

DOI 10.36074/logos-26.05.2023.002

SOCIO-ECONOMIC-ECOLOGICAL EFFECTS OF THE DEVELOPMENT OF MULTIFUNCTIONAL INNOVATIVE AND RECREATIONAL AQUACULTURE CENTERS

Hanna Tiutiunnyk

PhD in Economics of nature use and environmental protection,
Researcher, scientific secretary of the Department of Economic and Ecological
Development of the SeaSide Regions
SO «Institute of Market and Economic&Ecological Research NAS of Ukraine»

UKRAINE

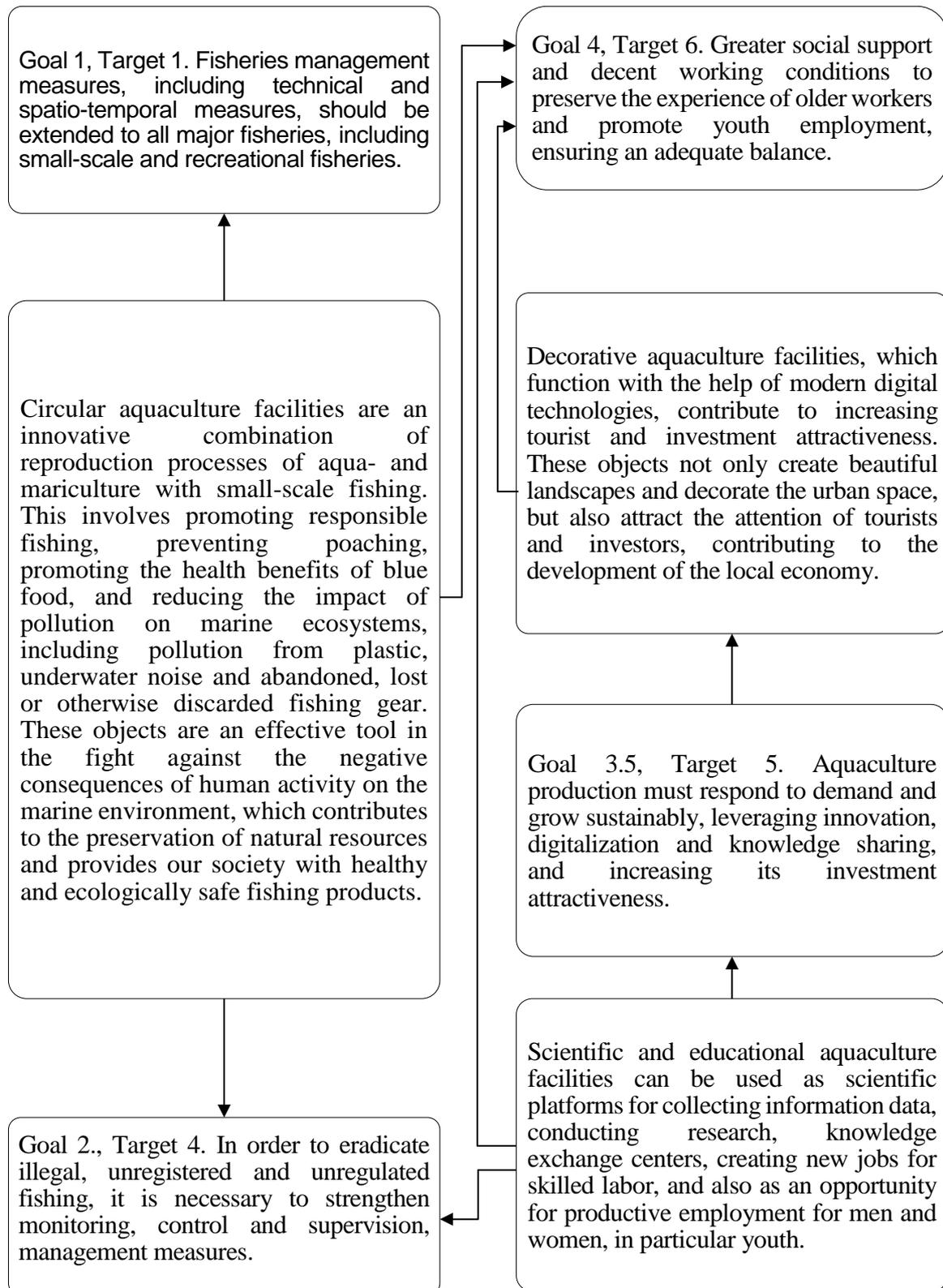
Innovative and recreational aquaculture centers are specialized multifunctional complexes equipped with innovations that combine elements of aquaculture (breeding of fish, seafood and other aquatic organisms) and recreation (fun games, active recreation, restaurants, hotels, etc.). Innovative recreation centers combine the functions of entertainment, product production, environmental sustainability and new jobs. Thanks to the formation of such centers, there is an opportunity to use natural resources and create new opportunities for the development of the local economy (Fig. 1).

The combination of innovative technological aquaculture systems with recreational purposes can help ensure access to nutritious food products in sufficient quantities throughout the year and develop aquaculture facilities in the direction of multi-functionality. Such a decision corresponds to the task of controlled fishing and the reproduction of aquatic biodiversity, contributes to the affordability of food prices and the fight against micronutrient deficiencies in vulnerable population groups (Goal 2, 9). Combining reproductive and nutritional functions with recreational ones helps to increase the interest and participation of young people in scientific research. These complexes combine fishing and aquaculture with inclusive, recreational, economic and environmental education functions. They can be located in both urban and rural areas and use innovative technologies to grow fish and other aquatic organisms. In addition to aquaculture installations, these complexes have recreation areas for visitors.

The purpose of these complexes is the production of aquaculture products, the provision of scientific and educational services, interesting and environmentally friendly forms of recreation for children and adults, which allow studying the diversity of aquatic biological resources and increasing environmental awareness. Such centers may include aquariums, fish farms, marine museums, attractions and other types of entertainment.

Multifunctional aquaculture facilities have many advantages, such as the use of low-quality soils, the possibility of being an ecological core of maintaining the balance of the ecosystem, contributing to the formation of a green corridor, the concentration of green areas and the creation of new jobs, as they require skilled labor and specialties. Aquaculture centers are an important ecological point with nature conservation and recreational potential, since multipurpose reservoirs and their adjacent territories are always characterized by a high level of biodiversity.

To achieve the goal of reducing the destruction of species, their preservation and reproduction, the formation of multifunctional aquaculture facilities that



Fig/ 1. Aquaculture facilities in the context of the implementation of the Strategy for Sustainable Fisheries and Aquaculture in the Mediterranean and Black Seas until 2030.

Source: authorial development with use [1, 2].

demonstrate the compatibility of fishing with the preservation of the natural environment and aquatic ecosystems of the facilities becomes an important task for

ensuring the sustainable development of fisheries and aquaculture, as well as for the preservation of biodiversity and natural resources. They help to understand the need to act on multiple fronts and to ensure that fisheries are compatible with ecological and sustainable approaches to the management of marine resources.

References:

- [1] FAO. 2021. *GFCM 2030 Strategy for sustainable fisheries and aquaculture in the Mediterranean and the Black Sea*. Rome. URL: <https://doi.org/10.4060/cb7562en> (дата звернення: 30.01.2023).
- [2] European MSP Platform. Aquaculture and tourism. *maritime-spatial-planning.ec.europa.eu*. URL: <https://maritime-spatial-planning.ec.europa.eu/sector-information/aquaculture-and-tourism> (дата звернення: 15.02.2023).