

## The Importance of Wild Fisheries For Local Food Security: SENEGAL

The marine waters off Senegal are very productive, and the country has a high dependence on wild fish for food security and livelihoods. Fish is a primary source of animal protein in Senegal, and fisheries make substantial contributions to the national economy. However, poor management, weak monitoring, overfishing, and illegal fishing threaten this critical resource and its contribution to food security and nutrition there.

**Food Security:** An estimated 30% of rural households in Senegal experience food insecurity, and more than half of these households are poor [1]. About 17% of the population is undernourished, which is an increase from 14% in 2010 [2]. Among children under 5, 19% are stunted (with stunting twice as prevalent in rural than in urban areas), 9% are acutely malnourished, and 16% are underweight [3]. Prevalence of anemia is high (70%) among young children, peaking at 83% in children ages 12 to 23 months [3]. Undernutrition and food insecurity have devastating negative impacts, with 31% of the country's child deaths attributed to undernutrition [4]. Fish is a critical source of protein and nutrition in Senegal, providing about 43% of animal protein supply [5]. Average per capita annual fish and shellfish consumption is estimated to be 24.5 kg [6].

National Development Priority: Sustainable management of wild fisheries is a high priority for the Senegalese government. Strategic objectives under Senegal's National Strategy for Economic and Social Development include sustainable management and improved productivity of fisheries and an overall increase in market access and competiveness for the fishing industry [7]. Marine Protected Areas – which have been shown to boost the natural productivity and resilience of fisheries – were introduced in Senegal by presidential decree. However, fisheries management has been hindered by politics, opposition, and limited involvement in management by fishers, as well as weak monitoring and enforcement [8]. Improved fishing practices, along with co-management approaches that involve fishers in the decision-making processes, are critical for the growth, development, and sustainability of Senegal's fisheries [9].

## COUNTRY PROFILE: SENEGAL Land Area Freshwater & Floodplains Marine Area/Exclusive Economic Zone

- Average per capita annual fish/shellfish consumption: 24.5 kg (54 lbs)
- Provision of animal protein by fish: 43%
- Stunting: 19%
- Undernourished population: 17%

**Economic Benefits:** Wild fisheries make significant contributions to the socio-economic development of the country [10]. The fisheries sector provides employment for over 600,000 individuals, about 17% of the working population [10, 11]. Small-scale fisheries contribute about 3% to the country's Gross Domestic Product and generate revenue of almost \$340 million annually [12].

**Challenges:** Overexploitation and poor management threaten wild fisheries in Senegal. These problems will also further constrain their growth and reduce their resilience in the face of climate change. Improved management of fisheries at the national and regional levels is necessary to mitigate these threats and enhance their adaptive capacity

[10]. While models differ on their predictions about the impacts of climate change on West Africa's coastal fisheries, a recent study found that climate change may increase their productivity, but benefits for local fishing communities will only be realized if threats such as poor management, overfishing, and poaching by other nations are effectively addressed [13, 14]. Illegal and unreported fishing not only depletes the natural resource base and lowers natural productivity, but also negatively affects fishers' livelihoods and national revenues – about \$300 million a year is lost from fish poaching [10]. Industrial fleets operating in Senegal are estimated to have discarded 40% of their total landed catch between 1950 and 2010 [10]. Some high value species, including *Epinephelus aeneus*, a large grouper often called "false cod", are now collapsing due to overexploitation [10, 15].

Women and Fisheries: For decades, women have played critical roles in Senegal's fishing industry, accounting for approximately 30% of the workforce [16, 17]. Thousands of women work as wholesale fish traders and processors. However, women account for less than 5% of those involved in fisheries governing bodies, as cultural factors hinder their ability to contribute to the decision-making process [18]. Women's involvement in governing bodies is thought to be essential because they play critical roles in both the fisheries sector and in addressing household nutritional needs. Because of women's roles in both of these realms, increasing involvement and creating leadership roles for women in the industry will foster more successful management of Senegal's wild fisheries. An example of this strategy is the USAID Collaborative Management for a Sustainable Fisheries Future Project (USAID/COMFISH) [18].

## **Sources:**

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