

Public seminar

The potential of value chains for nutrition

Knowledge exchange for better informed policies and practices

Background 2-pager for Friday 16 February, 2018

To achieve food and nutrition security for all, the various actors related to food value chains should integrate their strategies and actions from farm-to-fork, and need to adapt to changing circumstances synergistically and on a regular basis. Yet in everyday practice, the exchange and synchronization of knowledge between different food value chain actors (such as farmers, transporters, packagers, middlemen and consumers) is often limited and the theme of nutrition has not received much attention in this context. This seminar focuses **on how knowledge sharing, specifically throughout food value chains can be improved in order to contribute to food and nutrition security**. The seminar will explore nutrition-sensitive approaches in value chains e.g. interventions into the underlying and basic determinants of people's nutritional status that incorporate specific nutrition goals and actions, to maximize that chains for nutrition. While acknowledging that nutrition-specific interventions and nutrition-sensitive intervention in other sectors (e.g. health, sanitation, education, women's empowerment) are also important in an integrated nutrition approach, the seminar will focus on nutrition-sensitive interventions in agriculture and more specifically, the value chain. Ethiopia will be used as a case study to illustrate the possible bottlenecks and opportunities for linking value chains and nutrition through better knowledge exchange.

The need for knowledge exchange for better nutrition

In many low and middle income countries, including Ethiopia, the **problem of undernutrition is profound and pervasive**, and affecting almost half of all children under the age of five. This includes serious consequences for physical and cognitive development of affected children in the short-term, but also the economic development of a country in the longer term ([World Bank, 2013](#)). The nutritional status of people is influenced by three broad factors: (1) food and nutrition security (access to sufficient, safe and nutritious food to support a healthy active life); (2) health (including the health environment in terms of pathogens and environmental contaminants, water, sanitation and access to health services); and (3) care (child feeding and care practices of children and women). The seminar will focus on access to sufficient, safe and nutritious food (the first factor) and more specifically on how different actors along the food value chain can contribute to improving the nutritional status of the most vulnerable populations through better collaboration.

The causal pathways of the various manifestations of malnutrition – varying from short stature (stunting), wasting, low birth weight, micronutrient deficiencies, and under or overweight – are multifaceted and not attributable to one single factor. Therefore, a **multi-sector approach is essential to tackle malnutrition** effectively. For example, to deliver more local food of high nutritional value to domestic markets, public and private sector cooperation is needed to boost the investment in higher productivity of nutritious local crops and food value chain efficiency. However, knowledge exchange by multi-sectoral actors can be difficult, in particular when linking the value chain to nutrition. Most farmers and development or policy professionals are not trained in both agriculture and nutrition and this makes awareness raising on the relationships between agriculture and nutrition security a challenge. This seminar aims to make a contribution by bringing together representatives from different sectors to interactively share knowledge. This can promote more effective food value chains functioning, improvements in diet quality and ultimately nutritional status of individuals.

The potential and challenges of nutrition-sensitive value chain interventions

Value chain interventions have primarily focused on increasing income and production of farmers and other actors along the value chain, and less on alleviating malnutrition (Downs and Fanzo, 2016). Since just producing more food will not immediately trickle down to improved nutrition, innovative and integrated programs and deliberate interventions are needed to reach nutritional goals. Just investing in enhancing agricultural productivity will not directly solve the problems of the scarcity of nutritious foods and the lack of diet diversity that poor people face. A focus on productivity might even seriously affect food quality and health status ([FAO, 2015](#); [Carvalho, 2006](#)). However, recent studies indicate that specific investments in agricultural developments to enhance nutrition-agricultural linkages could have a long-term impact on people's nutritional status, health and well-being ([Balz et al., 2015](#); [Chung, 2012](#)). Therefore, if change in nutritional status of farmers, other actors in value chains and consumers is the end goal, it is necessary to incorporate nutrition goals throughout the value chain. This can be supported by **appropriate knowledge**

exchange and co-creation between the various actors in and related to different parts of food value chains. Using “nutrition-sensitive value chain approaches” could be helpful considering it goes beyond agricultural production into food storage, transport and trade, transformation, and retail, which can all impact the nutritional value and availability of nutritious foods ([GLOPAN, 2016](#)). In addition, if value chain interventions are conducted in cooperation with the private sector and can be demonstrated profitable, the approach has the advantage that entrepreneurs will have an incentive to further develop them (Allen & Brauw, n.d.). However there is still little documented evidence on these approaches and the remaining evidence gaps restricts the understanding of the feasibility of the value-chain-for-nutrition approach ([Hawkes & Ruel, 2011](#); [Brauw et al., 2015](#), [Allen & Brauw, n.d.](#)). As for limitations, value chains have a commodity specific focus and take into account the nutrient content of individual food, while better overall nutrition status can only be achieved through improvements in people’s overall dietary quality ([Brauw et al., 2015](#)). Also, it is debatable whether markets are the most effective ways of reaching the poorest, most vulnerable and most isolated populations, and the importance of informal markets and food exchanges is often neglected in the food value chain approaches ([IDS, 2016](#)). However when these limitations are taken into account, this broader scope that includes all actors in the value chain can be helpful when addressing this multifaceted and complex issue of ensuring nutrition security.

Synergistically linking value chain activities with nutrition

Value chain activities could thus be improved by incorporating nutrition goals on different levels.

Policies and practices aimed at the farmer-level could focus their interventions on reducing transaction costs or risks along the value chain, or by increasing the supply of raw materials to support an increased nutritious food availability and affordability, as well as supporting the fortification of selected processed foods ([Brauw et al., 2015](#)). With regards to transportation and the middlemen-level, the dissemination of results of willingness-to-pay studies to traders has had a positive impact in Uganda and Mozambique ([Hawkes & Ruel, 2011](#)). At the storage/cooling-level, better storage facilities could ensure that foods retain their nutritional levels. Within the food value chain, processing can both support dietary quality through increasing food availability, extending seasonality through the hunger gap, and make food safer to eat. Yet it can also lower the nutritional quality of products, for example, through producing trans fats from soya oil, chicken nuggets from plain chicken and producing ultra-processed foods that are high in energy, sugars, unhealthy fats and salt and low in dietary fiber ([GLOPAN, 2016](#)). Studies also show the importance of street foods and this raises specific challenges towards increasing street food vendors awareness to adopt processing techniques that retain the nutritional value of these foods ([Riet et al., 2001](#); [Mbogani Mwangi, 2002](#)). On the level of markets and retailers, more nutritious foods could be commercialized if retailers are aware of the benefits. On the consumer-level, interventions could stimulate increased consumption of nutritious foods, and thereby improve diets by raising awareness and providing nutritional information; or through increased income which could increase the demand for nutritious foods ([Brauw et al., 2015](#)). However, it is important to keep in mind that to improve nutritional status of people, the actors of the different levels should jointly exchange knowledge and take the limitations of a value chain approach into account. Tackling all these issues synergistically within the same setting can accelerate progress to meeting national food and nutrition objectives for countries.

Multi-sectoral experiences in improving nutrition in Ethiopia

The type of policy development and interventions related to nutrition in Ethiopia demonstrate firm government commitment to address food insecurity and undernutrition more comprehensively. A resulting example is the decrease of stunting of under five year old children from 58 to 38 % between 2000 and 2016 ([Ethiopia Demographic Health Survey, 2016](#)). The policy framework includes a multisectoral National Nutrition Programme, a Nutrition Sensitive Agriculture Strategy and the Seqota Declaration that provides a policy framework to find innovative solutions to the challenges being faced, to name a few. In addition, as part of the Scaling-Up-Nutrition Movement actions Ethiopia has put in place a National Nutrition Coordinating Structure that is intended to permeate to the Woreda District level. Ethiopia has a significant contingent of front line staff across sectors like health and agriculture and there have been efforts to develop training materials across different levels of education institutions to enhance nutrition sensitivity. The Ethiopian experience therefore presents useful opportunities for lesson learning.

This Seminar will foster discussion and learning on what needs to happen to synergistically integrate nutrition within value-chain developments, involving multiple related stakeholders working in Ethiopian value chains, not only for food security but to promote more adequate and diverse diets as a prerequisite to accelerating progress on improving nutrition status. The lessons learned will be reported and shared through various relevant nutrition stakeholder platforms in Ethiopia, and the websites of the [Food & Business Knowledge Platform \(F&BKP\)](#), [NWO-WOTRO Science for Global Development](#) in the Netherlands and [AgriProFocus](#).