



Food and Agriculture  
Organization of the  
United Nations

# BLUE TRANSFORMATION

## Roadmap 2022–2030

A vision for FAO's work on aquatic food systems



# **Blue Transformation**

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**A vision for FAO's work on aquatic food systems**

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# Abbreviations and acronyms

<b>CITES</b>	Convention on International Trade in Endangered Species of Wild Fauna and Flora	<b>NFIFO</b>	Technology and operations team
<b>COFI</b>	FAO Committee on Fisheries	<b>NFIFP</b>	Global and regional processes team
<b>EAF</b>	Ecosystem approach to fisheries	<b>NFIMF</b>	Food safety, nutrition and health team
<b>FAO</b>	Food and Agriculture Organization of the United Nations	<b>NFIMT</b>	Trade and markets team
<b>GAP</b>	Good aquaculture practice	<b>NFIFV</b>	Value chain development team
<b>GFCM</b>	General Fisheries Commission for the Mediterranean	<b>NFISG</b>	Gender Team
<b>IOTC</b>	Indian Ocean Tuna Commission	<b>NFISI</b>	Information and knowledge management team
<b>IUU</b>	Illegal, unreported, and unregulated fishing	<b>NFISR</b>	Resilience team
<b>NFI</b>	FAO Fisheries and Aquaculture Division	<b>NFISS</b>	Statistics team
<b>NFIAN</b>	National planning and development support team	<b>PPA</b>	Programme priority area
<b>NFIAP</b>	Global and regional processes team	<b>RFB</b>	Regional fishery body
<b>NFIAT</b>	Technology and production team	<b>SDG</b>	Sustainable Development Goals
<b>NFIFL</b>	Equitable livelihoods team	<b>UN</b>	United Nations
<b>NFIFM</b>	Assessment and management team	<b>UNCTAD</b>	United Nations Conference on Trade and Development
		<b>WTO</b>	World Trade Organization





## Purpose and approach

This document outlines a roadmap for the transformation of aquatic food systems<sup>1</sup> - 'Blue Transformation', providing a vision for the FAO's work on aquatic food systems for the period 2022–2030. This roadmap for Blue Transformation aligns with the 2021 Declaration for Sustainable Fisheries and Aquaculture of the Committee on Fisheries (COFI) of the Food and Agriculture Organization of the United Nations (FAO) and FAO's Strategic Framework 2022–2031 (Figure 1). It focuses on the elements that would maximize the contribution of aquatic food systems to the Sustainable Development Goals (SDGs).

The Blue Transformation roadmap recognizes the importance of aquatic food systems as drivers of employment, economic growth, social development and environmental recovery, which all underpin the SDGs. It also recognizes the need to support the 2030 Agenda through the transformation to more efficient, inclusive, resilient and sustainable aquatic food systems for better production, better nutrition, a better environment, and a better life, leaving no one behind.

The Blue Transformation roadmap provides an overall framework to support planning, implementation, monitoring and communication of FAO Fisheries and Aquaculture Division (NFI)'s work. It will be used to guide decision making across the Division and support resource mobilization and will be key to the integration of aquatic food systems related activities carried out by FAO headquarters, regional and national offices, ultimately leading to a more harmonized and coherent programme of work for aquatic food systems under FAO's Strategic Framework.



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### Aquatic food systems

Aquatic food systems encompass the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of aquatic food products that originate from fisheries and aquaculture and parts of the broader economic, societal and natural environments in which they are embedded (e.g., open oceans, coastal waters, wetlands, lakes, rivers, ponds, raceways, fields and tanks) (FAO, 2008).

<sup>1</sup>While applying to all aquatic food systems, the roadmap considers the critical role and potential of aquatic food systems in low income countries, food deficit countries and small island developing States, making them a particular focus of the Blue Transformation vision outlined in this document.



# FAO's vision and Strategic Framework

## FAO's vision

FAO is a specialized agency of the United Nations (UN) that leads efforts across the globe to defeat hunger. FAO's vision is of a world free from hunger and malnutrition where food and agriculture contribute to improving the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner, and carries three Global Goals:

- **eradication of hunger, food insecurity and malnutrition**, progressively ensuring a world in which people at all times have sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life;
- **elimination of poverty and the driving forward of economic and social progress for all**, with increased food production, enhanced rural development and sustainable livelihoods; and
- **sustainable management and utilization of natural resources**, including land, water, air, climate and genetic resources for the benefit of present and future generations.

## FAO's strategic narrative & key aspirations

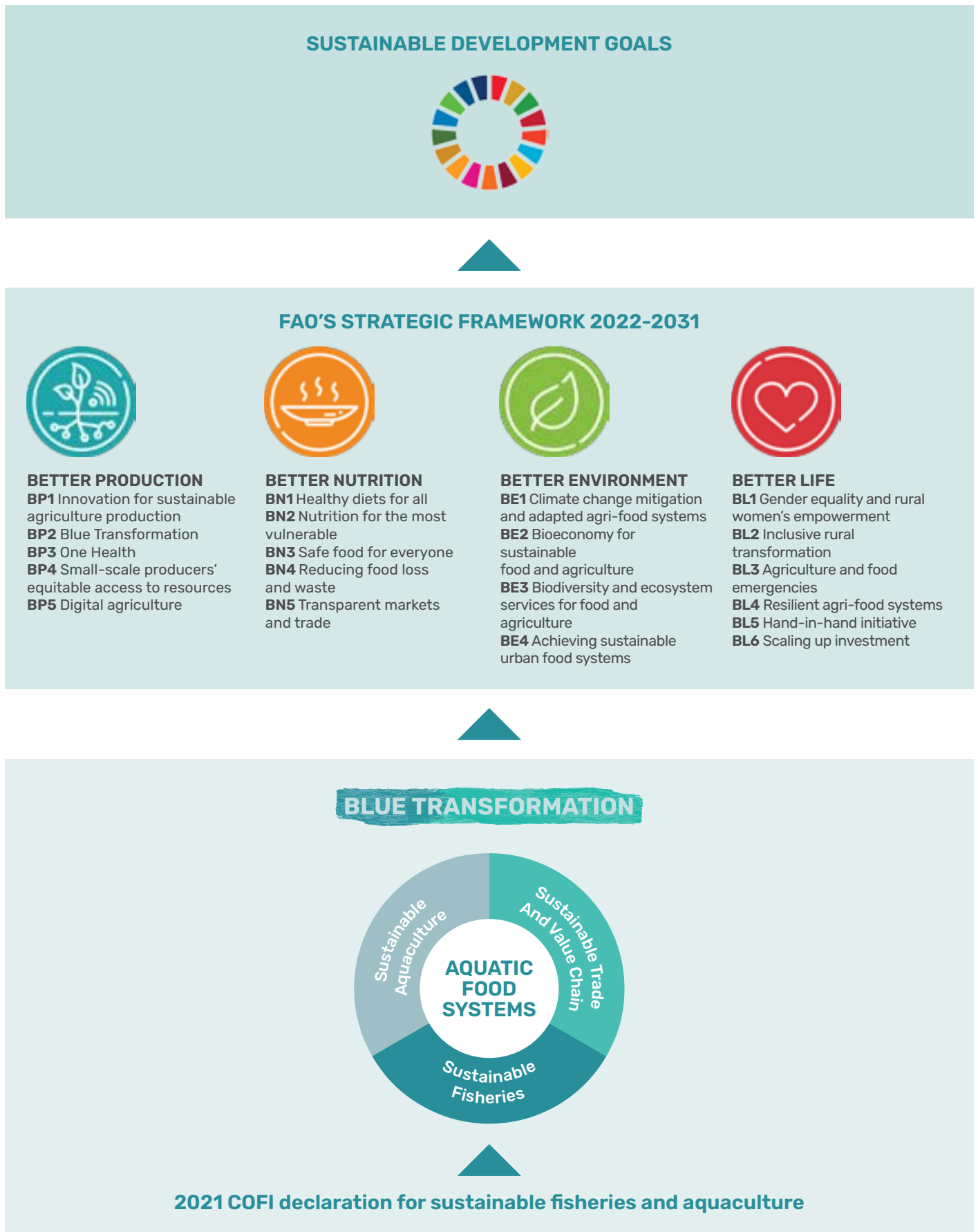
The strategic narrative guiding FAO's Strategic Framework<sup>2</sup> (FAO, 2021a) is the transformation to MORE efficient, inclusive, resilient and sustainable agri-food systems for better production, better nutrition, a better environment, and a better life, leaving no one behind.

These four betters represent an organizing principle for how FAO intends to contribute directly to its three guiding SDGs, SDG 1 (No poverty), SDG 2 (Zero hunger), and SDG 10 (Reduced inequalities) as well as support the broader SDG agenda, crucial for attaining FAO's overall vision.



<sup>2</sup> FAO's vision, strategic narrative and key aspirations were evaluated and endorsed by the 42nd Session of the FAO Conference held from 14–18 June 2021, and provide guidance to the Blue Transformation roadmap. More information is available in the Conference report and the Medium Term Plan report.

**Figure 1.** Schematic representation of the Blue Transformation roadmap to address the strategic priorities of FAO and maximize the contribution of aquatic food systems to the Sustainable Development Goals





# Blue Transformation

## What is Blue Transformation?

Blue Transformation is a targeted effort by which agencies, countries and dependent communities, use existing and emerging knowledge, tools and practices to secure and sustainably maximize the contribution of aquatic (both marine and inland) food systems to food security, nutrition and affordable healthy diets for all. It builds on existing successes while providing a framework to overcome sustainability challenges.

Blue Transformation acknowledges that aquatic food systems significantly influence human, animal and ecosystem health, including biodiversity, land and water use, climate, as well as other aquatic and land-based economic sectors. As such, their transformation requires a holistic and adaptive ecosystem approach, aimed at securing socially, environmentally and economically sustainable value chains that help secure livelihoods, foster an equitable distribution of benefits and support adequate use and conservation of biodiversity and ecosystems.

## Why do we need Blue Transformation?

The high and growing prevalence of hunger and malnutrition in all its forms in the world, combined with climate and environmental concerns, suggests that the global food system is failing to deliver safe, nutritious,

sustainable and equitable diets. As a result, the international community is calling for a transformation of food systems as highlighted at the 2021 UN Food Systems Summit.<sup>3</sup>

At the same time, population growth and rising affluence are fuelling demand for more food and for resource-intensive diets. In this landscape of demand and need, visions of what constitutes progress towards a sustainable food system diverge, but most of them incorporate aquatic foods as a vehicle to ending hunger and malnutrition and building nature-positive, efficient, inclusive, resilient and sustainable food systems for all.

Aquatic food systems can make key contributions to food security and nutrition, help prepare for and buffer the impacts climate change, and when properly transformed sustainably increase the supply of nutritious food and contribute to community resilience, decent employment, equity, gender equality, and poverty alleviation. Through Blue Transformation, aquatic food systems can:

- A. support the provision of enough aquatic food for a growing population that is environmentally, socially and economically sustainable and equitable;
- B. ensure the availability and accessibility of safe and nutritious aquatic food for all, in particular for vulnerable populations, and reduce food loss and waste;

<sup>3</sup> <https://www.un.org/en/food-systems-summit>

- C. ensure that aquatic food systems contribute to improving rights and income of vulnerable communities to achieve equitable livelihoods; and
- D. support resilience in aquatic food systems that are highly influenced by dynamic anthropogenic and non-anthropogenic processes, including from a changing climate.

## Guiding principles for Blue Transformation

A Blue Transformation process must follow a core set of guiding principles that underpin any action/programme or initiative stemming from this roadmap.

These follow principles agreed by FAO Members in the Code of Conduct for Responsible Fisheries, the Voluntary Guidelines on the Governance of Tenure, the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries, and The Global Sustainable Aquaculture guidelines, among others. Relevant Guiding Principles include:

**Human rights and dignity** – recognize, respect, promote and protect human rights principles of those participating in aquatic food systems, as stipulated in international human rights instruments.

**Economic, social and environmental sustainability and viability** – policies, strategies, plans, initiatives projects and actions for Blue Transformation are socially, economically and environmentally sound, reflect local or regional realities balance socioeconomic and environmental outcomes through appropriate decision-making processes and are climate-smart.

**Rule of law** – transformative actions apply, follow and reflect rules and regulations that are consistent with existing obligations under national and international law.

**Accountability and transparency** – actions programmes and initiatives are clearly defined and widely published so that they are accessible to all parties and are followed by commitment to hold individuals, agencies and actors responsible for decisions according to rule of law and best practices for aquatic food systems.

**Consultation and participation** – active, free, effective, meaningful and informed participation from stakeholders

involved in aquatic food system is ensured without exception, with particular attention to vulnerable, discriminated, under-represented groups as well as indigenous peoples and youth. This includes regular feedback from and support to these groups.

**Knowledge-based** – the formulation of transformative initiatives or interventions is based on the best available scientific/research, data,<sup>4</sup> technical, traditional, and local knowledge.

**Equity and justice** – promote justice and fair treatment of all people and communities and implement measures to accelerate the achievement of equitable outcomes, particularly for vulnerable and marginalized groups.

**Gender equality and equity** – recognize the vital role of women in aquatic food systems and promote gender responsive and transformative interventions (FAO, IFAD and WFP, 2020) that enhance equal rights, opportunities and benefits.

**Non-discrimination and respect for cultures** – recognize and respect all forms of organization, including traditional and local knowledge and practices, including indigenous peoples and ethnic minorities.

**Continuous improvement** – continue to improve the knowledge base for Blue Transformation including mechanisms that monitor and analyze ongoing interventions.



<sup>4</sup> Reference to data includes statistics throughout the document.





# Core components of Blue Transformation

This section outlines the three core global objectives of Blue Transformation with related targets and priority actions for each (Figure 3). The objectives and targets require contributions from FAO, as well as Members, and international, regional and national aquatic food systems stakeholders. While FAO is not solely responsible for these, its leadership and work will help drive partners towards their achievement and align their narratives.

The priority actions describe FAO’s contributions to achieve the targets. Priority actions cover a range of FAO areas of work and, where appropriate, include areas of collaboration with its partners.

Figure 2. Objectives and targets of the Blue Transformation roadmap

## BLUE TRANSFORMATION ROADMAP



AQUACULTURE	FISHERIES	VALUE CHAINS
<p><b>Objective:</b> Sustainable aquaculture intensification and expansion satisfies global demand for aquatic food and distributes benefits equitably.</p>	<p><b>Objective:</b> Effective management of all fisheries delivers healthy stocks and secures equitable livelihoods</p>	<p><b>Objective:</b> Upgraded value chains ensure the social, economic and environmental viability of aquatic food systems.</p>
<p><b>Targets:</b></p> <p>Effective <b>global and regional cooperation, planning and governance</b> Blue Transformation</p> <p><b>Innovative technology and management</b> support the expansion of sustainable and resilient aquaculture systems</p> <p>Equitable access to resources and services delivers new and secures existing aquaculture-based livelihoods</p> <p><b>Aquaculture operations</b> minimize environmental impact and use resources efficiently</p> <p>Regular <b>monitoring and reporting</b> of the growth and the ecological, social and economic impacts of aquaculture development</p>	<p><b>Targets:</b></p> <p>Effective policies, governance structures and institutions support fisheries</p> <p>Equitable <b>access to resources and services</b> enhance the livelihoods of fishers and fish workers</p> <p>Effective <b>fisheries management systems</b> address ecological, social and economic objectives, while considering tradeoffs</p> <p><b>Fishing fleets</b> are efficient, safe, innovative and profitable</p>	<p><b>Targets:</b></p> <p>Efficient value chains that increase profitability and reduce food loss and waste</p> <p><b>Transparent, inclusive and gender-equitable value chains</b> support sustainable livelihoods</p> <p>Fisheries and aquaculture products access <b>international markets</b> more effectively</p> <p>Increased <b>sustainable consumption of sustainable aquatic food</b>, particularly in areas with low food and nutrition security</p> <p>Increased <b>access to healthy, safe and high quality aquatic food</b></p>

# Aquaculture



## Objective

Sustainable aquaculture intensification and expansion satisfies global demand for aquatic food and distributes benefits equitably.

## Outcomes

- At least 35 percent growth in global sustainable aquaculture production by 2030 (FAO, 2020a).
- Growth in aquaculture employment and skilled labours improves income and livelihoods.
- Achieve full and productive employment and decent work in the aquaculture sector for all women and men by 2030.<sup>5</sup>

## Target A1. Effective global and regional cooperation, planning, and governance enhance aquaculture development and management

### Priority actions:

- Develop guidance and instruments on **good aquaculture practices** (GAPs).
- Support development and implementation of **national, regional and global governance** processes that enable sustainable aquaculture development, facilitate financial investment and integrate the aquaculture sector in cross sectoral policies and plans.
- Facilitate the development of **policies related to small-scale aquaculture** and support their integration in global, regional and national development agendas.
- Promote governance frameworks to increase preparedness to, reduce impacts from, and support rehabilitation of the aquatic food sector after **natural disasters, crisis and emergencies**.

- Encourage responsible **governance of tenure** to ensure inclusive, sustainable, secure and equitable access to land and water resources for those engaged in aquaculture.

## Target A2. Innovative technology and management support the intensification and expansion of sustainable and resilient aquaculture systems

### Priority actions:

- Facilitate the development of **innovative operations and climate-smart aqua-business**.
- Facilitate investment in **digital, technological and management innovations**, particularly in areas with high aquaculture development potential.
- Support appropriate application of technologies to promote **sustainable use and development of genetic resources** to improve supply of quality seed for enhanced production efficiency.
- Upscale and transfer **successful examples** of aquaculture intensification and expansion through South-South and Triangular cooperation programmes and public-private partnerships.

<sup>5</sup>Based on SDG Target 8.5.



- Facilitate the implementation of **innovative data collection and management systems** at local, regional and global scales.
- Increase capacity on **biosecurity, disease control and aquatic health management** at local, national and global levels.

### Target A3. Equitable access to resources and services delivers new and secures existing aquaculture-based livelihoods

#### Priority actions:

- Support **small and medium-scale fish farmers' access to financing, knowledge, data and information** for the development of profitable aquaculture enterprises that maximize social and economic benefits and minimize environmental impacts.
- Ensure a growing **participation of women** in aquaculture related decision-making processes, and accelerate their access to leadership, technologies, information, resources, and infrastructure.
- Promote **women and youth employment** in aquaculture.
- Provide **organizational, technical and business skills** for small and medium-scale fish farmers, ensuring inclusion of marginalized and vulnerable people.
- Enhance small and medium-scale aquaculture **communication, advocacy and outreach**.

### Target A4. Aquaculture operations that minimize environmental impacts and use resources efficiently

#### Priority actions:

- Facilitate the implementation of **sustainable aquaculture practices** that support biodiversity, facilitate ecosystem restoration and the delivery of ecosystem services, strengthen climate change mitigation and adaptation and build resilience to stressors.
- Support the development of climate and disaster resilient **aquaculture infrastructure**.
- Facilitate the **efficient, diverse and nature-positive use of inputs and resources** (e.g., water and feed).

### Target A5. Regular monitoring and reporting of the state and the ecological, social, and economic impacts of aquaculture development

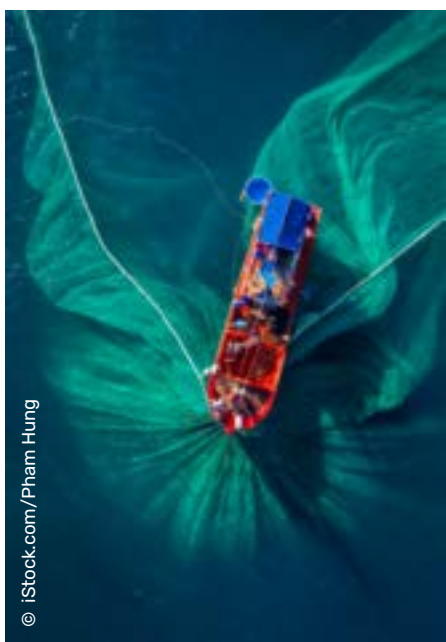
#### Priority actions:

- Support **climate-smart monitoring and reporting of aquaculture interactions with ecosystems**, particularly in vulnerable habitats.
- Facilitate **monitoring and reporting of social impacts of aquaculture**, including gender specific impacts and trends.
- Facilitate **monitoring and reporting of aquaculture performance**, focused on aquaculture enterprises, social equity and on data and capacity poor situations.
- Develop and promote **indicators of aquaculture sustainability**.



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# Fisheries



## Objective

Effective management<sup>6</sup> of all fisheries delivers healthy stocks and secures equitable livelihoods.

## Outcomes

- 100% of fisheries under effective management.
- All illegal, unreported and unregulated activities phased out.
- Achieve full and productive employment and decent work in the fisheries sector for all women and men by 2030.<sup>7</sup>

### Target F1. Effective policies, governance structures and institutions support fisheries

#### Priority actions:

- Facilitate adoption and effective implementation of new and existing **international instruments, regional coordination mechanisms, plans of action and guidelines**.
- Support responsible **governance of tenure** to ensure inclusive, sustainable, secure and equitable access to fisheries, land and water resources.
- Facilitate the **development of organizational, technical and business skills** of small-scale food producers, their organizations and institutions for equitable and effective participation in decision-making processes, resource management and value chain development.
- Support the integration of **fisheries related policies** in global, regional and national development agendas (cross-sectoral, multi-risk, food systems).

### Target F2. Equitable access to resources and services enhances the livelihoods of fishers and fish workers

#### Priority actions:

- Increase capacity and inclusive access to **social protection, decent working conditions, and safety at sea** of fishers and fish workers.
- Ensure a growing **participation of women** in fisheries related decision-making processes and their access to leadership, technologies, information, resources, and infrastructure.
- Promote **women and youth employment** in fisheries.
- Facilitate access of fishers and fish workers to **financing and insurance services, knowledge and data** to encourage responsible fishing practices and support equitable distribution of benefits from aquatic resources.

<sup>6</sup>The term “fisheries management” as used in this document implicitly accepts the ecosystem approach to fisheries (EAF) as a principle inherent in fisheries management. While EAF is not explicitly referred to in the document, its principles and requirements are considered critical to the delivery of Blue Transformation.

<sup>7</sup>Based on SDG Target 8.5.

**Target F3. Effective fisheries management systems address ecological, social and economic objectives, and consider tradeoffs**

**Priority actions:**

- Facilitate the development of innovative **data and information systems** to support fisheries policy formulation, assessment and management advice.
- Facilitate regular **monitoring and reporting** on the state of fisheries and the impacts of management interventions across ecological, social and economic dimensions.
- Support the development and implementation of **fisheries management plans, strategies and measures** that consider tradeoffs and address ecological, social and economic objectives, particularly in capacity-limited and data-limited systems.
- Promote the implementation of **fisheries management measures** that support biodiversity, facilitate ecosystem restoration, strengthen climate change adaptation and build resilience to stressors.

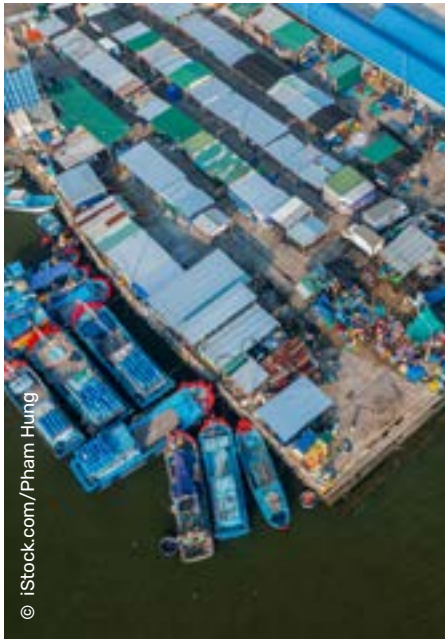
**Target F4. Fishing fleets are efficient, safe, innovative and profitable**

**Priority actions:**

- Facilitate the development of **data and information on the techno-economic performance** and profitability of fleets.
- Support and enhance **safety standards** for fishing vessels.
- Support **preparedness to and effective rehabilitation of fishing infrastructure** after natural disasters, crisis and emergencies.
- Support and enhance **technical innovations in fishing operations** to enhance their economic viability, and reduce ecosystem impacts.



# Value Chains



## Objective

Upgraded value chains ensure the social, economic and environmental viability of aquatic food systems

## Outcomes

- Significantly increase in global per capita fish consumption, especially across Global South.
- Reduce global fish loss and waste by half by 2030.<sup>8</sup>
- Current and potential exporters in developing countries can comply fully with import market requirements of major import countries.
- All forms of discrimination and abuse against women throughout the value-chain phased out.<sup>9</sup>

### Target V1. Efficient value chains that increase profitability and reduce food loss and waste

#### Priority actions:

- Promote and support the development of diverse practices and processes to **reduce fish loss and waste**.
- Add **value and increase consumption** through promotion of fish processing, co-products, and bycatch use.
- Facilitate **compliance with instruments** addressing post-harvest issues or trade at a global, regional or national level.
- Promote **resilient, efficient and inclusive processes for value addition** of fisheries and aquaculture products.
- Promote governance frameworks to increase preparedness to, reduce impacts from and support **rehabilitation of the aquatic food value chains after natural disasters, crisis and emergencies**.

- Facilitate uptake of **novel technologies** to improve post-harvest processes and reduce environmental impacts.

### Target V2. Transparent, inclusive and gender-equitable value chains support sustainable livelihoods

#### Priority actions:

- Enhance socio-economic data **collection along the value chain**, including on gender and vulnerable groups.
- Ensure a growing **participation of women** in value chain related decision-making processes, and accelerate their access to leadership, technologies, practices, resources, and infrastructure to enhance equal distribution of benefits.
- Promote **women and youth employment** in fish value chains.
- Support the development and implementation of **policies and regulatory frameworks that secure inclusive value chains**.

<sup>8</sup> Based on SDG Target 12.3.

<sup>9</sup> Based on; SDG 5 targets 1 and 2; FAO Policy on Gender Equality 2020–2023 (FAO, 2020b)

- Facilitate access to **market information** along the value chain.
- Increase **gender-responsive interventions** to ensure gender equality and women's empowerment in the value chain, taking effective action against discrimination and abuse.
- Increase capacity to improve national and local food control and **food safety management** and harmonize regional regulatory frameworks.
- Increase capacity to improve aquatic **biosecurity and assess disease burden**.

### Target V3. Fisheries and aquaculture products access international markets more efficiently

#### Priority actions:

- Improve **data and information on trade and markets** to reduce information asymmetries.
- Collaborate with international organizations and Conventions on aquatic species issues involving trade (e.g., WTO, UNCTAD, CITES, among others).
- Increase capacity to access **markets**, with a special emphasis on equitable participation and outcomes.
- Support the development of **market insertion possibilities** for businesses, including in collaboration with other international organizations, focusing on equitable market access for small-scale actors.

### Target V4. Increased consumption of sustainable aquatic food, particularly in areas with low food and nutrition security

#### Priority actions:

- Promote **aquatic foods as part of healthy diets** within planetary boundaries.
- Facilitate the inclusion of **aquatic foods in national food security and nutrition policies**, strategies, and programmes.
- Support the development of programs and increase capacity for **data collection and analysis on aquatic food consumption and nutrient composition**.

### Target V5. Increased access to healthy, safe and high quality aquatic food

#### Priority actions:

- Facilitate integration of scientific advice on **food safety and quality** into international instruments such as *Codex Alimentarius*.



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## Implementation

**Implementing Blue Transformation requires a commitment from international (including regional) partners, national and local governments and stakeholder (including the private sector), to collaborate and invest in aquatic food systems (Figure 3). Traditional and innovative resource mobilization and investment partnerships will be needed to secure: (i) cross-sectoral and multidisciplinary solutions needed to achieve Blue Transformation; and (ii) long-term stability and impact of Blue Transformation interventions. Achieving the objectives and targets of this roadmap, and ultimately the SDGs and beyond, rests on this.**

For FAO, the main mechanisms to implement the Blue Transformation roadmap are the priority programme areas (PPAs) of FAO's updated Strategic Framework, including but not limited to the Blue Transformation PPA. The Blue Transformation roadmap provides guidance and direction to closely align the work of all PPAs that involve aquatic food systems, ensuring a cohesive, manageable and cost effective approach that takes advantage of the entire breadth of FAO's expertise and knowledge both in its headquarters and its field offices.

Reflecting the subsidiarity principle advocated in the Strategic Framework, individual FAO Units, Divisions and decentralized offices will define the activities and work plans for each PPA. NFI teams will ensure that these and their individual work plans reflect the priority actions outlined in the Blue Transformation roadmap, thus directly contributing to achieving Blue Transformation.

FAO's Regional Fisheries Bodies (RFBs), regional aquaculture networks and its unique network of fisheries and aquaculture decentralized officers, are a crucial asset for the roadmap's success. The Blue Transformation roadmap may provide a guiding framework for them to deliver FAO's work in fisheries

and aquaculture, rather than implement a large number of PPAs independently, in the context of regional and country-led programmes of work. By doing so, collaboration with FAO headquarters will be strengthened, and communication and collaboration with FAO Members facilitated.

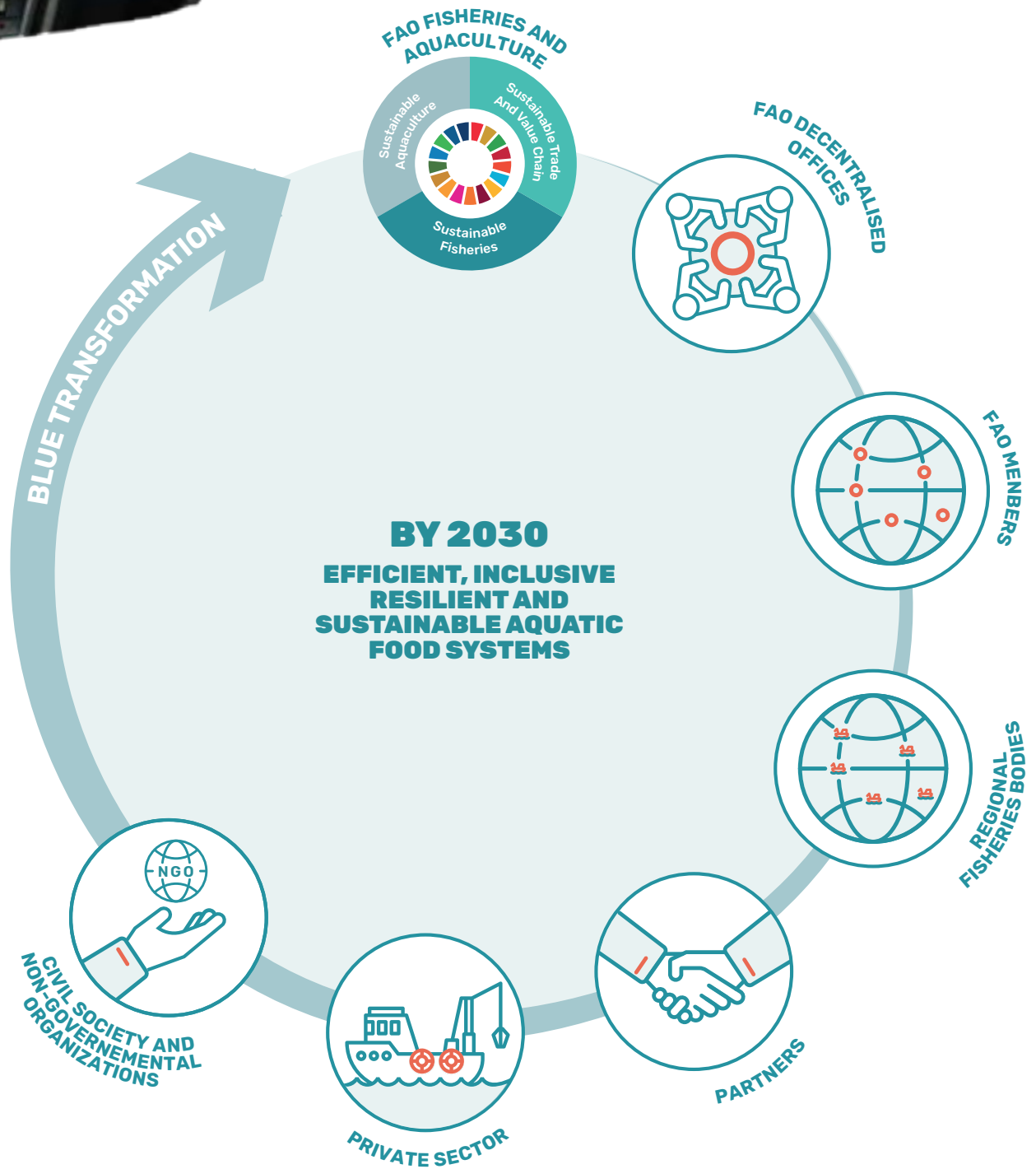
The implementation of the Blue Transformation roadmap will: a) reflect and incorporate FAO's cross-cutting elements and themes (identified and programmed into FAO's Strategic Framework) such as gender, youth, inclusivity, resilience and South-South cooperation; b) include the accelerators identified in the Strategic Framework (technology, innovation, data,<sup>10</sup> and complements [governance, human capital, and institutions]); c) integrate key elements of FAO's climate, biodiversity, private sector engagement, science and innovation, corporate environmental responsibility, and nutrition strategies.

Finally, the structure of the NFI Division is well aligned with the Blue Transformation roadmap, enhancing NFI's ability to effectively catalyze Blue Transformation and mobilize the expertise of its staff members, including those in the secretariats of relevant article XIV bodies, to implement the priority actions outlined in this document.

<sup>10</sup> The data accelerator builds the evidence base that underpins policies, strategies and programmes.



**Figure 3.** Blue Transformation requires the collaboration and involvement of all key actors







# References

**FAO**, 2018. *Sustainable food systems: concept and framework*. Brief. Rome, 8 pp.

<https://www.fao.org/3/ca2079en/CA2079EN.pdf>

**FAO**, IFAD and WFP. 2020. *Gender transformative approaches for food security, improved nutrition and sustainable agriculture – A compendium of fifteen good practices*. Rome, 154 pp. <https://doi.org/10.4060/cb1331en>

**FAO**. 2020a. *The State of World Fisheries and Aquaculture 2020: Sustainability in action*. Rome, 224 pp.

<http://www.fao.org/documents/card/en/c/ca9229en>

**FAO**. 2020b. *FAO Policy on Gender Equality 2020–2023*. Rome, 28 pp.

<https://www.fao.org/3/cb1583en/cb1583en.pdf>

**FAO**. 2021a. *FAO Strategic Framework 2022–31*. Rome, 39 pp. <https://www.fao.org/3/cb7099en/cb7099en.pdf>

**FAO**. 2021b. *2021 COFI Declaration for Sustainable Fisheries and Aquaculture*. Rome, 16 pp.

<https://doi.org/10.4060/cb3767en>

# Annex 1

## Mapping of the Blue Transformation roadmap to the COFI Declaration, FAO strategic Framework and SDG Targets

Target/action	COFI Declaration <sup>1</sup>	PPAs	SDG Targets	NFI Teams <sup>2</sup>
<b>AQUACULTURE</b>				
<b>A1. Effective global and regional cooperation, planning, and governance enhance aquaculture development and management</b>				
Develop guidance on <b>good aquaculture practices</b> (GAPs).	1, 4, 5	BP2, BE3	2.1, 2.2, 2.5, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c, 15.1, 15.3, 15.4, 15.6	NFIAN, NFIAP, NFIAT
Support development and implementation of <b>national, regional and global governance</b> processes that enable sustainable aquaculture development, facilitate financial investment, and integrate the aquaculture sector into cross sectoral policies and plans.	6, 7, 8	BP2, BL7	2.1, 2.2, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIAN, NFIAT
Facilitate the development of <b>policies related to small-scale aquaculture</b> and support their integration in global, regional, and national development agendas.	5, 7, 9, 14	BP2, BP4	1.4, 2.1, 2.2, 2.3, 2.4, 9.3, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIAN, NFIAP, NFIFL, GFCM
Promote governance frameworks to increase preparedness to, reduce impacts from, and support <b>rehabilitation of the aquatic food sector after natural disasters, crisis and emergencies</b> .	4, 15	BL4, BL5	1.3, 1.5, 2.1, 2.2, 2.3, 2.4, 16.1	NFIAN, NFIAP, NFIAT, NFIFO, NFISR
Encourage responsible <b>governance of tenure</b> to ensure inclusive, sustainable, secure and equitable access to land and water resources for those engaged in aquaculture.	9, 13, 14	BP2, BP4	1.4, 2.1, 2.2, 2.3, 2.4, 9.3, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIAP, NFIFL
<b>A2. Innovative technology and management support the intensification and expansion of sustainable and resilient aquaculture systems</b>				
Facilitate the development of <b>innovative operations and climate smart aqua-business</b> .	9, 11	BP2, BP5, BL3, BL4	1.1, 1.4, 2.1, 2.2, 5.b, 9.c, 11.a, 12.1, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c, 17.8	NFIAN, NFIAT, NFIFL, NFIMV
Facilitate investment in <b>digital, technological and management innovations</b> , particularly in areas with high aquaculture development potential.	3, 4, 5	BP2, BP5, BE2, BE3, BL2, BL3, BL7	1.1, 1.4, 1.b, 2.1, 2.2, 2.5, 2.a, 5.b, 8.3, 8.5, 9.c, 10.1, 10.2, 10.7, 10.b, 11.a, 12.1, 12.2, 12.4, 12.5, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c, 15.1, 15.3, 15.4, 15.6, 17.5, 17.8	NFIAT, NFIAN, NFISI, NFISS
Support appropriate application of technologies to promote <b>sustainable use and development of genetic resources</b> to improve increase access to quality seed and enhance production efficiency.	4, 15	BP2, BE3	1.b, 2.1, 2.2, 2.5, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c, 15.1, 15.3, 15.4, 15.6	NFIAP, NFIAT, NFIFL, NFISR, NFISI
Upscale and transfer <b>successful examples</b> of aquaculture intensification and expansion through South-South and Triangular cooperation programmes and public-private partnerships.	4, 5, 15	BP2, BL7	2.1, 2.2, 2.a, 10.1, 10.2, 10.b, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c, 17.5	NFIAN, NFIAT, NFISR
Facilitate the implementation of <b>innovative data collection and management systems</b> at local, regional and global scales.	3, 9	BP2	2.1, 2.2, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIAN, NFIAT, NFIAP, NFISS, NFISR, NFISI

<sup>1</sup> Numbers refer to the operative paragraphs of the COFI Declaration, see Annex 2 for a summary.

<sup>2</sup> This column maps actions to NFI Teams and Article XIV Bodies based in NFI. For decentralized officers/officers and their Article XIV bodies, it is understood that they will independently map themselves to these actions/targets based on their regional priorities and initiatives. Decentralized officers can also use this table to liaise with the NFI teams responsible for the priority actions that they wish to implement.

Target/action	COFI Declaration <sup>1</sup>	PPAs	SDG Targets	NFI Teams <sup>2</sup>
<b>AQUACULTURE</b>				
<b>A3. Equitable access to resources and services delivers new and secures existing aquaculture-based livelihoods</b>				
Support <b>small and medium-scale fish farmers' access to financing, knowledge, data and information</b> for the development of profitable aquaculture enterprises that maximize social benefits and minimize environmental impacts.	9, 11, 14	BP4, BL1, BL2	1.1, 1.4, 2.3, 2.4, 5.4, 5.a, 5.c, 8.3, 8.5, 9.3, 10.1, 10.2, 10.7, 14.b	NFIAN, NFIAP, NFIFL, NFISI, NFISG, NFISS
Ensure a growing <b>participation of women</b> in aquaculture related decision-making processes, and accelerate access to leadership, technologies, information, resources, and infrastructure.	14	BP2, BP4, BL1, BL2	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 5.4, 5.a, 5.c, 8.3, 8.5, 9.3, 10.1, 10.2, 10.7, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFISG, NFISI, NFISS
Promote <b>women and youth employment</b> in aquaculture.	9, 13, 14	BP2, BL1, BL1, BL2	1.1, 2.1, 2.2, 2.3, 5.4, 5.a, 5.c, 8.3, 8.5, 10.1, 10.2, 10.7, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIAN, NFIFL, NFISG
Provide <b>organizational, technical, and business skills</b> for small and medium-scale fish farmers, ensuring inclusion of marginalized and vulnerable people .	3, 9, 11, 14	BP2, BP4, BL1, BL2	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 5.a, 5.b, 5.c, 8.3, 8.5, 9.3, 10.1, 10.2, 10.7, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIAN, NFIAT, NFIMV, NFIFL, NFISI, NFISG
Enhance small and medium-scale aquaculture <b>communication, advocacy, and outreach</b> .	3, 8, 9	BP2, BP4, BL2	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 8.3, 8.5, 9.3, 10.1, 10.2, 10.7, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIAN, NFIAP, NFIAT, NFIMV, NFISI, NFISS
<b>A4. Aquaculture operations that minimize environmental impacts and use resources efficiently</b>				
Facilitate the implementation of <b>sustainable aquaculture practices</b> that support biodiversity, facilitate ecosystem restoration and the delivery of ecosystem services, strengthen climate change mitigation and adaptation, and build resilience to stressors.	4, 5, 15	BE1, BE2, BE3, BL4, BL5	1.3, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 12.2, 12.4, 12.5, 13.1, 13.2, 13.b, 14.3, 14.4, 15.1, 15.3, 15.4, 15.6, 16.1	NFIAT, NFIAP, NFISR
Support the development of climate and disaster resilient <b>aquaculture infrastructure</b> .	4, 15	BL4, BL5	1.3, 1.5, 2.1, 2.2, 2.3, 2.4, 16.1	NFIAT, NFIMV, NFISR, NFISI
Facilitate the <b>efficient, diverse, and nature-positive use of inputs and resources</b> (e.g., water and feed).	4, 5, 15	BP2, BE2, BE3	2.1, 2.2, 2.5, 12.2, 12.4, 12.5, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c, 15.1, 15.3, 15.4, 15.6	NFIAT
Increase capacity on <b>biosecurity, disease control, and aquatic health management</b> at local, national, and global levels.	4, 5, 15	BP2, BP3, BN3	1.5, 2.1, 2.2, 3.d, 12.3, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c, 15.8	NFIAT, NFIAP, NFIMF, NFISR
<b>A5. Regular monitoring and reporting of the state and the ecological, social, and economic impacts of aquaculture development</b>				
Support <b>climate-smart monitoring and reporting on aquaculture interactions with ecosystems</b> , particularly in vulnerable habitats.	3, 4	BP2, BE1, BE3	2.1, 2.2, 2.4, 2.5, 13.1, 13.2, 13.b, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c, 15.1, 15.3, 15.4, 15.6	NFIAN, NIFAP, NFISR, NFISI
Facilitate <b>monitoring and reporting of social impacts of aquaculture</b> , including gender specific impacts and trends.	3, 13, 14	BP2, BP4, BL1	1.4, 2.1, 2.2, 2.3, 2.4, 5.4, 5.a, 5.c, 9.3, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIAN, NFIAP, NFIFL, NFISS, NFISG
Facilitate <b>monitoring and reporting of aquaculture performance</b> , focused on aquaculture enterprises, social equity and on data and capacity poor situations.	5, 13, 14	BP2, BP4, BL1, BL2	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 5.4, 5.a, 5.c, 8.3, 8.5, 9.3, 10.1, 10.2, 10.7, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIAN, NFISS, NFISG, NFISI
Develop and promote <b>indicators of aquaculture sustainability</b>	3, 4	BP2, BE1, BE3	2.1, 2.2, 2.4, 2.5, 13.1, 13.2, 13.b, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c, 15.1, 15.3, 15.4, 15.6	NFIAN, NIFAP, NFISR, NFISI

Target/action	COFI Declaration <sup>1</sup>	PPAs	SDG Targets	NFI Teams <sup>2</sup>
<b>FISHERIES</b>				
<b>F1. Effective policies, governance structure and institutions support fisheries</b>				
Facilitate adoption and effective implementation of new and existing <b>international instruments, regional coordination mechanisms, plans of action and guidelines</b> .	1, 6, 7, 9	BP2, BE1, BE3, BL2	1.1, 2.1, 2.2, 2.4, 2.5, 8.3, 8.5, 10.1, 10.2, 10.7, 13.1, 13.2, 13.b, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c, 15.1, 15.3, 15.4, 15.6	NFIFP, NFIFL, NFIFO, NFISR, GFCM, IOTC
Support responsible <b>governance of tenure</b> to ensure inclusive, sustainable, secure, and equitable access to fisheries, land and water resources.	9, 13, 14	BP2, BP4, BL1, BL2	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 5.4, 5.a, 5.c, 8.3, 8.5, 9.3, 10.1, 10.2, 10.7, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIFM, NFIFL, NFISG
Facilitate the <b>development of organizational, technical, and business skills of small-scale food producer organizations and institutions</b> for equitable and effective participation in decision-making processes, resource management and value chain development.	9, 11	BP2, BP4, BE2, BL1, BL2	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 5.4, 5.a, 5.c, 8.3, 8.5, 9.3, 10.1, 10.2, 10.7, 14.2, 12.2, 12.4, 12.5, 14.4, 14.6, 14.7, 14.b, 14.c	NFIFL, NFIMV, NFIFO, NFISG
Support the integration of <b>fisheries related policies</b> in global, regional, and national development agendas (cross-sectoral, multi-risk, food systems).	1, 6, 7, 10, 15	BP2, BE1, BE3, BL4	1.1, 2.1, 2.2, 2.4, 11.a, 12.1, 13.1, 13.2, 13.b, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c	NFIFL, NFIFM, NFIFM, NFISR, GFCM, IOTC
<b>F2. Equitable access to resource and services enhances the livelihoods of fishers and fish workers</b>				
Increase capacity to access <b>social protection, decent working conditions, and safety at sea</b> of fishers and fish workers.	13, 14	BP4, BL1, BL2, BL5	1.1, 1.3, 1.5, 2.1, 2.2, 2.3, 2.4, 5.4, 5.a, 5.c, 8.3, 8.5, 10.1, 10.2, 10.7, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIFL, NFIFO, NFISR, NFISG
Ensure a growing <b>participation of women</b> in fisheries related decision-making processes, and access to leadership, technologies, information, resources, and infrastructure.	14	BP2, BP4, BL1, BL2	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 5.4, 5.a, 5.c, 8.3, 8.5, 9.3, 10.1, 10.2, 10.7, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFISG, NFIFL
Promote <b>women and youth employment</b> in fisheries.	9, 13, 14	BP2, BL1, BL2	1.4, 2.1, 2.2, 2.3, 2.4, 5.4, 5.a, 5.c, 9.3, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIFL, NFISG
Facilitate access of fishers and fish workers to <b>financing and insurance services, knowledge and data</b> to encourage responsible fishing practices and support equitable distribution of benefits from aquatic resources.	11	BP2, BP4, BL1, BL2, BL5, BL7	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 5.4, 5.a, 5.c, 8.3, 8.5, 9.3, 10.1, 10.2, 10.7, 11.a, 12.1, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIFO, NFISG

Target/action	COFI Declaration <sup>1</sup>	PPAs	SDG Targets	NFI Teams <sup>2</sup>
<b>FISHERIES</b>				
<b>F3. Effective fisheries management systems address ecological, social, and economic objectives, and consider tradeoffs</b>				
Facilitate the development of improved and <b>innovative data and information systems</b> to support fisheries policy formulation, assessment, and management advice.	2, 3, 9	BP2, BE1, BE3	2.1, 2.2, 2.4, 2.5, 13.1, 13.2, 13.b, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c, 15.1, 15.3, 15.4, 15.6	NFIFM, NFIFL, NFISS, NFISI, GFCM, IOTC
Facilitate regular <b>monitoring and reporting</b> of the state of fisheries and the impacts of management interventions across ecological, social, and economic dimensions.	2, 3, 4, 6	BP2, BP3, BE1, BE3, BL2	1.5, 2.1, 2.2, 2.4, 2.5, 3.d, 13.1, 13.2, 13.b, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c, 15.1, 15.3, 15.4, 15.6, 15.8	NFIFL, NFIFM, NFISS, NFISI, NFISR, GFCM, IOTC
Support the development and implementation of <b>fisheries management plans, strategies and measures</b> that consider tradeoffs and address ecological, social, and economic objectives, particularly in capacity-limited and data-limited systems.	1, 2, 3, 4, 7	BP2, BP3, BP4, BE1, BE2, BE3, BL2, BL5	1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.9, 3.d, 6.3, 9.3, 13.1, 13.2, 13.b, 14.1, 14.2, 14.3, 14.4, 14.6, 14.7, 14.a, 14.b, 14.c, 15.1, 15.3, 15.4, 15.6, 15.8	NFIFM, NFISS, NFISI, NFISR, NFIFL, NFIFO, GFCM, IOTC
Promote the implementation of <b>fisheries management measures</b> that support biodiversity, facilitate ecosystem restoration, strengthen climate change adaptation, and build resilience to stressors.	4, 5, 15	BE1, BE2, BE3, BL4, BL5	1.3, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 12.2, 12.4, 12.5, 13.1, 13.2, 13.b, 14.3, 14.4, 15.1, 15.3, 15.4, 15.6, 16.1	NFIFL, NFIFM, NFIFP, NFISR
<b>F4. Fishing fleets are efficient, safe, innovative, and profitable</b>				
Facilitate the development of <b>data and information on the techno-economic performance</b> and profitability of fleets.	1, 2	BP2, BP4, BE2	1.4, 2.1, 2.2, 2.3, 2.4, 9.3, 12.2, 12.4, 12.5, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIFO, NFISS, NFISI
Support and enhance <b>safety standards</b> for fishing vessels.	13	BP2, BP4, BE1, BL4	1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 9.3, 13.1, 13.2, 13.b, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c, 16.1	NFIFO, NFIFL
Support <b>preparedness to and effective rehabilitation of fishing infrastructure</b> after natural disasters, crisis and emergencies.	4, 7, 15	BP2, BP4, BE1, BE2, BL4	1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 9.3, 12.2, 12.4, 13.1, 13.2, 13.b, 12.5, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c, 16.1	NFIFO, NFIMV, NFISR, GFCM
Support and enhance <b>technical innovations in fishing operations</b> to enhance their economic viability and reduce ecosystem impacts.	3, 4	BP2, BP4, BE1, BE2, BE3, BL2	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 8.3, 8.5, 9.3, 10.1, 10.2, 10.7, 12.2, 12.4, 12.5, 13.1, 13.2, 13.b, 14.2, 14.3, 14.4, 14.6, 14.7, 14.b, 14.c, 15.1, 15.3, 15.4, 15.6	NFIFO, NFIFL, NFIMV, NFIFM, NFISR

Target/action	COFI Declaration <sup>1</sup>	PPAs	SDG Targets	NFI Teams <sup>2</sup>
<b>VALUE CHAINS</b>				
<b>V1. Efficient value chains that increase profitability and reduce food loss and waste</b>				
Promote and support the development of diverse practices and processes to <b>reduce fish loss and waste.</b>	8, 11	BP2, BN4	2.1, 2.3, 12.3, 14.7	NFIMV
Add <b>value and increase consumption</b> through promotion of fish processing, co-products, and bycatch use.	8, 11	BP2, BN4	2.1, 2.3, 12.3, 14.7	NFIMV, NFIMF
Facilitate <b>compliance with instruments</b> addressing post-harvest issues or trade at a global, regional or national level.	11, 12	BP2, BN3, BN5	2.1, 2.c, 3.2, 14.6, 14.c	NFIMV, NFIMT
Promote <b>resilient, efficient, and inclusive processes for value addition</b> of fisheries and aquaculture products.	11, 14	BP2, BP4, BE2, BL1	1.4, 2.3, 2.4, 5.4, 5.a, 5.c, 9.3, 12.2, 12.5, 14.b, 14.7	NFIMV, NFISG
Promote governance frameworks to increase preparedness to, reduce impacts from and support <b>rehabilitation of the aquatic food value chains after natural disasters, crisis and emergencies.</b>	4, 15	BL4, BL5	1.3, 1.5, 2.1, 2.2, 2.3, 2.4, 16.1	NFIMF, NFIMT, NFIMV, NFIFO, NFISR
Facilitate uptake of <b>novel technologies</b> to improve post-harvest processes and reduce environmental impacts.	11	BP2, BN3, BN4	2.1, 2.2, 3.2, 12.3, 14.7	NFIMV
<b>V2. Transparent, inclusive and gender-equitable value chains support sustainable livelihoods</b>				
Enhance socio-economic <b>data collection along the value chain</b> , including on gender and vulnerable groups.	3, 14	BP2, BL1, BL2	1.1, 2.3, 5.a, 8.3, 8.5, 10.1, 10.2, 10.7, 14.2, 14.b	NFIFL, NFIMV, NFISS, NFISG
Ensure a growing <b>participation of women</b> in value chain related decision-making processes, and accelerate their access to leadership, technologies, practices, resources, and infrastructure to enhance equal distribution of benefits.	14	BP2, BL1	2.3, 5.a, 5.c, 14.2	NFIFL, NFIMV, NFISG
Promote <b>women and youth employment</b> in fish value chains.	9, 13, 14	BP2, BL1, BL2	1.4, 2.1, 2.2, 2.3, 2.4, 5.4, 5.a, 5.c, 9.3, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c	NFIMV, NFIFL, NFISG
Support the development of policies and <b>regulatory frameworks that secure inclusive value chains.</b>	11, 12, 14	BP2, BN1, BN2, BL1, BL2	1.1, 1.3, 2.1, 2.2, 2.3, 5.4, 5.a, 5.c, 3.4, 8.3, 8.5, 10.1, 10.2, 10.7, 12.8, 14.4, 14.6, 14.7, 14.b	NFIMT, NFIMV, NFISG
Facilitate access to <b>market information</b> in support of workers along the value chain.	9, 12	BP2, BP4, BN5	2.3, 2.b, 2.c, 9.3, 14.b, 10.a, 14.7	NFIMT, NFIMV, NFISI, NIFSS
Increase <b>gender-responsive interventions</b> to ensure gender equality and women's empowerment in the value chain, taking effective action against discrimination and abuse	14	BP2, BL1	2.3, 5.a, 5.c, 14.2	NFIFL, NFIMV, NFISG

Target/action	COFI Declaration <sup>1</sup>	PPAs	SDG Targets	NFI Teams <sup>2</sup>
<b>VALUE CHAINS</b>				
<b>V3. Fisheries and aquaculture products access international markets more efficiently</b>				
Improve <b>data and information on trade and markets</b> to reduce information asymmetries.	3, 12	BP2, BN5	2.c, 10.a, 14.7	NGIMT, NFISS
Collaborate with international organizations and Conventions on aquatic species issues involving <b>trade</b> (e.g., WTO, UNCTAD, CITES, among others).	4, 12	BP2, BN5, BL5	2.b, 14.6, 14.c	NFIMT, NFISR, NFISS
Increase capacity to access <b>markets</b> , with a special emphasis on equitable participation and outcomes.	9, 12, 14	BP2, BP4, BN5	2.1, 2.3, 2.b, 2.c, 9.3, 10.a, 14.b, 14.7, 17.11	NFIMT, NFIFL, NFISG
Support the development of <b>market insertion possibilities</b> for businesses, including in collaboration with other international organizations, focusing on equitable market access for small-scale actors.	9, 12, 14	BP2, BP4, BN5, BL1, BL2	1.1, 1.4, 2.1, 2.3, 2.c, 5.4, 5.a, 5.c, 8.3, 8.5, 9.3, 10.1, 10.2, 10.7, 10.a, 14.b, 14.7, 17.11	NFIMT, NFIFL, NFISG
<b>V4. Increased consumption of sustainable aquatic food, particularly in areas with low food and nutrition security</b>				
Promote <b>aquatic foods as part of healthy diets</b> within planetary boundaries.	8, 10	BN1, BN2	2.1, 2.2, 3.2, 3.4, 12.8	NFIMF, NFISI, NFISS
Facilitate the inclusion of <b>aquatic foods in national food security and nutrition policies</b> , strategies, and programmes.	10, 14	BP2, BN1, BN2	2.1, 2.2, 3.2, 3.4, 14.b	NFIMF, NFIFL
Support the development of programs and capacity development for <b>data collection and analysis on aquatic food consumption and nutrient composition</b> .	3, 10	BN1, BN2	2.1, 2.2, 3.4, 12.8, 14.b	NIFMF, NFISS, NFISI
<b>V5. Increased access to healthy, safe and high-quality aquatic food</b>				
Facilitate integration of scientific advice on <b>food safety and quality</b> into international instruments such as Codex Alimentarius.	3, 11	BN3	2.1, 2.2., 3.2	NFIMF
Increase capacity to improve national and local food control and <b>food safety management</b> and harmonize regional regulatory frameworks.	3, 11	BP2, BN3	2.1, 2.2, 3.2, 14.7	NFIMF
Increase capacity to improve aquatic <b>biosecurity and assess disease burden</b> .	4, 15	BP3	1.5, 3.d, 15.8	NFIMF
Facilitate prevention of <b>antimicrobial resistance</b> in aquatic food systems.	4, 5	BP3	1.5, 3.d	NFIMF, NFIAT
Facilitate the development of <b>early warning, risk assessment and emergency preparedness</b> related to food safety and animal health.	4, 5, 15	BP3	1.5, 3.d	NFIMF, NFISI

# Annex 2

## Summary of the operative paragraphs of the 2021 COFI Declaration for Sustainable Fisheries and Aquaculture

The COFI Declaration for Sustainable Fisheries and Aquaculture (FAO, 2021b) supports an evolving and positive vision for fisheries and aquaculture in the 21st century, where the sector is fully recognized for its contribution to fighting poverty, hunger and malnutrition, its ability to prepare for and respond to changing climate and ocean conditions, and its commitment to sustainability.

1. Reiterate the commitment to the Code of Conduct for Responsible Fisheries and effective implementation of relevant binding and non-binding fisheries and aquaculture international tools and instruments.
2. Implement and improve fisheries assessment and management systems in all regions, principally in those where fish stock status is declining or unknown, with particular attention to data-poor regions, and towards reducing the digital divide.
3. Strengthen the scientific basis in support of fisheries and aquaculture management decisions, including through the use of new technology, considering the UN Decade of Ocean Science for Sustainable Development.
4. Recognize the importance of the ecosystem approach as an effective framework for integrating conservation and sustainable utilization, and reduce the impact of marine litter (including abandoned, lost, discarded fishing gear), reduce discards and by-catch issues and eliminate harmful fishing practices.
5. Recognize the potential of aquaculture for further growth, particularly through innovative practices which support environmental stewardship, inclusive sustainable aquaculture development programmes, investments, capacity building, research and extension services, with a particular attention to food deficit regions.
6. Reiterate the importance of international cooperative governance mechanisms to help improve sustainable fisheries and aquaculture and protect the ocean environment, such as the UN Convention on the Law of the Sea, UN Agreement on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated (IUU) fishing.
7. Strengthen the conservation and management regimes of regional fisheries advisory bodies and regional fisheries management organizations, and improve their performance to enhance fisheries governance, better preserve, and restore marine ecosystems and biodiversity, while more effectively contributing to sustainable growth, livelihoods, and food security.
8. Encourage consumption of fish, aquatic plants and their products derived from sustainable fisheries and aquaculture, recognizing they are among the healthiest foods on the planet, and especially the consumption of underutilized resources, while acknowledging future changes on productivity and distribution of species due to climate change.
9. Promote policies in support of the contribution of small-scale fisheries and aquaculture in food security, employment, and income, improve data collection systems and the access of small-scale fishers and fish farmers to markets and trade, including through the implementation of the FAO Voluntary Guidelines for Securing Small-scale Fisheries.
10. Ensure that fish are fully considered in food security and nutrition strategies, and contribute to the long-term sustainability of food systems to eliminate hunger and malnutrition, and reduce diet-related diseases.
11. Reduce pre- and post-harvest loss and waste in the sector, including discards, by implementing internationally agreed standards to improve fish





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processing, distribution, and consumption, thereby also increasing the value of fish products in support of sustainable and inclusive ocean economies.

12. Recognize the importance of scientific and rule based, open, non-discriminatory, and equitable trade of fisheries and aquaculture products, which do not result in non-tariff barriers or undermine conservation measures; prohibit certain forms of fisheries subsidies which contribute to overcapacity, overfishing and IUU fishing.
13. Promote decent work for all in the sector, halt forced labour, facilitate access to social protection programmes, and support measures to improve safety at sea.
14. Ensure women's empowerment by enhancing women's full access to and equal opportunities in the fisheries and aquaculture sector through gender-based policies, taking effective action against discrimination and abuse in the workplace, facilitating women's access to education and training,

credit, resources, and by combating systemic gender inequalities that disadvantage women.

15. Support the implementation of integrated and coordinated multi-sectoral, evidence and ecosystem-based management approaches, as well as temporal and spatial planning, in the context of growing external pressures in marine and inland aquatic systems, such as pollution, climate change, biodiversity loss, competition for the use of marine and coastal areas and other demands over freshwater and land access.

Further development of this new vision, as appropriate, be placed under the stewardship of the FAO Committee on Fisheries (COFI) to further strengthen participatory and science-based solutions.

# Annex 3

## Summary of the Programme Priority Areas of the FAO Strategic Framework 2022–2031

PPA	Outcome Statement	SDG Targets
<b>BETTER PRODUCTION</b>  <b>Ensure sustainable consumption and production patterns, through efficient and inclusive food and agriculture supply chains at local, regional and global level, ensuring resilient and sustainable agri-food systems in a changing climate and environment.</b>		
<b>BP1: Green innovation</b>	Integrated green entrepreneurial and business opportunities, inclusive of small-scale and vulnerable producers, created across sustainable crop, livestock and forestry production systems and supported through innovation, technologies and enabling policies	2.3, 2.4, 6.4, 15.2
<b>BP2: Blue transformation*</b>	More efficient, inclusive, resilient and sustainable blue food systems promoted through improved policies and programmes for integrated science-based management, technological innovation and private-sector engagement	2.1, 2.2, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c
<b>BP3: One Health*</b>	Strengthened and better performing national and international integrated One Health systems for human, animal, plant and environmental health achieved through improved pest and disease prevention, early warning and management of national and global health risks, including AMR	1.5, 3.d, 15.8
<b>BP4: Small-scale producers' equitable access to resources*</b>	Enhanced equitable access of small-scale producers and family farmers to economic and natural resources, markets, services, information, education and technologies ensured through improved policies, strategies and programmes	1.4, 2.3, 2.4, 9.3
<b>BP5: Digital agriculture*</b>	Accessible digital ICT technologies to enhance market opportunities, productivity and resilience integrated into agri-food systems policies and programmes, with particular focus on ensuring affordable and equitable access of poor and vulnerable rural communities	1.4, 5.b, 9.c, 17.8
<b>BETTER NUTRITION</b>  <b>End hunger, achieve food security and improved nutrition in all its forms, including promoting nutritious food and increasing access to healthy diets.</b>		
<b>BN1: Healthy diets for all*</b>	The right to adequate food established and transition towards healthy diets for national populations prioritized in integrated institutional, policy and legal environments that ensure and incentivize engagement of consumers and the private sector	1.3, 2.1, 2.2, 3.1, 3.2, 3.4, 12.8, 14.b
<b>BN2: Nutrition for the most vulnerable*</b>	Identifying and ending food insecurity and malnutrition for the most vulnerable individuals in all contexts made the specific focus of targeted policies, strategies and programmes developed and implemented by countries	1.3, 2.1, 2.2, 3.1, 3.2
<b>BN3: Safe food for everyone*</b>	Integrated, multi-sectoral food safety policies and legislation across national agri-food systems adopted and implemented by governments, and capacities and awareness of value chain operators and consumers enhanced.	2.1, 2.2, 3.2
<b>BN4: Reducing food loss and waste*</b>	Clear, specific and contextualized roadmaps to prompt and enable all actors in the food supply chain, the food environment and at consumer level to reduce food loss and waste put in place and implemented by governments and intergovernmental organizations	2.1, 2.2, 12.3
<b>BN5: Transparent markets and trade*</b>	Improved market transparency and equitable participation in markets, global value chains and international trade achieved through policy coordination and human and institutional capacities for evidence-based decision-making	2.b, 2.c, 10.a, 17.11

\* indicates PPAs relevant to the implementation of the Blue Transformation roadmap.

PPA	Outcome Statement	SDG Targets
<b>BETTER ENVIRONMENT</b> 	<b>Protect, restore and promote sustainable use of terrestrial and marine ecosystems and combat climate change (reduce, reuse, recycle, residual management) through more efficient, inclusive, resilient and sustainable agri-food systems</b>	
<b>BE1: Climate change mitigating and adapted agri-food systems*</b>	Transformation and resilience of agri-food systems to achieve sustainability and Paris Agreement goals enabled through the establishment and implementation of climate-smart agricultural practices, policies and programmes	2.4, 13.1, 13.2, 13.b, 14.3
<b>BE2: Bioeconomy for sustainable food and agriculture*</b>	A bioeconomy that balances economic value and social welfare with environmental sustainability promoted through formulation and implementation of integrated evidence-based policies and practices in micro and macro environments, using technological, organizational and social innovations	12.2, 12.4, 12.5
<b>BE3: Biodiversity and ecosystem services for food and agriculture*</b>	Biodiversity for food and agriculture maintained and sustainable use, conservation and restoration of marine, terrestrial and freshwater ecosystems, and their services promoted through adoption of targeted policies and practices	2.5, 14.4, 15.1, 15.3, 15.4, 15.6
<b>BL3: Achieving sustainable urban food systems*</b>	More efficient, inclusive, resilient and sustainable urban and peri-urban agri-food systems transformation that addresses urban poverty, food insecurity and malnutrition, enables healthy diets and catalyses inclusive and sustainable rural transformation, promoted through the adoption of supportive policies and programmes, and the initiation and scaling-up of actions and investments by national and local stakeholders	1.1, 2.1, 11.a, 12.1
<b>BETTER LIFE</b> 	<b>Promote inclusive economic growth by reducing inequalities (urban/rural areas, rich/poor countries, men/women)</b>	
<b>BL1: Gender equality and rural women's empowerment*</b>	Women's equal rights, access to, and control over resources, services, technologies, institutions, economic opportunities and decision-making ensured, and discriminatory laws and practices eliminated, through gender-responsive policies, strategies, programmes and legal frameworks	2.3, 5.4, 5.a, 5.c
<b>BL2: Inclusive rural transformation*</b>	Inclusive rural transformation and revitalization of rural areas ensuring equal participation of, and benefits to poor, vulnerable and marginalized groups accelerated through implementation of targeted policies, strategies and programmes	1.1, 8.3, 8.5, 10.1, 10.2, 10.7, 14.b
<b>BL4: Agriculture and food emergencies*</b>	Countries facing, or at risk of acute food insecurity provided with urgent livelihood and nutrition assistance and, adopting a humanitarian-development nexus and its contribution to peace, their populations equipped with appropriate capacities to better withstand and manage future shocks and risks	1.5, 2.1, 2.2, 2.3, 16.1
<b>BL5: Resilient agri-food systems*</b>	Resilience of agri-food systems and livelihoods to socio-economic and environmental shocks and stresses strengthened through improved multi-risk understanding and effective governance mechanisms for implementation of vulnerability reduction measures	1.3, 1.5, 2.4
<b>BL6: Hand-in-Hand (HIH) Initiative*</b>	Agricultural transformation and sustainable rural development accelerated through targeting the poorest and the hungry, differentiating territories and strategies, and bringing together all relevant dimensions of agri-food systems through analysis and partnerships	1.1, 1.2, 2.1, 2.2, 2.a, 10.1, 10.2
<b>BL7: Scaling up investment*</b>	Transformation towards sustainable agri-food systems with large-scale impacts on reducing inequalities and eradicating poverty and hunger accelerated through increased public and private investment, and improved capacities to leverage future investments	1.b, 2.a, 10.1, 10.2, 10.b, 17.5











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# Roadmap 2022–2030

A vision for FAO's work on aquatic food systems