

# Empowering waves: An ocean of opportunities for women

**UNCTAD, FAO and Global Seaweed Coalition event  
at the WTO public Forum 2023**

**Friday, 15 September 2023  
14:00-5:15 pm CET time**

**WTO Building, Room F, Geneva**

## **Simonetta Zarrilli's main points**

A few facts and figures to set the scene.

### **Fisheries, a traditional ocean-based sector that is stagnating because of planetary limits**

We have arrived to the ceiling on what can be extracted from the ocean. Wild capture has reached about 94 million tons in 2020 and there are no prospects for growth unless global stocks are fully sustainably managed.

Most employment in fisheries in developing countries is in the small-scale sector, in both the primary and secondary sectors. The primary sector includes fish capture by boat or vessel, an activity that traditionally mainly include men. Women constitute around 14 per cent of the total employment in the primary sector. The secondary sector involves the pre-processing, processing, value addition and transformation of raw fish and seafood products. Women are the majority of those employed in the secondary sector. Therefore, overall, the employment of women and men in fisheries in both the primary and secondary sectors is approximately equal.

### **Seaweeds, a new fast-growing sector**

Seaweeds can be used raw or processed for many purposes: human food, aquatic animal and livestock feed, biofertilizers, biofuels, cosmetics, pharmaceuticals, textiles, bio-packaging, plastics substitutes and green construction material. They can also be used for waste treatment and carbon capture. The seaweed cultivation sector is expected to double in value and volume over the next decade. However, its full potential remains untapped despite its economic potential.

Seaweed farming, production and consumption is enshrined in coastal communities' indigenous knowledge and is a main and vital source of income for many rural coastal women especially belonging to minorities and indigenous peoples' groups. While the use of seaweed has been widespread in Asia for centuries, increasingly people in the West are appreciating it as a protein-rich food.

Environmental concerns relate mainly to the uncontrolled spread of seaweeds, impacts of seaweed cultivation on other species and surrounding ecosystems, competition over coastal areas, and negative impacts on tourism by invasive species.

### **Aquaculture, another fast-growing sector**

The aquaculture sector or fish farming is also a rapidly growing sector. It involves the cultivation and harvest of fish, shellfish, and aquatic plants, in controlled environments such as ponds, tanks, cages, or other aquaculture systems.

Aquaculture contributes significantly to global seafood production and helps meet the growing demand for protein-rich food. It reduces the pressure on wild fish stocks, aiding in the conservation of marine ecosystems and biodiversity.

There are, however, some serious environmental concerns, including water pollution, habitat alteration, and antibiotic use. Therefore, many countries are increasing setting regulations governing aquaculture practices to ensure food safety and environmental protection.

The three sectors represent critical entry points for poverty alleviation: they contribute importantly to food and livelihood security, particularly for the poor and for indigenous communities; they represent the main source of jobs and income for coastal communities; they provide a source of revenue and foreign exchange earnings for the countries.

### **Women's participation in the three sectors**

In the three sectors, men and women tend to produce rather distinctive products, operate on different scales, and serve different markets. This results in rather specific gender-based production and trade patterns throughout the value chains. This division of labour reflects deeply embedded social roles: women look after the children, work on the family plot, etc. and are less likely than men to be away from home. However, it is also a consequence of gender disparities in access to productive assets. Observations at selected landing sites in several developing countries, for example, have evidenced women's unequal access to pre-processing and market facilities.

In the seaweed sector, according to a study conducted in the Banyan islands of the Philippines on 711 seaweed farms, women constitute the majority of workforce. A similar pattern is observed in relation to the predominance of women in the labor force of seaweed production in Tanzania. In Zanzibar, there are 26 000 farmers of which 78 per cent are women. Mainland Tanzania has a total of 5000 farmers, 90 per cent of whom are women.

Women are frequently involved in aquaculture as farm laborers. They participate in tasks such as feeding, harvesting, and maintaining the aquaculture facilities. In some areas, women are also engaged in aquaculture entrepreneurship. Women often play a significant role in post-harvest activities, including fish processing and value addition. As in the case of the fisheries sector, they are involved in cleaning, filleting, smoking, or packaging seafood products for sale in local or international markets.

Despite the significant presence of women in the fisheries, seaweed and aquaculture sectors, their role is, by and large, unrecognized and unvalued. This is reflected in the paucity of data on women in the sectors, including the near absence of data on social indicators such as health status and education levels. Indeed, there is no formal education for these sector and knowledge is usually transmitted in a traditional and intergeneration way. Many governments, private sector companies and international organizations do not collect data on post-harvest activities, particularly for the small scale and subsistence sector. Even when post-harvest data are collected, there can be large degrees of underestimation. Consequently, women are greatly underrepresented in the sectors governance and decision-making, and their concerns find low priority in national policy frameworks. The lack of reliable data leads to a vicious cycle of gender-blind policymaking. It also limits their access to resources, information, training, credit, welfare measures and social protection. Conversely, when women are included in leadership and management, they help foster community well-being and economic growth, bring attention to violence in the community and domestic

sphere and improve bargaining power for women within families, which, in turn, leads to positive outcomes for family well-being.

### **Traditional hurdles faced by women**

#### *Wages and labour market segregation*

Data on wages are hard to come by since most countries group fisheries, seaweed and aquaculture with agriculture and forestry. An additional problem is that a large proportion of employment in the sectors is informal and includes self-employed. Further, payment in the small-scale sector may not only be through wages but also through shares of fish. Wage data for women in fisheries are even more inaccessible. A significant proportion of women's work is unwaged and considered to be an extension of, or complementary to, housework—for example, helping men in the family in their fishing-related tasks, mending nets or maintaining accounts. Further, women are not always engaged in fishing, aquaculture or seaweed alone. Most women and also men from poor communities engage in complementary work in other sectors of the rural economy, including agriculture and forest-based work.

*Low credit access.* Another important hurdle for women is having access to credit. Women's loan requirements are usually frequent but small, making them appropriate recipients of microfinance. In principle, access to credit and financial support should not prove difficult for expanding activities such as aquaculture and seaweed culture.

*Limited access to local markets.* Most forms of public transport are inaccessible to women fish vendors carrying head-loads and baskets of fish for sale. Other than walking, often the only option is to hire private transport, which cuts into the profit of the trade.

*Limited access to technical training.*

*Limited participation and decision-making.* Gender-based discrimination and cultural norms also impact women's participation and decision-making roles.

### **New challenges faced by women**

*Modernization of fisheries and aquaculture.* The increasing industrialization and mechanization of the fishing industry can make women's labour redundant and force them out of the sector, without support for building alternative livelihoods. Examples from Indonesia, Maldives, Malaysia and South Africa demonstrate that when the three sectors become more intensified and commercialized, there is a corresponding decrease in the involvement of women.

*Global fish trade.* The process of globalization within the fisheries has been associated with intensified export orientation and the spread of joint ventures between rich and poor countries. Export-oriented fisheries directly affect fish processing and fish trade, which constitute the bulk of women's work in fisheries. NTMs play also an important role in exports: fish products face 2.5 times more NTMs than agricultural products.

*Climate change, pollution and overfishing.* The impact of climate change, pollution and overfishing on fish availability and fishing practices is an issue of global concern. They can significantly alter marine food availability and diversity with negative effects on women's activities and thus also on household food security and incomes.

### **Conclusions**

The rationale for gender-sensitive measures in the three sectors is twofold.

First, if the constraints affecting women's ability to carry out their productive and trade activities are not addressed, this may negatively affect the overall prospects for sectors' development. Improving the overall efficiency of operations will largely depend on ensuring that women processors and traders have sufficient access to quality supplies, upgraded facilities, credit, training and support services.

Second, given women's crucial roles in the domestic marketing chain, any efforts to reduce food insecurity must take into consideration the constraints that women face. The expansion of the export-oriented fish-processing industry is likely to generate significant employment opportunities for relatively unskilled women in factory processing, with positive effects on poverty alleviation. However, it may also bear potentially important food security implications. This is because the expansion of an export-oriented fish industry may incite some diversion of resources from the domestic segment to the export-oriented segment.

Hence, a call for trade policy responses that recognize and enhance the role of women in the fisheries, aquaculture and seaweed sector. They would be essential for achieving sustainable and equitable development in coastal communities, including indigenous communities, ensuring food security, and promoting gender equality.

Concrete measures may include: enhancing women's access to credit, for example a target percentage of credit to be disbursed to women and dedicated lines of credit for women operators; training on three key areas: i) technical training in the handling, processing, and marketing of fish and fish products to improve food security and quality; ii) marketing: how to use market information and establish business contracts; and iii) book-keeping and business plan formulation.

It is also important to explore niche markets for high-value products that can generate income for women, for instance aquaculture involving shrimps and oysters with a focus on high-value niche markets, or to the diaspora.