

Title: Fish4Thought: Youth in small-scale fisheries and aquaculture

Date: Thursday, 12 August 2021 **Time:** 16:00-17:00 (UTC+8)

Audience Questions and Answers

1. How can we improve the feed industry in African countries?

Farmers need profitable feeds, meaning feeds that boost productivity and are affordable, so they generate enough profit for the farmer to make them worth using. It would be better if adequate feeds could be made from local feedstuffs, but this is not always the case. As a result, expensive and/or imported ingredients have to be included which increase feed prices. There are also concerns that nutritious feedstuffs that can be eaten by people, like small dried fish, are used instead in aquaculture feeds.

Farmers can try to reduce feed costs by joining or forming producer organizations and buying in bulk from commercial companies. New approaches for feeding farmed species are also being developed, such as the use of feeds that nourish both the farmed species and other pond organisms, like bacteria, plankton and protozoa, to stimulate the pond's inherent capacity to break down fish wastes and produce natural foods for fish. For more detail, see https://hdl.handle.net/20.500.12348/4754.

2. Great lecture. How can one know the right breeds to farm?

The best breeds are those that meet the needs of the farmer as well as the customer, whether that be traders, processors, or consumers.

When choosing a breed, one should check the breeding objectives. Is fast growth important to you? What about disease resistance, and to what diseases? Are skin and flesh colour important? What about body shape (and thus fillet yield), or size at maturity?

It is also important to buy from a respected hatchery that has a well-managed breeding program and good biosecurity practices. This is not always easy to determine, so one may ask other customers of that hatchery for their views on the performance of the hatchery's seed.

For a useful primer in aquaculture genetics from the UN Food and Agriculture Organization, see http://www.fao.org/3/CA5345EN/CA5345EN.pdf.

3. Are there ways to support youth in aquaculture in developing countries like Uganda?

A good place to start looking for this information is our recently published brief on youth (https://hdl.handle.net/20.500.12348/4752)! While little of the information there is specific to Uganda, many of the lessons learned come from Uganda's neighbors.

4. How about including vocational training in fisheries and aquaculture in schools to attract and provide confidence to youth?

Great suggestion. One example is here: http://blog.worldfishcenter.org/2020/06/a-tilapia-based-e-learning-platform-created-to-improve-aquaculture-tevet-trainings-in-zambia/.

5. Good to hear about aquatic food system research by WorldFish in Odisha. We are an NGO with experts in agriculture, horticulture, livestock, and fisheries and are trying to develop fisheries. Can you please provide your contact details?



Ms. Neetha Shenoy from WorldFish can be contacted at N.Shenoy@cgiar.org. Thank you for your question and interest.

6. Start-ups and mentoring are good initiatives to focus on youth. Skill Development Programs in fisheries and aquaculture that focus on youth are the need of the hour.

Thank you, these points came through very strongly in the live discussions! View it here: https://youtu.be/wRgeQfcVTa4

- 7. How can WorldFish help youth in aquaculture in Africa, especially in Egypt? Thank you for the question. WorldFish has a center in Egypt and offers training in aquaculture. Send me an email (M.Phillips@cgiar.org) and I will make sure you receive details of training and other activities. We need to do more, and today's event helps us develop our programs for the future. Thank you!
- 8. Wonderful presentation Prof. Akintola. Our students need practical-based engagement during the mentorship. Our government and universities need to fund fisheries and aquaculture programs. Which way forward in this regard? WorldFish Nigeria staff may be able to provide relevant reports or contacts, including Dr. Siriwardena or Professor Subasinghe. Also, keep an eye on the WorldFish website for an upcoming report on Nigeria: https://www.worldfishcenter.org
- 9. How do youths access funds/loans to start aquaculture businesses in Nigeria? WorldFish Nigeria staff may be able to provide relevant reports or contacts, including Dr. Siriwardena or Professor Subasinghe. Also, keep an eye on the WorldFish website for an upcoming report on Nigeria: https://www.worldfishcenter.org
- 10. How have other countries adapted to sell farmed fish? Here in Tanzania, the people have a bad perception of consuming cultured fish. They say the fish are not palatable, so instead opt for wild fish. Are there any solutions to adapt from other countries, apart from raising awareness to accept the farmed fish? The reasons for low local demand of farmed fish will determine which strategies may be appropriate. Raising awareness about the benefits of farmed fish (https://blog.worldfishcenter.org/2015/11/tilapia-a-nutritous-environmentally-friendly-fish/) or other locally-relevant campaigns (https://www.worldfishcenter.org/blog/cairos-chefs-take-farmed-tilapia) may prove useful. Additionally, government and stakeholder support of suitable species for local farmers may be necessary. This would also require that local farmers are involved in the selection and trial processes, sustainability is a priority, and appropriate infrastructure and capacity, from extension services to market access, are developed (https://doi.org/10.3390/su12114592).
- 11. African natural resources, including land, are owned through inheritance guided by cultural norms. At what stage do you engage the elders or parents of youth in ownership of the productive assets?

A good place to start looking for this information is our recent brief on youth (https://hdl.handle.net/20.500.12348/4752). There you will find other references that may prove useful, including a case study from the UN Food and Agriculture Organization (http://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/463121/).