



A GENDER AND SOCIAL INCLUSION ANALYSIS OF ACCESS TO AGRICULTURAL SERVICES IN SENEGAL

Enabling Farmers for Agricultural Transformation (EFAT) Project

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A Gender and Social Inclusion Analysis of Access to Agricultural Services in Senegal

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ACRONYMS

ANPEJ	Agence Nationale de la promotion de l'Emploi des Jeunes (National Agency for the Promotion of Youth Employment)
ANCAR	Agence Nationale de Conseil Agricole et Rural
ANIDA	Agence Nationale d'Insertion et de développement Agricole (National Agency for Agricultural Insertion and Development)
ANSD	Agence Nationale de la Statistique et de la Démographie (National Agency of Statistics and Demography)
APOV	Association des Productions d'Oignon et de la Vallée (Association of Onion Producers of the River Valley)
ARD	Agence Régionale de Développement (Regional Development Agency)
CNAAS	Compagnie Nationale d'Assurance Agricole (National Agricultural Insurance Company of Senegal)
CNCR	Cadre National de Concertation et de Coopération des Rureaux (National Council for
	Consultation and Cooperation of Rural People)
CSP	Complementary service provider or provision
DAPSA	Direction d'Analyse et de de Prévisions des Statistiques Agricoles (Direction of Analysis and
	Forecasting of Agricultural Statistics)
DPEE	Direction des Prévions et des Etudes Economiques (Direction of Forecasting and Economic Studies)
EAS	Agricultural extension and advisory services
EFAT	Enabling Farmers for Agricultural Transformation
ENABEL	Agence Belge de Développement (Belgian Development Agency)
FAO	United Nations Food and Agriculture Organization
FONGS	Fédération des Organisations Non Gouvernementales du Sénégal (Federation of Non-
	Governmental Organizations of Senegal)
GIZ	German Agency for International Cooperation
GOS	Government of Senegal
IFAD	International Fund for Agricultural Development
IMCEC	Institutions Mutualistes Communautaires d'Epargne et de Crédit (Community Mutual Savings and Credit Institutions)

Enabling Farmers for Agricultural Transformation (EFAT) A Gender and Social Inclusion Analysis of Access to Agricultural Services in Senegal

ISRA	Institut Sénégalais de Recherche Agricole
LBA	La Banque Agricole (The Agricultural Bank)
MAERSA	Ministère de l'Agriculture, de l'Equipement Rural et de la Souveraineté Alimentaire (Ministry of
	Agricultural, Rural Equipment and Food Sovereignty)
POs	Producer organizations
SAIDA	Services Agricoles et Inclusion Digitale
SHF	Smallholder farmers
SODAGRI	Société de Développement Agricole et Industriel du Sénégal

EXECUTIVE SUMMARY

This report discusses the challenges faced by women and young smallholder producers in Senegal when it comes to accessing and using agricultural services. Specifically, it focuses on extension and advisory services, credit, inputs and farm equipment, market, and climate information. The gender and social inclusion (GESI) analysis complements an assessment of agricultural services in four locations in Senegal, conducted as part of the Enabling Farmers for Agricultural Transformation (EFAT) Project's start-up activities. The analysis draws on existing literature and interviews with key informants.

Although women and youth play a critical role in the country's agricultural sector, they face more limited access to various agricultural services compared to men. This is primarily due to the following factors:

- 1. Gender and social norms: These norms that limit women and youth from accessing productive resources, particularly land and labor, contribute to discriminatory practices that affect their access to agricultural services. As a result, they often contribute to lack of agency, low confidence and risk adverseness.
- Low representation in producer organizations and farmer groups: Women and youth are underrepresented as members in formally registered producer organizations and farmer groups. These organizations are the primary channels for disseminating agricultural services, including subsidized fertilizer, credit, and training.
- 3. Educational and literacy limitations: Women have lower educational and literacy levels, which restrict their access to certain services and limit their benefits from information channels and advisory approaches.
- 4. Domestic and care responsibilities: Women bear a disproportionate burden of domestic and care work within households. This limits the time they can dedicate to attending advisory activities or seeking out agricultural services.

While many agricultural service providers recognize these barriers and constraints, their efforts mainly focus on targeting these marginalized groups, particularly women. However, there is a lack of identification and addressing of the specific barriers that limit women's access to extension and advisory services. This analysis found that there has been relatively little attention given to addressing the needs of young male and female farmers for agricultural services, with limited information available on this topic.

Extension and advisory services (EAS). Women and youth access to EAS and ability to benefit from these services appears to be affected by several factors including the advisory methods used, male bias in the content of extension/advisory messages, the gender of advisors, and EAS advisors' lack of awareness and skills to identify and address the specific needs of women and youth. Fewer efforts are made by EAS organizations to target young farmers. While some EAS organizations have gender and youth strategies, they lack policies that promote gender and youth responsiveness at all levels of their organizational culture.

Credit. Women and youth face greater barriers than men accessing formal credit and financial services for agricultural activities due to social norms, societal attitudes and, in some cases, their own risk averse behavior resulting from their socialization. Marginalized groups are often not aware of the requirements for applying for loans from semi-formal or formal institutions, lack the requirements (e.g., collateral such as land or large assets, documentation), have low rates of financial literacy and low confidence to apply for formal loans. Additionally, staff of financial institutions are often biased toward men. In contrast to women who are perceived as reliable borrowers, young people seeking to obtain credit face negative perceptions.

Agricultural inputs and farm equipment. Reliable gender and age disaggregated statistics on input use in Senegal are difficult to find, but evidence suggests that women are less likely than men to use chemical fertilizers and certified seed. No information was found on input use by young farmers. Constraints women and youth face in accessing inputs include their low representation in POs, limited access to credit and low purchasing power. Input suppliers do not appear to recognize gender differences in their clients' needs or use approaches to attract women or youth clients and cater to their needs. Although government agencies provide extension agents and applicators with limited technical training on pesticides, it is unlikely that such training covers gender issues or that input suppliers receive gender training. No information was found on whether companies that manufacture tools and other farm equipment take into account women's specific needs and produce tools and farm equipment that are ergonomically suited to women.

Market information. Companies provide agricultural market price information to smallholder farmers through mobile phone apps and messaging and web-based platforms. Despite efforts by these companies to be more inclusive, women farmers are less likely than men to use these services because of their more limited access to mobile phones, inability to pay for these services and lower levels of digital literacy.

Climate information. Several organizations, including public sector agencies, private companies, and donor funded projects, disseminate climate information through multiple channels including radio and text messages, sometimes bundled with crop insurance. Although there are little or no gender differences in climate information needs by smallholder farmers, men and women have different preferences for the way such information is disseminated. As with other agricultural services, women face greater difficulties accessing and using climate information compared with men.

The analysis concludes that EAS providers could improve how they address and respond to the needs of women and young producers by adopting gender and youth responsive training and advisory approaches, hiring more women as advisory staff, training staff on these issues and adopting policies that provide incentives for staff and organizations to be more gender and youth responsive. Importantly, where possible, EAS should incorporate gender transformative approaches which seek to transform deeply rooted gender and social norms. Other general recommendations include developing more credit products designed to address the specific needs of women and youth smallholder producers, removing the barriers these groups currently face in accessing credit and developing innovative ways to improve women's ownership and access to ICT tools and services (mobile phones, tablets, internet) and strengthening their digital literacy and skills. Finally, it is recommended that

agricultural service providers develop gender and youth-responsive indicators for monitoring the performance of service delivery programs and conduct periodic national level assessments on women's and youth's access to and use of agricultural services. It is recommended that the EFAT Project support service providers working with the project to develop gender and youth action plans that go beyond targeting women and young farmers to devising specific interventions, actions and strategies that address the barriers and constraints these groups face in accessing and benefiting from agricultural services, provide customized gender training for service providers and link them to organizations that can provide resources to improve women's and youth's access to agricultural services.

PROGRAM DESCRIPTION/INTRODUCTION

Winrock International was awarded the **Enabling Farmers for Agricultural Transformation (EFAT)** on October 1, 2022. EFAT builds evidence on approaches for strengthening pluralistic extension and advisory services (EAS) for the effective delivery and scaling of climate-smart agricultural innovations. EFAT has three broad objectives:

- Pilot EAS delivery models to learn how to organize and incentivize public, private, and civil society organizations to effectively work together to provide inclusive, demand-driven advisory and complementary services to smallholder farmers, particularly women and youth.
- Engage with USAID mission to provide technical assistance and support projects globally to strengthen EAS programming.
- Strengthen a global community of practice (CoP) on EAS to promote learning, knowledge exchange and scaling of proven EAS practices, methods, and approaches.

Pilot activities to test EAS delivery models will be implemented In Senegal over a period of three years (2022-2025) focused on five value chains prioritized by USAID-Senegal: rice (lowland and irrigated), maize, orange-fleshed sweet potato, horticulture and sheep/goats.

Without access to the latest agricultural technologies and practices, improved skills and knowledge and access to complementary services (e.g., credit, inputs, climate information, market information), smallholder farmers (SHFs) in Senegal and worldwide will not be able to deal with the multiple challenges they face, including declining agricultural productivity, sudden outbreaks of devastating pests and diseases, climate change and meeting global quality standards. Although women and young people¹ worldwide contribute significantly to the agricultural sector, they have less access to, and benefit less than men from agricultural extension and advisory services and complementary services (CS). This situation is attributed to various barriers and constraints women smallholder producers face. There is also growing recognition that young women and men producers are often sidelined by agricultural service providers even against a backdrop of an aging farming population and calls to engage youth as EAS clients as well as EAS providers.

The term agricultural extension and advisory services used in this document refers to organizations from the public and private sectors and civil society (producer organizations, individual entrepreneurs) who

¹ Most Senegalese organizations define youth to be between 15 and 35.

provide knowledge, skills and information related to agriculture (productivity, marketing, nutrition etc.) to farmers. Complementary service providers are the organizations from both the public and private sector that provide a range of services that farmers need to support their agricultural enterprises such as inputs, finances, equipment, machinery, crop insurance, climate information etc.

This gender equality and social inclusion (GESI) analysis of agricultural service provision in Senegal investigates women's and young people's access to and ability to benefit from EAS and CS in order to identify entry points and activities that the EFAT Project can undertake to address the specific needs and demands of women and youth SHFs. Due to the paucity of information on other marginalized groups involved in agriculture in Senegal such as disabled people, this report focuses on women and youth. The GESI analysis complements other start up assessments carried out by the EFAT Project to identify agricultural service providers in four locations in Senegal, document farmers' needs and priorities for agricultural services, analyze the barriers and constraints they face in adopting agricultural technologies and identify opportunities for project intervention (Winrock, 2023).

The GESI analysis of access to and use of agricultural services in Senegal addressed the following questions:

- Are there differences in men's and women's demand and access to EAS and complementary services?
- What barriers and constraints do women and young farmers face in accessing and benefiting from EAS and CS provision?
- Do organizations involved in providing EAS and complementary services take gender and age into account and seek to address gender and age-related constraints where they exist?
- What constraints do EAS and CS providers face in addressing these constraints at the organizational level and individual provider level?

The report is organized in three sections. Following the introduction and methodology section, section 2 provides an overview of the Senegalese context in relation to agricultural systems in the country, the types of crops grown, the roles of women and youth in agriculture, and the gender and social norms that affect the participation of women and young people in this sector. Additionally, this section explores whether agricultural policies in Senegal recognize and seek to address the specific needs and demands of women and youth SHFs. Section 3 of the report presents findings on women's and youth's access to agricultural services in Senegal by looking specifically at their access to and use of extension and advisory services, credit, agricultural inputs, market information and climate information. Lastly, section 4 provides conclusions and recommendations.

METHODOLOGY

The GESI analysis draws on a desk review of existing documents on women's and youth's access to agricultural services in Senegal sourced from the internet. Publications examined include peer reviewed journal articles, project reports, evaluations, case studies, technical briefs and various types of grey literature. To complement the desk review, the consultant interviewed 8 key informants representing different categories of agricultural service providers (Table 1, see Annex 1) to elicit information on

approaches in providing services to meet the needs of women and youth, successes and challenges encountered and good practices. Informants were purposively selected and all interviews were conducted by phone in February 2023. Examples and insights provided by the key informants are woven into the discussion.

Table 1. Organizations represented by key informants

Organization	Туре	
ANCAR	Public sector extension	
Nafoore Warsaaji Project	USAID Feed the Future Project on horticulture	
Réseau des Organisations Paysannes et Pastorales du Sénégal (RESOPP)	Seed supplier	
Société des Produits Industriels et Agricoles (SPIA)	Agro dealer	
La Banque Agricole	Public sector financial institution	
Institutions Mutualistes Communautaires d'Epargne et de Crédit (IMCEC)	Public sector financial institution	
Compagnie Nationale d'Assurance Agricole du Sénégal (CNAAS)	Public sector insurance agency	
Coopérative Fédération des Organisations Non- Gouvernementales du Sénégal (FONGS)	Producer organization	

LIMITATIONS OF THE STUDY

A major limitation of this GESI analysis was the reliance on existing literature to obtain information. While literature exists on the role of women in Senegalese agriculture (see for example, Nation, 2010; Poulsen, 2015; USAID-Senegal, 2016a; Feed the Future, Naatal Mbay, 2018), relatively little detailed information is available on women's and youth's use and access to agricultural services and no specific studies have been conducted on this topic. Existing information is scattered in grey literature, and for some issues non-existent, and often based on observation rather than research findings. The findings in this report therefore reflect the paucity of information and draw attention to these gaps.

The small number of agricultural service providers interviewed due to time constraints is a second limitation of this GESI analysis. The service providers interviewed represent different types of services but do not constitute a representative sample. Another constraint the consultant faced was difficulties in securing interviews with key informants. Some informants were stationed outside of Dakar and therefore could only be contacted by telephone. Others did not respond to emails requesting an interview despite multiple attempts to contact them. In some cases, key informants did not have detailed information pertaining to women and youth. Due to the small number of key informants interviewed, findings in this report should not be taken as conclusive but as indicative of trends and observations that should be verified through a sample survey with a larger number of respondents. The

EFAT team will continue to monitor and document constraints and barriers women and youth face in accessing and benefitting from agricultural services and will look for, and integrate good practices in project activities to address these constraints.

CONTEXT

AGRICULTURAL IN SENEGAL AND THE ROLE WOMEN AND YOUTH

The agriculture and livestock sectors are the mainstay of Senegal's economy, representing 15 percent of gross domestic production (GDP) and employing about 70 percent of the population (World Bank, 2021a). The country is divided into the following six agro-ecological zones (AEZs): the Senegal River Valley, Niayes, the Groundnut Basin, Silvo-Pastoral Zone, Eastern Senegal and the Casamance. About 42 percent of the population of 18.3 million live in rural areas, and more than 60 percent are below the age of 25 (CIA 2023).

The agriculture economy is dominated by smallholder farmers producing millet, sorghum, maize and rice for subsistence and peanuts, cotton and horticultural crops for sale. Other food crops of importance include cowpea, cassava, fruits and vegetables. With the exception of the far southern part of the country, Senegal is located in the drought-prone Sahel which is experiencing the increased vagaries of climate change. There are two seasons, a long dry season and a 3-4 month rainy season. The livestock sub-sector plays a significant role in the country's economy, accounting for 35 percent of GDP in the agricultural sector and employing 3 million people (African Development Bank, 2013). SHFs face many challenges with agricultural production, processing and marketing including irregular rainfall and poor soil conditions, poor access to high-quality seed, fertilizer and other agro-chemicals, machinery, climate information, market access and financial services and lack of rural infrastructure (CIAT, BFS/USAID, 2016). Climate change, as manifested through irregular distribution in space, time and amount of rainfall, a decrease in the number of days in growing season, a reduced amount of, and increased temperature, is making agriculture even more precarious for SHFs.

Senegalese women play an important role in agriculture as producers, processors and marketers, contributing significantly to household food security and livelihoods. A study conducted in the key farming areas of the country found that men contribute a higher number of hours to agricultural activities than women (FtF Nataal Mbay, 2018). The majority of women live in male-headed households and work on their husbands' plots supporting the production of staple cereal crops, and also cultivate crops on their own plots. In many Senegalese communities (e.g. the Wolof), male heads of households are expected to provide food for their dependents, which is the rationale for men's control over land, granaries and most agricultural equipment. Women are expected to make their own money and use it to cover personal expenses for themselves and their children and produce and buy foodstuff (Carr et al., 2016). Like women in other parts of the world, Senegalese women bear a double burden by engaging in agricultural activities alongside their responsibility for domestic and care work. It is estimated that Senegalese women spend an average of five hours a day doing unpaid care work, compared to two hours for men (UN Women, 2022). Most processing of agricultural products is done manually by women. Efforts to introduce modern processing equipment such as mills, huskers and shellers have improved the situation but supply does not meet the demand for such equipment. Women's time

poverty contributes not only to lower agricultural output, but also means that they have less time to engage in more lucrative income generating activities which results in them having fewer financial resources to invest in agriculture compared to men.

Women's involvement in agriculture varies by value chain, location and ethnicity, with a higher involvement of women in farming in the south-east of the country (e.g. Kolda and Tambacounda) (USAID, 2016a). Women are more strongly involved in low land rice production, particularly in Kolda, Sédhiou and Ziguinchor regions, accounting for 63 percent of plots owners (FAO, 2018) and dominate the cultivation of local vegetables such as hot pepper, African eggplant, Bambara nuts largely used for home consumption. On their own plots, women cultivate crops for household consumption such as peanuts, vegetables, hibiscus and sometimes, cereals (maize, millet, rice) and generally control the income from the sale of these crops (Poulsen, 2015). They control only 28 percent of cowpea plots, 15 percent of peanut plots and 7 percent and 3 percent of maize and millet plots respectively (Government of Senegal, 2016). Women's involvement in irrigated rice production in the Senegal River Valley varies by location and ethnicity (FtF Nataaly Mbay, 2018). Female involvement tends to be higher in the Delta sub-region and in Mboudoum, for example. On average women's plots are significantly smaller than men's plots (0.4 ha compared to 1.3 ha for men) (Government of Senegal, 2016) due to challenges they face accessing land and time and resource constraints.

Both men and women are involved in growing horticultural crops for urban consumption and export, however men dominate this sector based on their larger plot size and higher yields. Men are more likely to grow onions and potatoes, while women are more concentrated in the production of tomatoes and local vegetables (USAID, 2016a). More recently women, and increasingly young men, are targeting the production of horticultural crops (processed tomato, dried okra, orange-fleshed sweet potato, fresh mango and bananas) for the domestic market. Both men and women own and raise all types of livestock but have gender-based responsibilities. Women playing an important role in managing small ruminants (sheep, goat) and poultry owned by their husbands and themselves, while men are responsible for monitoring and selling cattle (USAID, 2016a).

Even though most Senegalese women farm their own plots and own livestock, major decisions are typically made by men across agricultural activities (FtF Nataal Mbay, 2018). Most women, however, feel free to make their own decisions, although social norms call for women to inform their husbands of major expenditures using their own income. Notably, women's voice in decision making tends to increase with their level of contribution to household food security and finance, and their membership in producer organizations (FtF Nataal Mbay, 2018). Women's decision-making power in households also varies by ethnic group.

Climate change disproportionately affects rural women in Senegal and worldwide in several ways. Climate change often increases the amount of time women spend searching for water and firewood. Additionally, climate change has negative impacts on women's health and is associated with an increase in gender-based violence (Awiti, 2022). In relation to agricultural production, climate shocks may lead to greater competition over land and water for agricultural production to women's disadvantage and increased female labor and additional need for financial resources, inputs, tools and other technologies. For example, in the lowlands, where women predominate in rice production, greater salinization of soils as a result of climate change has increased labor requirements to work the soil and for weeding, requiring other tools and equipment which women may not necessarily have access to (USAID, 2016a).

Producer organizations provide smallholder farmers in Senegal with key services such as credit, subsidized fertilizer and other inputs, training, farm equipment and marketing channels. Although POs are open to both men and women, men make up the majority of members. Notably, women must get their husbands' consent to join POs (FtF Nataal Mbay, 2018) and their time poverty and limited access to land means that they are often unable to receive all benefits from membership in POs.

About half (52 percent) of Senegalese youth live in rural areas (ANSD, 2014). Limited growth in the rural economy means that a significant proportion of rural youth (32 percent compared to 24 percent in urban areas) are unemployed, a situation which contributes to high numbers of young people migrating to urban areas and outside of the country. Traditionally, young men and women worked on their family's plots without pay before getting married and setting up their own households. In present day society, young people are not satisfied to work without pay, and several factors including a negative perception of farming, a desire to earn income quickly and lack of resources to engage in agriculture, make agriculture an unattractive option for them. Against this background, the government's youth-focused strategy is to create employment opportunities and promote entrepreneurship for young people in the agricultural sector (USAID, 2016b).

GENDER AND SOCIAL NORMS THAT AFFECT THE PARTICIPATION OF WOMEN AND YOUNG PEOPLE IN AGRICULTURE

Gender and social norms restrict women's participation in agriculture in significant ways especially in how they are socialized, their domestic and care responsibilities as earlier discussed and attitudes toward women's agricultural and entrepreneurial activities and education. There are significant differences between ethnic groups in Senegal, but in general patriarchal norms accord women and young people low social status. While Senegalese women in the rural areas are expected to farm, in some communities their activities in agriculture are perceived of as less important than men's (Carr et al., 2016). Although no studies were found on these issues in the Senegal context, findings from other African countries show that patriarchal norms contribute to women's low self-efficacy, lack of agency, and decision-making power, particularly at the household level and in relation to entrepreneurship, as well as psychological traits such as low confidence and self-esteem and risk adverseness (David, 2021).

The tendency of families to favor boys' schooling, coupled with early female marriage negatively impact women's educational achievements and contribute to high female illiteracy rate (Table 2). Low educational attainment has far reaching consequences by limiting women's access to agricultural services, particularly digital services, curtailing their financial literacy and access to credit and financial services and restricting their access to market and trade opportunities, among others.

	-
Adult female literacy rate (%)	40 % (65 % for men) ²
Percent of female headed households (national level)	25 % ³
Female ownership of mobile phones	73 % (81 %for men) ⁴
Female access to the internet	16 % (25 % for men) ⁵

Table 2: Selected socio-demographic indicators on women in Senegal

Although the Senegalese constitution guarantees women and men equal rights to land ownership, this tenant is typically not enforced in the rural areas and the traditional patrilineal system of land inheritance remains the norm. Based on the customary land tenure system, women have fewer opportunities to own land and after moving to their husband's village after marriage, rely on their husbands or use other means to access land. Competition over limited land resources, especially for cash crop production, means that husbands often apportion their wives small plots, sometimes of low soil fertility (USAID, 2016a). Due to their dependence on men to allocate them land, many Senegalese women cannot be sure of the size of fields they will farm each season. Some husbands choose to rent fields for their wives to cultivate and change the size of plot given to their wives from season to season (Carr et al., 2016), which makes it difficult for women to plan their farming activities and the inputs they need. Additionally, women's low ownership of land and other key assets that serve as collateral for loans limits their access to credit.

Women also face significant labor challenges in farming as they have less access to family labor to work on their personal plots. Whereas male farmers as heads of households can call on their wives and children to provide labor on their fields, women farmers depend on their own labor, on hired labor and to some extent help from their children. Furthermore, women's subordinate position in households means that they have to first provide labor on their husbands' or family plots before attending to their own fields. As earlier noted, women's double burden in production and domestic activities and their lower income generating capacity means that they tend to have less funds compared to men to invest in agriculture. For example, a study found that 41 percent of women compared to 59 percent of men used loans to obtain farmland and only 14 percent of women compared to 86 percent of men were able to lease land due to a lack of cash (Government of Senegal, 2016).

There is agreement in the literature that one of the top constraints to youth involvement in agriculture in many parts of Africa is access to land due to social norm that puts control over land in the hands of older men. Other constraints are access to finance and skills (Youth Power2, nd). In Senegal, both young men and women have limited access to land for agriculture, but young women are affected by the dual burden of gender and age-related biases. In contrast with rural women as a group, however, young people have higher educational levels (76 percent of 15–24-year-olds are literate, World Bank, 2021d), a high degree of digital literacy and strong aspirations to make money, factors which potentially gives them advantages in the agricultural and agribusiness sectors. On the downside, school attendance is contributing to a decline in the transmission of local agricultural and other forms of knowledge from the older to the younger generation.

² World Bank, 2021b

³ World Bank, 2021c

⁴ Délégation de l'Union Européenne au Sénégal, 2021

WOMEN, YOUTH AND AGRICULTURAL POLICIES

Over the past three decades, the Government of Senegal has adopted key policies and strategies that seek to improve women's and youth involvement in the agriculture sector, promote gender equality and transform agriculture into an engine of economic growth (Table 3).

Table 3: Key agricultural policies and strategies that specifically mention women and youth

Delision Churchonica Ducamente	
Policies, Strategies, Programs	Objectives/Actions
Lei Arre Sulue Destarel (LOACD) (record in 2004)	Constitutes the legal framework for the development
Loi Agro-Sylvo-Pastoral (LOASP) (passed in 2004)	of the agriculture sector
	Development of family farming and agro-industries,
Dian Concert Francisco Concert Dian) (DCF)	promotion of gender equity and equality and women's
Plan Senegal Emergent (Emerging Senegal Plan) (PSE)	empowerment and employment of youth throughout
(2014-2035) and its two priority action plans	target value chains
	Contributes to the improvement and securing of the
	productive base, the sustainable increase of agro-
	sylvo-pastoral and fisheries production and
Netional Assistational Investment Decomposition Factor	productivity, resilience, and social protection of
National Agricultural Investment Program for Food	vulnerable groups, the economic empowerment of
Security and Nutrition	women farmers, herders, etc.
	Increase agricultural production and productivity,
Sectoral Policy Letter for Agricultural Development	diversify agricultural production systems, strengthen
2019-2023	agricultural services, improve governance of the sector
	Promote the intensification of agricultural production,
	strengthen water management, achieve food self-
	sufficiency in rice and onions, optimize the
	performance of the groundnut sector, develop the off-
Senegalese Agriculture Acceleration Program 2014-	season fruit and vegetable sectors, support women's
2018	economic empowerment
National Strategy for Women's Economic	Promote the economic empowerment of women in
Empowerment (SNAEF)	agricultural value chains, among other strategies
	Eliminate inequalities between women and men in
	order to ensure women's rights and protection, by
	encouraging their full participation in decision-making
National Strategy for Equity and Gender Equality	processes and equitable access to development
(SNEEG) (updated in 2016)	resources and benefits

With regard to youth, the Loi Agro-Sylvo-Pastoral (LOASP), the PSE and a law permitting the formation of economic interest groups (groupement d'intérêt économique or GIE) specifically promote youth employment and involvement in the agribusiness sector as entrepreneurs (USAID, 2016b). Notably, these policies and strategies seek to modernize agriculture as a way of attracting youth. Youth-focused programs designed to operationalize these policies and strategies include the National Agency for Integration and Rural Development (ANIDA), the Program for Accelerated Agricultural Development (PRACAS), and the Community Agricultural Program (PRODAC).

The bigger issue is, however, not a lack of policies but rather in the implementation and enforcement of existing policies and laws. As noted earlier, women's right to land ownership is

not usually enforced in the rural areas. Furthermore, there are also contradictions between laws and policies. For example, while both women and men have equal rights to land ownership, the Family Code recognizes men as the legal heads of households, thereby granting them greater access to agricultural inputs and land (USAID, 2017). It should be noted that since the 1990s, Senegal has been in the process of adopting a new land law (Enda Pronat and LANDac, 2018).

WOMEN'S AND YOUTH'S ACCESS TO AND USE OF AGRICULTURAL SERVICES

EXTENSION AND ADVISORY SERVICES

EAS in Senegal are provided by public sector agencies (ANCAR, SAED, DRDR, ARD), producer organizations (POs), donor funded projects and programs implemented by government, international and local NGOs and private firms (Winrock, 2023; Franzel et al., 2018). At the time of this assessment, three Feed the Future Projects (Doolel Mbay, Nafoore Warsaaji and Dundel Suuf) with strong EAS components were being implemented.

In general, EAS in Senegal, especially those provided by public sector agencies and donor funded projects, are aware that women clients have different needs from men and most make deliberate effort to target women (Winrock, 2023). Public sector EAS organizations such as ANCAR, SAED and Société de Développement Agricole et Industriel du Sénégal (SODAGR) I have gender focal persons, run programs and initiatives targeting women and set gender targets for their activities. ANCAR has a gender and social inclusion policy and aims to reach 20 percent of women and youth in all of its activities (Bineta Mbengue, personal communication). The Projet d'Intensification Eco-Soutenable de l'Agriculture dans les Niayes (PIESAN) offers small grants to producers and gives women preferential terms. Women are required to contribute 20 percent of the cost of the item purchased compared to 40 percent for men (Winrock, 2023). Examples of women-focused EAS activities include SAED's and ARD's efforts to strengthen women producer organizations in Saint Louis and Dagana Department (Winrock, 2023). Relatively few EAS providers and agricultural programs, with the exception of donor funded youth focused projects such as FAO's Integrated Country Approach (ICA), specifically cater to youth.

Pronouncement by some organizations interviewed (e.g. RESOPP) that men and women receive the same extension and advisory services suggests that gender responsiveness by EAS organizations tends to be limited to targeting women without identifying the barriers that limit women's access to EAS, addressing them and responding to women's specific needs. A 2018 study on the agricultural extension system in Senegal noted "Whereas there is broad understanding and acceptance of the need to increase women's role in EAS and improve access of EAS to women, there is less understanding of how to do so" (Franzel et al., 2018: 32). One reason for gender and youth-blind EAS may be a lack of detailed data and analysis of women's and youth's role in agriculture, their needs for agricultural services and the barriers they face in accessing these services. For example, one informant attributed the relatively low number of women who receive climate information to the fact that "women mainly deal with post-harvest

processing and managing their households". While donor funded projects such as Nataal Mbay and Nafoor Warsajii routinely conduct gender and social inclusion analyses before they start, it is unclear whether public and private EAS organizations conduct such studies and use gender and age disaggregated data to inform their interventions.

To effectively target women and other marginalized groups in delivering services, EAS activities and projects need to be clear about who their clients are and adopt different extension and advisory approaches to reach different client groups (DLEC, 2019). Who EAS providers target (i.e. individuals, the household) and how farmers are selected for EAS is also often biased in favor of men. In Senegal, many agricultural services including advisory services, training, subsidized inputs, and credit and marketing are channeled through producer organizations. Women's and youth's lower representation in PO membership (Nataal Mbay, 2018) is an important factor that limits these groups' access to a range of agricultural services. Many women and youth belong to women or youth groups or associations, but these groups often find it difficult to register officially which bars them from receiving subsidized loans and inputs (Winrock, 2023).

Women's and youth's access to EAS and complementary services and ability to benefit from EAS appears to be affected by several other factors including the advisory methods used, male bias in the content of extension/advisory messages, the gender of advisors, and EAS advisors' lack of awareness and skills to identify and address the specific needs of women and youth. The most common extension and advisory methods used in Senegal include farmer-to-farmer extension, farmer field schools (FFS), training events, printed extension materials, farm management advisory services, mobile phones and radio (Franzel et al., 2018). Some of these extension and advisory methods and approaches do not necessarily meet women's needs for information, knowledge and skills and, depending on how they are implemented, may limit women's participation. For example, women may find it difficult to attend lengthy, residential training events or participate in methods such as FFS that require a significant time investment. Moreover, many of these extension approaches require some level of literacy which puts many women at a disadvantage due to their high rates of illiteracy (see Table 2) and lower levels of education. Without specific efforts to address these barriers and accommodate their needs, women are less likely to participate in and benefit from extension and advisory activities. However, it is unclear whether EAS providers take into account women's specific needs in terms of timing of events, location of extension activities, childcare, low literacy and make accommodations when implementing extension and advisory methods. The approach adopted by some extension organizations such as SAED of training PO or group leaders rather than working directly with farmers limits both male and female farmers' access to technical information, skills and knowledge as leaders often do not pass down what they learn to farmers (Winrock, 2023; Aicha Diagne, personal communications).

Having less access to mobile phones (particularly smart phones), radios and the Internet and lacking the time and digital literacy skills to use these resources (see Table 2) also limits women's access to services and information provided through these channels. Several e-extension platforms such as ANCAR's E-Conseil and Services Agricoles et Inclusion Digitale (SAIDA) e-advice platform have addressed these constraints by providing messages in multiple local languages through text, audio and mobile phone applications.

Evidence from other countries suggests that even when women have access to EAS, they may not necessarily benefit because often the technologies developed by national research systems reflect male bias in terms of crops, characteristics and access to resources, often resulting in the development of technologies that are often less relevant for women and the poor (Petrics et al., 2015). For example, in Senegal, the research system puts more emphasis on the irrigated rice value chain dominated by men compared to the rainfed rice value chain, the stronghold of women. Between 2015 and 2023, 21 improved irrigated rice varieties were released and disseminated compared to only 7 rainfed rice varieties (Winrock, 2023). Similarly, most EAS organizations pay limited attention to improving post-harvest processing or transportation of agricultural goods, areas which offer opportunities for marginalized groups that lack access to land (Winrock, 2023). In designing and implementing agricultural extension and advisory programs, perceptions of women producers are often based on traditional gender roles rather than the dynamic nature of the reality on the ground. The assumption that women are primarily interested in production of food crops and local crop varieties and men in commercial crops and improved varieties based on a food/cash crop farmer dichotomy is a common misperception that influences agricultural advisory programming.

EAS providers in Senegal face a number of challenges in providing services to women and youth. Most EAS organizations have gender strategies and action plans that address gender at programmatic and policy levels but put less emphasis on mainstreaming gender in their organizational culture by providing incentives for prioritizing gender equality in EAS provision, designing gender-responsive extension delivery mechanisms, hiring and retaining more women as extension staff, allocating resources to activities that accommodate the needs of women, among others. While some EAS organizations such as FONGS provide gender training to their staff (Aisha Diagne, personal communications), it is unclear whether this is common practice among other organizations and whether other forms of capacity development are provided. The absence of policies requiring gender training for all staff may result in staff lacking gender skills and competencies and managers not being aware of the gender-related challenges faced by field staff. It is also unclear whether public EAS organizations allocate resources to accommodate the needs of women producers. Some EAS organizations do not have procedures and guidelines for collecting sex-disaggregated data which prevents them from monitoring the impact of advisory and other programs on men and women. Public EAS organizations in the Saint Louis area were unable to quantify the number or percentage of youth and women they worked with (Winrock, 2023), and few studies assess the impact and effectiveness of interventions targeting women and youth.

Although having more women as EAS staff is not a prerequisite for more gender-equitable services, the gender of advisors may be important in a Muslim country like Senegal where women tend to feel more comfortable speaking out in the company of other women and husbands are more comfortable with their wives interacting with female extension staff. Yet, women make up a relatively small number of field advisors and farmer trainers (*paysan relais* in French). In 2018 Franzel and colleagues estimated that women made up about 11 percent of field advisors in the country (Franzel et al., 2018); more recent statistics were not available from ANCAR and other EAS organizations. Human resource policies that overlook barriers faced by women advisors in carrying out their jobs and advancing in advisory careers are unlikely to achieve gender parity in staffing. Information on the gender aspects of human resource policies of the EAS organizations interviewed was not available. To attract more women field

advisors and accommodate their needs, the FtF Naatal Mbay Project reduced the amount of travel required for female extension staff (IRG, 2016).

Interviews with extension organizations did not provide information on whether and to what extent gender is covered in the pre-service or in-service training of public sector extension staff. As this study was unable to assess gender awareness and capacity among extension staff in public and private extension organizations, there is need to investigate this issue in detail at the level of EAS organizations and the Interprofessional Center for Training in Agriculture Professions (CIFA) which provides in-service training for extension agents. However, one of the challenges with gender training is the focus by many EAS organizations on working at the PO or group leadership level rather than directly with farmers (Aicha Diagne, personal communications). A training-of-trainers approach on gender and youth responsive approaches is therefore needed to ensure capacities related to gender and youth inclusion are strengthened at all levels of EAS organizations and their partners.

CREDIT

Accessing credit and financial services for agricultural activities is challenging for both men and women, but women and youth face greater barriers than men due to social norms, societal attitudes and in some cases, their own risk averse behavior resulting from their socialization. Many agricultural financial agencies and programs such as the La Banque Agricole, Credit Mutuel du Sénégal (CMS) and ACEP provide subsidized loans to producer organizations, farmer groups and individual producers and agripreneurs. Numerous microfinance agencies such as the Mutualistes Communautaires d'Epargne et de Crédit (IMCEC) exist throughout the country operating as Decentralized Financing Institutions (DFIs) whose operations are regulated by the Central Bank (Direction de la Microfinance, 2015). These institutions mainly provide cash loans and grants to individual smallholder producers and traders and farmer groups to enable them to purchase inputs and equipment. Informal savings groups known as 'tontines' or Village Savings and Loan Associations (VSLAs) are common and mainly used by women.

As in other developing countries, women and youth have more limited access to formal credit and face challenges accessing financial services. In 2015, only 10 percent of women compared with 21 percent of men had access to some form of formal financial services (UN Capital Development Fund, nd). On average, women represent 43 percent of the members/clients of Decentralized Financial Services (DFS) and mobilize almost 27 percent of DFS deposits reference. Additionally, women represent 53 percent of active borrowers but only 28.5 percent of the loan portfolio (Direction de la Microfinance, 2015). The availability of digital financial services has somewhat improved the situation, particularly for youth. Whereas young adults (15–24 years) made up 34 percent of digital financial service account owners (GIZ, 2021), only about 15 percent of Senegalese women had a mobile money account (UN Capital Development Fund, nd).

The following institutions have developed specific credit products for women and youth:

• LBA works in partnership with projects and programs to develop credit facilities targeting women and youth. About a third of its clients are women and young people (Abdou Aziz Diedhiou, personal communications).

- IMCEC offers credit products that target women (community group credit) and youth ("Legeey"). These products have interest rates of less than 10 percent, low up-front personal contributions, and deferred 15-month loan repayment for 12-month working capital loan (Abdoulaye Ndiour, personal communications).
- RESOPP, an association of agricultural cooperatives composed of 43 percent women and 15 percent youth, offers financial services such as loans to its members. However, the association notes that women are often not able to take full advantage of the digital financial services it provides due to low literacy.
- LOCAFRIQUE, a financial company specializing in leasing agricultural equipment for the rice value chain, distributes financial literacy materials and flyers tailored to youth and women entrepreneurs (Winrock, 2023).

There are multiple reasons both on the demand and supply side for women's and youth's lower involvement in formal credit markets. Marginalized groups are often not aware of the requirements for applying for loans from semi-formal or formal institutions, lack the requirements (e.g. collateral such as land or large assets) and documentation (e.g. birth certificate), have low rates of financial literacy and low confidence to apply for formal loans. Additionally, staff of financial institutions are often biased toward men. In contrast to women who are perceived as reliable borrowers, young people seeking to obtain credit face negative perceptions. As expressed by a loan officer from IMCEC "Young people are considered higher risk because they have no credit or savings history. They have fewer perceived responsibilities and are very mobile" (Abdoulaye Ndiour, personal communication). It is unclear whether these institutions provide gender and youth training for their staff to address gender and age discrimination. In the absence of specific studies, it is difficult to assess how effective current efforts to improve women's and youth's access to agricultural credit are.

AGRICULTURAL INPUTS AND FARM EQUIPMENT

Inputs such as chemical fertilizer, pesticides and high-quality seed are critical for enhancing agricultural productivity, but many smallholder farmers in Senegal cannot afford to buy the desired quantities and quality inputs may not be available at the right time. To enhance agricultural productivity, farmers also need access to farm equipment such as pesticide application equipment and irrigation systems. Although the Senegalese government distributes subsidized fertilizer mainly through PO using a quota system between locations, demand is much higher than supply (Winrock, 2023; Seck, 2016). Farmers can also purchase inputs on the open market using loans or their own funds. With the exception of irrigated rice where the majority of farmers plant certified seed, most smallholder farmers rely on farm-saved and locally sourced seed (Seed Systems Group, 2020). Agrochemicals are widely used in the horticulture sector, which has a high representation of women, but are not subsidized.

Reliable gender and age disaggregated statistics on input use in Senegal are difficult to find, but evidence suggests that women are less likely than men to use chemical fertilizers and certified seed (Feed the Future Nataal Mbay, 2018; USAID, 2016a). No information was available on input use by young farmers. Constraints women and youth face in accessing inputs include their low representation in POs, limited access to credit and low purchasing power. Both male and female farmers in Dagana Department reported using much lower rates of fertilizer than recommended due to the unavailability of subsidized fertilizer (Winrock, 2023). In addition to agro-dealers, NGOs and projects such as MyAgro and the Syngenta Foundation's Farmer Hub project help small farmers, particularly women and youth, source inputs at a competitive price or by using a mobile phone-based layaway application (MyAgro, 2023; Syngenta, 2023). Furthermore, women may not have adequate knowledge and information about fertilizer and pesticide application due to their more limited access to EAS and because these tasks are mainly carried out by men in some locations (Feed the Future Nataal Mbay, 2018).

Input suppliers interviewed did not appear to recognize gender differences in their clients' needs or use approaches to attract women or youth clients and cater to their needs. An input supplier who attributed poor performance of products by some clients to their inability to read and understand labels did not mention that this problem is more likely to be experienced by women (Winrock, 2023). According to the Technical Director of Société des Produits Industriels et Agricoles (SPIA), an input supply company, women clients are more demanding and concerned about the price and quality of products purchased compared to men and negotiate to get lower prices and better quality (Ibrahima Dièye, personal communications). With regard to agricultural equipment, the director noted that there are few gender differences in the purchase of agricultural equipment but observed that women purchase treatment equipment more adapted to their size, strength and the crops they grow. No information was found on whether companies that manufacture tools and other farm equipment take into account women's specific needs and produce tools and farm equipment that are ergonomically suited to women. Government agencies provide extension agents and applicators with limited technical training on pesticides (Spradley, 2015) but it is unlikely that such training covers gender issues or that input suppliers receive gender training.

AGRICULTURAL MARKET INFORMATION

A market information service or system (MIS) provides collects, analyses, packages, stores and disseminates prices and other information on agricultural commodities needed by farmers, traders, processors and rural actors to enable them to make informed decisions about when and where to sell their agricultural products for the best price). The lack of timely and accurate information about market conditions, including prices and demand, may result in lower profits or even losses for farmers. Market information systems may focus on a single commodity (such as maize), or a wide range of products and may cover farm outputs (crops, livestock) and inputs (fertilizer, seed, pesticides. Market information may be disseminated through several channels including mobile phones the internet, radio, television, print media and noticeboards. The channel used to disseminate market information has important gender implications due to women's low literacy, time poverty and limited access to certain communication channels as discussed earlier.

In Senegal two local companies, MLouma and Jokolanté provide market price information as well as other services to smallholder farmers (see section on climate information). MLouma, a digital platform created in 2012, provides market price information through Louma Mbay, a mobile phone and web-based platform covering 10 regions (Mlouma, 2023). The cost of this service is US\$1.70/year/product and farmers can also buy and sell produce through a virtual marketplace. Sellers pay a fee of 5 percent of the sale to Mlouma if transactions are successful. Jokolanté provides market price information in partnership with l'Agence de Régulation des Marchés (ARM) to 14 regions of Senegal. Its messages are

in six local languages and French (Jokolanté, 2023). While most of the clients of these two companies are men, both companies are making efforts to be more inclusive. Mlouma trained women millet traders to use its platforms for buying and selling millet (Franzel et al., 2018).

CLIMATE INFORMATION

Climate information services (CIS) for smallholder producers, first introduced to Senegal in 2011 under the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) working with the Senegalese National Meteorological Agency (ANACIM), provide a range of information regarding climate, its impacts on crops, livestock, fisheries, and management practices to be followed to prevent, reduce, and manage risks. Several organizations provide CIS including public sector agencies (Compagnie Nationale d'Assurance Agricole du Sénégal (CNAAS), ANACIM), private companies (Mlouma, Jokolanté) and donor funded projects (Feed the Future Nataal Mbay, FAO's Agricultural Services and Digital Inclusion SAIDA Project). Some organizations such as CNAAS also provide crop insurance as a bundle with climate information. Climate information is disseminated through multiple channels including radio and text messages in several local languages.

All CIS report on the number of women and young producers reached, although it is unclear whether they deliberately target these marginalized groups. CNAAS claimed to have reached 612,000 producers, 29 percent of whom were women and 12 percent young people, with climate information and agricultural insurance services (CNAAS, 2022). The use of multiple channels to disseminate climate information is justified and supported by evidence showing radio as a popular channel for both men and women and women's preference for receiving through community-based organizations and social networks (Diouf et al., 2019). To be gender and youth responsive, CIS should take into account community perceptions, local knowledge, livelihood patterns, vulnerability, gender and users' preferred communication channels, all of which may be different for men, women and young people. Moreover, farmers' ability to act on climate information is conditioned by, among other factors, gender roles, responsibilities and control over resources (Carr et al., 2016). A 2017 study found no gender differences in climate information needs among Senegalese farmers but observed that men had greater access to all CIS than women (Diouf et al., 2019). The study also found that literacy in local languages was critical for accessing climate information. As with other agricultural services discussed in this report, there is little documented information on gender differences in the use and application of climate information in Senegal.

CONCLUSION AND RECOMMENDATIONS

This report discusses the barriers and constraints women and young smallholder producers in Senegal face accessing and using key agricultural services including extension and advisory services, credit, inputs and farm equipment, market and climate information. While male producers also face constraints in accessing these services, gender and age-related barriers and constraints further limit opportunities by women and young farmers to enhance their agricultural productivity and improve their livelihoods. There are limited data quantifying the impacts and outcomes of gender and age-related gaps and barriers in access to advisory and complementary agricultural services in Senegal, but these are certain to be significant. Importantly, this assessment highlights a significant scarcity of evidence on women's

and youth's access to agricultural services and their overall involvement in the sector. There is a lack of detailed information on gender and youth-focused approaches being implemented by service providers, as well as limited analyses of the impacts of these approaches, what is effective, why it works, and what further actions are necessary. While reports on donor funded projects provide detailed analyses of the role played by women and youth in the agri-food sector and the barriers and constraints they face, there is a lack of documented information from public and private service providers who have a broader geographic coverage. Improving the evidence on what works to improve women's and youth's access to EAS and other agricultural services is critical for designing, implementing and monitoring interventions, as well as for multiplying scale and institutionalizing gender and age responsiveness in Senegal's agricultural sector.

The GESI analysis carried out shows that women and youth have more limited access to all types of agricultural services due to the following factors: 1. gender and social norms that limit their access to productive resources (particularly land and labor) and give rise to discriminatory practices affecting access to agricultural services and a lack of agency, low confidence and risk adverseness; 2. low membership in formally registered producer organizations and farmer groups which are a main channel for disseminating agricultural services such as subsidized fertilizer, training and credit; 3. women's low educational and literacy status which restricts them from accessing certain services and benefiting from certain information channels and advisory approaches; 4. and women's disproportionate responsibilities for domestic and care work at the household level which limits the time they have to attend advisory activities or seek out agricultural services. While most service providers recognize these barriers and constraints and are making efforts to target women and youth, there have been few efforts to introduce gender transformative approaches which seek to transform deeply rooted gender and social norms. Notably, not all agricultural service provision activities need to be gender transformative and it is expected that most service provisions programs should aim to fall somewhere along the gender-responsive and gender transformative continuum.

Most public and private organizations that provide agricultural services lack policies that promote a gender and youth responsive organizational culture at all levels of their operations. It is not enough to have a gender and youth strategy without having policies to ensure inclusive staff recruitment and retention, having women working at all levels of the organization (management, field advisors), providing gender and youth responsiveness training to all staff and ensuring that advisory approaches and service provision responds to and accommodates the needs of marginalized groups.

The following recommendations are proposed for implementation by public and private sector agricultural service providers in Senegal and international donors:

- Improve women's and youth's access to land and opportunities to engage in agricultural value chain activities that do not require land;
- Support the development of more credit products designed to address the specific needs of women and youth smallholder producers and remove the barriers they currently face in accessing credit;
- Develop innovative ways to improve women's ownership and access to ICT tools and services (mobile phones, tablets, internet) and strengthen their digital literacy and skills;

- Encourage the development and formal registration of more women's collectives;
- Develop a gender and youth-responsive organizational culture in public and private organizations that provide agricultural services;
- Develop gender and youth-responsive indicators for monitoring extension and other service delivery programs and the performance of service providers; and
- Carry out a mixed-methods study at national level of women's and youth's access to and use of
 agricultural services that will assess the impact of existing approaches and provide evidence for
 improving service delivery. Such a study should be conducted periodically by multiple agencies
 working together.

To help EAS organizations and complementary service providers become more gender and youth responsive, the EFAT Project should consider the following recommendations:

- Integrate gender and youth considerations in all aspects of the project's strategy and activities.
- Help service providers working with the project develop gender and youth action plans that go beyond targeting women and young farmers to devising specific interventions, actions and strategies that address the barriers and constraints these groups face in accessing and benefiting from agricultural services and identify and monitor related performance indicators.
- Provide customized training for service providers at all levels (management, field level) on the business/development rationale for addressing the needs of women and youth producers, gender and youth responsive approaches to agricultural service provision, mitigating the impacts of climate change on women producers etc. and provide implementation support.
- Link service providers working with the project to organizations that can provide resources to improve women's and youth's access to agricultural services. For example, EFAT could work with mobile phone companies to supply women farmers or women's groups with smart phones through their social corporate responsibility programs.

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ANNEXES

ANNEX 1. LIST OF KEY INFORMANTS INTERVIEWED

Organization name	Type of organization	Contact person and title
ANCAR Regional	Public sector extension	Bineta Mbengue, Gender Specialist, Regional Director
Nafoore Warsaaji	FtF/USAID Project on horticulture	Adama Sarr, Monitoring and Evaluation Specialist
Réseau des Organisations Paysannes et Pastorales du Sénégal (RESOPP)	Seed supplier	Arona Diop, Technical Director
Société des Produits Industriels et Agricoles (SPIA)	Agrodealer	Ibrahima Dièye, Technical Director
La Banque Agricole (LBA)	Public sector bank	Abdou Aziz Diedhiou Gender Focal Point, Studies and Strategy Department Head
Institutions Mutualistes Communautaires d'Epargne et de Crédit (IMCEC)	Public sector micro-finance institution	Abdoulaye Ndiour, Loan Officer, Regional Technical Director
Compagnie Nationale d'Assurance Agricole du Sénégal (CNAAS)	Public sector insurance company	Omar SOW, Libasse Gueye, Business and Technical Director, Assistant Director
Coopérative Fédération des Organisations Non- Gouvernementales du Sénégal (FONGS)	Producer organization	Aicha Diagne, Gender Focal Point

ANNEX 2. QUESTIONS USED TO INTERVIEW KEY INFORMANTS

Extension and Advisory Services (EAS)

- 1. Does the organization take gender and age into account in its work and seek to address gender and age-related constraints where they exist? How?
- 2. How does the organization identify the specific needs of women and youth producers?
- 3. What specific measure are used by EAS staff to make extension methods and approaches more accessible to women and youth? Are there some extension methods that are more/less likely to reach women farmers (e.g. use of mobile phones) or young farmers?
- 4. How many women staff involved in extension/advisory services does your organization have (in what roles-managers, field staff?)? If you work with paysan relais, how many (percent) are women (ask for each value chain)? How many are young people (below 35 years) (as for each value chain)?
- 5. What are some practices used by the organization to reach women and youth and ensure that they benefit from these services?
- 6. What are the constraints the organization faces in reaching women and youth producers?
- 7. How are these constraints addressed?
- 8. Does the organization have a gender policy and youth engagement policy/strategy? Please describe.
- 9. Are staff trained on gender and youth related issues? Who gets this training (managers? Field staff?), how often?

Credit for agricultural activities

- 1. What credit and other financial services does your organization provide? Where do you operate?
- 2. What percent of your clients are women and young producers? If the percent is lower than for men, why?
- 3. Are the requirements for getting credit the same for men and women producers, young people? If not, how are they different ?
- 4. Do you have specific credit products designed to meet the needs of women and youth? Please describe.
- 5. Do you use any specific strategies to attract more women and youth clients? Please describe.

Input suppliers

- 1. What percent of your customers are women? If the percent is lower than for men, why?
- 2. Is the purchasing behavior of women the same or different from men? Do women farmers tend to purchase a particular product more than others? Why?
- 3. Do women rarely purchase a particular product? Why?
- 4. Do women farmers make any specific requests for products/services that men don't? Why?
- 5. Do you do anything specifically to attract more women clients? Describe.

Market information services

1. What crops do you provide market information on?

- 2. What channels do you use to provide market information to smallholder farmers?
- 3. What percent of people who receive market information from your company are women? Youth?
- 4. Does your organization take gender and the age of producers into consideration in the provision of market information? How ?
- 5. Do you use specific strategies to reach women and youth in the provision of market information?
- 6. Do women and youth face barriers in accessing the communication channels you use for providing market information?
- 7. What are the specific challenges women and youths face in accessing market information?
- 8. What are the impacts of market information on women and youth farming activities, productivity, income and livelihood?

Climate information services

- 1. What kind of climate information does your organization provide?
- 2. What channels do you use to provide climate information to smallholder farmers?
- 3. Do men and women experience climate change differently? Do they have different needs for climate information? What are the climate information needs of women and youth farmers?
- 4. What percent of people who receive climate information from your company are women? Youth?
- 5. Does your organization take gender and the age of producers into consideration in the provision of climate information? How?
- 6. Do you use specific strategies to reach women and youth in the provision of climate information?
- 7. Do women and youth face barriers in accessing the communication channels you use for providing climate information?
- 8. What are the specific challenges women and youths face in accessing climate information?