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## The issue

Providing food to more than 9 billion people in 2050 will be a challenge, as resources for food production are limited. Fisheries and aquaculture have the potential to meet some of the additional need, if we continue to make improvements in fisheries management and address key issues, such as feed and seeds in aquaculture. Catches from wild-capture fisheries have plateaued around 80 million tonnes annually, for example, but these could be improved, or at least maintained, with effective management. And while there is scope to supply more fish protein in future, with 35 percent of catches lost or wasted, not all of the expected increase in demand can be met. Aquaculture could plug some of this deficit, but only if there is more effective management along the value chain.

The Blue Production programme offers tools and approaches to develop a prosperous aquaculture sector and to manage the fisheries and aquaculture sectors sustainably along the value chain, so as to meet future production needs and contribute to food security, better livelihoods and decent work.

## The action

Blue Production takes an integrated and holistic approach to addressing production issues in fisheries and aquaculture by supporting the development and enhancement of policies, plans and best practices. The programme focuses on enablement and empowerment in four key areas:

1. Encouraging sustainable and efficient resource use;
2. Creating decent work opportunities;
3. Reducing carbon footprints; and
4. Promoting financial and technical innovation.

Specific project interventions in these areas include:

- Mainstreaming the Blue Growth approach into key fisheries and aquaculture policies, financing, capacity building and innovation among FAO Members;
- Capacity building for the uptake and upscaling of best practices along value chains in the fisheries and aquaculture sectors;
- Identifying and implementing Blue Production approaches to generate synergies between interventions, such as aquaponics, in FAO Members; and
- Reducing carbon emissions from capture fisheries and aquaculture production.

## BLUE GROWTH

# Blue Production

Making fisheries and aquaculture  
more productive and sustainable

## The issue in numbers



**60 million**  
people directly employed by  
fisheries and aquaculture globally



**3.2 billion**  
people get more than 20 percent  
of their animal protein from fish



**23%**  
decline in sustainable fish stocks  
around the world from 1974 to 2015

## Programme targets



**5**  
national Blue Growth production  
policies adopted



**1 000**  
fishers/farmers trained in  
sustainable production



**100 000**  
tonne increase in sustainable  
production

## The budget



**USD 45 million**



**4 years**



**16 countries**

## Expected results

- Improved management of fisheries and aquaculture operations, better profitability, more and better decent work opportunities and lower carbon emissions;
- National and local institutions implement improved policies, guidelines and tools to enhance income-generating and decent opportunities within the fisheries and aquaculture value chains, mainly among women and youth, and to foster financial and technical innovation.

## Geographic focus

The Blue Growth Initiative is global in scope, but will target least developed countries (LDCs) in Africa and Small Island Developing States (SIDS) that have prioritized the development of marine and aquatic-based economies in their national strategies.

**Africa:** Algeria, Cabo Verde, Côte d'Ivoire, Kenya, Madagascar, Mauritania, Morocco, Sao Tome and Principe, Seychelles, Tunisia and Zambia

**Asia Pacific:** Bangladesh and Kiribati

**Caribbean:** Barbados, Grenada and St. Lucia

## In partnership with

The programme provides a common platform and approach in order to streamline support at the local, national, regional and global levels, as well as to pool technical expertise and financial resources. In addition to member countries, FAO will work with:

- Regional fisheries management organizations and regional economic commissions;
- Intergovernmental organizations, including financial institutions (World Bank, African Development Bank), UN Environment, the United Nations Development Programme (UNDP), the International Union for Conservation of Nature (IUCN), United Nations Economic Commission for Africa (UNECA), the African Union Interafrican Bureau for Animal Resources (AU-IBAR) and the Economic Community of West African States (ECOWAS);
- Non-governmental organizations, such as the World Forum of Fish Harvesters and Fishworkers (WFF), The Nature Conservancy (TNC), Rare, the International Center for Advanced Mediterranean Agronomic Studies (CIHEAM);
- Academic institutions, including Wageningen University, Michigan State University and the United Nations University Fisheries Training Programme (UNU-FTP).



### SDG contribution



## Aquaponics innovation in Barbados

As a Small Island Developing State, Barbados' energy, freshwater and other resources are limited and costly. Consequently, aquaponics fits well with Barbados' aquaculture plans. Aquaponics combines aquaculture (growing fish) with hydroponics (growing plants in water) and generates significant environmental benefits and economic efficiencies for Barbados. First, aquaponics maximizes freshwater use by growing tilapia for local consumption, while simultaneously growing high-value lettuce crops for restaurants. Second, Barbados uses solar energy to power its aquaponics system, which is environmentally responsible and economically cheaper than conventional energy sources. Third, the materials for aquaponics are readily found in hardware stores and do not need to be specially ordered.



## Why invest?

Investment in transforming the world's current fisheries and aquaculture systems to Blue Production systems will enhance the overall productivity and sustainability of aquatic resources and ecosystems, and support Blue Communities and Blue Trade now and into the future. The Blue Production platform offers a unique integrated approach that adds value to long-standing policies, tools and best practices, such as the ecosystem approach and the Code of Conduct for Responsible Fisheries. Lessons learned from the first set of pilot projects provide an opportunity to refine and, in future, scale up the approach in meaningful ways.

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