Intervention by Dr. Jörn Schmidt

Science Director for Sustainable Aquatic Food Systems, WorldFish (CGIAR) Ocean Action Panel 9 – Promoting the Role of Sustainable Food from the Ocean for Poverty Eradication and Food Security UN Ocean Conference 2025

Excellencies, distinguished colleagues, and friends of the ocean,

It is a great honour to speak to you today.

Let me begin with a truth too often overlooked: Aquatic foods are one of the few tools that can simultaneously tackle poverty, hunger, and climate risk. And yet they are often left off the table.

They are central to transforming food systems because they can close the nutrition gap, efficiently and equitably, and in ways that are environmentally responsible and climate-adaptive.

They already nourish over 3 billion people. And support the livelihoods of hundreds of millions, and are deeply woven into the cultural and economic fabric of both coastal and inland communities.

But to realize their full potential, we must act on three fronts: Nutrition, Production, and Equity.

1. Let's start with nutrition.

Aquatic foods, fish, shellfish, seaweed, and other organisms are nutritional powerhouses. They are rich in critical micronutrients, including vitamin B12, omega-3 fatty acids, zinc, iron, iodine, and calcium, nutrients often lacking in the diets of vulnerable populations, particularly women and young children.

We know that even modest increases in aquatic food consumption during the first 1,000 days of life can significantly reduce stunting and enhance cognitive development.

And aquatic foods offer more than nutrients; they offer diversity. They support culturally appropriate, locally sourced diets in both rural and urban contexts.

But nutrition isn't just about what we eat; it's also about how and where food is produced.

2. We Must Rethink Food Production, Towards Resilience and Regeneration

Aquatic food systems can be both **low-impact** and **high-return**.

Compared to terrestrial animal proteins, many aquatic species require fewer inputs, less land, and generate significantly lower greenhouse gas emissions.

Some, such as seaweed and bivalves, not only feed people but also help restore ecosystems and sequester carbon.

But we must also face the reality:

Many aquatic ecosystems are under immense pressure. **Overfished, polluted, and degraded** by climate change and poor governance. The way forward must be one of **restoration and regeneration**.

And here's the key: small-scale fishers and small-scale aquaculture farmers are not the problem. They are essential to the solution.

With the right investments and recognition, they can be stewards of ecosystem recovery, innovation leaders, and anchors of resilient food systems.

So what must we do?

- Support **decentralised production systems**, such as community-based aquaculture and small-scale fisheries in coastal, inland, urban, and fragile landscapes;
- Promote nature-based solutions, including mangrove-friendly aquaculture, aquaponics, Integrated Multi-Trophic Aquaculture, and seaweed farming that contribute to biodiversity restoration and climate resilience;
- Recognise wild harvest and aquaculture as complementary systems, working together to enhance food security, reduce pressure on vulnerable stocks, and create diverse livelihood opportunities.

These aren't just ideas. In many parts of the world, communities are already putting them into practice:

- restoring estuaries through participatory fisheries management,
- utilizing floating gardens and aquaponics in flood-prone areas,
- and integrating traditional knowledge with digital monitoring to enhance sustainability and equity.

Yet, these innovations will only succeed if they are matched by more substantial investment and governance.

This is not just about production, it's about **agency**, dignity, and long-term sustainability.

3. and third, equity, because food systems must work for the people who depend on them most.

The ocean feeds us, but it is people, small-scale fishers, farmers, processors, women, and Indigenous peoples, who sustain the systems that make this possible.

Too often, these actors are excluded from decision-making and denied access to markets, finance, and training.

Reversing this requires action

- Securing tenure rights and supporting customary governance arrangements;
- Providing targeted support to women-led enterprises and youth innovators;
- Embedding social protection and nutrition goals into national aquatic food strategies.

Some of the most promising efforts we see today combine local leadership with inclusive innovation.

In small island states, this has meant reimagining food systems to both reduce dependence on imports and build resilience through the use of ocean resources.

Across Asia and Africa, multi-country learning platforms are enabling shared solutions, from digitising value chains to improving fish-based food environments.

The way forward lies in embracing **co-creation and mutual learning**, recognising that community voices, ancestral knowledge, and scientific innovation must shape the future together.

In Closing

Aquatic ecosystems are under severe stress.

Overfishing, pollution, and climate impacts threaten their productivity and long-term viability.

Reversing this is possible, but only through **restoration**, **responsible governance**, and **regeneration**.

Small-scale fishers and aquaculture producers can be among our greatest allies in this effort. If we invest in their capacity, uphold their rights, and give them agency in shaping the solutions.

Because aquatic foods are not just about nutrition;

- they are about resilience,
- they are about **equity**,
- and they are about renewal.

- They nourish children and communities.
- They regenerate ecosystems while supporting local economies.
- They offer a blueprint for building food systems that are not only sustainable but also fair and future-proof.

Let 's bring aquatic foods from the margins to the mainstream. not as a niche solution, but as a pillar of planetary health and human well-being.

At WorldFish and CGIAR, we stand ready to work with you to make this shift real.

Because the future of food must include the ocean.

Thank you.