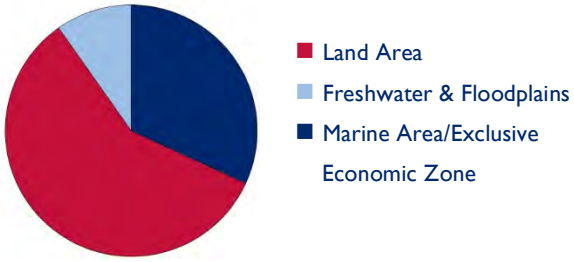
The Importance of Wild Fisheries For Local Food Security: CAMBODIA

Cambodia's wild fisheries are among the most diverse and productive in the world and provide employment, income, and food security for millions of people. However, both productivity and diversity are declining due to poor management, with fish harvests exceeding sustainable limits, widespread use of illegal fishing methods, climate change, and the loss and degradation of essential floodplain/fishery habitats.

Food Security: Among children under 5 in Cambodia, 28% are underweight, 40% suffer from stunting, and 11% are acutely malnourished [1]. Further, 55% of children ages 6-59 months and 44% of women have some degree of anemia [1]. A key driver of maternal and child malnutrition is low dietary diversity [2]. Average annual per capita fish and shellfish consumption is estimated to be 34 kg and accounts for over 60% of Cambodia's animal protein consumption [3, 4]. The Tonle Sap supports one of the world's most productive inland fisheries and with it, the nutrition and livelihoods of more than a million people who live in the region around the lake [5, 6]. Fisheries are critical for increasing food security and dietary diversity and provide critical sources of essential micronutrients, including vitamin A and iron. Some indigenous fish are very micronutrient-dense and may be especially important for combating nutritional deficiencies [7, 8]. For example, a serving of a traditional Cambodian fish soup contains 45% of the daily iron requirement for women [7]. With the large dependence on fish as a source of protein intake, any decrease in domestic capture, quality, or diversity would have serious repercussions, especially for poor and marginalized communities [9].

COUNTRY PROFILE: CAMBODIA



- **Average per capita annual fish/shellfish consumption: 34 kg (75 lbs)**
- **Provision of animal protein by fish: 66%**
- **Stunting: 40%**
- **Underweight children: 28%**

National Development Priority: Cambodia's fisheries face a number of threats including poor management, fish harvests that exceed sustainable limits, widespread use of illegal fishing methods, habitat degradation, and climate change [10]. The 2014-2018 National Strategic Development Plan (NSDP) highlights the progress that the country has made towards fisheries reform, including the increase in conservation areas and the promotion of community-based fisheries management. The NSDP prioritizes fisheries laws and emphasizes the importance of strengthening fishing communities and conservation zones. The government also aims to continue to implement measures to sustain freshwater and marine fisheries to meet their goal of boosting fish production for domestic and export markets [10].

Economic Benefits: Cambodian fisheries are a major source of employment and contribute about 10% of Cambodia's gross domestic product [11]. The livelihoods of almost 30% of Cambodians directly depend upon small-scale fisheries [12, 13]. Many households depend on fishing as their main source of income and have seen declines in profits in the past two decades. Women account for more than 50% of individuals involved in the total fisheries workforce [11].

While the contribution of small-scale fisheries to job security is thought to be large, their economic viability is under pressure by increased competition, declining catch per unit effort, and increases in the cost of inputs [13]. Despite the recent reduction in the poverty rate, many Cambodians are still only marginally above the poverty line [14]. Equitable access to fisheries is an engine for growth and a principal means of poverty reduction for poor, rural households [15, 16].

Fisheries Management: The Department of Fisheries (DoF) of the Ministry of Agriculture, Forestry, and Fisheries is in charge of national fisheries laws and policies. Cambodia has created a dedicated Community Fisheries Development Office within the DoF [17]. In 2007, the Tonle Sap Basin Authority was established to facilitate coordination, management, and conservation [18]. There is active engagement between the central government, grassroots organizations, and non-governmental organizations around fisheries management and governance [19]. Efforts to reduce threats, recover stocks, and enhance wild fish productivity, livelihoods, and food security – such as USAID's successful Management of Aquatic Ecosystems through Community Husbandry (MACH) program in Bangladesh – could be applied in the management of Cambodia's freshwater fisheries.

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