

**Title:** Transforming food systems with aquatic foods: Advancing equitable livelihood for healthy people and planet

**Date:** Friday, 25 June 2021

**Time:** 19:00-20:30 (UTC+8)

## Questions and Answers report

- 1. You cannot raise recreational fishing to commercial levels, so the comparison in price per pound is a bit biased. Isn't it like comparing trophy hunting to agriculture?**  
 Thank you for your question. Recreational fishing benefits coastal communities directly, especially those who have lost their livelihoods thanks to commercial overfishing. We are, therefore, looking for scaling up opportunities for the small-scale fishers, especially the women.
- 2. What is the sustainability of fish supply to Kibera slums in food system approach?**  
 Thank you for your question. We started with Nyeri county, where farmers are well-organized in a cooperative. With this existing advantage, neighboring counties can bulk their fish and use the already established Nyeri system to take their fish to Kibera, ensuring a continuous supply of fish. Of course, research is also essential in matching urgent needs with the most appropriate solutions – this will be key in ensuring the sustainability of the fish supply to Kibera.
- 3. How is food safety issues considered in Ghana's fish value addition, given that fish is highly perishable and prone to turning stale.**  
 Thank you for your question. It is highly considered, as far as policy is concerned. But the issue is with the small-scale fisheries, where enforcement is a challenge. As part of the SmallFishFood project, we analyze nutrients and food safety parameters; <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0242086>
- 4. For the small fish project in Ghana, do you have any concerns about the amount of single-use plastic introduced in the new system's value chain?**  
 Thank you for your question. Plastic pollution is a big problem in Ghana, but abolishment is taking time as it is actively being used. So, we tried to introduce different packaging materials, like paper, these women to as well. But these are expensive.  
 This question was also answered live: <https://youtu.be/tRXkhKdLvBk>
- 5. Have you ever compared the drying time between the two drying methods?**  
 Thank you for your question. We are presently performing a study where we compare the two drying methods, two smoking methods and analyze samples directly after processing and then storing fish from the different treatments for up to 9 months. We study both nutrients and food safety parameters. The results are still pending but we find that ground drying is faster.
- 6. What was the reason for cutting the head off before drying the small fish? Studies have shown that the head has high nutritional content, too.**  
 Thank you for your question. The head is not cut off during drying. It is only removed when we want to mill it into powder as it gives a bitter after taste. This was also an optional method.
- 7. Criminal gangs in the fish industry have a leeway of operating in international waters outside exclusive zones. So how will blue justice rein them in?**  
 Thank you for your question. We need to build capacity in the criminal justice systems and build inter-agency cooperation internally in countries. Furthermore, international collaboration is vital. Even if you have insufficient coast guard capacities, it is possible,

through international cooperation, to work against these syndicates. The Blue Justice initiative and the Copenhagen Declaration approach is to address all crimes through the whole fisheries value and supply chain. Through this approach, enforcement at sea is not the only option for law enforcement interventions. Issues such as document fraud are criminalized in all jurisdictions and are an integrated and essential part of committing fisheries crimes through the whole value chain.

**8. Is there any contamination from drying fish directly on mosquito nets, if that is the case, for the model where the fish drying installation could be turned over?**

Thank you for your question. We didn't find any microbial or chemical contamination. I don't know of microplastics, though. It is instead the ground drying that had contamination.

**9. What is the reason for the undersized fish? Poor quality food? Poor water quality? Dwarfing (due to low O<sub>2</sub>) is also a widespread phenomenon in pond aquaculture.**

Thank you for your question. Several issues are linked to small fish/stunted fish produced by farmers in Kenya (specifically for the Nile tilapia). Still, the biggest challenge is in the quality of seed and poor cultural conditions to the farmers.

**10. How would you rate the reduction in post-harvest loss caused by drying the small fish on the racks? Also, given that drying of the small fish is weather-dependent, what happens when it rains for 2-3 days?**

Thank you for your question. On the ground drying, the fish is washed away when it rains, causing financial loss to these women. But on the racks, they can just be covered with polyethylene.

**11. What is the average price difference between the undersized fish and the giant fish?**

Thank you for your question. The price varies on place, season, quality of fish. They can also be sold either in pieces or Kilos. For instance, the small amounts of less than 100g would cost about 0.03 Euro while a 250g tilapia (table size) would cost about 0.1-0.45 Euro.