We’ve heard a compelling case to broaden the focus of nutrition in agriculture from one that focusses exclusively on increasing production of nutritious foods to one that recognizes that there are many links beyond the farm gate that affect food quality, availability and acceptability for poor consumers.

Research is of fundamental importance in helping us achieve goals faster and better.

Three points about research on this issue:

1. Placing gender at the center of the research agenda is essential;
2. Post harvest processing and handling offers great opportunity, and;
3. Understanding and influencing consumers will pay enormous dividends.

I will use fish to illustrate these arguments

**Place gender at the center of the research agenda**
Over-arching theme is that issues of gender are rather under-emphasised.

In almost every link in fish value chains women play a central role. Our research agenda in support of development efforts for fish value chains needs to recognize this as a central organizing concept. I would be surprised if the same were not true for fruits and vegetables and other animal source foods.

- Role of women in fish value chains. Recent work on the nine major fish producing countries indicates that 46% of the people engaged in SSF are women. Probably the tip of an iceberg, if you include fish farming and gleaning.
- A huge research agenda here. Focussing our research effort on women, in particular, will be a key to filling the gaps in knowledge needed to inform sectoral policies.
- Explicitly thinking about women can suggest new approaches. Example from Bangladesh: working with women to culture larger fish (the carps) for sale, but simultaneously growing very nutrient dense smaller species for home consumption.

**Post-Harvest processing and handling offers great opportunity**
In general there is a positive correlation between a food’s nutritional value and its perishability.
For fish this is a truly enormous problem. Spoilage estimates for Africa, for example, range from 20-25%, up to as much a 50%. Globally 10 to 12 million tonnes of fish per year.

Perhaps one of the quickest ways to increase access to animal source foods is to better understand what is going on and find ways to fix it. Needs technical work on cold chains, and on processing technologies, and on the economics and incentives for adopting improved methods.

Even where processing is currently in hand there is work to do.
- Example: fish pastes and sauces. The amounts of salt used in these products are very high, bringing with it increases blood pressure, and risks of stroke and heart attack. But as yet noone has investigated methods to minimise the amount of salt used or to properly quantify the benefits of reduced salt intake on women’s health.
- Example: Dried fish. To keep away flies and insects, insecticides (DDT) are sprayed on the fish. Research is needed on innovative, simple, quick and safe methods for drying fish in order to reduce women’s work load, and give a product of high nutritional and food safety qualities, as well as long shelf life.
- Example: Processing of fish is done in the seasons with plentiful fish supply. Research is needed in developing market mechanisms for staggering the sale of the products so that the market value is stable and gives the producers (mainly women) reasonable incomes.

**Understanding and influencing consumers will pay enormous dividends**
Understanding poor consumers demands and preferences and thier willingness to pay for nutritional quality will be absolutely key to unlocking the potential of a value chain approach.

Only when we have that understanding can we start to tailor products to thier needs and shift preferences through marketing and promotion of nutritious products and balanced diets.

This is a huge research agenda that needs to bring together researchers to identify practical options for making a balanced nutritious diet available and affordable and finding cost-effective methods to change behaviour where necessary. There is little doubt that a focus on women will be key to such behaviour change.

**Concluding comment**
A value chain approach can offer an important added dimension to efforts to improve nutrition, but it will only do so if we actively pursue VC work from a nutritional perspective and bring to light clearly any trade-offs between economic and nutritional goals.

I have illustrated the importance research using fish as an example, but the issues no doubt apply for many other foods, which also deserve the same kind of attention.