

# Country Profile – Senegal

## Gender, Climate Change, and Nutrition Linkages

Wim Marivoet, Ampa Dogui Diatta, Timothy Thomas, Nathaniel Ferguson, and Elizabeth Bryan

### Introduction

This country brief supports GCAN's goal of integrating gender, climate resilience, and nutrition considerations into policies, interventions, and research by providing policymakers, program officers, and researchers with an analysis of Senegal's current situation and policy landscape in these areas. In 2019, the agrifood system of Senegal accounted for 36% of total GDP and employed 43% of the total work force. The off-farm components (i.e., processing, trade/transport, food services, and input supply) are slightly more important than primary agriculture in terms of GDP and less important in terms of employment, which implies that labor productivity is higher for off-farm activities. The most important value chains as a percentage of total agrifood system's GDP are groundnuts (15%), cattle/dairy (14%), and sorghum/millet and fish (both around 11%) (Diao et al. 2023). In part due to important food losses observed during storage and distribution, Senegal's agrifood system is generally failing to provide nutritious and affordable diets to its population. In fact, total food supplies are dominated by energy-dense food items, with supplies in fruit and pulses amounting to only 55 and 15 grams per capita per day, respectively, resulting in 50% of all Senegalese being unable to afford a healthy diet in 2022.<sup>1</sup>

Based on simulations using IFPRI's Rural Investment and Policy Analysis (RIAPA) model, the development of the fish, horticulture, rice, and maize subsectors is likely to generate the biggest combined impact on poverty reduction, economic growth, job creation, and quality of diets (Diao et al. 2023). In several of the currently or potentially important subsectors, women already play an active role despite their generally disadvantaged position in the economy compared to their male counterparts. This not only relates to cereals (such as millet and sorghum), legumes (such as groundnuts and cowpeas), and horticultural crops, but also to the fish and dairy subsectors. In addition, the involvement of women typically relates to various food processing activities and tends to increase with higher levels of processing, which often constitutes their only income source (Onibon Doubogan et al. 2022; Marivoet et al. 2021; Republic of Senegal 2016a, 2024a).

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<sup>1</sup> See: [www.foodsystemsdashboard.org/countries/sen](http://www.foodsystemsdashboard.org/countries/sen) (January 9, 2025).

Climate change is expected to have a substantial impact on the entire agrifood system of Senegal. In terms of primary agricultural production, climate change is expected to reduce cereal yields, and to negatively affect horticulture, livestock, and fish production (Republic of Senegal 2020a). With less primary output available, the sustainable development of the wider agrifood sector may be jeopardized, resulting in fewer jobs, lower incomes, or more insecure livelihoods, especially for women and other vulnerable groups with less capacity or opportunities to adapt. As such, the availability and affordability of nutritious foods are likely to become an even bigger concern in Senegal, which in turn will negatively affect the nutritional outcomes of the population, especially given the vulnerable position of women who play a central role in the immediate nutritional well-being of all family members.

Following the national elections of March 24, 2024, won by his Excellency Bassirou Diomaye Diakhary Faye, a new government was formed in April 2024, led by prime minister Ousmane Sonko. This new government has the daunting task of putting Senegal on the trajectory of sustainable, inclusive, and climate-resilient development, while at the same time improving the nutritional outcomes of its population. Despite several strategies and focal points within key ministries (see below), it remains to be seen to what extent gender equality and women's empowerment are prioritized in future policies. This question is further fueled by criticism of the low representation of women in the government, with only 4 women in a cabinet of 25 ministers and 5 secretaries of state.<sup>2</sup>

## Climate Change

Based on the international disaster database EM-DAT covering the period 2000-2020, the western part of Senegal was identified as one of the most impacted areas of the world given that it faced a combination of seven climate-related disasters. The most prominent disaster types that occurred in this period include droughts, riverine floods, and flash floods (Donatti et al. 2024). While flooding is not expected to increase much when comparing historical data (1981-2010) with future projections (2020-2040), heat stress is likely to increase substantially across all regions of the country. Interestingly, expected changes in drought occurrences vary a lot by region. While the southern Casamance is likely to become drier, both the Niayes area along the Atlantic Coast to the north of Dakar and large parts of the Saint-Louis, Matam, and Tambacounda regions appear to be relatively spared or may even become wetter (Craparo et al. forthcoming). These observations are important given that the Casamance is an important breadbasket of the country, the lion's share of horticulture production takes place in the Niayes area, and the three mentioned regions are either known for their irrigated rice, sugarcane, and horticultural crops (in the case of Saint-Louis) or characterized by important pastoral activities (in the case of Matam and Tambacounda) (Republic of Senegal 2023; Fare et al. 2017).

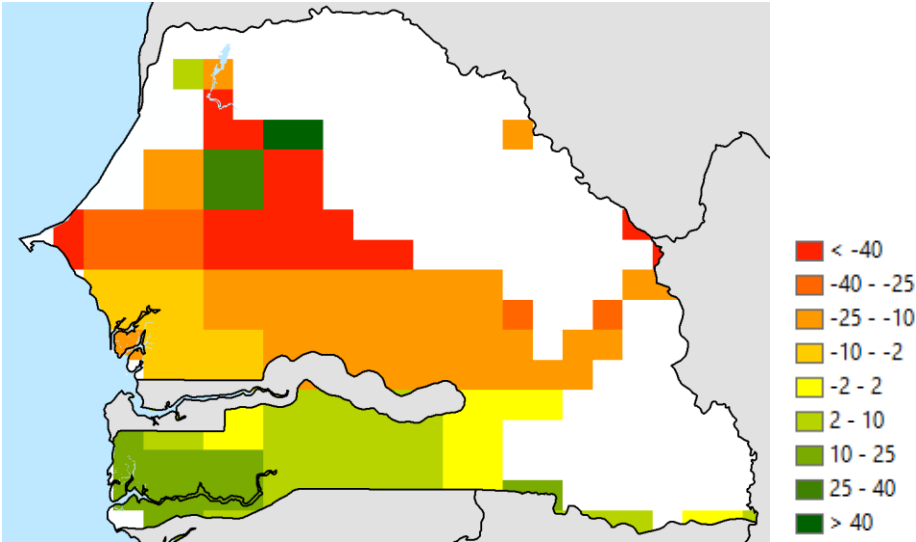
In terms of harvested area, groundnut is the most important crop in Senegal (FAO 2022). Using the Decision Support System for Agrotechnology Transfer (DSSAT) crop modeling software (Hoogenboom et al. 2021; Hoogenboom et al. 2019; Jones et al. 2003), Thomas and Robertson (2024) examined the impact of climate change on rainfed groundnut yields between 2005 and 2050. Using five climate models from ISIMIP3b (Lange 2021) for RCP8.5 (the high-emissions scenario), they found for the median output from the 5 models that yields would be 34% lower than without climate change. However, they also found that when the effect of CO<sub>2</sub> fertilization is taken into account, which tends to boost yields, the total effect of climate change on groundnut yield is only 17% lower than what would happen without climate change.

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<sup>2</sup> Radio France International: <http://www.rfi.fr/fr/afrique>.

Figure 1 shows the geographic distribution of climate change on groundnut yields, with a strong north-south gradient, with large losses in the north and some areas with yield gains in the south. Unlike many other countries where temperature is the main driver of yield change, in Senegal, both higher temperatures and lower rainfall drive yield losses. The irregularity in the distribution of rainfall during the agricultural season (i.e., late start, early stop, dry spells) is another factor contributing to lower yields.

**Figure 1:** Projected change (%) in rainfed groundnut yields in Senegal, 2005-2050, with CO2 fertilization



**Source:** Thomas (2024) and Thomas and Robertson (2024).

Thomas and Robertson (2024) also find for the median model that maize yields will decline by 21.3% and sorghum yields by 9.5% (maize and sorghum have very little CO<sub>2</sub> fertilization effect, with the magnitude of each less than 1%). While the impact of climate change on yields is high in Senegal relative to what the yields would have been without climate change, Rosegrant et al. (2024) remind us that for many crops, the growth rate from productivity gains through improved seeds and better farm management will offset some of the losses for many crops.

**Gender Profile**

In 2023, Senegal ranked 127<sup>th</sup> on the Gender Inequality Index (GII) and in the group of medium to low equality countries on the Gender Development Index (GDI) with scores of 0.490 and 0.924, respectively. These scores are better than the Sub-Saharan African average (0.565 for GII and 0.915 for GDI) and slightly worse than the score for all developing countries combined (0.485 for GII and 0.929 for GDI). While Senegal performs very well on women’s representation in parliament (44.2%), the constituent indicators of GII and GDI related to education and labor market are markedly lower in Senegal compared to the average observed in Sub-Saharan Africa and other developing countries. Women have less access to secondary education (9.2% for women compared to 19.0% for men) and contribute less to gross national income per capita (PPP\$ 2,256 for women against PPP\$ 4,712 for men), reflecting both unequal wages and unequal access to labor markets. In terms of female reproductive health, the 2022 maternal mortality ratio in Senegal stands at 261 deaths per 100,000 live births, while the adolescent birth rate amounts to 64.6 births per 1,000 women aged between 15 and 19 years. The latter observation relates to the high incidence of early marriage in Senegal: roughly one third of all women between 20 and 24

years surveyed in 2019 were married or in a union before the age of 18 years (UNDP 2024; UNICEF 2024).

The good performance of Senegal regarding political representation is the result of the gender parity law adopted in 2010, which allows for an alternating presence of men and women in elective and semi-elective public institutions (Republic of Senegal 2024a). However, this law, together with the country's constitution, which proclaims the equality of all citizens (that is, irrespective of race, sex, or religion), is no guarantee of the further achievement of gender equality. On the one hand, the mere counting of seats occupied by women in public institutions is no reflection of the real opportunities for women to fully and effectively weigh in on the decision-making process (Morgan et al. 2024). On the other hand, some legal dispositions, like article 152 of the "Family Code" on marital power, which assigns full authority of men over women, are not aligned with the non-discriminatory nature of the Constitution (Republic of Senegal 2020b).

The prevailing sociocultural norms governing Senegalese society explain much of the gender inequality discussed above. These norms are shaped, challenged, and perpetuated by continuous interactions within the family and the broader ethnic group to which it belongs. Most ethnic groups in Senegal (Wolof, Pulaar, Sereer, Diola, and Mandingue) are characterized by a strong social and patriarchal hierarchy with different roles and status assigned to men and women. While men typically have full authority over the family, women are responsible for domestic tasks, including reproductive roles. This differentiation of roles also structures access to (productive) resources and community services, such as education and health, and in turn determines the level of agency that men and women can exert in society (Republic of Senegal 2016a; Onibon Doubogan et al. 2022).

The above gender disparities are also reproduced across several subsectors of the Senegalese agrifood system. In general, women in the agricultural sector are disadvantaged compared to men in terms of ownership of, access to, and control over land and livestock resources, as well as regarding access to inputs (like seeds and fertilizer), irrigation, labor, equipment, technology, veterinary services, and market information (Republic of Senegal 2016a, 2024a). Regarding land and livestock, there is again a sharp incongruity between legal texts and reality. Despite equal rights in terms of ownership, acquiring land and livestock is often conditional upon the approval of the broader family and community. As a result, women's access remains fragile, unguaranteed, revocable, or only applying to more remote plots with poor soil quality or smaller ruminants and poultry only (Republic of Senegal 2016a, 2024a; IPAR 2019).

Depending on the subsector or geographical area, the relative weight of women's deprivations and disadvantages might be different. For example, in three key value chains (rice, millet, and maize) across four main agroecological zones in Senegal, the Abbreviated Women's Empowerment in Agriculture Index (A-WEAI) methodology applied to a project *Naatal Mbay* implemented in 2016 pointed to substantial differences in empowerment, with women mainly suffering from limited decision-making power, followed by low group membership and poor access to and decision-making power over credit, while ownership of productive assets and workload appear to be less problematic (IPAR 2016). In contrast, given the lack of irrigation infrastructure, the horticulture subsector typically relies on manual water fetching, which is mostly carried out by women as part of their domestic workload. For the fish and livestock subsectors, apart from access to credit, women mainly suffer from inadequate equipment to support their fish and milk processing and marketing activities (Republic of Senegal 2024a).

## Nutrition Profile

As measured by the Food Insecurity Experience Scale (FIES), food security remains a major challenge in Senegal where roughly half of the population face either a moderate or severe food insecurity level (FAO et al. 2023). This issue of limited access to food is further exacerbated by poor dietary diversity. According to the 2023 Demographic and Health Survey (DHS), only 26.5% of children between 6 and 23 months of age meet the minimum dietary diversity threshold. Other indicators on infant and young child feeding practices also remain problematic or even worsened, such as exclusive breastfeeding which fell from 40.8% in 2019 to 34.4% in 2023 (ANSD/ICF 2019, 2023). In addition, based on household food consumption data collected in 2017/18, Senegal was found to face challenges of hidden hunger, especially regarding calcium, iron, and vitamin B12 with nutrient adequacy rates ranging from 25.5% to 41.1% for urban areas, and from 17.8% to 46.7% for rural areas (Marivoet et al. 2021). To some extent, depending on the exact timing of the survey, this observation is confirmed by the household dietary diversity score (HDDS) and the minimum dietary diversity indicator for women (MDD-W), which indicate that 42.7% of all Senegalese households in 2022 and 62.8% of all women of reproductive age in 2023 consumed food from at least five distinct food groups (ANSD 2024; ANSD/ICF 2023).

With an estimated minimal cost of USD 2.19 per day using 2017 price data, healthy diets in Senegal, however, appear to be among the cheapest in West Africa. While this finding has positive implications in terms of affordability, all people living below the international poverty line of USD 2.15 will not be able to access a healthy diet, with vegetables being the most expensive food group in Senegal – accounting for 31% of the total healthy diet cost (Bai et al. 2023). In addition to financial constraints, people often also lack knowledge about healthy diets. This is illustrated by the 2023 DHS survey, which indicates that 46.6% of all children between 6 and 23 months old did not consume any fruit or vegetables, and that 39.8% of the same population group and 34.3% of women of reproductive age consumed unhealthy snacks, such as chocolates, biscuits, and chips, in the preceding 24 hours (ANSD/ICF 2023).

While there is no systematic evidence of food contamination and the associated burden of foodborne diseases in Senegal, several studies indicate that food safety is an important issue. For example, contamination from aflatoxins appears to be widespread, as illustrated by a study that confirmed the presence of aflatoxin B1 in 85% of all groundnut (oil) samples collected in Kaolack and Diourbel. In a similar vein, many studies on microbial contamination in poultry reported contamination rates well above 50%, and, regarding the microbial quality of dairy products, 81% of sour milk, 92% of raw milk, and 93% of pasteurized milk do not meet official standards (Arias-Granada et al. 2020; Abebe et al. 2023). These food safety issues relate to the lack of proper facilities, infrastructure, and practices for correct production, processing/handling, and transport of food to local markets, as well as the subsequent cooking habits and sanitary conditions at the household level (Leone et al. 2022; FES 2022). Regarding household sanitary conditions, the 2023 DHS survey indicates that 75.7% of all Senegalese people do not treat water before drinking, and only 28.0% have water and soap to wash hands (ANSD/ICF 2023).

As a result of these limited and poor diets combined the food safety and hygienic challenges, nutrition outcomes in Senegal remain problematic, with the prevalence of stunting and wasting among children under the age of 5 years reaching 17.5% and 10.2%, respectively. Further, the prevalence of low birth weight has shown very little progress since 2010, going from 19.5% in 2010 to 17.2% in 2020 (ANSD/ICF 2023; UNICEF 2023). Likewise, the 2019 prevalence of anemia stands at 67.9% for preschool children (6-59 months) and 52.7% for women of reproductive age; folate deficiency affects roughly half of all non-pregnant women; and vitamin A deficiency in children aged 12-59 months amounts to 12.1% – with rural areas recording higher deficiency rates (WHO 2024a; COSFAM 2022). While overweight among children

under 5 years of age remains low in 2022 (3.4%), despite some slight increase from 2012 (1.5%), it becomes more of a concern with children and adolescents (5-19 years) with rates increasing from 5.6% in 2012 to 8.5% in 2022, and especially among the adult population of which almost one third (30.2%) suffer from overweight in 2022 – an increase from 25.4% in 2012 (WHO 2024a; UNICEF et al. 2023).

In sum, Senegal faces the so-called triple burden of malnutrition, which relates to the coexistence of undernutrition (wasting), micronutrient deficiencies (inadequate intake of vitamins and minerals), and overnutrition (overweight and obesity) across the life course of the population. In addition, non-communicable diseases (NCD), including those related to diet, are estimated to account for 52.7% of all deaths in Senegal, with cardiovascular diseases and diabetes contributing to more than 47.4% of all NCD cases (WHO 2024b). With a rate of 24.0%, the prevalence of hypertension among the adult population in 2015 is also alarmingly high with women (26.0%) being more affected than men (21.9%) (Republic of Senegal 2016c). For diabetes, the estimated prevalence is similar for both men and women and amounts to roughly 8.5% (GNR 2022).

## **Integration of Gender, Climate Change, and Nutrition**

The impacts of climate change on nutrition can be subdivided into direct and indirect channels. The direct impacts relate to reductions in calorie and nutrient availability and affordability, also known as the production pathway (Grossi et al. 2021). For example, in addition to yield losses, the nutrient density or nutritional value of crops might be lower due to heat and water stress, which is the case with high temperatures that can reduce the content of zinc and magnesium in crops like maize (Myers et al. 2014; Thomson and Mason 2018). A similar observation applies to the quality of meat and milk sourced from animals that suffer from a lack of water, inferior fodder, and recurrent episodes of animal disease, challenges that are exacerbated by climate change. Further, the decrease and migration of fish populations along the Atlantic coastline following declining marine ecosystems and increasing ocean temperatures represent another potential loss in affordable animal protein and related nutrients (Onibon Doubogan et al. 2022, Republic of Senegal 2020a). Given low adequacy levels of vitamin B12, calcium, and iron observed in both urban and rural areas of Senegal (Marivoet et al. 2021) and given the difficulty to assure sufficient intake of these nutrients without relying on animal-source food items (Beal et al. 2023), the expected impact of climate change on the livestock and fish subsectors will further complicate people's access to healthy diets.

The indirect impacts of climate change on nutrition work through income losses resulting from lower yields and corresponding economic activity, known as the income pathway (Grossi et al. 2021). As can be observed by comparing urban and rural areas in Senegal, low-income households have generally poorer diets, dominated by energy-dense cereals, while high-income households have more diversified diets, with higher portions of vegetables, fruit, meat, and fish (Marivoet et al. 2021). The impact of income losses on nutrition is likely to be smaller when people have higher incomes, multiple income sources (especially sources less affected by climate change), or more assets to pursue various forms of consumption smoothing (Lazzaroni and Wagner 2016). However, with more than one third of the Senegalese population living in poverty (37.8% in 2018/19) and the majority of people depending mainly on rain-fed agriculture (ANSD 2021), the options to deal with shocks are not only very limited (WFP 2023) but may include maladaptive responses, such as cutting back on food consumption (Haggblade et al. 2017). While the interaction of shocks is important, a study in rural Senegal estimates that the occurrence of a drought or income shock explains, respectively, 25% and 31% of the pooled weight-for-age (underweight) standard deviation (Lazzaroni and Wagner 2016).

Gender roles and relations further influence the direct and indirect pathways through which climate change affects nutrition. First, given their relatively greater involvement in certain agricultural value chains (such as dairy, fish, and horticulture) or in later stages of the agrifood system, Senegalese women may be particularly impacted by climate change. Indeed, since cattle herders and fishermen need to travel longer distances due to dwindling water resources and migrating fish populations, women increasingly face insecure supplies of primary material to set up or maintain their processing and commercial activities, with negative implications for women's incomes (Onibon Doubogan et al. 2022; Republic of Senegal 2024a). Second, as discussed in the gender profile above, most Senegalese women have (at best) only one income-generating activity, little time, and limited access to and control over resources needed to anticipate, absorb, and recover from climate-related shocks, or to transform their livelihoods. For example, according to a study in Kaffrine, Louga, and Thies (regions which cover part of the groundnut basin in Senegal), only 6% of the recipients of climate information services or climate-smart agricultural training were women (Kumar et al. 2022). Third, given that women and mothers are the primary caregivers of children and given their limited options for consumption smoothing, any income loss due to climate change is likely to have an immediate impact on the nutritional well-being of other family members (Grossi et al. 2021).

## Policy Analysis

With the arrival of a new administration, the cornerstone of all policies in Senegal is the “Senegal 2050: National Agenda for Transformation,” which is structured along four main axes, involving the development of a competitive economy (Axis 1); the strengthening of human capital and ensuring social equity (Axis 2); the sustainable and equitable planning and development of the national territory (Axis 3); and the strengthening of good governance and African commitment (Axis 4). The Senegal 2050 framework is expected to receive territorial and sectoral spin-off versions and will be implemented through Strategic Masterplans covering periods of 10 years combined with National Development Strategies (NDSs) every 5 years, the latter which will be made operational using Priority Action Plans (PAPs). These PAPs will define the required investment and budget portfolio needed to implement the selected actions by sector, while at the same time ensuring consistency between the expected outcomes and across strategic priorities and objectives. Compared to the “Emerging Senegal Plan (PSE),” which was the policy foundation of the previous administration, the Senegal 2050 framework and related documentation have a more explicit focus on the challenges of climate change and its impact on future generations. However, being an overarching policy, issues related to gender and nutrition as well as their explicit linkages with environmental concerns are only briefly discussed (Republic of Senegal 2014; 2018a; 2024b; 2024c).

Following an initial version validated in 2015, the Nationally Determined Contribution of Senegal (NDC) was approved in 2020 and covers both mitigation and adaptation (Republic of Senegal 2020a). The elaboration and planning of specific adaptation measures is part of an ongoing process at the sectoral level, which is expected to culminate in a full National Adaptation Plan (NAP) (Kohli & Alam 2018), which will replace and update the 2006 National Adaptation Plan of Action (NAPA) (Republic of Senegal 2006). As of early 2024, six out of nine sectoral NAPs have been finalized including fishing and aquaculture, coastal zones, health, agriculture, management of flooding, and land transport infrastructure (Republic of Senegal 2024a).<sup>3</sup> The sectoral NAPs on water resources, biodiversity and tourism, and livestock are expected later following a process initiated in May 2025. While the NDC document explicitly underscores the need for multi- and inter-sectoral approaches in the design of mitigation and adaptation policies, and the need

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<sup>3</sup> While six NAPs have been finalized, only one (fishing and aquaculture) has been politically validated and can be accessed online.

to take into account key priorities, such as gender and nutrition (Republic of Senegal 2020a), only two of the six finalized NAPs (fishing/aquaculture and coastal zones) have adequately integrated gender, while the other sectoral plans have failed to do so – despite existing studies on the topic (Republic of Senegal 2024a). Despite the creation of gender focal points in key ministries, the failure to systematically integrate gender into climate policies relates to regulatory and financial constraints (Onibon Doubogan et al. 2022). While gender received some consideration, the attention devoted to nutrition in climate policies appears much less explicit, being mentioned only in terms of broadly modeling the policy impact on a selected number of SDGs or by statements that fish is an important source of proteins, vitamins, and minerals (Republic of Senegal 2020a; Republic of Senegal 2016b).

Over the past decades, Senegal has developed two Woman Action Plans (in 1982 and in 1996), two National Strategies for Equity and Gender Equality (SNEEG), covering the periods 2005-2015 and 2016-2026, and one National Strategy for Women’s Economic Empowerment (SNAEF) (Republic of Senegal 2016a; Republic of Senegal 2020b). The SNEEG of 2016 fully resonates with the vision and structure of PSE by setting gender objectives that cut across the three main PSE axes, broadly focusing on economic empowerment, social protection, and political representation of women. However, explicit linkages to the challenges of climate change and nutrition are nearly absent within the comprehensive logical framework developed by SNEEG (Republic of Senegal 2016a). Compared to the 2016 SNEEG, the 2020 SNAEF puts a more explicit focus on changing mentalities related to gender norms and roles, as well as on empowering women across various domains (such as education, finance, health, and poverty reduction) to assure decent incomes in both the formal and informal sector. Yet again, little or no explicit attention is devoted by the 2020 SNAEF to environmental or nutrition issues (Republic of Senegal 2020b).

With the creation of the Unit to Fight against Malnutrition (CLM) in 2001, which was later renamed the National Nutrition Development Council (CNDN), nutrition policies in Senegal have become increasingly multisectoral as highlighted in the 2015 National Nutrition Development Policy (PNDN) document (Republic of Senegal 2015a) and further reinforced in the Multisectoral Nutrition Strategic Plan (PSMN) for the 2018-2022 period (Republic of Senegal 2018b).<sup>4</sup> The latter plan outlines how each of the twelve sectors will contribute to nutrition outcomes through their sectoral action plans. For example, the Ministry of Environment will contribute to strengthening the availability of diversified, healthy, and nutritious foods and the Ministry of Family will contribute through social safety nets, agricultural insurance, and school meals targeted at vulnerable households, as well as through the socio-economic empowerment of women and the implementation of early childhood development activities. At the onset of the PSMN, all nutrition specific and sensitive activities were budgeted for each of the twelve sectors involved, and a global M&E framework and an integrated information system were announced to be set up. The 2015-2035 National Strategy of Food Security and Resilience (SNSAR) is another major policy to improve nutrition outcomes in Senegal using a multisectoral approach. However, SNSAR’s linkages with both climate change and gender appear more general and less elaborate compared to PSMN (Republic of Senegal 2015b). Table 1 provides a summary on the level of integration across the dimensions of climate change, gender, and nutrition for the major policy documents discussed.

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<sup>4</sup> For a comprehensive historical overview of nutrition policies in Senegal, see: Spray (2018).

**Table 1: Assessment of climate, gender and nutrition integration in key policy documents**

	Climate (1-4)	Gender (1-4)	Nutrition (1-4)
<b>Climate policies</b>			
NDC (2020)	-	1	1
NAP – fishing and aquaculture (2016)	-	3	1
NAP – coastal zones (2022)	-	3	na
NAP – health (2023)	-	1	na
NAP – agriculture (2023)	-	2	na
NAP – management of flooding (2023)	-	2	na
NAP – land transport infrastructure (2023)	-	2	na
<b>Gender policies</b>			
SNEEG (2016)	1	-	1
SNAEF (2020)	1	-	1
<b>Nutrition policies</b>			
PNDN/PSMN (2015/2018)	3	3	-
SNSAR (2015)	2	2	-

**Note:** The scores in this table roughly indicate the level of integration across the three dimensions, with 1 referring to the lowest levels and 4 to the highest levels of integration. Given their inaccessibility at the time of writing (na), the gender assessment of the sectoral NAPs is largely based on the evaluation conducted by MEDD (Republic of Senegal 2024a). For a more detailed analysis that screens for several key parameters across sixteen nutrition-relevant policies, see Diatta et al. (2021).

**Source:** Own compilation of Authors.

In terms of the institutional landscape, the main mechanism for coordination of climate action in Senegal sits within the Ministry of Environment and Ecological Transition (METE),<sup>5</sup> which oversees the design, implementation, and monitoring and evaluation of all climate policies. The Secretariat of the National Committee on Climate Change (COMNACC) is housed in the METE Directorate of Climate Change, Ecological Transition and Green Financing (DCCTEFV) and is responsible for overseeing the integration and coordination between the ministries involved, as well as monitoring climate action and interventions at the national and local level. The Regional Committees on Climate Change (COMRECC) perform similar functions as COMNACC but at the regional level (Koumasssi et al. 2022). The NAP process is managed by DCCTEFV. To ensure that efforts to reduce vulnerability to climate change are adequately funded, several divisions of the Ministry of Economy, Finance and Planning (MEFP) are involved in this process (Kohli & Alam 2018). The overall planning process to design the sectoral NAPs is also technically and financially supported by a number of donors and stakeholders, and is structured around a series of piloting, technical, and sectoral committees (Badiane-Ndour et al. 2020a).

## Concluding Remarks

As illustrated with the agricultural NAP process, climate action in Senegal clearly aims to be participatory, comprehensive, and cut across the multiple sectors. However, the often-mechanical reproduction or devolution of functions at lower administrative levels or within different ministries (such as the focal points

<sup>5</sup> Before the introduction of the new government in 2024, this ministry was called the Ministry of Environment and Sustainable Development (MEDD).

on gender), or the identification of roughly overlapping impact areas (such as fishing and aquaculture, coastal zones, water resources, biodiversity and tourism) might have artificially inflated the number of stakeholders, thus preventing an efficient consultative process. In addition, substantial capacity building is required to assure genuine participation, the lack of which is often compensated for by relying on consultants, thus partially derailing the ownership process. In addition to creating the necessary platforms and commissions, the coordination and integration of evidence-based policies across sectors not only require more localized studies on climate vulnerabilities but might also benefit from a revision of COMNACC's role and mandate in providing technical advice to the government (Koumasssi et al. 2022; Badiane-Ndour et al. 2020b). Following an in-depth diagnosis carried out by the Operations and Methods Office (BOM), a reform of COMNACC is currently underway, which aims to revise the committee's organizational structure, mission, and operations as well as its legal framework to better respond to new national and international policy challenges. Finally, in contrast to the current project-based funding, a structural and institutionalized budget should be earmarked to support the ongoing policy consultations, capacity building of stakeholders, and research aggregation, while at the same time more attention should be devoted to the integration and estimation of costs linked to internationally-funded policies into the budgetary planning process of the government (Koumasssi et al. 2022). While these recommendations require bold decisions, the incumbent administration in Senegal has been elected on an agenda of "discontinuity" with previous policies, which facilitates the introduction of new directions or corrective measures.

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## ABOUT THE AUTHORS

**Wim Marivoet** is a Research Fellow in the Development Strategies and Governance Unit of the International Food Policy Research Institute (IFPRI)

**Ampa Dogui Diatta** is a Research Analyst in the Nutrition, Diets and Health Unit of IFPRI

**Tim Thomas** is a Senior Research Fellow in the Foresight and Policy Modeling Unit of IFPRI

**Nathaniel Ferguson** is a Research Analyst in the Natural Resources and Resilience Unit of IFPRI

**Elizabeth Bryan** is a Research Fellow in the Natural Resources and Resilience Unit of IFPRI

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1201 Eye Street, NW, Washington, DC 20005 USA | T. +1-202-862-5600 | F. +1-202-862-5606 | Email: [ifpri@cgiar.org](mailto:ifpri@cgiar.org) | [www.ifpri.org](http://www.ifpri.org) | [www.ifpri.info](http://www.ifpri.info)

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