Linking agriculture, food systems and nutrition: what’s your perspective?

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What is the role of an economist in improving nutrition along the food system? What support they need from other players of the food system in order to accomplish this task?

Economists can play several roles in helping us to 1) understand the food system, 2) measure whether nutrition related interventions are having their intended effect, and 3) understand the costs of an intervention in relation to its measurable benefits. Economists can draw on secondary data as well as help generate primary data to understand the demand and supply of different foods in the existing system. Through working with nutritionists and accessing appropriate food composition databases, the demand and supply of specific nutrients of interest can be generated.

Within our current effort to transform the role of pro-vitamin A rich orange-fleshed sweetpotatoes within the food systems of sub-Saharan Africa, the economist has led the design of standardized baseline modules in our projects that seek to build the evidence base for how to best deliver sweetpotato to the enduser. In this effort, the economist works directly with nutritionists and agronomists to construct and test these modules in addition to constructing additional modules specific to each project. In designing these modules, the economist works closely with statisticians and nutritionists to ensure that a sufficient sample size is obtained so that changes in the key quantifiable indicators can be detected after conducting the endline survey.

The economist has also been engaged in conducting rapid appraisals of the market situation given settings for our project seeking to develop viable markets for sweetpotato-based processed products. By understanding the relative prices of sweetpotato versus other sources of energy and other sources of vitamin A rich foods and learning how the current value chain for sweetpotato is operating, the research team (consisting of agronomists, food processors, and extension personnel) can better design the intervention understanding where price or other barriers may exist that could influence adoption. Testing potential products requires understanding the cost of making the product and conducting consumer acceptance tests, which the economist has been assisting to design.

Core to our work is developing sustainable approaches for ensuring that
resource-poor farmers have access to sweetpotato vines, the “seed” of this crop. We have been testing different models to ensure this access and economists have been heavily involved in collecting data to measure the costs of the different approaches relative to their benefits. They have also been conducting studies to determine the willingness of farmers to pay for vines of new varieties with specific traits, or disease free planting material compared to local material of mixed quality. In these efforts, they work closely with agronomists and extension personnel. Economists also have assessed the trade-offs farmers face in producing the introduced crop compared to other dominant crops in the system. This helps the entire team understand the factors driving adoption of the introduced varieties.

Economists also have been involved in setting up monitoring and evaluation systems for the project, drawing on their knowledge of database management and understanding of how to identify and collect key indicator data. This involves close interaction with all disciplines (breeding, agronomy, nutrition, gender specialist) to ensure that a cost-effective data collection system is set up that is not overly burdensome, yet enables the team to capture the key information required for managing the project as well as for reporting outputs and outcomes.

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