collection process, which will allow for timely feedback and follow-up if necessary. An early analysis of findings can also lead to the discovery of additional areas and issues to explore during the assessment process. Final interpretation should be completed when all the information is collected and in view of all the aspects assessed.

How to analyse the findings?

The analysis should address all the blocks, namely:

- country context and how it impacts EAS and their clients;
- clients' perspective: what their needs are and how they perceive EAS; and
- the EAS system, including its structure, functions and internal enabling factors.

Furthermore, some key principles must be applied in the analysis, as follows.

→ **Cluster data from different sources as they come in.**

The assessment will most likely produce a high quantity of data and information on different topics that are addressed at various times throughout the assessment process. The guiding questions, suggested survey forms and tables proposed in Section 4.2 and in the Annexes provide some structure to gathering and organizing data, but it can also very helpful to analyse and present data in an adapted form.

→ **Triangulate data.**

Analyse each topic area from different perspectives. It is essential to compare what was stated on the same issue by the government, senior officials representing EAS management, EAS field workers, rural producers and other EAS clients. Their views can differ dramatically: sometimes it may help to verify the credibility of information (are interactions with EAS providers really frequent and successful as the organizers claim? Does the coordination committee really meet as often as stated in its terms of reference, or has perhaps no meeting/activity been organized in the past few years?) Sometimes, however, there is no one true answer – just different perspectives and experiences, which are also important to capture in the final report.

→ **Disaggregate data.**

As explained above, different people may have very different experiences of EAS. That is why it is important to avoid general statements such as “All rural producers prioritize market services” as for example those in subsistence farming may have different, more pressing needs. Similarly, not all providers face the same challenges and opportunities. Pay due attention to these differences in the analysis and the report. On the demand side, make sure that demands/needs for services are disaggregated in terms of gender, age (especially to capture the needs of youth), farm size, vulnerable groups such as indigenous people, the poor, migrants and so on.

→ **Alternate between “zooming in” and “zooming out”.**

While it is important to provide concrete case examples in the EAS assessment final report, it is also critical to bear in mind the bigger picture of the EAS system. Always



remain aware of the distinction between information specific to a given situation and examples which inform the bigger picture. To keep the balance between the two, consider whether individual examples can be representative of general issues (or certain groups). For instance, does this case reflect general trends in access to EAS by youth in the country? If not, is this case worth featuring for other reasons, such as issues affecting youth in the poorer regions of the country? Or maybe young women rather than young men? Always look for and analyse the root causes of the identified issues and their consequences for different actors. “Why” and “how” should be the key words of every analysis.

Also, whenever possible, analyse EAS trends and their consequences over time. For example: what happened to EAS system performance after the country forum was established? How have recent reforms or political troubles affected the system (for example perhaps insecurity increased and affected access to services?) You can also use a timeline to illustrate significant changes in the system.

General conclusions should be drawn from the EAS assessment report, bearing in mind the national priorities identified in the preparation phase in order to measure the EAS system against them. First, consider the vision or desired state of the EAS system in light of national priorities and compare it with the findings on the actual state of EAS, then consider how EAS are contributing to the achievement of national priorities (including the views of diverse stakeholders). Finally, a summary should be made of the key gaps (that is, what is lacking in order to achieve national priorities/the desired state of EAS, and so on), their root causes and consequences. Potential ideas on how to overcome or “fill” the identified gaps can be structured into a short list of clear and precise recommendations at the end.

How to present the findings?

As EAS system analysis is quite complex, it is very helpful to use innovative ways to present the findings in a manner that is both comprehensive and in-depth and yet understandable for non-academic audiences. Otherwise, there is a risk of producing an extremely long and dense study which would most likely end up on a shelf and fail to serve as a tool for advocacy or a basis for concrete actions.

Maps, illustrations, graphs, and other figures are very helpful to illustrate findings. In general, visual aids and visualizations can be very useful to render assessment results more accessible. Visual elements for the report can be used and/or adapted from secondary sources or produced using secondary data from databases such as FAOSTAT. Furthermore, the results from tools used during the implementation, such as stakeholder mapping, social network mapping, power/interest matrix, as well as others, such as



SWOT analysis, problem trees can also be helpful in both clustering and presenting key findings. Finally, including quotes and short statements from key informant interviews (for example with farmers, EAS providers) that reflect broader themes in the EAS system can be a great way to contextualize and humanize assessment findings (but please remember to anonymize the quotes).

The EAS assessment report need not necessarily follow any particular structure or outline –this may vary depending on the context in which the assessment is conducted, however a suggested outline of the report is provided in Annex 13. Throughout the process of consolidating the findings and writing the report, it is vital to consider the target audience of the report. It should be kept as concise as possible without sacrificing in-depth analysis or skipping over important details and should be geared towards its intended audience. As policy actors with limited time will not be able to read a lengthy report, a well-structured and succinct executive summary should be included in the report to provide an overview of major findings. Overall, the contents should be organized clearly and logically to provide in-depth information as accessibly as possible (for academics and non-academics alike).

4.3.2 Validation by national stakeholders and communication of the results

The results of the assessment must be validated by representatives of the key stakeholders, especially those who were directly involved in the process (including representatives of different types of rural producers). Validation is crucial for ownership of the findings by the concerned stakeholders. This is because:

- The assessment emphasizes national ownership and participation. External parties may contribute with a neutral perspective but the concerned stakeholders are the ones who need to accept and recognize the results.
- The assessment should be non-judgmental and pro-learning. Thus, if the stakeholders do not agree with the results, they will not be willing and able to use them for the improvement of the system.

During the finalization of the report, a first draft should be shared with the members of the country team and governmental focal points, as well as external technical experts supporting the process (if available). The findings should be adapted based on this preliminary feedback and then validated by a wider group, preferably during a multi-stakeholder workshop. The invitees should include members of the broader assessment advisory group (if such a group exists) but can be even more inclusive, if the resources allow. Representatives of different types of EAS clients should be present. Based on the inputs received, final revisions to the report can then be made.

 **Tips and considerations for the validation:**

- As mentioned earlier, every assessment or evaluation has some limitations and cannot provide a 100 percent reliable picture of all EAS system dimensions. There is therefore a need to manage expectations regarding the findings to avoid misinterpretations by clearly communicating the limitations to the study and being realistic with proposed implications and recommendations.
 - The draft report should be shared with participants before the validation workshop. However, not everyone is likely to read it. That is why well-prepared, engaging and comprehensive presentations for the workshop are key, as well as group engagement (for example through exercises) to allow for more in-depth discussions.
 - If for some reason the workshop cannot be held, you may use other multi-stakeholder processes: e.g. online seminar, forum discussion, sharing the draft report and collecting feedback via an online form.
-

Communication of the findings:

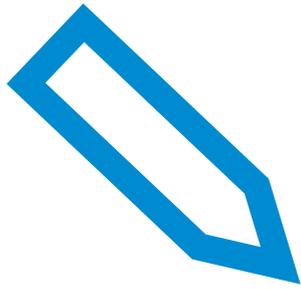
The target audiences, beyond those who participated directly in the assessment and in the validation are:

- pluralistic EAS providers (including staff and management);
- policy makers;
- related ministries (of agriculture, rural development, nutrition, natural resource management);
- donors (or potential donors such as international organizations, foundations, NGOs, and more);
- rural producers and their organizations; and
- other actors in the agrifood system (secondary clients);

While all the information shared needs to be truthful and transparent, it is also crucial to adapt the messages to different target audiences:

- As policy actors (including policy makers and other important institutional stakeholders) as well as donors and potentially journalists, may not have the time to read the whole assessment report, a well-written executive summary is important. However, it can also be very beneficial to produce a summarized version of the report, such as a policy brief, containing key messages and actionable recommendations. Clear language (free of technical jargon) should be used and illustrated with relevant data and other visuals to help make the brief more accessible and intuitive. (For further helpful tips on preparing a policy brief please see Ffrench-Constant, 2014)

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- Although the primary target audience of the EAS assessment report is made up of EAS providers, policy makers and potential investors, the findings may also be interesting and relevant to rural producers. In this case, the relevant results should be adapted accordingly in terms of language (use of local language(s), simple language and a shorter format, such as flyers). In addition, radio, community gatherings, audio or visual materials, theatre and so on may be used, depending on the context. These varied communication strategies can also be useful in communicating results with EAS providers and other stakeholders in rural areas. While the assessment budget may not stretch to many of these broader communication initiatives, appropriate communication activities should be planned for. National stakeholders can also be advised on how to carry out communication activities after the assessment is finished.
 - EAS Experts and practitioners (both national and international) will most likely need the full version; this version should ideally be made easily accessible online and in print.



5

Conclusion

After decades of underinvestment in extension and advisory services, policy makers and donors are now more interested in transforming EAS through policy and investment support. However, this transformation, which has the potential to contribute significantly to the achievement of several SDGs, is only possible if pluralistic EAS are well-coordinated and respond to the needs and demands of producers and their other clients. A systems-level assessment of the current state of EAS is therefore a precondition for the successful transformation of EAS, as it generates relevant knowledge and evidence to inform appropriate policy and investment decision-making.

This operational guide meets the long-established demand for guidance on undertaking such a comprehensive assessment of national EAS systems. It provides detailed directions on how to organize the entire process, from preparation to implementation and consolidation. Its implementation will help identify gaps and entry points for targeting investments and realigning policies for transforming EAS. When used together with FAO's EAS indicator framework and EAS-Y scoring tool, the comprehensive EAS assessment methodology will provide a 360-degree appraisal of the system, covering the entire range of qualitative and quantitative aspects that are relevant for policy making, performance improvement and investment design.

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Glossary of terms

Actors: individuals and organizations (e.g. civil society, private sector, enterprises, government ministries, non-governmental organizations, research and development institutes, extension services, universities and vocational training centres, and so on).

Agricultural innovation: the process whereby individuals or organizations bring existing or new products, processes and forms of organization into social and economic use to increase effectiveness, competitiveness, resilience to shocks or environmental sustainability, thereby contributing to food and nutritional security, economic development and sustainable natural resource management (TAP, 2016).

Agricultural innovation system (AIS): a network of actors or organizations, and individuals, together with supporting institutions and policies in the agricultural and related sectors, that brings existing or new products, processes, and forms of organization into social and economic use” (TAP, 2016).

Agrifood system: the combination of activities and institutions around the production and consumption of a particular food item. These systems are complex, operating simultaneously at multiple levels of scale (from global to local) and time (particularly with respect to the timing of outcomes) (IPES, 2015).

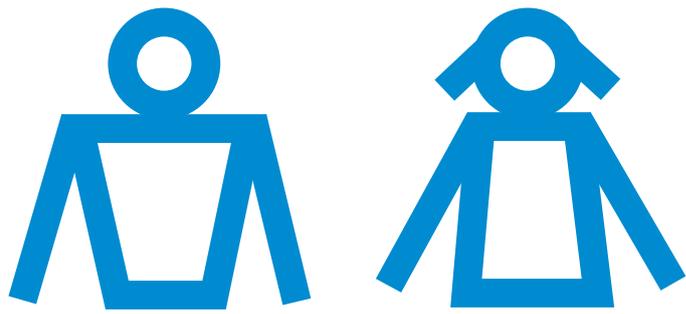
Capacity: the ability of people, organizations and society as a whole to manage their affairs successfully. Capacity development is “the process of unleashing, strengthening and maintaining of such capacity” (OECD/DAC). This includes the ability to create, understand, analyse, develop, plan, achieve set targets, reflect on outcomes of actions, move towards a vision, change and transform. Capacities at the three dimensions are interlinked: individuals, organizations and the enabling environment are parts of a whole. (FAO, 2010).

Capacity development: the process whereby individuals, organizations and society as a whole unleash, strengthen, create, adapt and maintain capacity over time (OECD, 2006).



Enabling environment: the context in which individuals and organizations put their capabilities into action, and where capacity development processes take place. It includes the institutional set-up of a country, its implicit and explicit rules, its power structures, and the policy and legal environment in which individuals and organizations function. (FAO, 2010).

Extension and advisory services (EAS): the sum of activities that provide the information and services needed and demanded by farmers and other actors in rural settings to assist them in developing their own technical, organizational, and management skills and practices, so as to improve their livelihoods and well-being. This process recognizes the diversity of actors in extension and advisory provision, offers wide-ranging support to rural communities (beyond information and knowledge) and embraces new functions such as facilitation, intermediation and brokering by extension and advisory services. (GFRAS, 2012).



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Annex 1

Guidance on information needed for understanding the country context

Sub-elements	Information to be collected and potential indicators
1. Agroecological diversity and natural resource status	<ul style="list-style-type: none"> • Nature of production in different agroecological zones (priority crops/livestock, etc.); • area under irrigation – percentage area irrigated out of net cultivated area (if available, or estimate); • area of degraded land – percentage of area impacted by different types of degradation (e.g. erosion, salinity etc.); • vulnerability to climate change and natural disasters (percentage area vulnerable to different types of stress, prone to natural disasters, etc.); • key challenges and bottlenecks of agricultural production? • Key strength and opportunities in agricultural production?
2. Socio-economic landscape	<ul style="list-style-type: none"> • Population diversity, density and distribution across different regions (rural and urban); share of youth in the population; presence of minorities, migrants, refugees, internally displaced people (IDPs), indigenous peoples etc.; • literacy level; • social/cultural norms including those related to gender; • population dependent on agriculture (percentage) and employed in agriculture (current state and trend); • land holding pattern (e.g. area and ownership of landholdings (small/medium/large, family farms/companies); • extent of poverty: percentage of the population that is poor (both rural and urban); • prevalence of commercialized vs subsistence producers, levels of diversification of economic activities; • contribution of agriculture to GDP and exports); • extent of agricultural/food imports/exports; • level of development of domestic and access to international markets; • stability (presence of conflicts, social unrest etc.); • key social and economic challenges and bottlenecks? • Key strength and opportunities in this area?



<p>3. Policy/governance context</p>	<ul style="list-style-type: none"> • Agricultural policy (which year the latest comprehensive policy was enacted and whether national priorities (e.g. self-sufficiency in staple crops, export orientation, etc.) institutional set-up, mandate, objectives and expected roles from EAS are presented there?) • Extension policy (Yes/No; if so, whether national priorities, institutional set up, mandate, objectives and expected roles from EAS are reflected there?) • Any other laws/regulations/decrees/acts related to agricultural development and extension (illustrating the institutional set up, mandate, objectives and expected roles from EAS), e.g. cooperative law, or anti-poverty or gender policies; • Are policies effectively implemented? Status of the implementation and key challenges and strengths? • Agricultural research organizational setup including public investment in research; • EAS overall structure and public investment in extension; • other sources of investment and financing in agriculture? Other main investors? • Main decision-making process in relation to budget allocation, priority setting and policy/program formulation? • Is the regulatory framework conducive to a positive business environment? (see also the World Bank's Enabling the Business of Agriculture webpage (eba.worldbank.org) which assesses laws and regulations in agriculture) • Key challenges and bottlenecks? • Key strength and opportunities?
<p>4. Supportive infrastructure for EAS</p>	<ul style="list-style-type: none"> • Road network (percentage of motorable roads of the total road length); • electrification (percentage of rural households electrified); • communication network (Mobile density, Internet penetration and bandwidth available, related cost and affordability, social norms).

Annex 2

Checklist for assessing client perspectives

First, take some general notes, or if using a survey form include a short section to collect socio-demographic information such as age, gender, (if applicable) farm size, membership of PO or other relevant organization, and other relevant information of clients being interviewed/surveyed - it is not necessary to ask every question as presented below. It is best to become familiarized with the questions and more importantly the underlying information needed and thus be able to facilitate a more fluid interview/discussion. Sometimes one question is enough for the interviewee to give information related to several questions. Other times, the questions help to reorient the discussion which may go off topic, other times, using prompting questions can help to deepen some topics, and so on.

It is important to sometimes use open-ended questions to stimulate the discussion and get more inputs on the topic without necessarily asking all questions explicitly. You may also need to adapt the questions to the discussion flow and use concrete examples from the country context to better illustrate what you mean.

Do you use extension and advisory services? If yes, why? (e.g. you find them effective, they are offered for free, when you have a problem) _____

How often? (approximately) _____



If not, why not? (e.g. not available, difficult access and costs, lack of time, poor quality, inadequate delivery mode, lack of translation, lack of trust and so on) _____

If the response is “no” or “very rarely”, please move on to the questions on page 71

Where do you usually get the information and advice from? (e.g. public advisors, private companies, NGOs, producer organizations/ farmers groups, community-based organizations/ self-help groups, fellow farmers and neighbours, TV, internet and social media, development projects, others – please specify) _____

Why this provider/source? (e.g. accessibility, availability, quality, habit or good relation) _____

What are the main topics that you usually seek advice on? _____

What are the main topics of advice provided by those EAS providers whom you can access? (e.g. crop production, pest management, market linkages and value chain issues, weather-based advisory, credit, insurance, infrastructure, natural resource management, post-harvest and processing, animal husbandry/ fisheries, human health and nutrition, local employment opportunities, government schemes, legal aid, community mobilization, others – please specify)

How relevant for your needs and demands are the services you receive? _____



What are the services that you would need/like to access but are missing? Why? (e.g. you don't know who provides them, lack of access due to distance, modality, costs, poor quality, eligibility criteria) _____

Which method(s) of service delivery are the most used and which ones do you like the most and why? (e.g. technology transfer methods, awareness raising, demonstration, farmer field schools, on farm trials, exposure visits, training, Internet, SMS alerts, Interactive Voice System, visuals, phone or in person consultations, videos) _____

How do you access services? (e.g. on demand, periodically, they reach out to you) _____

Do you pay for services? (e.g. yes, no, sometimes, partially, through subsidies/vouchers, membership fee – also, if no would you be willing to pay for services?) _____

What are the potential difficulties of access? (e.g. distance, cost [or hidden cost e.g. for transportation, accommodation], lack of time, lack of care facilities or accommodation, eligibility criteria [what kind?], inadequate delivery mode [e.g. materials not in local language, only written materials], you feel that it may be inappropriate for you to attend [e.g. informal eligibility criteria, social norms]) _____

Do EAS providers ask you for your feedback on their services and how? On what aspect(s) (e.g. content, delivery mode, behaviour)? Can you see that your feedback is acted upon?



How do you perceive the skills and competencies of providers (e.g. *technical, personal and soft skills, behaviour*)? _____

What kind of relation you have with them? (e.g. *trust, equal partners, client-provider, you feel supervised, controlled*) _____

Do you see any change or improvement in your skills, personal or technical, after using the service/training? (e.g. *better marketing, better negotiation, more confident*)? _____

What service do you think brought about this improvement? _____

What changes for your business and livelihoods, if any, did you notice after using the service? (e.g. *enhanced yield/income, better management of natural resources, increased resilience to climate change or other shocks, access to other services*) _____

What do you consider as the biggest constraint to EAS? _____



Questions for those who are not using advisory services or are using them very rarely

Why are you not using advisory services? _____

If you need any business/management/farm/legal/financial advice, where do you get it from? (e.g. Family? Neighbours? Community members/leaders? Church/mosque? Radio? TV? Your input shop/dealer? Internet? Books? WhatsApp group? Facebook? YouTube?) (This question is meant to double-check whether they are not using any advice at all or maybe just advice from sources not perceived as "extension") _____

Have you used any such services in the past? If so, why did you stop? (e.g. they became unavailable/too costly/too distant or any other kind of access barrier, the quality deteriorated, your personal situation has changed, you feel you do not need them anymore) _____

What would have to happen so that you start to use such services? _____

How do you think your business and livelihoods would be different if you used/could use such services? _____

Annex 3

Identifying actors performing key EAS functions

EAS services / functions	Information to be collected			
	Names of actors/ organizations performing these roles	Type of clients served (e.g. all farmers, commercial farmers, smallholders, other value chain actors)	Level of operation (National, provincial/ district or in select territories)	Comments (e.g. what is working well or poorly with regards to provision of this service)
1. Enhance technical knowledge of farmers on new technologies and their use, etc.	1. 2. 3.			
2. Provide support to enhance producers' marketing, business and financial skills	1 2 3			
3. Provide support to develop producers' skills in value addition	1. 2. 3.			
4. Provide problem-solving support at field level	1. 2. 3.			
5. Mobilize farmers into groups and help them articulate demands	1. 2. 3.			
6. Share market information (related to price, requirements, etc.)	1. 2. 3.			
7. Share weather information	1. 2. 3.			



EAS services / functions	Information to be collected			
	Names of actors/ organizations performing these roles	Type of clients served (e.g. all farmers, commercial farmers, smallholders, other value chain actors)	Level of operation (National, provincial/ district or in select territories)	Comments (e.g. what is working well or poorly with regards to provision of this service, etc.)
8. Support adaptation to climate change by building producers' skills in sustainable practices	1. 2. 3.			
9. Provide information and other support on biodiversity and natural resource conservation/ sustainable use	1. 2. 3.			
10. Provide feedback to researchers from the field	1. 2. 3.			
11. Organize and link producers to input supply	1. 2. 3.			
12. Entrepreneurship development	1. 2. 3.			
13. Support policy change	1. 2. 3.			
14. Link farmers to other sources of support and services (e.g.: inputs, mechanization services)	1. 2. 3.			
15. Link producers to domestic and international markets	1. 2. 3.			
16. Enhance farmers' knowledge of food safety standards	1. 2. 3.			
17. Promote sustainable diets and nutrition	1. 2. 3.			
18. Others	1. 2. 3.			

Annex 4

Advisory methods and how they are used

[Tick (✓) at the appropriate response]

Advisory methods	Detailed information on advisory method				
	Used to provide which service(s) [refer back to Annex 3]?	Which providers use it? (generally, e.g. public, private, NGO)	Frequency of use (always, often, sometimes, rarely)	For which types of clients (e.g. all farmers, women farmers)	Pros and Cons (method works well/poorly, is costly/cost effective, etc.)
1. Field and home visit					
2. Farmer training					
3. Farmer field school					
4. Farmer business school					
5. Use farmer trainers					
6. Para extension workers					
7. Campaigns					
8. Demonstrations (e.g. of technology use)					
9. Group meetings					



Advisory methods	Detailed information on advisory method				
	Used to provide which service(s) [refer back to Annex 3]?	Which providers use it? (generally, e.g. public, private, NGO)	Frequency of use (always, often, sometimes, rarely)	For which types of clients (e.g. all farmers, women farmers)	Pros and Cons (method works well/poorly, is costly/cost effective, etc.)
10. Seminar					
11. SMS based advisory					
12. Help line					
13. Radio					
14. Television					
15. Print media					
16. Video					
17. WhatsApp					
18. Facebook					
19. Website or information and knowledge sharing system					
20. Interactive multi-actor innovation partnerships					
21. Other (specify)					

Annex 5

Capacities required at the individual level in EAS

Functional

- Community mobilization (organizing producers and rural women into different types of interest/activity groups);
- farmer organization development (organizing, sustaining and federating farmer organizations to take up new extension and advisory service tasks in agriculture and linking them to new source of knowledge and services);
- facilitation (facilitating discussions, enabling consensus building and joint action, accompanying multi-stakeholder processes);
- reflective learning (organizing experience sharing workshops and facilitating learning);
- mediating conflicts (by improving dialogue and helping to reach agreement);
- negotiating (helping to reach a satisfactory compromise or agreement between individuals or groups and developing negotiating capacity among other stakeholders);
- brokering (creating many-to-many relationships among the wide range of actors);
- networking & partnership development;
- advocating for changes in policies and institutions;
- leadership-capacity to inspire and motivate;
- managing resources (human and financial);
- critical thinking and problem-solving skills;
- self-reflection and learning from mistakes;



- service-mindedness;
- accountability;
- responsibility;
- dedication/commitment;
- working in multi-organizational and multi-sectoral teams; and
- working with rural women and using gender sensitive extension approaches.

Technical

- Good understanding of appropriate, relevant and new technologies, practices, standards, regulations and policies in agriculture and natural resource management.
- These include: technical options to support climate change adaptation, agribusiness management, value addition and value chain development, technologies for improving resource use efficiency, application of biotechnologies, intellectual property, farmer rights and use of new ICT, among others.

Annex 6

Existing mechanisms for staff capacity development

Mechanisms for training EAS staff	Name of organization where staff goes for training/Unit within the organization that organizes staff training	Topic of training(s)	Frequency of training (times in a year/2 year/ 5 years)	Average number trained (per year, and gender breakdown, if available)	Limitations if any impacting effectiveness of capacity development
1. Induction training	1.				
	2.				
	3.				
2. In-service training	1.				
	2.				
	3.				
	4.				
	5.				
3. Inviting resource persons from other organizations					
4. Others					

Annex 7

Existing mechanisms for identification of capacity gaps

Mechanism	How often? (frequency)	Capacity gaps identified through this mechanism (List these)
1. Survey of staff on capacity gaps		
2. Informal feedback from staff		
3. Formal feedback from clients (e.g. from feedback form)		
4. Survey of farmers		
5. Informal feedback from clients		
6. Issues identified from government/industry policy documents		
7. Others		

Annex 8

Collaboration between EAS providers and other actors in the AIS

AIS actors engaged in different domains	Nature of collaboration with EAS providers (Examples)	What needs to improve? (Specific measures)
1. Technology development (Agricultural research)	1. 2. 3.	
2. Agricultural education	1. 2. 3.	
3. Market/value chain actors (e.g. input suppliers, buyers of agricultural products, processing companies, etc.)	1. 2. 3.	
4. Financial support (e.g. banks, cooperatives providing loans, other micro-finance agencies)	1. 2. 3.	
5. Policy making state and non-state actors influencing policies related to agriculture	1. 2. 3.	
6. Demand articulation (e.g. organization of producers, consumers, exporters)	1. 2. 3.	
7. Others		

Annex 9

Guiding questions for interviewing EAS providers

The questions proposed here are intended to guide the interview/discussion process with EAS providers – it is not necessary to ask every question as presented below. It is best to become familiarized with the questions and more importantly the underlying information needed and thus be able to facilitate a more fluid interview/discussion. Sometimes one question is enough for the interviewee to give information related to several questions. Other times, the questions help to reorient the discussion which may go off topic, other times, using prompting questions can help to deepen some topics.

It is important to use open-ended questions to stimulate the discussion and get more inputs on the topic without necessarily asking all questions explicitly. You may also need to adapt the questions to the discussion flow and use concrete examples from the country context to better illustrate what you mean. For example, instead of asking: *What is the decision-making process in your organization?* Ask: *Who decides priority expenses?*

The questions below can be asked to both EAS field workers and management, as well as to EAS experts, key informants and so on. Depending on whether you are talking to a provider or EAS expert, you may ask for his/her organization experience or with EAS in general.

Who is the interviewee? Name, position, organization (*it is helpful to also get some information about their organization [if not already gathered], such as main mandate and activities, number of staff, female staff, available equipment*) _____



What do you see as the most important challenges for the EAS system? _____

What are the current weaknesses of the EAS system? _____

What changes in EAS are needed to improve their relevance and effectiveness? _____

What works well? What would you like to see more of? _____

What are the most important challenges in your job? (e.g. *lack of financial means, lack or turnover of staff, staff capacity*) _____

On which topics do you usually provide services/advice/training and so on? (e.g. *pest control, new varieties, market linkages and value chain, meteorological advice, credit, insurance, infrastructure, natural resource management, green practices, post-harvest and processing, livestock / fisheries, human health and nutrition, advice on local employment opportunities, governmental programmes, legal aid, community mobilization*) _____

What delivery methods do you use and find the most effective? Why? (e.g. *training, demonstration, visits, SMS, radio/TV, coaching, FFS*) _____



What services/research areas do you think would be needed but are not currently available (low quality or low coverage)? Why? _____

Who are EAS clients? What type of rural producers are better served and what types are left behind? How would you describe your clients? (e.g. *small, medium, large scale producers, subsistence producers, the poor, people with low levels of literacy, women, youth, those engaged in value chain activities other than production*) _____

How do you interact with your clients? How are they involved in designing and monitoring your services? Is the feedback acted upon? _____

In general, what are the technical and functional capacities needed for EAS providers? Are they available? _____

Are there any courses for extension workers at university level or technical institutes? What are the topics? How are they aligned with the most requested services? Are the courses accessible and attended? Are there courses specifically on extension? _____

Are there challenges in recruiting enough women? _____

What challenges do female staff face in the organization? (i.e. *security on the ground, maternity leave, childcare, access to certain positions, lower wages*) _____



What about access to available equipment, vehicles, computers, training materials, demonstration sites and so on? _____

Who provides EAS with other needed ICT/logistics/credit services? _____

What services would be necessary but are missing/difficult to access? _____

How do you work with other organizations and service providers? (Including informal exchange and collaboration) With whom? What activities are you doing jointly? _____

What activities do you think you should be doing together? _____

What are the benefits/incentives and limitations of these collaborations? _____



The questions below will be most likely used during interviews with EAS management/experts

What is the national policy / vision / action plan for agricultural extension? How are the strategic orientations and roles articulated? _____

What are other key standards / policies / institutions that regulate and impact the system? (whether directly related to extension or not). _____

How do they impact the agricultural sector and the EAS system? How do they impact your organization (e.g. *agriculture and its sub-sectors, development / poverty reduction strategies, food security, environmental standards, trade, food standards, finance, women's empowerment, education and vocational training, employment, freedom of association, subsidy (fuel, inputs, prices for consumers)*) _____

What are the main sources of financing at the system level? (e.g. *public, private sector, donors, fee-for-service, mix*) _____

What are the main sources of funding for your organization? Who is/are the strategic resource partner/s? What are the main challenges related to funding? (e.g. *sustainability, inadequacy, fluctuations, dependence on donors, lack of freedom in the allocation of resources*) _____

What is the long-term vision for funding at the system level? Does the system/your organization have a strategy for resource mobilization? _____



What are the institutional set-up, mandate and expected roles of the bodies relevant to EAS at central and local level? What is the level of decentralization and how does it work? _____

Is there a mechanism (formal or informal) in place within EAS and/or with EAS and other agrifood system stakeholders to coordinate and collaborate? How does it work at local and national levels? (e.g. *network, forum, committee, ad hoc events, certification scheme, specified quality standards for services*) _____

What are the incentives/benefits and challenges/limitations of this mechanism? (e.g. *the benefits could be: closer collaboration, improved service quality, no duplication of activities, enhanced capabilities, new funding opportunities. And the limitations could be: important stakeholders are not included or fully participating, there is no MEL, meetings are not frequent enough, there is no will/trust to collaborate*) _____

If there is no such mechanism, or it is not working well, what are the reasons? And how does this influence the system? _____

What does the decision-making process look like? Who are the stakeholders involved and what are their roles? (e.g. *in relation to the development and implementation of national policies and projects, planning, financing, budget allocation*) _____

What is the role of the public sector? What should it be? _____

Annex 10

Areas of intervention by EAS providers

[Tick (✓) the appropriate response]

Area of intervention	Very much or fully RANK 4	To a good extent RANK 3	Partially RANK 2	Very little or not at all RANK 1	Don't know RANK 0
1. Enhance technical knowledge of farmers on new technologies through trainings					
2. Disseminate new technical knowledge through mass media					
3. Build producers' marketing, business and financial skills					
4. Build producers' skills in value addition					
5. Provide problem solving support at field level					
6. Mobilize farmers into groups and help them articulate demands					
7. Share market information (related to price, requirements etc.)					
8. Share weather information					
9. Support adaptation to and mitigation of climate change by building producers' skills in sustainable practices					



Area of intervention	Very much or fully RANK 4	To a good extent RANK 3	Partially RANK 2	Very little or not at all RANK 1	Don't know RANK 0
10. Provide feedback to researchers					
11. Organize and link producers to input supply					
12. Entrepreneurship development					
13. Support policy change					
14. Link farmers to other sources of support and services (e.g. inputs, mechanization services, etc.)					
15. Link producers to domestic and international markets					
16. Enhance farmers' knowledge on food safety standards					
17. Promote sustainable diets and nutrition					
18. Others					

Annex 11

Assessing inclusiveness

Please rate the extent to which the following groups are covered by EAS (generally or by one organization under assessment) [Tick (✓) the appropriate response]

Client focus	Very much or fully RANK 4	To a good extent RANK 3	Partially RANK 2	Very little or not at all RANK 1	Don't know RANK 0
1. All EAS clients					
2. Type of production [e.g. crop, livestock, fishery, forestry, etc.]*					
a.					
b.					
c.					
3. Client characteristics [size of farm, level of commercialization, etc.]*					
a.					
b.					
c.					
4. Social characteristics [gender, age, ethnic background, other disadvantaged groups, migrants, etc.]*					
a.					
b.					
c.					
5. Other value chain actors (e.g. traders, aggregators, processors)*					
a.					
b.					
c.					

* Note: please specify the relevant client groups that apply and rank in separate rows

Annex 12

Funding from different sources for EAS

Funding from different sources for EAS provision	Total annual budget available	Amount spent for EAS provision	Share of EAS budget to total budget (%)	Don't know
1. Government (please specify which level of government)				
Central				
Provincial				
State				
District				
Municipality or units below				
2. Donor(s) [specify]				
a.				
b.				
3. Industry (specify)				
Input industry				
a.				
Agroprocessors				
a.				
4. NGOs (specify)				
5. POs (specify)				
a.				
b.				
6. User contributions				
7. Others				
TOTAL				

Annex 13

Suggested outline of the report

Executive summary

(Why and how the assessment was implemented and highlights of the main findings – the reader should acquire a good overall impression of the assessment process and results from reading this section)

1. Introduction:

- **Global and regional trends in EAS** *(very brief, possibly focusing on the region)*
- **Objective of the assessment in the country** *(why the assessment was conducted in the first place and what its objectives are, for example reform, impact evaluation, a project)*
- **Assessment methodology** *(brief account of the methodology and more detailed account of how it was applied in the country: process, selected regions/value chains, selection criteria, interviewed stakeholders)*

2. Assessment Findings:

- **National priorities** *(against which the EAS system is being assessed)*
- **Country context** *(agroecological, socio-demographic, macro- and micro-economic and policy conditions. It is also good to include a very brief overview of the history of EAS in the country)*
- **Clients** *(what are the main characteristics of producers in the country, what are their main needs and challenges, their perception of EAS and what kind of EAS providers/sources they usually use. Many of these aspects will be also brought up in the following sections, but it is good to give an overview of the clients' perspective first)*



- **Functions** (*matching of services identified as needed by producers and other actors with those delivered by different providers, their general relevance, inclusiveness, adequacy, delivery methods, individual capacities of providers needed to deliver the services can be also included here, includes also clients' perspective*)
- **Structure** (*stakeholder mapping, who they are, their mission and activities, clients served, capacities, weaknesses and strengths, also including clients' perspective of them*)
- **Detailed organizational assessment of selected providers** (*this can be presented as a section here or also used to supplement different sections of the report, not necessarily presented as a separate section*)
- **Enabling internal factors** (*governance and coordination of the system, MEL, decision-making and participation of different stakeholders, incentives, funding, capacities of providers needed to deliver the services can be also included here together with capacity development opportunities for EAS*).

3. Conclusions

(Highlights from the main findings with a focus on key interpretations and analysis, keeping in mind the national priorities and whether EAS are contributing to them).

4. Recommendations

(Strategic directions with main suggested interventions designed to address specific gaps and weaknesses.)

Annexes

(Sample of questionnaires used, list of stakeholders interviewed/invited [organizations, not individuals' names] to the workshops, regions visited, more detailed tables and graphs if needed).

Extension and advisory services (EAS) play a key role in facilitating innovation processes, empowering marginalized groups through capacity development, and linking farmers with markets. EAS are increasingly provided by a range of actors and funded from diverse sources. With the broadened scope of EAS and the growing complexity of the system, the quantitative performance indicators used in the past (for example related to investment, staffing or productivity) are no longer adequate to assess the performance of EAS systems. This operational guide meets the long-standing demand for guidance on undertaking such a comprehensive assessment of national EAS systems. It provides detailed directions on how to organize the entire process, from preparation to implementation and consolidation. Its use will help identify gaps and entry points for targeting investments and realigning policies for transforming EAS.

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