Event Summary

A side event at the High-Level Political Forum on Sustainable Development 2024
entitled *One food system – Integrating terrestrial and aquatic food systems*

We are running out of time to reach the SDGs, particularly critical for SDG2 on zero hunger and SDG14 on life below water. We need to improve systems thinking, translate science into policy effectively and promote and showcase good practices. Aquatic foods are often overlooked in food and nutrition policies. It is crucial to integrate both aquatic and terrestrial food systems. This event showcased the importance of coordinated efforts and circular approaches with aquaculture playing a key role. The panellists, including young voices, policy makers, scientists, and UN-agencies, discussed solutions to scale up and accelerate the transition towards sustainable food systems.

More than 50 HLPF participants attended the side event, from Norway, Brazil, United States, Malta, Italy, Ecuador, Kenya, and the Netherlands, representing both government, academia, industry, youth, UN bodies and other international organisations.

The event started with three high level opening remarks: **Carlos Mello, Special Advisor to the Brazilian Minister of Fisheries and Aquaculture** emphasized the urgency to act as one and act quickly for a sustainable, equitable, and prosperous future. Brazil face challenges such as high population, large demographic area, natural disasters, and cultural diversity. In Brazil, fisheries and aquaculture are crucial for food security, climate change actions, and social and cultural aspects. **Bjørg Sandkjær, *Norwegian Deputy Minister of International Development***, reminded us that we are falling behind in achieving SDG2 and SDG14. Integration of terrestrial and aquatic food systems can provide a sustainable solution. Norway is taking steps for sustainable fisheries and aquaculture globally through partnerships like the EAF Nansen programme. Efforts must also be made in areas like technologies, science, and private sector to apply knowledge-based management and to ensure socially, environmental and economically sustainable food systems. **Alvaro Lario, *President of* the International Fund for Agricultural Development (IFAD)**, shared the missions of IFAD and addressed challenges particularly related to climate change. He stressed the importance of global partnership, investments, and sustainably usage of natural resources. Additionally, he emphasised the need to address social and economic dimensions of value chains for small-scale producers to help them implement sustainable resource management, create jobs, support communities and build resilience against future crises and shocks.

Opening remarks were followed by a panel of experts presenting possible solutions. **Katrine Soma, from Wageningen University and Research**, **in the Netherlands**, presented a project in Kenya improving local farming technologies by using Affordable Recirculation Aquaculture Systems (A-RAS). These systems can filter, oxygenate, and reuse water at a low-cost. By connecting multiple A-RAS to Green-Hubs, the project increased productivity and created job opportunities particularly for women and young people. **Nina Liland, Norwegian Institute of Marine Research**, shared work on converting aquaculture sludge to feed. Aquaculture sludge

can be used to feed insects (black soldier fly larvae) which can subsequently then be used as animal feed. This will reduce the loss of nutrientsAnd is low-cost and low-carbon technology. Obstacles include EU regulation on using manure as insect feed, and accumulation of minerals and heavy metals in sludge and insects. **Felipe Suplicy, Aquaculture and Fisheries Development Center, EPAGRI**, **in Brazil**, shared their work on low-cost, zero-emission brown mussel farming. Highlighting mussels as nutritious food for humans, and also useable as feed (e.g. chicken meal). Mussel farming does not require advances technology if local species are used as well as water with low pollution levels. **Benson Odinga, youth representative, final year bachelor student at Maseon University in Kenya, and intern at the Nasio Trust organisation**, presented his work at Nasio Trust. They produce spirulina for hospitals to provide patients with nutritious food. This industry has zero-emission, it does not require advanced technology, and it creates great business opportunities for the younger generation who represent a large share of the population and who are also often unemployed. They are collaborating with Laikipia University to develop spirulina-based fish feed.

The second panel, chaired by **Bjørg Sandkjær**, looked at 'why are we lagging behind in sustainable aquatic food production?' and 'how can we join our different food systems into one system we want. **Guangzhou Qu, Director of FAO Liaison Office in New York,** reassured the important role of aquatic food in combating hunger and malnutrition He also highlighted challenges such as growing population and lack of aquaculture development in low-income countries, and mentioned FAOs new Guideline for Sustainable Aquaculture (GSA) as a solution to promote good practices for sustainable aquaculture production. **Sanda Ojiambo, Assistant Secretary General of UN Global Compact,** emphasized the importance of a one food system and more innovation to scale up good solutions for healthy populations, income, livelihoods and economy. she suggested a holistic pathway, involving multiple sectors and levels (regional and national). **Carlos Mello** discussed challenges like changing dietary habits and the need for educating young people to consume more aquatic foods. Multiple stakeholders should jointly discuss sustainable aquaculture production and governments must listen. **Bjørg Sandkjær** highlighted the need to focus on investments, finance at all value chain levels, knowledge and skills for sustainable production and consumer acceptance of eating more aquatic foods. **Guangzhou Qu** identified challenges, to be addressed such as mismatched demand and supply, regional quality disparities, and lack of awareness about the potential of aquaculture. **Sanda Ojiambo** underscored the need to engage the private sector through ongoing conversations, (like the High-level Week, G20 and Ocean 20, Food systems summit 2025) exploring all different aspects of aquaculture (supply, demand, logistic and storage, retail, waste management), and providing finance, innovation and business cases. **Carlos Mello** stressed the importance of information, education, investments, finance and continues dialogue for a positive future for aquaculture and fisheries. Finally, **Sandkjær** thanked everyone for sharing their knowledge and for a good discussion and reaffirmed that the conversation of sustainable production of aquatic food through a one food system approach would continue via Norway's partnership with African Union and with Brazil in G20, involvement in the Food Systems Summit and in close collaboration with the Global Action Network on Sustainable Food from the Oceans and Inland Waters for Food Security and Nutrition.