



13TH CGIAR SYSTEM COUNCIL MEETING

# REMARKS FROM DR. SHAKUNTALA THILSTED

2021 WORLD FOOD PRIZE LAUREATE

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Thank you so much for giving me this opportunity to tell you briefly about my work. I have worked in the area of nutrition-sensitive aquatic food systems for very many years, before joining WorldFish ten years ago.

I began this work in Bangladesh, and later in Cambodia, while I was at the Royal Veterinary and Agricultural University in Denmark. Having a strong educational background in both agriculture and nutritional physiology I was able to use multiple entry points for nutrition-sensitive aquatic food systems. While many in CGIAR begin with production systems, and inputs to production, I begin with consumption data, household and individual data, and the nutrient composition of common foods. In Bangladesh, my first entry point was pond polyculture of micronutrient-rich small fish species, with larger fish-carps and tilapia. A very good entry point in Bangladesh, with over four million homestead points, and small fish being culturally very well-accepted.

Another entry point was the inclusion of large and small fish in seasonal wetland water bodies. To these, we added production of seasonal, culturally acceptable micronutrient-rich vegetables on the pond dykes and in homestead gardens. I was the first to introduce orange sweet potato in Bangladesh, after which the USAID Feed the Future supported CIP to scale orange sweet potato throughout the country.

Other components of the nutrition-sensitive approaches we developed included essential nutrition messaging, with a focus on fish and other nutritious foods, vegetables and fruits; development and use of fish-based products – for example, fish chutney and fish powder for women and children in the first 1000 days; Women's engagement and empowerment in aquatic food systems; partnerships, especially with national institutions and universities; and strong monitoring and assessment.



With these nutrition-sensitive approaches, we increased the quantity of fish produced, the productivity, the nutritional quality of the total production, intake of fish (especially in women and young children), household income from sale of fish, and women's empowerment. At the policy level, this nutrition-sensitive concept is fully supported in the present Bangladesh Country Investment Plan, nutrition-sensitive food systems – with nutrition-sensitive aquatic food systems – rated very highly. An example of our research in Bangladesh analysing consumption data over the last 20 years, we have shown that while fish intake has increased – especially by the better-off population groups, propelled by the large advances in agriculture in the country – micronutrient contribution from fish intake has fallen, especially for the poor, due to the decrease in the quantity and diversity of species from inland capture fisheries. Diversity, both in consumption and production, is fundamental for nutrition-sensitive approaches.

Scaling nutrition-sensitive aquatic food system approaches to other countries meant adaptation of the entry points, taking into consideration different geographies and peoples. For example, in Cambodia, our entry point was fish and other aquatic foods in rice fields, to which we added all the other components that we had in Bangladesh. In addition, a strong entry point was polyculture of large and small fish by women community groups in village tanks; never before were these tanks used for production of food. Much of this work on nutrition-sensitive aquatic food systems in Asia and Africa has been supported by IFAD, EU and the USAID Feed the Future.

**Question: As we progress towards One CGIAR – how do you see your work contributing to the organisation's mission - to deliver science and innovation that advance transformation of food, land and water systems in a climate crisis?**

Moving forward, it's extremely exciting that the One CGIAR mission includes food, land and water systems – so I would like to see that One CGIAR makes full use of the multiple benefits, that the diverse aquatic foods, animals, plants and microorganisms, across water and land systems offer to nourish all people, nations and planet. Let us not box this enormous potential of aquatic foods into one of the 33 One CGIAR initiatives. Also, the 'golden eggs' and innovations that we have today do not include nutrition-sensitive aquatic food systems. Let us elevate this to the One CGIAR level. Let me give just three priorities for research, innovation and scaling, and how we should shift the agenda from feeding to nourishing.

First, harnessing the vast diversity of aquatic foods, which are produced at low environmental cost, thereby shifting the focus from plant-sourced foods on land.

Second, making full use of aquatic food-based products, which can also include other nutritious foods such as fruits and vegetables, spices and oils to meet the micronutrient and essential fatty acid needs of women and children, particularly in the first 1000 days of life.

And third, and extremely important for One CGIAR after 50 years of focus on staple foods, make full use of aquatic foods for enhancing, perhaps doubling, the bioavailability of micronutrients in plant-sourced foods on the plate. Zinc in rice, beta-carotene in orange sweet potato and orange maize, iron in millet – these can all be increased tremendously by having a small amount of aquatic foods on the plate. This will truly transform the agenda of One CGIAR, from feeding – with a focus on quantity, to nourishing – which includes quality. So, please do invite me again to give my ideas on these enormous opportunities that aquatic food systems present for the success and the relevance of One CGIAR; up to 2030 and beyond.

Thank you.

