

Unsung Heroes

Not only is fish an important part of nutrition in the Southern African Development Community (SADC), but it is also a major—and unrecognized—element of trade

Fish and fish products are a primary source of protein and essential nutrients in the human diet. Various fish and other aquatic species are available from both marine and fresh water in every country of the Southern African Development Community (SADC) region. These fish make a significant contribution to the nutrition and food security of people in southern Africa.

A major challenge to nutrition and food security is the increasing human population, particularly in developing countries, and the resultant increase in demand this will generate on already-stretched food resources. The global population is expected to grow by another 2 bn to reach 9.6 bn people by 2050, says FAO's 2015 State of Food Insecurity in the World report. More than half of this global population growth is expected to occur in Africa. Between 2015 and 2050, the populations of 28 African countries are projected to more than double. By 2100, the populations of five SADC countries are projected to increase by at least five-fold: Angola, Democratic Republic of Congo (DRC), Malawi, United Republic of Tanzania, and Zambia. During 2015-2050, half of the world's population growth is expected to be concentrated in nine countries, and two of these are SADC countries: the DRC and Tanzania.

The role of fisheries in food and nutritional security has not been well documented in the region for a range of reasons, including the difficulties in acquiring adequate and appropriate data and information.

The role of fish in food security can be placed in a situation in which all households have both physical and economic access to adequate amounts of fish for all members, and where households are not at risk of losing such access. The people who are most susceptible to food insecurity are those living in rural areas, including fishing and fish farming communities.

The value chain in small-scale fisheries is often driven by local circumstances. Fishing vessels form the base of the chain, with primary and secondary processing done in onshore processing facilities, where the finished products are directly exported to wholesalers or to retailers. Women are involved predominantly in post-harvest activities as fish processors in formal processing (employed in land-based units) and informal processing (including smoking and salting,

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among other things). Women have an important role in fish trade in countries like Angola and Mozambique and, in particular, it is reported that a number of women go to sea to fish or harvest intertidal resources for basic food consumption, livelihoods and income.

The role of small-scale fisheries in food security can be divided into five main contributions: (i) direct and (ii) indirect contributions to household food security; (iii) direct and (iv) indirect contributions to domestic markets (local and national levels); and (v) contributions to international (worldwide) food security.

Exports, imports

The fisheries sector in the region contributes an average of about 2 per cent to the SADC gross domestic product (GDP), with total average exports worth US\$152 mn, and average imports of US\$100 mn. The sector employs an average of 145,000 people; more than 1 mn people benefit indirectly from this. The per capita fish consumption in the region is 11

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Table 1: The contribution of fish to food and nutrition security in SADC by country

Country	Contribution of fish to food and nutrition security
Angola	Per capita fish consumption: 16 kg, i.e. 8 per cent of the total protein intake and 26 per cent of the total animal protein intake.
Botswana	Per capita fish consumption: 3 kg. Contribution of fish to total protein and total animal protein intake: 1 per cent and 3 per cent, respectively, both below the regional averages.
Democratic Republic of Congo	Per capita fish supply: 6 kg . Although contribution of fish to total protein is low at 6 per cent, fish constitutes 39 per cent of the total animal protein intake, amongst the highest in SADC.
Eswathini	Per capita fish consumption: 2 kg, about 1 per cent of the total protein intake and 3 per cent of the total animal protein intake, well below the regional, continental and world averages.
Lesotho	Data not available.
Madagascar	Per capita fish supply and consumption and the contribution of fish to protein intake are all below the regional average, estimated below 5 kg.
Malawi	Per capita fish consumption: 8 kg, which accounts for 28 per cent of the total protein intake.
Mauritius	Per capita fish consumption: 23 kg, which accounts for 8 per cent of the total protein intake and about 17 per cent of the total animal protein intake.
Mozambique	Per capita fish consumption: 9 kg, which makes up 40 per cent of the total animal protein intake and 5 per cent of the total protein intake.
Namibia	Per capita fish consumption: 12 kg, which constitutes 5 per cent of the total protein intake and 14 per cent of the total animal protein intake.
Seychelles	Per capita fish consumption: 59 kg , the highest in SADC. This constitutes 22 per cent of the total protein intake and 48 per cent of the total animal protein intake.
South Africa	Per capita fish consumption: 6 kg, which is below the regional, continental and global average. This constitutes 2 per cent of the total protein intake and 5 per cent of the total animal protein intake.
Tanzania	Per capita fish consumption: 6 kg, which constitutes 4 per cent of the total protein intake and 22 per cent of the total animal protein intake.
Zambia	Per capita fish consumption: 7 kg per person, constituting 4 per cent of the total protein intake and about 20 per cent of the total animal protein intake.
Zimbabwe	Per capita fish consumption: 3 kg person, constituting about 2 per cent of the total protein intake and 7 per cent of the total animal protein intake.

Source: The role of fisheries in food and nutrition security. Centre for the Coordination of Agricultural Research in Southern Africa (CCARDESA) (2016)

kg, which constitutes an average of 16 per cent of the total animal protein intake and 5 per cent of the total protein intake. This shows the significance of fisheries' contribution to nutrition and food security in the region.

Fish are a particularly important source of protein for several African countries—especially for poorer segments of the population—and, therefore, plays an important role in improving Africa's food security and nutrition status. In small island developing states (SIDS), such as the Seychelles and Mauritius, per capita fish supply is among the highest in the world. Although humans cannot live on fish alone, small quantities of fish in human diets can make a decisive difference to health, including the development of brain, bone and muscle tissue, prevention of blindness, preventing ailments like heart attacks and cancer, and mitigating the effects

of HIV/AIDS. Fish are highly nutritious, rich in essential micronutrients, minerals, essential fatty acids and proteins, and represent an excellent supplement to nutritionally deficient cereal-based diets.

According to the Centre for Coordination of Agricultural Research and Development in Southern Africa (CCARDESA), fish can increase food and nutrition security in the SADC region. For instance, regular consumption of small fish species existing in the region plays a critical role in providing micronutrients, especially when consumed whole with bones, heads and internal organs, where the micronutrients are concentrated. These species include *arenque (Clupea harengus)*, *dagaa (Rastrineobola argentea)*, *kapenta (Limnothrissa miodon)*, *matemba (Barbus paludinosus)*, *sardines (Sardina pilchardus)*, *usipa (Engraulicypris)* and



Women processors at Ngwalu Beach, Salima district, Malawi. There is a strong link between food security, good nutrition and gender. People's overall access to food relies, to a great extent, on the work of rural women.

utaka (*Copadichromis*). Hence, there is a need to devote more attention to fish in food policies due to its importance in the food basket, its unique nutritional properties, and its higher efficiency of production and low carbon footprint compared to other forms of animal production systems.

There is a strong link between food security, good nutrition and gender. People's overall access to food relies, to a great extent, on the work of rural women. The economies of SADC countries are largely agrarian, with agriculture playing a significant role in socioeconomic development. In the SADC region, women contribute more than 60 per cent of total food production and provide the largest labour force in the agriculture sector (fisheries being a sub-sector of the agricultural sector). In some member states, women perform more than 70 per cent of the work in agriculture.

Inter-regional fish trade plays a key role in the socioeconomic development of SADC countries. Women in small-scale fisheries play a key role and make major contributions in the regional fish trade. Women feature significantly in informal trade. It is estimated that 70 per cent of informal cross-border traders in the SADC region are women and

30-40 per cent of the trade within the SADC region comes from informal cross-border trade. Data on employment in the fisheries sector in SADC is available for a few countries and disaggregated data is available for only two nodes of the value chain, namely, fishers and processors.

Invisible women

Despite their important role in fisheries and fishing communities, women's contributions are often rendered invisible or seen as an extension of domestic work, resulting in their exclusion from the discourse around fisheries. A recent study found that women play an important role in the small-scale fish-value chains, and their involvement has differentiated outcomes at individual, household and community levels. In addition, engagement has brought more positive outcomes for women. Intra-household relations improved as a result of women participating in value-chain activities. A significant household-scale finding surfaced in both cases regarding gendered roles and relations in decisionmaking, including strategic decisions related to food and nutrition provisioning. Through their involvement in value-chain activities, women play an important role at the

household level, generating income used for food and nutrition.

The gender agenda to advance the interests of women at various levels is acquiring greater attention within organizations. In the small-scale fisheries sector, the mechanisms for co-ordination and organization of women include fish trade and processor associations. These groups are used as a means of engaging in policy dialogue. They offer platforms for trade partnerships and linkages and also exchanging relevant knowledge on fish processing, handling and packaging techniques. They promote an entrepreneurial culture among women. The SADC secretariat worked in partnership with the WorldFish Regional Office for Southern Africa, based in Zambia, in a project titled 'Improving Food Security and Reducing Poverty Through Intra-Regional Fish Trade' (called the Fish Trade project). Implemented between 2013 and 2017, it supported the development of 11 harmonized fish quality standards for the SADC region. These standards are helping to build capacities for trade among private sector associations, particularly women fish processors and traders, to make better use of expanding trade opportunities through competitive small and medium-scale enterprises.


Overcoming challenges

A number of women-led associations and networks in small-scale fisheries benefitted from this intervention. Of interest within the SADC region are Kafue Women Fish Processors' Association and Lotuno Enterprises Ltd. in Zambia, to mention just two. The groups were supported with storage facilities to prolong the shelf life of fish products, and educated with strategies to overcome challenges within the fish trade business and adopt hygienic ways of handling fish. The standards, especially for fish sausages and fish snacks, have helped the women processors' association to improve processing and to negotiate markets outside Zambia.

Specialists in fisheries debates have been concentrating predominantly on questions of biological sustainability and on the economic efficiency of fisheries, neglecting issues linked to its contribution to reducing hunger and malnutrition and to supporting livelihoods. Most regional non-fishery

food security experts and decision makers seem unfamiliar with these facts and, therefore, unaware of fisheries' critical role now and in the future. Fish has so far been only marginally included in the regional debate. Many nutritional programmes are still neither aware of it nor are they recognizing and building on the potential of fish for the reduction of micronutrient deficiency.

According to the outcome of the 2013 SmartFish study, titled "Flavoring Fish into Food Security" by Kurien and LopezRios, this lack of integration of fisheries in the food security policy scenario is attributed to the low participation, if any, of national fishery officers in the design of policies. Fish deserves more attention in food policies than it currently receives, given its importance in the food basket, its unique nutritional properties, its higher efficiency of production and lower carbon footprint compared to other forms of animal production systems. Some of the challenges that need addressing include making fish more affordable for the poor, improving the environmental sustainability of the sector, access to fish and fish-related employment, resolving the tensions between small-scale and commercial producers, and climate change.

Despite women's significant contributions in small-scale fisheries and their role in food security, they face a number of challenges. These include the lack of storage infrastructure, from the landing beach to the borders; harassment by customs officials at the borders; confiscation of fish due to lack of proper documentation for those involved in fish exports; and lack of an enabling environment for fish processors and traders to sell fish across borders, especially to access formal markets within the region. These need to be addressed as a priority. 

For more

<https://www.sadc.int/>

The Southern African Development Community (SADC)

<http://www.fao.org/3/ca7343en/CA7343EN.pdf>

Africa Regional Overview of Food Security and Nutrition 2019: Containing the Damage of Economic Slowdowns and Downturns to Food Insecurity in Africa