

**LAUREATE SPOTLIGHT: ADVANCING WOMEN & CHILDREN FURTHER FASTER**  
**Shakuntala Haraksingh Thilsted - WorldFish | 2021 World Food Prize Laureate**  
**Anita Zaidi - Bill & Melinda Gates Foundation**  
October 21, 2021 | 10:45-11:45 a.m.

## *Introduction*

### **Barbara Stinson**

President, World Food Prize Foundation

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Welcome to a special spotlight on the 2021 World Food Prize Laureate, in discussion with the president of a new division of the Bill & Melinda Gates Foundation. Let's meet our speakers. Dr. Shakuntala Haraksingh Thilsted, Global Lead for Nutrition and Public Health at WorldFish. This is a global CGIAR Research Center headquartered in Malaysia. Dr. Anita Zaidi, Bill & Melinda Gates Foundation president for Gender Equality and Director of Vaccine Development and Surveillance and Director Enteric and Diarrheal Diseases.

Each year the World Food Prize is awarded to an exceptionally significant individual achievement that advances human development with a demonstrable increase in the quantity, quality and availability of food for all. Dr. Shakuntala Thilsted's groundbreaking research innovations in diverse aquatic foods and nutrition-sensitive aquatic food systems has impacted the nutrition and health, wellbeing of vulnerable people in communities around the world. Her work guides WorldFish, other research institutions, major funders, government agencies and public and private organizations to work together to reshape food systems to deliver on the U.N. sustainable development goals. Researchers now use Dr. Thilsted's holistic approach to increase the sustainable production and consumption of nutritious fish and fish-based foods in Asia, Africa and the Pacific. As an adviser to heads of state, ministers, high-level panels and international boards, Dr. Thilsted guides research, policy and practices in pursuit of improved food systems that boost biodiversity, enhance environments, reinforce resilient communities, all while increasing incomes, empowering women, and seeking to provide better nutrition for all.

Dr. Anita Zaidi is president of the Foundation's Gender Equality Division. In this role, Dr. Zaidi oversees the Foundation's efforts to achieve gender equality by integrating gender across the Foundation's global work and investing in women's economic empowerment, women's leadership, and removing the barriers to women and girls thriving. Dr. Zaidi also serves as the Foundation's Director of the Vaccine Development, Surveillance and Enteric Diarrheal Diseases programs and is an accomplished pediatrician. As part of the Foundation's mission to ensure all lives have an equal opportunity to thrive, the Foundation works to improve nutrition and diets for all. This requires changes across the entire food system, from how food is produced to how it is sold and consumed. The Foundation's work in food systems supports local and national efforts to develop systems anchored by smallholder producers that can sustainably deliver safe, affordable and nutritious food throughout the year to all of our vulnerable populations. Building sustainable and resilient food systems that produce nutritious crops, aquatic foods and livestock products requires an approach that supports many different actors from farm gate to

market, including farmers, fisherfolk, processors, traders, food companies and retailers with a critical focus on gender equality and women's empowerment.

Today we are so fortunate to have these two women pioneers speaking to the issues of advancing women and children further and faster. Anita, I believe you have an opening question for Shakuntala.

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**Anita Zaidi**

President, Gender Equality Division - Bill and Melinda Gates Foundation;  
Director of Vaccine Development and Surveillance and Director EDD

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**Shakuntala Haraksingh Thilsted**

2021 World Food Prize Laureate  
Global Lead for Nutrition and Public Health - WorldFish

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***Conversation***

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Anita So, Shakuntala, first off, let me begin by congratulating you on receiving the 2021 World Food Prize this evening. It's such a distinct honor to join this conversation with you as you accept this prestigious award. And now I am curious. It's been a few months since the announcement of your selection. How has this experience impacted you and in particular your work?

Shakuntala Thank you, Barbara, for your kind introduction. And thank you, Anita, for the opportunity to engage with you in this Laureate Spotlight event. I look so much forward to our discussions. The annual World Food Prize Award gives the laureates an exceptional and unique opportunity to showcase their research and innovations globally. As the 2021 World Food Prize Laureate, I have experienced tremendous and exciting recognition of my work. My award highlights the essential yet often overlooked role of aquatic foods to sustainable, healthy diets and the critical roles that a woman plays in aquatic food systems.

This award gives people across the world the opportunity to learn about food and act upon the shift in the food system's narrative. From a narrow focus on feeding a growing, global population, just concentrating on the quantity of food and the energy value to nourishing all people and nations by incorporating the quality of food, the nutritional value and food safety. Aquatic foods are essential to transforming food, land and water systems in a challenging climate crisis.

Being the 2021 World Food Prize Laureate, I have been able to amplify this message in various high-level global platforms, for example, now the U.N. Food Systems Summit 2021. With being awarded this World Food Prize in 2021, I have reached billions across the globe through news stories, podcasts, interviews and many global, regional and national events. Personally, this award gives me great hope for the future of women in science, especially women from low- and

middle-income countries. I'm the first woman from the Caribbean and the first woman with an Asian heritage to receive this award. And I am sure that my story will inspire other women to follow my examples.

Anita Thank you. It's really wonderful to hear you talk about just what this achievement means to you. And I really also like the way that you distinguish feeding the world versus nourishing the world. And I'd love to come back to that theme later on in our questions if time permits.

Let me go on to note how struck I am by your research and landmark innovations that you have highlighted in your work, especially the critical link between diverse aquatic foods and food systems for the nutrition, health and wellbeing of wonderful communities, in particular, the health and nutrition of women and children. I'm curious if you will share your insights on why you think fish and aquatic food systems deserve our attention when exploring ways to improve diets and nutrition in low- and middle-income countries.

Shakuntala My research shows that aquatic foods are an integral part of local diets, food production and culture in many low- and middle-income countries. Aquatic foods can be integral to local and culturally appropriate food-based solutions to combat malnutrition and improve the nutrition and health of people, including women and children. My research has shown that diverse fish species contain high concentrations of multiple micronutrients, minerals and vitamins, and essential fatty acids in addition to protein. And these nutrients are crucial for cognition, development and growth in children and nutrition and health in women. These diverse aquatic foods are there for super foods.

Anita I've been very interested in how you have made the point that fisheries and aquatic food systems are not just sources of a healthy, nutritious diet but are also important for livelihoods for women. And in my role as president for the Gender Equality Division at the Bill & Melinda Gates Foundation, I'm always interested in learning about innovations that empower women. And so your research has shown, for example, that aquatic food systems present unique opportunities for research, design and funding innovations for both improving the nutrition of women and empowering women as agents of change. Can you share some more insights about that from your work?

Shakuntala Thank you, Anita, and this is something that I have used a lot of time on in my work being in the field and working with communities. And when you work with communities, you realize that you have to have a family approach, within the family approach, of course, you can have more focus on certain family members. And this I did by having a family approach but at the same time having much more focus on women and girls.

What I did was I used the nutrition-sensitive approach to aquatic food systems. This packed innovations that have championed the roles of women in countries across Asia, Africa and the Pacific. In all aspects of aquatic food systems from production to supply chain to consumption. If we would begin with production and the nutrition-sensitive approaches that I applied to captive fisheries and aquaculture. These approaches promote the production of diverse fish species,

both small and large species, in homestead ponds, in rice fish systems, in wetlands water bodies. And production of these local fish species can also be integrated with production of local micronutrient-rich vegetables in homestead gardens and under dikes of the ponds.

If we continue allowing the food system pathway and look at consumption, we in WorldFish and with many partners have worked with women in Asia, in Africa and in the Pacific. And we have developed ways to include small fish—these are superfoods in the diets of women and children. Beginning with all family members being empowered with the knowledge of the nutritional value of fish for cognition, for growth and development of young children, and also the value for nutrition of health of pregnant and lactating women, we develop products just such as fish powder to add to local recipes in the diets of children and fish chutney as a condiment in women’s meals. Providing hands-on training on solar drying of small fish and trying local recipes, we see an increase in the consumption of these superfoods.

Anita By coincidence, most of my work on child survival, improving child survival in Pakistan has been done in fishing villages. And so what you say, Shakuntala, really resonates with me. And I wanted to go back, if you don't mind, to the theme of women in science. You have had such an illustrious and successful career. What advice do you give to young women in the field, especially young women pursuing agriculture or aquatic food systems research in developing countries and low- and middle-income countries? And how do you motivate women to really keep persevering and moving forward?

Shakuntala Well, thank you, Anita. And I've been in this field of research for such a long time that I've seen great changes. In the beginning, I would be the only woman in the room. When I'd go to conferences and meetings, I'd be the only woman attending. But now, for example, when I go to the Bangladesh Agricultural University and hold lectures, about half of the students are women. So there has been a great change.

However, still from a UNESCO study that stems back in 2015, we know that only about 30% of researchers around the world are women. And women working in science, technology, engineering and mathematics are poorly represented in leadership positions. Men, and especially those in powerful and in leadership positions, must propel this change. And they must make space to include women leaders.

Anita So there is this common saying that you cannot be what you cannot see. And I think your example and the recognition of your work, Shakuntala, by the World Food Prize is a powerful example that we send to women and girls around the world to pursue science, to pursue technology, to work hard and to get ahead.

Shakuntala I can see that, Anita, and if you would just see in my inboxes how many emails I'm getting from young women all across the world; and even from children in primary schools, or women and young girls are writing to me and asking me—how do we pursue a career in science? And sometimes I feel that I'm not perhaps getting the best education and giving the best advice; because as far as I

know from my own background and my own childhood, the beginning is hard work. So you must work hard, and you must have an interest, and then it can take it from there. And you must have mentors and people who believe in you to help you get across.

Anita That's wonderful to hear, and I completely agree. Thank you for that. So let me now move to asking you some questions about the others who facilitate, who can propel forward the kind of work that you've been doing. So, for example, what actions do you think governments, donors and civil society can take to capture the full benefits of aquatic food systems in meeting national priorities as related to the Sustainable Development Goals? You know, now we have less than ten years left.

Shakuntala Thank you, Anita, and this has been a theme that has run through the last two years with the preparations and all the meetings and dialogues that we have had with the U.N. Food Systems Summit. In recent years we have seen some governments around the world recognizing the links between aquatic foods and health and nutrition, as well as the links between food and agriculture policies and nutrition and public health policies. However, these are a few examples, and we must do much more.

Firstly, policymakers, donors and civil society must be armed with the knowledge of aquatic foods as superfoods for nutrition and health, as well as aquatic food systems for improving resilience and sustainability. Research institutions, U.N. organizations, the Committee on World Food Security, all play a vital role in having governments reach to this realization. Donors must support governments of low- and middle-income countries with investments in national capacity, also women researchers and in the implementation of the solutions. And we must bring in the voices of people where these voices must be amplified, and we must have the traditional knowledge brought to the fore in developing solutions that work for all people. Also at leadership levels we need much more, much more women and youth to be engaged. And we also need the response of the private sector actors that value nutrition and public health for all.

I can give two examples from the areas in which I work. And if I would take one example from the state government of Rhodesia. The government of Rhodesia has a strategy for an audacious pathway to accelerated nutrition. And in this program they have included dried fish and dried fish powder in maize in childcare centers, in school feeding programs, and take-home rations for pregnant and lactating women and adolescent girls. So the government of Rhodesia has recognized that aquatic foods are superfoods that can improve health and nutrition.

The government of Bangladesh, as another example, has included pond polyculture of large and small fish as a high priority action in the Bangladesh country investment plan to nutrition-sensitive food systems. So we are seeing changes in governments, and we are seeing changes in the acknowledgement in policymakers of aquatic foods being superfoods.

- Anita            So there's a lot that others can then learn—other countries can learn from the experiences and the examples that you all right describing. Thank you.
- Shakuntala     Yes, and the two examples I have given STEM from Asia. There are many more examples in parts of Asia that we can link to other parts of the world, for example, in many of the African countries, so it would be really great to have governments working together and having linkages and cross-link and crossovers from experiences from one part of the world to the other.
- Anita            Looking forward, what do donors, funders and investors need to keep in mind in order to think differently about aquatic food systems and its place in the global nutrition and food system transformation agenda? What do you see as the main research priorities? And where is funding and innovation most needed? We'd love your answer for that.
- Shakuntala     Let me give three examples that I see, starting with nutrition. Firstly, we must make full use of the vast diversity of aquatic foods, which are also produced at low environmental cost, for example, seaweeds. And we can use these foods to expand the food systems beyond just terrestrial plant source foods and livestock.
- Secondly, we must make full use of aquatic food-based products, which can also include other nutritious foods such as vegetables, fruits, spices and oils and to meet the micronutrient and essential fatty acids of women and children, especially in the first 1,000 days of life.
- And thirdly – which not many people have thought about yet—I do think we need to make full use of aquatic foods by enhancing, perhaps doubling the bioavailability of micronutrients in plant-source foods on the plate. For example, the zinc in the rice, beta carotene in orange sweet potato and orange maize, iron in millet. The absorption of these crucial micronutrients can be increased tremendously by including small amounts of diverse aquatic foods on the plate. This will truly transform the research agenda from feeding, with a focus on quantity, to nourishing, with a focus on quality.
- Anita            Those are some really great points and areas for future work, and I'm particularly interested in what you said about how to increase absorption of iron and zinc in foods by using a fish-based food. So that was great to hear. Thank you for that.
- Shakuntala     There is so little we know about that. We haven't yet identified the components in aquatic foods which give this benefit to absorption of micronutrients. So there is so much that can be done. So a lot of work for young researchers to come and go with.
- Anita            So in the end, Shakuntala, I wanted to come back to this point that you had earlier made on the role of women in agriculture. So you've described that one in every two workers in aquatic food systems are women, and most of them work in supply chains where they face many barriers. Can you describe to our audience how nutrition-sensitive innovations are fostering women's engagement in aquatic food production and increasing their equitable employment? I have a team that is now thinking about, you know – what will we do at the Gates Foundation for women's economic empowerment, and I'm just very interested in

hearing your thoughts about this. How do we link back women's role in aquaculture, also back to improvements of nutrition, improvement of nutrition for themselves and for their families. So both issues – role of women in aquatic food systems as well as role of aquatic food systems in improving the diet and the quality of their family's health and nutrition?

Shakuntala And this is extremely important, because if you work in the field and work with communities in which aquatic food systems are important for food in nutrition, for livelihoods, and those of a culture, you will see that women play a crucial role. They provide labor, often unpaid. They have innovative ideas, and they are entrepreneurs. And they come forward with small innovations that can have big impacts to empower women. Let me give some examples.

If you would look in Malawi and Zambia we are using, together with women's groups, low-cost solar technologies to improve food safety and reduce loss and waste. Together with partners, we have developed and promoted solar tents to improve the process of drying, and this has reduced the time needed to dry the fish. It has improved the quality and the food safety of the dried fish. And as many of you know, many of us know, dried fish is an important food in sub-Saharan Africa. It's traded locally and regionally, and it's a great source of income for many women traders.

Another example I can give stems from Odisha in India. And here we see that if you have nutrition-sensitive policies, you can overcome some of the gender myths, for example, the gender myth about women not being able to manage aquatic food systems. If you would look at villages, many villages have village tanks, water tanks, but these are traditionally restricted areas and not open for the communities and not open to women. In Odisha, women's groups now are getting to write, and they're being trained to stock and to harvest fish from these village tanks. They have both large- and small-size fish. They sell the large fish for income, while the small fish are consumed by health members. Thus you have a system that increases livelihoods, to increase income, as well as improving food and nutrition security by increased intake of small fish, which as I've said before are superfoods.

Anita Thank you so much for the conversation today, Shakuntala, and I learned a lot, and I look forward to following your work and hoping that we get a lot of attraction with the upcoming events, as you talked about, the Food Summit; then we have Nutrition for Growth at the end of the year. There's just a lot of opportunity for people to understand all that you have done for aquatic food systems and how much potential there is to improve the quality of food that is accessible to more people and women and children around the world. So thank you very much.

Shakuntala Thank you, Anita.

Barbara Shakuntala, do you have a final comment as well?

Shakuntala It has been such a pleasure doing this conversation together with Anita. And, Anita, as the president of the Gender Equality of the Bill & Melinda Gates

Foundation, and also your background with your work in Pakistan. There is so much that we can do together with the role of women in aquatic food systems and also how aquatic food systems improve the health and nutrition of women. So I look forward to working together with you in the future.

Barbara

I have to thank both of you so much. On behalf of our entire audience from around the world, it's been an amazing half hour together to hear both your perspectives and to be able to draw on your tremendous experience, because there's have so much synergy and really common themes and both great examples of work and research going on on the ground and the principles that you both advance in your very different work, but just both so important. So thank you so much for coming today, and we'll look forward to watching both of you as you continue in your endeavors and your paths continue to cross. Thank you.