



Global Shield
against Climate Risks

Gender Analysis of Climate and Disaster Risk Finance and Insurance in Senegal

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Preface

This assessment was conducted by Oxford Policy Management Europe GmbH on behalf of the Centre of Excellence on Gender-smart Solutions. The project manager is Alessandro Maggioni. The technical lead for this assessment is Humaira Hansrod.

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The Centre of Excellence on Gender-Smart Solutions (CoE) is an initiative under the Global Shield against Climate Risks and serves as a hub for advancing gender-responsive approaches within Climate and Disaster Risk Finance and Insurance (CDRFI). Its primary role is to centralize expertise, best practices, and resources to ensure that gender equity is integrated into CDRFI solutions, fostering inclusive resilience against climate risks. To support the Global Shield In-Country Process (ICP), the CoE has commissioned Oxford Policy Management (OPM) to conduct a gender analysis. This analysis aims to identify gender-specific vulnerabilities and opportunities within the national context, providing critical evidence to inform [Senegal's Global Shield stocktake and gap analysis](#) as well as the [Request for Support to the Global Shield](#).

The findings can help pinpoint protection gaps and guide the development and implementation of inclusive, gender-responsive strategies as part of the Global Shield support package. For more information, visit [Home | Centre of Excellence](#).

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List of Abbreviations

ADRiFi	Africa Disaster Risk Financing Programme
ARC	African Risk Capacity
ASAP	Adaptation for Smallholder Agriculture Programme
CAURIE	Coopérative Autonome pour le Renforcement des Initiatives Economiques par la MicroFinance (CAURIE Microfinance)
CDR	Climate and Disaster Risk
CDRFI	Climate and Disaster Risk Finance and Insurance
CIS	Climate Information Services
CRI	Climate Risk Insurance
CNAAS	Compagnie Nationale d'Assurance Agricole du Sénégal (National Agricultural Insurance Company of Senegal)
CSA	Climate-Smart Agriculture
DRF	Disaster Risk Finance
DRM	Disaster Risk Management
FSN	Fonds de Solidarité Nationale (National Solidarity Fund)
GCF	Green Climate Fund
GDRMP	Gender and Disaster Risk Management Platform
GESI	Gender Equality and Social Inclusion
IMF	International Monetary Fund
ISF	InsuResilience Solutions Fund
LBA	La Banque Agricole (Agricultural Bank)
LLA	Locally-Led Adaptation
MSMEs	Micro, Small and Medium-sized Enterprises
PICAP	Pacific Insurance and Climate Adaptation Programme
PSE	Plan Sénégal Émergent (Emerging Senegal Plan)
SNEEG	Stratégie Nationale pour l'Équité et l'Égalité de Genre (National Strategy for Gender Equity and Equality)
SNIF	Stratégie Nationale d'Inclusion Financière (National Financial Inclusion Strategy)
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
WFP	World Food Programme

1 Introduction

1.1 Purpose of the analysis: Importance of integrating gender in Climate and Disaster Risk Finance and Insurance

Climate change poses significant risks and impacts that disproportionately affect vulnerable groups, particularly women. While measures such as access to credit, savings tools, and affordable insurance products can help mitigate losses and damages caused by climate-related events, there are stark gender-specific differences in how these risks and impacts are experienced. These disparities stem from complex, multifaceted inequalities and play a crucial role in determining the extent of climate-related risks faced by different groups. Particularly susceptible to the effects of climate change are individuals and communities who experience marginalisation in various spheres of life, including social, economic, cultural, political, and institutional domains. This heightened vulnerability extends not only to the direct impacts of climate change but also to certain adaptation and mitigation strategies implemented to address these challenges (UNDP, 2016). The uneven distribution of climate risks underscores the importance of inclusion in climate action while highlighting the need for targeted interventions that address the root causes of vulnerability and ensure that solutions do not inadvertently exacerbate existing inequalities. Climate and Disaster Risk Finance and Insurance (CDRFI) plays a crucial role in building resilience against climate-related shocks and disasters. However, without proper consideration of gender equality and social inclusion (GESI), these mechanisms may fail to adequately protect vulnerable populations.

This review primarily focuses on the integration of gender considerations in CDRFI policies and programmes in Senegal, with only partial exploration of other aspects of social inclusion. The aim is to identify gaps and provide recommendations for integrating and/or strengthening gender-responsive approaches within CDRFI. Ensuring the inclusion of gender perspectives is critical to guarantee that different segments of society—particularly women—have equitable access to the financial resources needed to build resilience and mitigate the economic impacts of climate-related disasters. While the analysis touches on other socially excluded groups, such as children, youth, the elderly, and marginalised populations, the scope of this report is centred on gender.

1.2 Key gender issues in CDRFI

Several gender-related challenges persist within CDRFI systems in Senegal:

Financial and digital exclusion: Women, especially those in low-income and rural settings, remain largely excluded from financial systems and through digital systems, limiting their ability to financially manage climate risks.

Limited decision-making power: Women and vulnerable groups (e.g., youth, rural populations, elderly, people with disabilities) are often excluded from decision-making processes, reducing the effectiveness of CDRFI programmes in reaching these populations.

Socio-cultural norms and land ownership: Structural and legal barriers often prevent women from obtaining formal land ownership, houses, or other assets that could serve as financial guarantees for loans or insurance payouts. Perceptions that insurance and loans are religiously inappropriate can further limit women's access to financial tools, hindering their entrepreneurial initiatives and ability to manage climate risks.

Lack of gender-disaggregated data: The absence of comprehensive gender-disaggregated data hinders the design of effective CDRFI instruments that are incorporating the specific needs of their beneficiaries.

1.3 Scope and objectives

This report reviews key national policies, strategies, and programmes incorporating CDRFI and gender in Senegal to identify ways through which gender considerations can be better integrated in CDRFI in Senegal. The approach includes:

- Evaluate the level of consideration for gender and social inclusion in present CDRFI frameworks.
- Identify protection gaps with regard to gender in Senegal's climate risk context.
- Provide policy recommendations to improve gender-responsive CDRFI approaches in Senegal.

2 Methodological Approach

2.1 Research methods

The review draws data from desk-based research and interviews with key stakeholders. The study began with a comprehensive review of existing Senegalese planning documents, policies, programmes, and insurance models relevant to CDRFI for vulnerable groups, especially women. Key documents examined include the Emerging Senegal Plan (PSE), National Financial Inclusion Strategy (SNIF), and policies related to climate change and disaster risk management. A stakeholder review was conducted during virtual discussions with the in-country support structure to identify influential actors within Senegal's CDRFI context. From these discussions, we identified and contacted key stakeholders from relevant organisations, including government entities, microfinance networks, insurance companies, and non-governmental organisations. Four key stakeholders were interviewed to gather insights on gender-inclusive CDRFI practices, challenges, and opportunities for upscaling [see Annex B for the list of stakeholders interviewed].

2.1.1 Intersectional approach to CDRFI

The study adopted an intersectional approach to ensure that gender mainstreaming and other key factors of vulnerability, such as socio-economic status, geographic location, and employment sector, were considered in a review of existing and/or potential CDRFI interventions. This approach addresses the heterogeneity that characterises vulnerable populations in Senegal.

Figure 1 below presents a three-pillar analytical framework used to guide the gender analysis in this review. Pillar 1, '**Core Domains for Gender Analysis**', structures the investigation by identifying the essential thematic areas requiring examination, such as gender-differentiated vulnerabilities, economic empowerment, and access to finance and technology. Pillar 2, '**Mechanisms for Mainstreaming Gender**', then translates the findings from this analysis into a set of practical actions, detailing how to integrate gender considerations through policy reform, inclusive product design, and capacity building. Finally, Pillar 3, '**Desired Outcomes of Gender-Responsive CDRFI**', illustrates the desired goals of this work, from enhanced resilience for women to their empowered participation in decision-making. The framework establishes a clear pathway from diagnosis to impact: the analysis (Pillar 1) informs the strategic actions (Pillar 2), which are expected to lead to the transformative outcomes (Pillar 3). This report applies Pillar 1 by systematically examining these core domains within Senegal's CDRFI context, which then forms the basis for the strategic recommendations and implementation approaches presented through the lens of Pillars 2 and 3.

Figure 1. – Analytical framework for gender-inclusive CDRFI

Core Domains for Gender Analysis (What to investigate to understand the gender-specific context)	Mechanisms for Mainstreaming Gender in CDRFI (How to use the analysis to take concrete action)	Desired Outcomes of Gender-Responsive CDRFI (What success looks like across different levels of society)
1. Gender-Differentiated Vulnerability	1. Multi-Stakeholder Coordination on CDRFI and Gender/Inclusion	1. Enhanced Resilience for Women and Households
2. Social and Cultural Norms, Structures and Power Dynamics	2. Gender-Inclusive Financial Products	2. Increased Financial Inclusion and Protection
3. Access and Control over Resources (e.g., land, mobile phones)	3. Integration of Gender into Policy and Budgets	3. Equitable Access to Resources
4. Financial Inclusion and Literacy	4. Capacity-Building	4. Empowered Participation in Decision-Making
5. Leadership and Participation	5. Women's Leadership and Voice	5. Growth of Women-Led Enterprises
6. Access to Information and Technology (e.g., early warning systems, climate data)	6. Accountable Monitoring, Evaluation, and Learning	6. Gender-Responsive Institutional Systems
7. Policy and Institutional Landscape	7. Awareness and Advocacy	7. Gender Inclusive Policies and Regulations
8. Availability and Quality of Gender-Disaggregated Data	8. Gender-Disaggregated Data Collection	8. Accurate Gender-Based Analytics

Source: Oxford Policy Management

2.2 Limitations of the study

The primary limitation of this study is the lack of gender-disaggregated data on climate risk, exposure, and vulnerability in Senegal. This data gap poses significant challenges in identifying effective gender-responsive CDRFI policies and analysing the impact of existing programmes on gender. Additionally, the desk-based research approach, aligned with the defined scope, provided limited opportunities for direct community engagement. However, stakeholder interviews helped to supplement these insights.

3 Country Context and Profile

3.1 Geographic location and vulnerability to climate hazards

Senegal, located in West Africa, faces significant climate-related challenges due to its geographic location and socio-economic conditions. The country's semi-arid to tropical climate and its position along the Atlantic coast make it particularly vulnerable to various climate hazards.

Key climate risks in Senegal

While Senegal is at medium risk for major climate disasters, it faces high vulnerability when these occur (UNDP, 2024). The most frequent hazard is flooding, affecting urban areas due to heavy rainfall and poor drainage connected to dense ground sealing. Heavy rains in the wet season can lead to flash floods and particularly affect urban areas like Dakar, Saint Louis, and Kaolack. Droughts are common in arid regions, impacting agriculture and water resources. While Senegal has a long history of droughts, particularly in the Sahelian north, climate change has heightened rainfall variability, leading to reduced agricultural productivity and water scarcity. Rises in sea level and coastal erosion are threatening coastal communities, livelihoods like fishing, and infrastructure. There has also been an increase in the frequency and intensity of heatwaves and wildfires, threatening human health and ecosystems. Lastly, desertification remains a growing risk in northern regions bordering the Sahara.

3.2 Socio-political and economic vulnerabilities related to climate risks

Senegal faces significant socio-political and economic vulnerabilities related to climate risks, which pose substantial challenges to the country's development and stability. Senegal's economy is heavily dependent on agriculture, with about 60% of the population engaged in agricultural activities. Women comprise 60% of those working in the agricultural sector (IFAD, 2019). Furthermore, 95% of farms are smallholdings, with the remaining 5% being larger, likely commercial farms (Landlinks, 2010). The sector is particularly vulnerable to climate change due to: reliance on rain-fed agriculture, with less than 5% of cultivated land being irrigated (Madurga-Lopez, et al., 2023); prevalence of smallholder farmers growing subsistence crops like rice, maize, millet, and sorghum; and projected reduction in crop yields due to warmer and drier climatic conditions (IMF, 2023). Consequently, the country relies on imports to meet nearly 70% of its food requirements

(UNCDF, 2023). Under high climate change stress, the International Monetary Fund (IMF) (IMF, 2023) predicts the poverty rate could double as early as 2030, mainly due to higher food prices and reduced food production. Senegal's coastal zones, home to 52% of the population and 68% of GDP, are threatened by climate-related changes such as flooding, coastal erosion, sea-level rise, and salinisation, compromising the fishing and tourism sectors (IMF, 2023).

Climate change also exacerbates existing socio-economic vulnerabilities. With limited progress in poverty reduction and growing inequality despite economic growth, climate change could push more than two million Senegalese into poverty by mid-century (World Bank, 2024). Climate-induced migration is a growing concern, threatening to affect up to 1 million people in Senegal by 2050 (IMF, 2023). Migration has a strongly male face, with coastal cities like Dakar, Saint Louis, and Thiès becoming main hotspots of climate-induced out-migration (Madurga-Lopez, et al., 2023). This is compounded with rapid urbanisation where climate risks intersect. The urban coastal zone, home to about 67% of the country's population and responsible for about 90% of its industrial production,¹ faces risks of flooding and erosion due to high population settlements and poor drainage infrastructure (USAID, 2023), impacting livelihoods, food security, physical infrastructure, and health (CDN Senegal, 2020). Lastly, climate change has raised political and security concerns. Climate disasters such as desertification and droughts are exacerbating resource-based conflicts, with more frequent and intense conflicts between farmers and migratory pastoralists while amplifying land right issues (Madurga-Lopez, et al., 2023). There are also legitimate concerns that climate-induced livelihood insecurity is contributing to the increased likelihood of radicalisation and recruitment of young men into armed and radical groups in vulnerable regions such as the north (Madurga-Lopez, et al., 2023).

¹ According to most recent data available, in 2022, female employment in industry in Senegal was at 11.29% of total female employment (Trading Economics, 2025). Men are twice as likely as women to be employed in the industrial sector; 27.1% of employed males work in industry (ILO, 2023).

4 National Policies, Programmes, and International Frameworks

4.1 Review of CDRFI-related national policies, strategies, and international frameworks

Senegal currently lacks a comprehensive disaster risk finance (DRF) strategy (UNDP, 2024). Nonetheless, several mechanisms and instruments are in place while the government is working towards developing a national CDRFI strategy to mobilise innovative financing for climate shocks (World Bank, 2024). This includes a recent partnership with the World Bank and the Global Shield Financing Facility to build financial resilience against climate risks such as through the introduction of innovative and inclusive financial instruments, or through instruments that target and/or aim to support women and vulnerable groups.

There are several policies and regulations that provide and/or support the enabling environment for inclusive financing and insurance.² The **Inter-African Conference on Insurance Markets** (Conférence Inter africaine des Marchés d'Assurances) **Insurance Code's Book 7 on Microinsurance** provides the regulatory framework for microinsurance in Senegal and also promotes index-based insurance products (UNDP, 2024). It focuses on low-income individuals, which includes many women. The **PSE** is a comprehensive national development strategy with the ultimate goal of placing Senegal on the path to industrialisation and achieving emerging-country status by 2035. The PSE connects to inclusive CDRFI in several ways, including by prioritising women and girls in several flagship projects programmes (Plan Sénégal Émergent, 2023). PSE also promotes human capital through significant improvement of people's living conditions, with a focus on social inclusion.

Stemming from PSE, the **SNIF** is a comprehensive plan aimed at improving access to financial services and products for the public in Senegal (SNIF, 2022). While SNIF focuses on general financial inclusion, its complementarity with CDRFI runs along its focus areas such as financial education, financial inclusion especially for young people in certain regions, digital economy, Islamic finance, and banking insurance. The potential synergies between SNIF and inclusive CDRFI are around expanding financial access to more

Senegalese citizens, especially for women and youth, and enhancing their financial resilience. SNIF is also part of a set of public policies and actions that target the most vulnerable populations. SNIF aligns with the **Family Security Grants Programme (Programme national des Bourses de Sécurité familiale)** and the **Universal Health Coverage (Couverture Maladie Universelle)** to reach vulnerable groups. SNIF also reflects the government's ambition to offer broader segments of the population access to basic formal financial services, education, and protection through mobile phones, which the government identifies as key to its financial inclusion goals of towns, villages, and far reaches of Senegalese society (SNIF, 2022).

There are currently no laws that cover DRF and disaster risk management (DRM). However, a **National Disaster Risk Reduction Strategy 2023–2027**, still being finalised, appears to focus on: strengthening risk governance, including gender-differentiated vulnerabilities in agriculture; strengthening understanding of risks; investing in DRR for resilience building; and strengthening preparedness for response and recovery (UNDP, 2024).

Internationally, Senegal is a signatory to frameworks such as the Paris Agreement, the Sendai Framework, and participates actively in the UN Framework Convention on Climate Change. Additionally, Senegal collaborates with Multilateral Climate Finance Institutions such as the Green Climate Fund (GCF), African Risk Capacity (ARC), the Adaptation Fund, the Global Environment Facility, and the Africa Adaptation Initiative, which supports projects focused on community adaptation, particularly for marginalised groups.

4.2 Programmes and initiatives on CDRFI

While there are several initiatives and projects that have gender components, this section highlights some of the key initiatives relevant to gender-inclusive CDRFI in Senegal. The country's **National Solidarity Fund (Fonds de Solidarité Nationale, or FSN)** is a financial mechanism established by the Senegalese government to provide support during crises and emergencies. While initially created in response to the COVID-19 pandemic, its role has expanded to become an integral part of Senegal's broader strategy for financial resilience against various climate shocks. In particular, the FSN's funding model, a multi-stakeholder approach

² According to the International Association of Insurance Supervisors, inclusive insurance comprises insurance products that serve excluded or underserved markets. It does not represent only microinsurance or products catering for low-income groups only (UNDP, 2024).

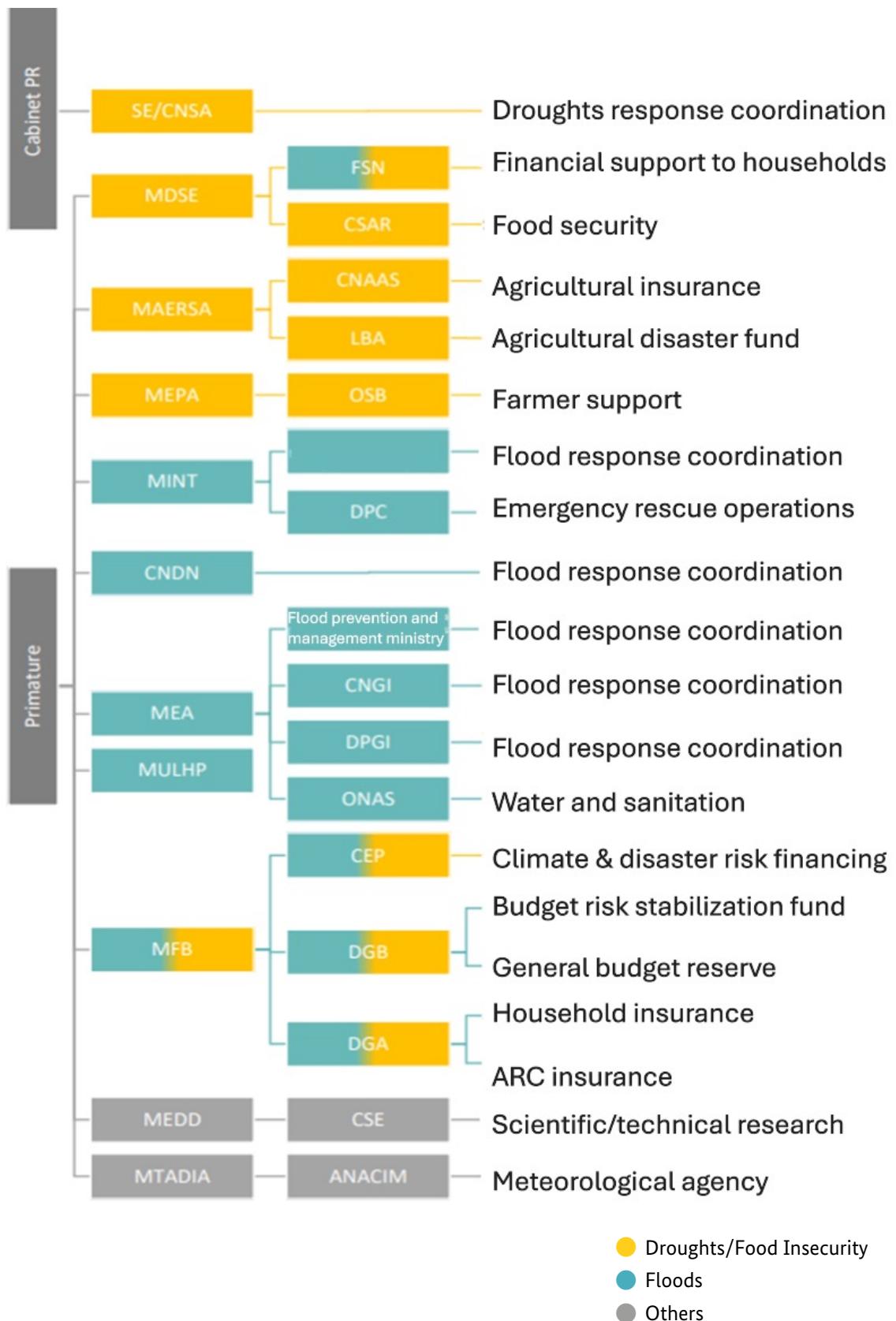
involving the state, private sector, and development partners, aligns with the collaborative approach needed for comprehensive CDRFI strategies. Funders such as the World Bank and the InsuResilience Solutions Fund (ISF) (Global Shield, 2024) are currently supporting the Senegal government in strengthening the FSN's responsiveness and capacity to respond to climate shocks (World Bank, n.d.), including through a programme that specifically targets female-headed households (see Annex A for details on this programme).

Senegal also implements government-subsidised agricultural insurance and has become one of the main markets in francophone Africa for index-based agricultural insurance (UNCDF, 2023; UNDP, 2024). This creates a major opportunity for developing gender-inclusive products that meet women's needs and overcome barriers to their access and use. Founded in 2009 following a collaboration between the Senegal government and the World Bank to develop the agricultural insurance sector in the country, the public-private **National Agricultural Insurance Company of Senegal** (Compagnie Nationale d'Assurance Agricole du Sénégal, **CNAAS**) has been providing index-based insurance along its traditional offerings since 2012. With collaborations and support from numerous partners, including the World Food Programme (WFP) and La Banque Agricole (Agricultural Bank, or LBA), CNAAS covered more than 185,000 farmers in 2020 (UNCDF, 2023).³ While there is evidence of CNAAS being an implementing partner in some gender-focused partnerships (UN Women), the company does not publish gender-disaggregated client data and a clear, standalone strategy for women's inclusion could not be found.

The World Bank supports several policies and initiatives around climate adaptation and mitigation in Senegal along its Nationally Determined Contribution priorities while targeting women and vulnerable groups. These include: the **Social Safety Net project** and **Adaptive Safety Net project**, strengthening the country's **social protection** system's responsiveness following climate shocks; financing **climate-smart agriculture** to promote investments into the sector through projects like Sahel Irrigation Initiative Support, which focuses on improvements to water management; and technical assistance through the **Partnership for Market Implementation** that is exploring the road to implementation of **carbon pricing** instruments in Senegal (IMF, 2023). These programmes demonstrate a concerted effort to include women and vulnerable groups in climate adaptation and mitigation strategies in Senegal, recognising their unique vulnerabilities and potential as agents of change (UN Women, 2021).

³ The average premium paid by producers was 5,000 CFA francs and around 200,000 CFA francs of insured capital per farmer (UNCDF, 2023).

Figure 2. National actors involved in responding to climate risks (i.e. droughts, food security, and floods) in Senegal



Source: Adapted with translation of the author from World Bank (2024)

5 Differential Vulnerabilities to Climate and Disaster Risks

The majority of Senegal's population is dependent on climate-sensitive livelihoods in agriculture, livestock, and fishing, heightening their vulnerability to climate shocks (Zamudio & Terton, 2016). Understanding this vulnerability through a gender lens recognises that climate impacts are not uniform. Vulnerability is shaped by intersecting social factors, including one's gender, age, location, and livelihood. While several national policies aim to serve vulnerable populations, a gender analysis seeks to understand how these intersecting factors create different realities for men and women.

This section briefly explores some of these differential vulnerabilities. It first provides an overview of key at-risk groups (e.g., rural, coastal, and urban populations) while acknowledging that **gender roles and inequalities are a cross-cutting issue within each**. It then focusses specifically on the agricultural sector to provide a detailed analysis of how climate and disaster risks affect men and women differently. This focus is critical, as the agricultural sector employs around 60%⁴ of the population and is therefore primed as a key driver for economic growth and development. Yet, the sector is unable to meet the food requirements of the population due to a number of factors including poor weather and soil conditions, infrastructure, and production inputs (CIAT and USAID, 2016). The next section reviews some of these social groups and key climate-related vulnerabilities they face.

5.1 Differential vulnerabilities of affected groups

Rural populations and smallholder farmers are particularly vulnerable to climate impacts. Current agricultural production is highly dependent on rainfed agriculture for livelihoods and food security. This is compounded with limited access to reliable irrigation, with only 2.1% of cropland being irrigated while facing high vulnerability to droughts, floods, and changing rainfall patterns (Madurga-Lopez, et al., 2023). Limited access to financing, resources, and technical advice to implement adaptation strategies constrains innovation, and scaling of successful programmes, to support adaptation, production, and mitigation in the agricultur-

al sector (CIAT and USAID, 2016; IFAD, 2019; IMF, 2023; USAID, 2023).

Coastal communities face high risks from climate shocks to their lives and health, homes, livelihoods, and food security. The urban coastal zone is home to about 67% of the population, responsible for 90% of industrial production (USAID, 2023). Rising sea levels and coastal erosion is threatening the living settlements of populations living in coastal areas while saline intrusion into coastal waterways and groundwater is affecting fishing-dependent livelihoods and water security (Zamudio & Terton, 2016).

Residents in urban centres, especially informal settlements in peri-urban areas, are highly vulnerable due to climate shocks. About 32% of the urban population live in informal settlements.⁵ They are often located in flood-prone areas due to poor infrastructure and drainage systems. Housing in such settlements is usually of low quality, being home to mostly the poor and economically vulnerable, and unable to withstand extreme weather (World Bank, 2009). Urban zones, especially Dakar, have historically also been reception areas for internal migrants from rural areas and motivated by economic opportunities. However, **the higher frequency and intensity of climate shocks and degrading environmental conditions has been another key motivator for internal displacements**, with climate-induced internal migration is expected to displace up to 1 million Senegalese by 2050 (Rigaud, de Sherbinin, Jones, Abu-Ata, & Adamo, 2021).

5.2 Gender-differential impacts of climate and disaster risk (CDR): Focus on the agricultural sector

In many countries, discriminatory laws, norms, and practices limit women's access to education, labour force participation, property and asset ownership, and decision-making across many areas. Such "gender-discriminatory norms limit women's adaptive capacity and prevent them from developing stronger climate resilience" (GIZ, 2021, p. 9). In Senegal, socio-economic inequalities between men and women are key drivers of women's higher vulnerability to climate change. The distinct ways that underlying

⁴ When combining agriculture and livestock, the sector employs about 70% of the population (CIAT and USAID, 2016). IFAD (2019) calculated 60% of the population as employed in agriculture.

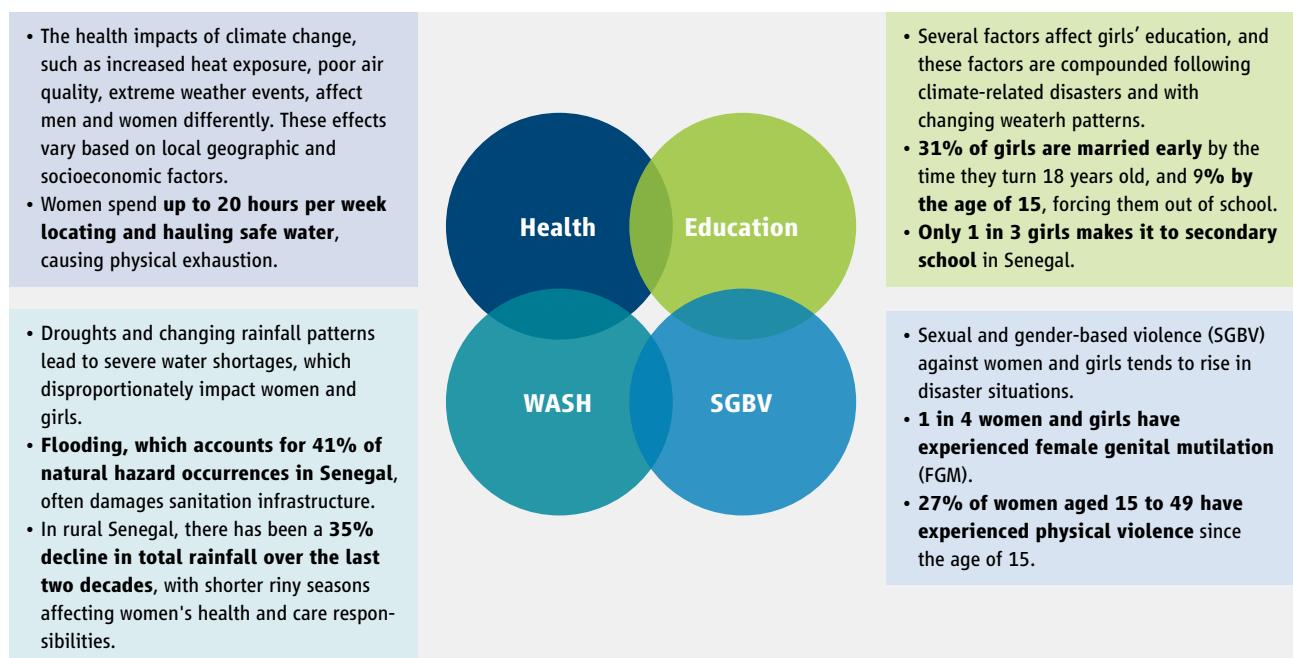
⁵ Data used is for 2020 (Population living in slums (% of urban population) - Senegal, 2024).

social, economic, and cultural factors impact women are particularly pronounced in the agricultural sector and rural areas. This increased vulnerability stems from: unequal access to resources and services; control over less and poorer quality land (personal communication, 2024); insecure land tenure; and limited access to cash, extension services, formal education, and agricultural organisations. From these inequalities stem differential perceptions and responsibilities. While both men and women in Senegal perceive climate risks such as rising temperatures, shorter rains, and erratic rainfall as threats, women often have a broader and more long-term view of risks due to their responsibilities in managing household resources (Kumar, et al., 2023).

A review of the key programmes and policies in Senegal (see section 4.2) suggests that the country's key priorities for CDRFI are in ensuring food security and livelihood protection for its population to support sustainable economic growth and poverty reduction.⁶ This leads to a focus on the agriculture sector where the majority of farmers, both men and women, recognise the adverse impacts of climate change on crop production, including impact on yield, soil health, water scarcity, new pests, and diseases (Kumar, et al., 2022). Yet, there are gender disparities in farming-related decision-making and access to climate information and climate-resilient technologies, which hinder women's ability to respond effectively to climate risks (Kumar, et al., 2023). These disparities further impact the coping mechanisms men and women can pursue.

In Senegal's dry regions, common coping strategies for both genders include diversifying livelihoods, altering cropping patterns, and seeking off-farm employment. However, women face more barriers to adaptation due to barriers such as lack of access to resources like money and land, climate information services (CIS), and capacity building opportunities for climate-smart agriculture (CSA) (Kumar, et al., 2022; Kumar, et al., 2023). In one study, 90% of female small business owners reported being affected by extreme weather or climate-related events. Climate-induced impacts on these female-owned Small and Medium-sized Enterprises included supply chain disruptions, lower quality raw materials, and reduced customer demand (CDKN Global, 2021). There are also barriers due to certain social norms that can limit women's mobility and ability to network, share information, and participate in community decision-making processes (personal communication, 2024). The reasons for women's limited access to CIS, CSA, and capacity building opportunities are multifaceted and, based on information shared by stakeholders interviewed and from the literature, include: sociocultural norms that make it difficult for women to attend training sessions in public spaces, especially where men and women are grouped together and/or sessions are held at inconvenient times and locations; the burden of household responsibilities that constrain women's free time to participate in various programmes; gender-blind programme design; and literacy and education gaps, between men and women as well as within vulnerable groups such as the elderly and rural populations, that can prevent women from accessing and understanding CIS.

Figure 3. – Examples of how climate-induced shocks affect women and girls



Source: Oxford Policy Management

⁶ See for example: SNIF (2022); CDN (2020); World Bank (2024); Madurga-Lopez (2023); PSE (2023).

5.2.1 Impact of intersectionality on vulnerability

The concept of intersectionality provides valuable insights into the complex nature of vulnerability to climate change and disaster risks in Senegal, revealing how multiple social factors intersect to create unique experiences of vulnerability for different groups.

There are intersecting factors that influence vulnerability. Women in Senegal face increased vulnerability due to the **intersection of gender with socioeconomic factors**. Limited access to resources, including land, cash, and agricultural services reduces women's access to adaptation and mitigation options. They also have insecure land tenure due to social norms that prioritise men to inherit land over women, and women being bestowed land of lower quality and/or smaller size (personal communication, 2024). Women often control less and poorer quality land, with limited or no legal recourse to land ownership (CDKN Global, 2021; personal communication, 2024), limiting their options to mitigation options like insurance and loans. The **intersection of gender with cultural and social norms** further exacerbates vulnerability with traditional roles confining women to domestic spheres and assigned positions, limiting their entrepreneurial opportunities (CDKN Global, 2021).

Gender-disaggregated analysis reveals distinct labour divisions within households. While agriculture is the primary occupation for both genders, women farmers tend to focus more on post-harvest activities such as crop threshing and value addition (Kumar, et al., 2023). In contrast, male farmers engage in a broader range of activities, including animal husbandry and trade, alongside crop cultivation. This **complexity in gender roles underscores the importance of policies that emphasise the complementary skills of both genders to promote resilience to climate risks**. To build gender-inclusive and socially resilient farming systems, it is crucial to recognise and address the specific needs and constraints of women farmers in both female-headed and male-headed households. Even where women have become heads of households while their husbands migrated to find work, the increased responsibilities did not translate into improved status. **Female-headed households in Senegal, which was about 30% of households in 2016,⁷ face significant disadvantages compared to their male-headed counterparts**. These households are typically smaller, led by younger individuals with lower education levels, have less land, lack access to adaptation and mitigation technologies, and have substantially lower per-capita incomes (Kumar, et al., 2023). These disparities highlight the structural challenges faced not only by female-headed households but also by women in male-headed households, em-

phasising the need for targeted interventions to address these imbalances.

Intersectionality reveals disparities in access to crucial resources for adaptation. There are significant gaps between men and women in receiving Climate Information Services and training on CSA (CIAT & USAID, 2016; Kumar, et al., 2023). Limited access to climate-resilient technologies, information, and coping mechanisms for women hinders their ability to respond effectively to climate risks. Intersectionality highlights how different groups develop unique coping mechanisms, with men usually migrating away, often to urban centres, in search of work while women remain in rural areas with limited options or support.

Understanding intersectionality in the context of climate vulnerability in Senegal emphasises several needs. There is a need for tailored adaptation strategies that consider the unique challenges faced by different groups. These strategies' success will depend on understanding social inequalities and power dynamics that underlie gender roles and performance but also consider how additional layers of vulnerability – such as being an older/younger woman, a migrant (e.g., rural to urban), and a disabled person – impact exposure and response to climate risks. There is a need for increased access to climate information and technologies for marginalised groups, particularly women, in order to improve climate adaptation and mitigation options. With climate-induced or heightened changing weather patterns and their impacts on resources like water and land, conflicts between farmers and migratory pastoralists are becoming more intense and frequent (Madurga-Lopez, et al., 2023). These impacts exacerbate existing tensions around governance and land right issues, challenging both livelihoods and social cohesion (Schwartzstein, 2023). Here, there is also a need to acknowledge and support diverse coping mechanisms and indigenous knowledge while recognising the rights of different yet vulnerable groups.

⁷ See for instance data from the World Bank at <https://www.ceicdata.com/en/senegal/population-and-urbanization-statistics/sn-female-headed-households>.

6 Gender in CDRFI

Senegal faces significant climate-related challenges that disproportionately affect women and marginalised groups. While the country's government is taking steps to integrate gender considerations within its climate policies, aligning national strategies with international commitments, these are at an emergent stage in the absence of a national CDRFI strategy. Key national frameworks like the **National Adaptation Programme of Action and the PSE** emphasise resilience and inclusion for vulnerable populations while the National Strategy for Gender Equity and Equality (Stratégie Nationale pour l'Équité et l'Égalité de Genre, SNEEG), aims at promoting gender equality and women's empowerment such as through gender equality efforts with Senegal's broader national development goals like the PSE. Without a national CDRFI strategy, the opportunity to integrate gender considerations into a national strategy with real potential to address CDRFI will likely be through the country's **National Financial Inclusion Strategy (SNIF)**.

SNIF aims to improve access to and usage of financial services for all segments of the population, placing significant emphasis on targeting women and vulnerable groups (Ministère des Finances et du Budget, 2022). For example, SNIF aims to increase the rate of financial inclusion for women from 50.9% in 2021 to 75% by 2026, and calls for the development of financial products and services specifically adapted to women's needs, such as savings accounts for women's groups and credit products for female entrepreneurs. It is also set to increase financial inclusion in rural areas from 54.5% in 2021 to 75% by 2026 and emphasises the need for inclusive design of financial services and distribution channels to ensure accessibility for persons with disabilities. A key objective of SNIF is to reduce the gender gap in financial inclusion from 11.8 percentage points in 2021 to 5 percentage points by 2026. Specific measures are outlined to improve access to finance for Micro, Small and Medium-sized Enterprises (MSMEs), including the development of credit guarantee mechanisms and the promotion of digital financial services tailored to their needs (SNIF, 2022).

SNIF also targets other vulnerable groups. The strategy aims to increase financial inclusion for young people (aged 15-35) from 57.6% in 2021 to 75% by 2026. It focuses on developing and promoting basic bank accounts and mobile money services to reach low-income segments of the population. Specific measures are outlined to improve access to finance for MSMEs, including the development of credit guarantee mechanisms and the promotion of digital financial services tailored to their needs (SNIF, 2022).

There is also significant potential to integrate gender considerations as well as (and into) CDRFI through local-level efforts and programmes. Specifically, CDRFI can be more effective and inclusive when it finances and supports **locally-led adaptation (LLA)** efforts, where local communities are actively involved in developing and implementing adaptation strategies. These are also the types of risk-reduction measures that well-designed financial instruments can fund. Examples include practices like: introducing drought-resistant crop varieties and promoting sustainable farming practices and agricultural diversification; improving irrigation systems and constructing boreholes powered by solar panels to ensure water availability; and implementing Assisted Natural Regeneration practices and reforestation projects to combat land degradation and foster land restoration. Community-based initiatives like the climate-smart village of Daga Birame involve women farmers and local communities in co-identifying and implementing adaptation strategies which include developing community plots and sharing climate information through local networks (Sy, 2023). From a CDRFI perspective, these community structures are vital, as they can serve as the distribution channels for forecast-based financing or the trusted entities for managing insurance payouts.

Senegal can integrate inclusive CDRFI into its government-led efforts on gender equality and disaster response. Through the Ministry of Family and Children (Ministère de la Famille et des Solidarités), the government has demonstrated its commitment to issues related to women, families, and vulnerable groups (Ministère de la Femme, de la Famille et des Solidarités, 2024). Additionally, Senegal has, among other things:

- Enacted legal reforms promoting gender equality, including electoral representation and citizenship rights (UN Women, 2024).
- Implemented approximately 50 social protection programmes covering various thematic areas, including social assistance, emergency programmes, employment programmes, and social insurance. These programmes adopt a lifecycle approach and target different vulnerable groups, including women (Bharadwaj, et al., 2023).
- Launched an action plan to collect high-quality inclusive data to ensure that marginalised groups, including people with disabilities, are accurately represented in official statistics (Sightsavers, 2022).

While these and other initiatives demonstrate Senegal's commitment to gender equality and inclusion, challenges remain at the micro, meso and macro levels. At the macro level, Senegalese society remains deeply patriarchal and social norms often impact gender roles. The social structure further influences women's and men's differential access to education, employment, assets, finance, and more (personal communication, 2024).

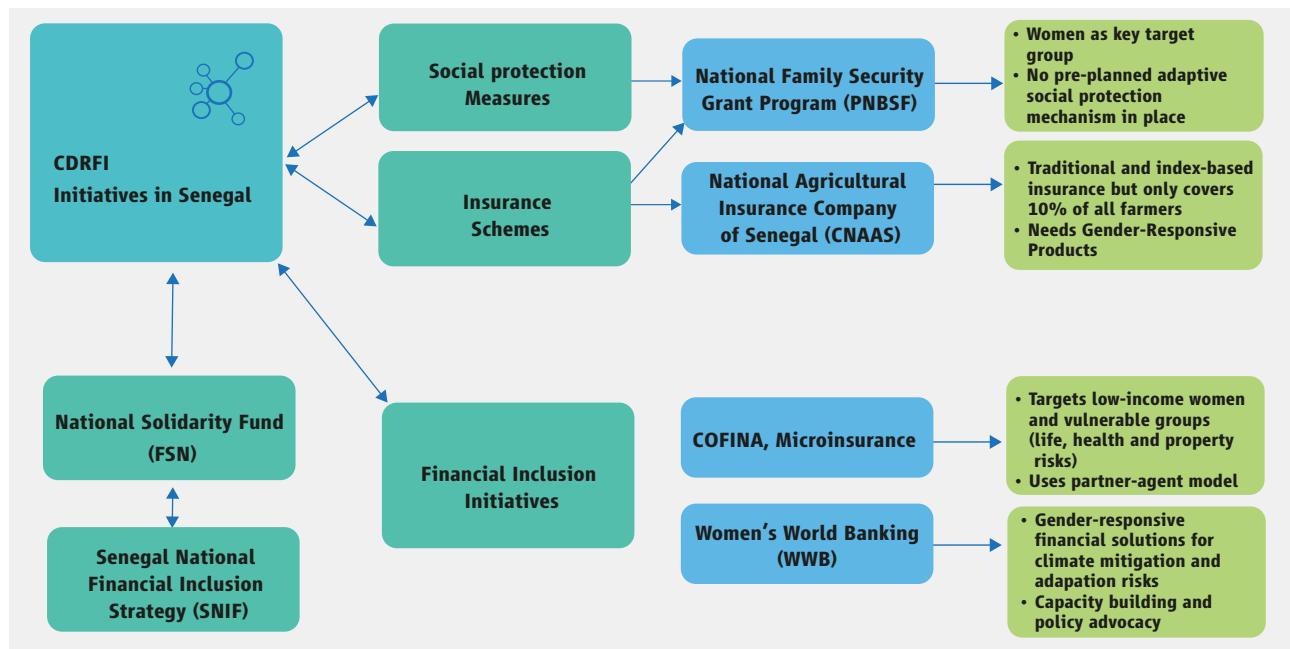
6.1 Access and barriers to financial resources

Women and vulnerable groups in Senegal face considerable barriers in accessing financial resources, including those related to CDRFI. These barriers stem from socio-cultural norms, economic factors, and institutional constraints. As highlighted by the Climate & Development Knowledge Network (2021), women in particular face significant barriers such as:

- **Limited access to land and assets:** Women often lack formal ownership of land, houses, or other assets that could serve as financial guarantees for loans.

- **Socio-cultural norms:** Beliefs supporting traditional gender roles can hinder both women's and men's entrepreneurial efforts. Certain religious and cultural beliefs in Senegal lead men and women to view disasters as acts of divine will, reducing the perceived value of insurance (personal communication, 2024).
- **High interest rates and administrative costs:** Loan interest rates of 7–13% and associated costs discourage women from accessing formal finance. For instance, while women in Senegal are eligible to access loans and do not require approval from a male relative,⁸ they usually do not have the required collateral required by major financing institutions and/or lack access to such financing institutions. Their lack of required collateral, relative to men, not only excludes them from many loans but also drives up the cost of any credit they can obtain.
- **Lack of climate information and knowledge:** Women entrepreneurs struggle to access relevant climate information for their businesses.
- **Limited government support:** Nearly 96% of women surveyed reported receiving no financial, material, or technical support from government or partner organisations to tackle climate change impacts (CDKN Global, 2021).

Figure 4. – Exploring gender-inclusive entry points within the existing CDRFI initiatives in Senegal



Source: Oxford Policy Management

⁸ In fact, Senegal has made efforts to improve women's access to financial services. The country has established government programs like the National Women's Credit Fund to support women's access to formal financial resources and promote female entrepreneurship (UNIDO, 2021).

6.1.1 Financial and digital inclusion

Financial inclusion remains a significant challenge in Senegal, particularly for women and youth. In 2016, only 8.2% of women had bank accounts compared to 16% of men (Winrock International, 2023). A World Bank Group Financial Capability Survey revealed that less than one in five Senegalese adults (17%) report owning an account at a formal financial institution, with the odds of being financially included are 9 percentage points higher for men than they are for women (Zottel, 2016). This gender gap limits women's ability to access and benefit from CDRFI products and services.

SNIF tries to address some of these challenges by improving access to financial services for the general public, but its focus on youth and women needs more advanced targeting to open channels for tailored products and services. One of those channels looks to be digital finance. In 2021, 45% of adults in Senegal had a mobile money account, compared to just 6% in 2014 (Bouri & Klapper, 2022). While approximately 35% of women had a mobile money account in Senegal (Bouri & Kapper, 2022), women demonstrate a substantial lack of trust in the security and ease of use of mobile money (GSMA, 2024). Efforts to increase women's trust, awareness, and digital literacy could help improve access and usage of CDRFI products and further boost financial inclusion among women and vulnerable groups in Senegal.

Another promising way to improve advanced targeting mechanisms in the short to medium term is through existing channels. Initiatives like the Women's Investment Club are working to bridge the gap between informal savings groups (tontines) and formal financial structures by supporting women-owned enterprises (Winrock International, 2023). Such efforts can contribute to increasing women's access to CDRFI products. Furthermore, the use of digital tools like the YAPU platform by CAURIE (Coopérative Autonome pour le Renforcement des Initiatives Economiques par la MicroFinance, or CAURIE-MF), where 78% of 77,000 borrowers are women, demonstrate enhanced financial inclusion by streamlining loan processes and incorporating climate risk assessments that draw from climate data (Climate Champions, 2024).

6.1.2 Insurance product design

The design of insurance products plays a crucial role in determining their accessibility and relevance for women and marginalised groups. In Senegal, the CNAAS has been providing index-based insurance along with traditional offerings since 2012. However, these products may not always address the specific needs and constraints faced by women farmers (personal communication). A project supported by Global Affairs Canada in the Casamance region provides an example of efforts to tailor agricultural insurance products to women's needs. This initiative focuses on

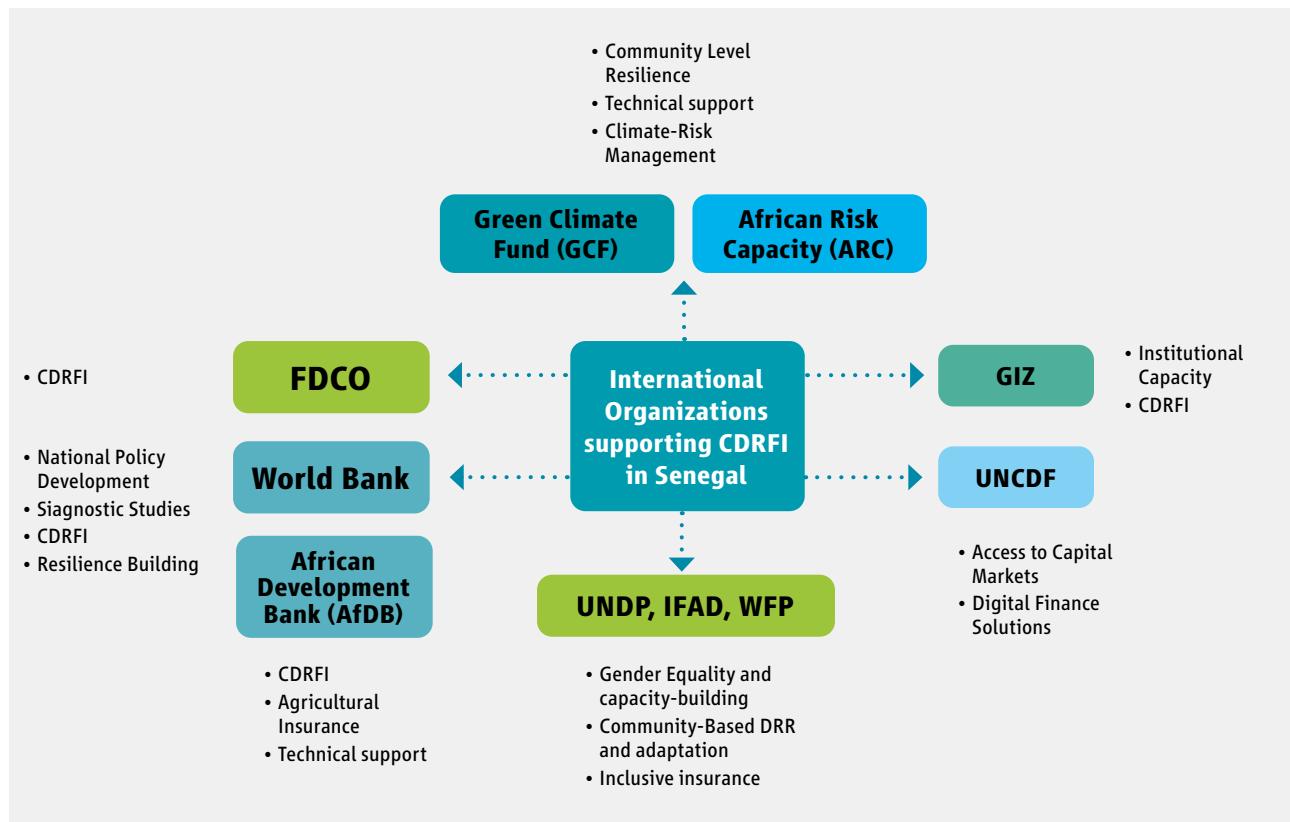
developing and implementing an innovative business model for distributing agricultural insurance to women and women's groups (Winrock International, 2023). To improve product design for insurance and other financing options, the vulnerability and intersectionality review suggests it will be essential to go beyond simple provision of products to understand and address the needs of specific groups. Some examples for service providers include:

- **Gender-sensitive approach:** This involves conducting gender-responsive market research to understand the specific risks and needs of women as well as men and marginalised groups in particular sectors and regions. For example, CAURIE's (Coopérative Autonome pour le Renforcement des Initiatives Economiques par la MicroFinance, or CAURIE-MF) implementation of a gender-sensitive climate risk management policy informs the design of financial products, including potential insurance offerings (Climate Champions, 2024).
- **Tailored solutions:** Includes developing flexible premium payment options that accommodate irregular income patterns, which is often the case for vulnerable groups. A greater focus on sustainable agricultural practices and technologies (e.g., drip irrigation, solar energy) will create a need for insurance products that cover these specific investments.
- **Accessibility considerations:** Given the barriers to accessing formal financial services, insurance product design should consider alternative and/or simplified processes to reach vulnerable groups. This includes simplifying policy language and claims processes and incorporating gender-sensitive distribution channels.

Several challenges hinder more inclusive CDRFI in Senegal. There is limited gender-disaggregated data on CDRFI coverage and impacts. Additionally, there is low financial and digital literacy among women and vulnerable groups. The insurance sector does not have strong gender-responsive policies and regulations, which is compounded by (and contributes to) the limited capacity of financial institutions to develop inclusive products.

However, there are also opportunities for improvement. First, a normative analysis of the socio-cultural context of Senegal suggests that leveraging existing women's organisations and networks to raise awareness about CDRFI will be key to its success. Second, if digital literacy can be expanded, utilising digital technologies to expand access to financial services will more effectively reach vulnerable populations. Notwithstanding the absence of a current CDRFI strategy and policy, integrating CDRFI into existing gender equality frameworks and complementing policies like SNIF and SNEEG will be crucial while collaborating with international organisations to build capacity and implement best practices.

Figure 5. – Key implementing partners: Exploring gender-inclusive entry points in existing CDRFI initiatives in Senegal



Source: Oxford Policy Management

7 Recommendations

7.1 Policy recommendations

Climate change is holding back development and the fight against poverty, representing a major challenge for achieving the objectives of the PSE by 2035 (CDN Senegal, 2020). Senegal is currently one of the main markets in French-speaking Africa for index-based agricultural insurance, covering nearly 240,000 farmers (UNCDF, 2023). The agricultural sector is also the main source of Senegal's Greenhouse Gas (GHG) emissions through savanna burning (slash and burn practice) and enteric fermentation from livestock (USAID, 2023). Policies and programmes seeking to improve inclusion and/or CDRFI have several options for consideration, of which some are noted below based on analysis of the findings from the previous sections of this report.

7.1.1 For governments

1. Develop a comprehensive national CDRFI strategy with a strong focus on gender and social inclusion. This strategy could include:

- Setting specific targets for women's and vulnerable groups' participation in CDRFI schemes
- Mandating gender-responsive and inclusive design of CDRFI products
- Allocating dedicated funding for inclusive CDRFI initiatives, including collecting and publicising gender-disaggregated data

Rationale: Senegal currently lacks a comprehensive DRF strategy. A national strategy with explicit inclusion goals would provide a framework for coordinated action.

2. Increase subsidies for CDRFI premiums targeted at women and vulnerable groups.

- Consider higher subsidy rates (e.g. 75% instead of the current 50%) for women and vulnerable groups
- Consider implementing a quota system to ensure a minimum percentage of subsidised premiums go to these groups

Rationale: The government already subsidises agricultural insurance premiums up to 50%. Targeted higher subsidies could help overcome the financial barriers faced by women and vulnerable groups in accessing CDRFI.

3. Strengthen land tenure rights and access for women and youth.

- Consider reforming land laws to explicitly protect women's land rights
- Explore the implementation of programmes that facilitate land access for young farmers

Rationale: Limited access to land is a key constraint for women and youth in agriculture. Secure land tenure would enhance their eligibility for CDRFI products.

7.1.2 For the private sector

1. Design CDRFI products tailored to the needs of women and vulnerable groups. This could include:

- Developing microinsurance products with lower premiums and coverage amounts
- Creating bundled products that combine insurance with other services like credit or inputs
- Collecting gender-disaggregated data, ensuring this information is made publicly available and informs product development and targeting strategies
- Offering flexible payment options, such as paying premiums in instalments

Rationale: Women and youth often have lower purchasing power and different risk profiles compared to male farmers (Winrock International, 2023). Tailored products could increase uptake among these groups.

2. To reach underserved populations, a key avenue is expanding distribution channels. This could include:

- Partnering with women's associations, youth groups, and community organisations
- Leveraging mobile technology and digital platforms for outreach and enrolment
- Training and employing female agents to market CDRFI products to women farmers

Rationale: Traditional distribution channels often fail to reach women and marginalised groups effectively (UNCDF, 2023). Di-

verse and targeted channels informed by better data could improve access.

3. Invest in financial and insurance literacy programmes.

This could involve, for instance:

- › Developing simple, visual educational materials on CDRFI concepts
- › Conducting community-based training sessions targeting women and youth. This could also be done jointly with women's associations and other organisations/groups to reach a wider audience and build on existing networks.
- › Using local languages and culturally appropriate messaging

Rationale: Low financial literacy is a key barrier to CDRFI uptake, especially among women. Targeted education is likely to increase understanding and demand.

7.1.3 For other implementing institutions (e.g., development and humanitarian partners, civil society institutions)

1. Strengthen gender mainstreaming within CDRFI initiatives by considering how the institution can:

- › Implement gender equality policies and training for staff
- › Set targets for female representation in leadership and technical roles
- › Conduct regular gender audits of CDRFI programmes

Rationale: Many agricultural service providers lack gender-responsive policies and practices (Winrock International, 2023). Institutional reforms could help ensure inclusive implementation.

2. Improve data collection and analysis on gender and inclusion in CDRFI by exploring how to:

- › Collect gender-disaggregated data on CDRFI uptake, claims, and impacts
- › Conduct regular assessments of barriers faced by women and vulnerable groups
- › Use this data to inform product design and policy decisions

Rationale: There is limited gender-disaggregated data on CDRFI in Senegal. Better data is crucial for evidence-based policymaking and product development.

3. Enhance collaboration with grassroots organisations.

This could include:

- › Partnering with women's groups, youth associations, and farmer organisations
- › Involving these groups in product design, awareness campaigns, and distribution
- › Supporting capacity building of local organisations to act as CDRFI intermediaries

Rationale: Local organisations often have strong trust and networks within marginalised communities (UNCDF, 2023). Leveraging these relationships could improve CDRFI outreach and uptake.

4. Integrate CDRFI with broader resilience-building initiatives by, for instance:

- › Linking insurance products with climate-smart agriculture training
- › Combining CDRFI with savings groups or microfinance initiatives
- › Coordinating with social protection programmes to enhance overall resilience

Rationale: Integrated approaches can address multiple vulnerabilities simultaneously and provide more comprehensive support to vulnerable groups.

7.2 CDRFI instrument recommendations

7.2.1 Macro

1. Develop a comprehensive national CDRFI strategy with explicit and integrated gender-inclusive components at the designing, targeting, and monitoring stages.

2. Enhance data collection and analysis on gender and inclusion in CDRFI. With limited gender-disaggregated data on CDRFI in Senegal, better data is crucial for evidence-based policymaking and product development.

- › Collect sex-disaggregated data on CDRFI uptake, and on how payouts are targeted, distributed, and used by men and women
- › Conduct regular assessments of barriers faced by women and vulnerable groups specifically in benefiting from macro-level instruments
- › Use this data to inform product design, implementation (e.g., around payout plans, contingency planning of products), and policy decisions

3. Strengthen collaboration with grassroots organisations. Local organisations often have strong trust and networks within marginalised communities. Leveraging these relationships could improve CDRFI outreach and uptake.

- › Partner with women's groups, youth associations, and farmer organisations
- › Involve these groups in product design, awareness campaigns, and distribution
- › Support capacity building of local organisations to act as CDRFI intermediaries

7.2.2 Meso

1. Develop partnerships with high-quality distributors and aggregators. Effective distribution channels are crucial for reaching a large number of smallholder farmers with CDRFI products.

- › Collaborate with organisations like Inclusive Guarantee, IBA, CAURIE, and ASPRODEB to expand distribution channels
- › Partner with producer networks like FEPROMAS and FPA to reach more farmers⁹

2. Strengthen technical and administrative capacities of CNAAS. Since CNAAS is the main agricultural insurance provider in Senegal, strengthening its capacities has the most potential to improve the overall CDRFI landscape.

- › Provide training and resources to enhance CNAAS's ability to design and manage inclusive CDRFI products
- › Support CNAAS in expanding current pilot projects to reach more women and vulnerable groups

3. Improve communication and education on climate risk insurance. Lack of understanding and trust in insurance is a major barrier to adoption, especially among marginalised groups.

- › Develop targeted awareness campaigns for women and youth
- › Utilise digital platforms and mobile technology for outreach and education
- › Train local "ambassadors" to build trust and understanding of CDRFI products

7.2.3 Micro

1. Design tailored CDRFI products for women and vulnerable groups. Given the lower purchasing power and different risk profiles compared to male farmers, tailored products could increase uptake among these groups.

- › Develop micro-insurance products with lower premiums and coverage amounts
- › Create bundled products that combine insurance with other services like credit or inputs
- › Offer flexible payment options, such as paying premiums in instalments

2. Increase subsidies for CDRFI premiums targeted at women and vulnerable groups. The government already subsidises agricultural insurance premiums up to 50%. Targeted higher subsidies could help overcome the financial barriers faced by women and vulnerable groups in accessing CDRFI.

- › Consider higher subsidy rates (e.g. 75% instead of the current 50%) for women, youth, and other marginalised groups
- › Implement a quota system to ensure a minimum percentage of subsidised premiums go to these groups

3. Digitise outreach and education procedures. Digital tools can help overcome some of the barriers faced by women and vulnerable groups in accessing CDRFI, such as limited mobility and time constraints.

- › Develop mobile apps and digital platforms for CDRFI education and enrolment
- › Utilise SMS and voice messaging to reach farmers with limited literacy
- › Implement digital payment systems to facilitate premium payments and claims processing

⁹ Several major farming cooperatives and associations play a significant role in the agricultural sector, including: Association Sénégalaise pour la Promotion du Développement à la Base (ASPRODEB), the largest network of farmer cooperatives; Réseau des Organisations Paysannes et Pastorales du Sénégal (ROPPA), a network of farmer organisations and cooperatives promoting sustainable agriculture; and Union des Coopératives Agricoles de la Chaîne de Valeur Anacarde du Sine-Saloum (UCACVA-SS), a union of 17 cooperatives focusing on cashew production. Furthermore, the Association Sénégalaise de Producteurs de Semences Paysannes (ASPSP) links 15 regional farmer organisations with around 63,000 members and the majority being women while Coopérative de l'Association des Jeunes Agriculteurs de Casamance (AJAC-LUKAAL) has about 3,500 farmer-members, with 75% being women (Oakland Institute, n.d.).

7.3 Conclusion on strengthening gender inclusion in CDRFI in Senegal

Strengthening gender inclusion in CDRFI in Senegal requires a multifaceted approach that addresses the complex interplay of social, economic, and environmental factors affecting vulnerable populations, particularly women and youth in rural areas. The review highlights several key areas for improvement and potential strategies to enhance inclusivity in CDRFI:

- › **Policy integration:** While Senegal has made strides in developing policies that promote gender equality and financial inclusion, there is a need to explicitly integrate gender-specific considerations into CDRFI strategies. The SNIF provides a foundation, but a comprehensive national CDRFI strategy with strong gender components is crucial.
- › **Tailored financial products:** The development of CDRFI products must consider the specific needs and constraints of women and vulnerable groups. This includes designing microinsurance products with lower premiums, flexible payment options, and bundled services that combine insurance with credit or agricultural inputs.
- › **Digital innovation:** Leveraging digital technologies can help overcome barriers to access for marginalised groups. Initiatives like CAURIE Microfinance's use of the YAPU platform demonstrate the potential of digital tools to enhance climate risk assessment and loan processes.
- › **Capacity building:** Strengthening the technical and administrative capacities of key institutions like CNAAS is essential for expanding inclusive CDRFI products and services.
- › **Education and awareness:** Improving financial and insurance literacy among women and vulnerable groups is critical. This requires targeted awareness campaigns, community-based training sessions, and the use of local languages and culturally appropriate messaging.
- › **Addressing structural barriers:** Efforts must be made to tackle underlying issues such as limited land tenure rights for women, socio-cultural norms that restrict women's entrepreneurial activities, and the disproportionate burden of household responsibilities on women.
- › **Data collection and analysis:** Enhancing the collection and analysis of gender-disaggregated data on CDRFI uptake, claims, and impacts is crucial for evidence-based policymaking and product development.
- › **Collaborative partnerships:** Strengthening collaboration with grassroots organisations, women's groups, and youth associations can improve outreach and ensure that CDRFI initiatives are responsive to local needs and contexts.
- › **Integrated approach:** CDRFI should be integrated with broader resilience-building initiatives, including climate-smart agriculture training, savings groups, and social protection programmes.
- › **Targeted subsidies:** Increasing subsidies for CDRFI premiums specifically for women and vulnerable groups can help overcome financial barriers to access.

By addressing these key areas, Senegal can work towards a more inclusive CDRFI landscape that effectively supports the resilience of all its citizens in the face of climate change and disaster risks. This approach not only enhances the adaptive capacity of vulnerable groups but also contributes to broader national goals of sustainable development and poverty reduction.

Annex A – Gender-Responsive Examples

Below are examples of how gender-sensitive CDRFI initiatives in Senegal are gaining momentum.

- The United Nations Development Programme's (UNDP's) Insurance and Risk Finance Facility (IRFF) has completed a country diagnostic for Senegal, detailing the existing conditions and offering recommendations to enhance **inclusive insurance and risk finance**. This involves creating insurance products specifically designed for vulnerable populations and boosting financial literacy to encourage greater adoption (UNDP, 2024). An interview with Ismaila Diatta from UNDP Senegal also revealed that the country office is currently working on developing and launching a parametric insurance for fishers through the **Access to Insurance Initiative**.¹⁰
- A feasibility study conducted by the United Nations Capital Development Fund (UNCDF) examines **climate risk insurance (CRI)** in Senegal. The study is intended to guide programming within UNCDF's 'Climate Agenda' by evaluating both the demand and supply of CRI instruments. Its objective is to strengthen resilience and adaptation by developing targeted climate risk insurance products (UNCDF, 2023).

- ISF is the main funder of the programme 'Renforcement De La Réponse Financière Du FSN Au Profit Des Populations Vulnérables Victimes De Catastrophes Naturelles Au Sénégal'. The primary goal of the programme is to bolster the financial protection and resilience of vulnerable households in Senegal against extreme floods and droughts. This will be achieved by strengthening FSN, financial, institutional, and operational capacity to cope with disasters. Among its expected outcomes, the programme seeks to: target compensation, prioritising female-headed vulnerable households; and build capacity through training sessions for social workers and community development agents in selected towns, 50 percent of whom must be women.¹¹
- Efforts are being made to create a comprehensive **disaster risk financing strategy**, which includes re-establishing a national disaster relief fund, advancing insurance coverage for public assets and infrastructure, and enhancing capacity for disaster risk financing. These initiatives are intended to offer financial protection and facilitate rapid recovery from disasters (UNDP, 2024).

More specific gender-focused CDRFI initiatives/strategies under various institutions are provided in the table below.

10 Personal Communication. December 2024.

11 Lea Kulick. Personal Communication. November 13, 2024.

Institution Name	Programme Name	Programme Description	Location
Green Climate Fund (GCF)	Gender Action Plan and Gender-Responsive Climate Finance Initiatives	The Gender Action Plan ensures that all GCF-funded projects include gender-responsive activities, performance indicators, and a focus on empowering women. Specific initiatives include providing loans to women-led enterprises in Ghana for climate-resilient agriculture and supporting women-led cooperatives in Morocco for sustainable management of argan trees. These efforts aim to close gender gaps, enhance adaptation, and boost livelihood benefits.	Ghana, Morocco
African Risk Capacity (ARC)	Gender and Disaster Risk Management Platform (GDRMP)	The Gender and Disaster Risk Management Platform (GDRMP) aims to promote knowledge development and sharing, advocacy, and policy dialogue on gender-transformative disaster risk management (DRM) approaches. It focuses on adopting a gender transformative 'culture of insurance' by Member States, building Member States' capacity for gender mainstreaming in disaster risk management, and addressing gender disparities in disaster preparedness and response.	African countries, with a specific focus on ECOWAS member states, including Nigeria.
World Bank	Global Shield Financing Facility	The Global Shield Financing Facility aims to help developing countries access more financing for recovery from disasters and climate shocks. It supports the Global Shield Against Climate Risks initiative, providing integrated financial protection packages to vulnerable populations. These packages include pre-arranged financing, insurance solutions, and risk transfer instruments like catastrophe bonds, complementing investments in climate adaptation and disaster risk reduction.	Developing countries, including Africa, Asia, and Small Island Developing States
African Development Bank (AfDB)	Africa Disaster Risk Financing Programme (ADRFi)	The ADRFi Programme supports African countries in building resilience and responses to climate shocks. It provides technical assistance, capacity building, and financial protection through instruments like parametric insurance. The programme aims to enhance anticipatory planning and adaptation to climate risks, protecting millions of people from severe droughts and tropical cyclones.	Comoros, Djibouti, Somalia, South Sudan, and other African countries
IFAD	Adaptation for Smallholder Agriculture Programme (ASAP)	ASAP integrates gender equality and climate resilience for smallholder farmers globally, promoting sustainable agricultural practices and climate-smart adaptation.	Global (ASAP)
WFP	R4 Rural Resilience Initiative	The R4 Rural Resilience Initiative combines risk reduction, risk transfer, and financial services to empower rural women and communities, enhancing their resilience to climate shocks	Rural areas in developing countries (R4 Rural Resilience Initiative)

Institution Name	Programme Name	Programme Description	Location
GIZ	InsuResilience Global Partnership	The InsuResilience Global Partnership aims to strengthen the resilience of developing countries and protect the lives and livelihoods of poor and vulnerable people against the impacts of disasters. It promotes gender-sensitive climate risk insurance solutions, addresses gender-specific differences in susceptibility to climate risks, and develops strategies to dismantle obstacles preventing women from obtaining insurance coverage. The programme also facilitates knowledge sharing, capacity building, and collaboration among stakeholders to implement comprehensive climate risk management plans.	Global
UNCDF	Pacific Insurance and Climate Adaptation Programme (PICAP)	The Pacific Insurance and Climate Adaptation Programme (PICAP) aims to improve the financial preparedness of Pacific governments and communities, particularly vulnerable segments of society, against climate change and natural hazards. It focuses on GESI by integrating these dimensions into product development, consumer empowerment activities, and partnerships with public and private sectors. The programme includes activities such as parametric insurance product development, capacity building, and targeted interventions to address the needs of persons with disabilities and other marginalised groups.	Pacific region, including Fiji

Annex B – Stakeholders Interviewed

1. Centre de Suivi Ecologique

2. Promo Conseil Assur SA

3. Women in Mining

4. UNDP Senegal

8 References

Bharadwaj, R., Mitchell, T., Karthikeyan, N., Raj, N., Chaliha, S., Abhilashi, R., . . . McCabe, T. (2023). *Delivering anticipatory social protection: Country readiness assessment*. Retrieved from International Institute for Environment and Development: <https://www.iied.org/sites/default/files/pdfs/2023-10/21941iied.pdf>

Bouri, M., & Klapper, L. (2022, May 22). *Maintaining momentum of financial inclusion through digital adoption in the West African Economic and Monetary Union (WAEMU)*. Retrieved from World Bank Blogs: <https://blogs.worldbank.org/en/allaboutfinance/maintaining-momentum-financial-inclusion-through-digital-adoption-west-african>

CDKN Global. (2021). *Climate change, gender and obstacles to small enterprises' adaptation – the case of Senegal*. Retrieved from Climate & Development Knowledge Network: <https://cdkn.org/story/feature-climate-change-gender-and-obstacles-to-small-enterprise-development-the-case-of-senegal>

CDN Senegal . (2020). *Contribution Determinee au Niveau National du Senegal*. Retrieved from <https://unfccc.int/sites/default/files/NDC/2022-06/CDNSenegal%20approuv%C3%A9e-pdf.pdf>

Chemonics. (2015). *Climate Change and Health Risks in Senegal*. Retrieved from https://pdf.usaid.gov/pdf_docs/PBAAF210.pdf

CIAT and USAID. (2016). *Climate-Smart Agriculture in Senegal*. Washington, D.C.: International Center for Tropical Agriculture (CIAT), Bureau for Food Security, United States Agency for International Development (BFS/USAID).

Climate Champions. (2024, May 1). *Race to Resilience in action: Strengthening climate resilience in Senegal through digital agricultural finance*. Retrieved from United Nations Framework Convention on Climate Change: <https://climatechampions.unfccc.int/race-to-resilience-in-action-strengthening-climate-resilience-in-senegal-through-digital-agricultural-finance/>

GAFSP. (2018). *Strengthening rural women's livelihood for a sustainable economic development in the Eastern region of Senegal*. Retrieved from Global Agriculture and Food Security Program: [https://www.gafspfund.org/sites/default/files/inline-files/Senegal%20MMI%20Project%20-%20FAO%20\(Jan%202018\)_0.pdf](https://www.gafspfund.org/sites/default/files/inline-files/Senegal%20MMI%20Project%20-%20FAO%20(Jan%202018)_0.pdf)

GIZ. (2021). *Diving into the gap: Gender dimensions of Climate Risk Management*. Retrieved from [https://www.giz.de/en/downloads/GIZ-GP-\(2021\)_Diving%20into%20the%20gap_Genderdimensions%20of%20Climate%20RiskManagement.pdf](https://www.giz.de/en/downloads/GIZ-GP-(2021)_Diving%20into%20the%20gap_Genderdimensions%20of%20Climate%20RiskManagement.pdf)

Global Shield. (2024). *Strengthening Senegal's financial resilience to climate change*. Retrieved from <https://www.globalshield.org/news/strengthening-senegals-financial-resilience-to-climate-change/>

GSMA. (2024). *Women's Trust of Mobile Money and Agents in Nigeria and Senegal: A qualitative framework to understand trust*. Retrieved from GSMA: https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2024/01/Womens-Trust-of-Mobile-Money-and-Agents-in-Nigeria-and-Senegal_Eng.pdf

IFAD . (2019). *Republic of Senegal: Country Strategic Opportunities Programme 2019–2024*. Retrieved from International Fund for Agricultural Development: <https://webapps.ifad.org/members/eb/126/docs/EB-2019-126-R-18.pdf>

ILO. (2023, June). *ILO Youth Country Briefs: Senegal*. Retrieved from International Labor Organization: <https://api.repository.cam.ac.uk/server/api/core/bitstreams/167e4ae4-947c-441a-a2f8-c022920d6b23/content>

IMF. (2023). *Senegal: First Reviews Under the Extended Fund Facility, the Extended Credit Facility, and the Resilience and Sustainability Facility Arrangements, Requests for Modification of the Quantitative Performance Criteria and Rephasing of Access*. Retrieved from International Monetary Fund: <https://doi.org/10.5089/9798400263330.002>

Kumar, S., Pramanik, S., Nourou-Dine, Y. A., Das, A., Singaraju, N., Puskur, R., . . . Huyer, S. (2023). *Gender differentiated adaptation strategies considering climate risk perceptions, impacts and socio-technical conditions in Senegal's dry regions*. Retrieved from ICRISAT Working Paper No. 66: https://oar.icrisat.org/12337/1/Gender%20Differentiated%20Adaptation%20Strategies_WPS%20No%2066.pdf

Kumar, S., Pramanik, S., Yessofo, A. N., Gondwe, T., Worou, O. N., & Whitbread, A. (2022). *Gender-differentiated farmers' perception of climate risk and its impact, access to climate information, and adaptation strategies in Senegal*. Retrieved from AICCRA Case Study: <https://hdl.handle.net/10568/126927>

Landlinks. (2010, November). *Senegal*. Retrieved from Landlinks: USAID Land and Resource Governance: <https://www.land-links.org/country-profile/senegal/>

Madurga-Lopez, I., Medina, L., Carneiro, B., Liebig, T., Läderach, P., & Pacillo, G. (2023). *How does climate exacerbate root causes of conflict in Senegal? Climate Security Pathway Analysis*. Retrieved from CGIAR: <https://cgspace.cgiar.org/server/api/core/bitstreams/93ffa54b-ad69-460e-a26d-48806dc9e26a/content>

Ministère de la Femme, de la Famille et des Solidarités. (2024, November 12). Accueil. Retrieved from Gouvernement du Sénégal.: <https://femme.gouv.sn/>

Ministère des Finances et du Budget. (2022). Stratégie Nationale d'Inclusion Financière (SNIF) du Sénégal 2022-2026. Retrieved from <https://www.afi-global.org/wp-content/uploads/2022/03/SNIF-Senegal-version-finale.pdf>

Oakland Institute. (n.d.). *Rural Women's Associations and Sustainable Agriculture in Casamance*. Retrieved from Oakland Institute: Alliance for Food Sovereignty in Africa: https://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/Women_Association_Senegal.pdf

Plan Sénégal Émergent. (2023). Plan Sénégal Émergent: Plan d'Actions Prioritaires 3 (2024-2028). <https://www.finances.gouv.sn/app/uploads/PSE-PAP-3-2024-2028.pdf>.

Population living in slums (% of urban population) – Senegal. (2024). Retrieved from Accessed on December 1, 2024: <https://data.worldbank.org/indicator/EN.POP.SLUM.UR.ZS?locations=SN>

Rigaud, K. K., de Sherbinin, A., Jones, B., Abu-Ata, N. E., & Adamo, S. (2021). *Groundswell Africa: Deep Dive into Internal Climate Migration in Senegal*. Retrieved from Washington: <https://documents1.worldbank.org/curated/en/776881634532602504/pdf/Groundswell-Africa-Deep-Dive-into-Internal-Climate-Migration-in-Senegal.pdf>

Schwartzstein, P. (2023). *Out of Place, Out of Time: The Experience of Senegal's Migratory Pastoralists*. Retrieved from Wilson Center. Accessed on December 1, 2024: <https://www.wilsoncenter.org/article/out-place-out-time-experience-senegals-migratory-pastoralists>

Sightsavers. (2022, December 20). *Senegal launches action plan to collect inclusive data*. Retrieved from <https://www.sightsavers.org/news/2022/12/senegal-launches-action-plan-to-collect-inclusive-data/>.

SNIF. (2022). *Strategie Nationale d'Inclusion Financiere 2022-2026*. Ministere des Finances et du Budget: Direction Generale du Secteur Financier et de la Competitivite.

Sy, I. (2023). *Unlocking adaptation potential: Insights into Senegal's climate change policies, initiatives, and local actions*. Retrieved from Afripoli: <https://afripoli.org/projects/climate-adaptation/unlocking-adaptation-potential-insights-into-senegals-climate-change-policies-initiatives-and-local-actions>

Trading Economics. (2025, January 8). *Senegal – Employees, Industry, Female (% Of Female Employment)*. Retrieved from Trading Economics: <https://tradingeconomics.com/senegal/employees-industry-female-percent-of-female-employment-wb-data.html>

UN Women. (2021). *Empowering Women through Climate-Resilient Agriculture in West and Central Africa*. Retrieved from UN Women: https://wrdd.unwomen.org/sites/default/files/2022-04/EN%20Women%20in%20Climate%20Resilient%20Agriculture%20in%20WCA_0.pdf

UN Women. (2024, November 12). *Senegal enacts legal and policy reforms, commits to meaningful empowerment and true equality*. Retrieved from <https://www.unwomen.org/en/get-involved/step-it-up/commitments/senegal>

UN Women. (n.d.). *UN Women*. Retrieved from https://trainingcentre.unwomen.org/pluginfile.php/66830/mod_folder/content/0/Empowering%20women%20through%20a%20climate-resilient%20agriculture%20%28Senegal%29.pdf

UNCDF. (2023). *Étude de faisabilité sure l'assurance contre les risques climatiques*. United Nations Capital Development Fund.

UNDP. (2016). *Gender and Climate Change: Overview of Linkages between Gender and Climate Change*. Retrieved from United Nations Development Fund: <https://www.undp.org/sites/g/files/zskgke326/files/publications/UNDP%20Linkages%20Gender%20and%20CC%20Policy%20Brief%201-WEB.pdf>

UNDP. (2024). *Inclusive Insurance and Risk Financing in Senegal: Snapshot and Way Forward 2024*. Retrieved from United Nations Development Program: Insurance and Risk Finance Facility: <https://irff.undp.org/diagnostic-reports/inclusive-insurance-and-risk-financing-senegal-snapshot-and-way-forward-2024>

UNIDO. (2021). *Policy Assessment for the Economic Empowerment of Women in Green Industry – Country Report: Senegal*. Retrieved from United Nations Industrial Development Organization: <https://www.unido.org/sites/default/files/unido-publications/2023-02/Policy-Assessment-for-the-Economic-Empowerment-of-Women-in-Green-Industry-Country-Report-Senegal-en.pdf>

USAID. (2023). *Senegal Climate Change Fact Sheet*. Retrieved from United States Agency for International Development. Accessed on November 28, 2024: <https://www.usaid.gov/sites/default/files/2023-03/2022-USAID-Senegal-Climate-Change-Country-Profile.pdf>

USAID. (2023). *Senegal Climate Change Fact Sheet*. Retrieved from United States Agency for International Development. Accessed on November 28, 2024: <https://www.usaid.gov/sites/default/files/2023-03/2022-USAID-Senegal-Climate-Change-Country-Profile.pdf>

Winrock International. (2023). *A Gender and Social Inclusion Analysis of Access to Agricultural Services in Senegal: Enabling Farmers for Agricultural Transformation (EFAT)*. Retrieved from United States Agency for International Development: https://winrock.org/wp-content/uploads/2023/11/EFAT_A-Gender-and-Social-Inclusion-Analysis-of-Access-to-Agricultural-Services-in-Senegal_Final-AUG21-2023_for-DEC.pdf

World Bank. (2009). *Preparing to Manage Natural Hazards and Climate Change Risks in Dakar, Senegal: A Spatial and Institutional Approach – Pilot Study Report*. Retrieved from <https://documents.worldbank.org/en/publication/documents-reports/document-detail/234281468305334046/preparation-a-la-gestion-des-perils-naturels-et-des-risques-lies-aux-changement-climatique-a-dakar-senegal-une-approche-spatiale-et-institutionnelle-rapport>

World Bank. (2024). *Diagnostic sur le Financement des Risques Climatique et de Catastrophes au Senegal*. Disaster Risk Financing and Insurance Program.

World Bank. (2024). *Senegal – Country Climate and Development Report : Executive Summary (English)*. Retrieved from Washington, D.C. : World Bank Group: <https://documents.worldbank.org/curated/en/099110524125512140/P18094310b67000de18fc011f923c1f4c86>

World Bank. (n.d.). *Senegal*. Retrieved from Sahel Adaptive Social Protection Program Trust Fund.: <https://www.banquemonde.org/fr/programs/sahel-adaptive-social-protection-program-trust-fund/country-work/senegal>

Zamudio, A. N., & Terton, A. (2016). *Review of current and planned adaptation action in Senegal*. Retrieved from CARIAA Working Paper no. 18.: <https://www.iisd.org/system/files/publications/idl-55877-senegal.pdf>

Zottel, S. (2016, October 19). *Improving the Odds of Being Formally Financially Included in Senegal*. Retrieved from World Bank: <https://blogs.worldbank.org/en/nasikiliza/what-are-the-odds-of-being-formally-financially-included-in-senegal>



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