Food and Agriculture Organization of the United Nations

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The State of Agricultural Commodity Markets *IN DEPTH*

Nutrition in the trade and food security nexus[1]

What are the issues?

Goal 2 of the 17 Sustainable Development Goals adopted by the UN General Assembly in 2015 is *end hunger, achieve food security and improved nutrition and promote sustainable agriculture*, with Target 2.2 being to "end all forms of malnutrition." The World Health Organization also has adopted voluntary global targets on nutrition and non-communicable diseases (NCDs). Though progress towards meeting these targets is being made, malnutrition remains prevalent (IFPRI, 2015). A total of 161 million children under age 5 are too short for their age (stunted), and 51 million don't weigh enough for their height (wasted) (UNICEF/WHO/World Bank, 2015). Millions of women have diets that are insufficient in Vitamin A, iron, iodine and zinc. Forty-two million children under 5 and 1.9 billion adults are overweight (WHO, 2015a). In 2010, it was estimated that over 12 million global deaths resulted from NCDs linked with unhealthy diets and inadequate physical activity (Lim *et al.*, 2013).

All these forms of malnutrition have a range of causes at differing levels. A common cause at the immediate level is unbalanced dietary intake in terms of quantity and/or quality. Food security – "when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO, 2001) – is thus fundamental to addressing all forms of malnutrition. The four pillars of food security play a key role in promoting good nutrition: foods that contribute to nutritious and healthy diets must be

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available to all people throughout the year and utilized in a way that promotes good nutrition. People must also have the income to be able to access the food.

Food security is a necessary but not sufficient condition for optimal nutrition. People also need to have a sanitary environment, adequate health, education and care (including breastfeeding) to have food and nutrition security. Moreover, though it is well established that household access is a critical component of food security, the term "food security" is, in practice, often interpreted as the aggregate supply of food at the global and/or regional/national level (e.g. Godfray *et al.,* 2010). Managing the food supply at these levels does not necessarily translate into food security among households most in need; a country may be "food secure" but still contain malnourished people; the food may also be of inadequate quality for a nutritious and healthy diet. Thus, other conditions need to be met to translate food availability into positive nutritional outcomes.

Linkages between trade, food security and nutrition

Four pathways have been proposed of how trade can influence nutrition in a positive way through enhanced food security (Gilson *et al.*, 2015; UKDBIS, 2013; Brooks and Matthews, 2015; Burnett and Murphy, 2013):

- *Stability of food supply and prices.* Global food output is relative stable compared to domestic food output, so trade in food can act as a buffer to counter domestic fluctuations in food supply and in the prices of that food
- *Diversity of supply.* Trade also has the potential to increase the diversity of national diets by increasing the availability of different types of foods.
- *Lower food prices.* More open trade allows production of foods to switch from higher to lower cost producers, so in theory enabling food prices to decrease for consumers.
- *Increased income.* Increased trade is associated with rising incomes, which can provide government revenues, and improve food access if trade positively impacts employment for poor people.

Yet these pathways are largely limited to the food supply and income aspects of food security (Clapp, 2014). There is very little evidence available on how these changes link through and affect nutritional status on the ground. While a necessary condition for good nutrition, these pathways are not sufficient for all people to have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs. Further actions would be needed, or conditions met, to make this happen.

While there are frameworks that link trade and food security, food security and nutrition, and trade and nutrition, there is not yet an established framework that links all three. This is in part because of the lack of adequate evidence on the linkages, and also because of series of related challenges.

A core challenge is that not all foods are created equal: foods differ in their contribution to improving nutrition. Some foods can contribute to good nutrition in any amount, some in modest amounts, and some are discretionary and should be consumed in moderation. Yet trade may have the effect of boosting the availability and lowering the prices of both healthy foods (e.g. fruits, fish) (Huang *et al.*, 2010; Asche *et al.,* 2015), and foods that should be consumed in moderation (e.g. soft drinks and snacks) (e.g. Hawkes, 2006; Stuckler *et al.*, 2012; Schram *et al.*, 2015). The association of unhealthy eating with trade and accompanying investment is one which has received particular attention owing to concerns about excessive consumption of high calorie snacks and drinks. Concerns have also been raised about the impact of trade on the availability and promotion of breastmilk substitutes (Smith *et al.*, 2014).

Another challenge is that the relationship between trade and nutrition outcomes can be expected to vary over time and space. At certain times of the year, trade can serve to fill food shortages, or in the case of emergencies (del Ninno and Dorosh, 2001); during

other times, if it may undermine local markets (Khor *et al.*, 2006). Trade can also be expected to have different impacts on different countries depending, among other factors, on the nature of the food systems. For example, the relationship between trade and nutrition could be expected to be different between net food importing countries and net food exporting countries (Brooks and Matthews, 2015).

The relationship between trade and malnutrition can also be expected to differ between different forms of malnutrition. Some forms of malnutrition are associated with inadequate consumption, some excess consumption – and in some cases health and inadequate caring practices are more important causes. So children who are experiencing moderate acute malnutrition, or people in emergency situations, may benefit from trade – but people at risk of malnutrition associated with excessive consumption may not.

As a result of these factors, it is hard to draw generalizable relationships between trade and nutrition: trade can be expected to have both positive and negative impacts on nutrition. These dynamics are shown in the Table. Column 3 shows that trade can have both positive and negative implications for food security through the four pathways. Column 4 shows that how these positive or negative impacts translate into better nutrition outcomes in part depends on accompanying actions – or a lack of them.

This, in turn, suggests that a conceptual framework of the links between trade, food security and nutrition requires consideration of the differential impact trade has in different places and at different times, the effect it has on different foods, how it affects different forms of malnutrition, and what is needed to transfer the positive impacts of trade on food security into nutritional outcomes, and mitigate the negative.

Promoting policy coherence between trade, food security and nutrition

In 2014, the Rome Declaration on Nutrition called for "trade policies to be conducive to fostering food security and nutrition for all" (FAO/WHO, 2014). Both nutrition and trade policy are included in the Sustainable Development Goals (SDGs), which call for greater coherence between policies in implementing the Goals. Target 17.14 is "Enhance policy coherence for sustainable development".

Modern trade policy involves a huge array of different policies designed to influence not just the physical movement of products across national borders but the provision of services and economic exchange. It includes measures that influence trade across borders as well as "behind-the-border" policies that affect trade and the incentives for private companies to trade and invest. In what is termed "trade liberalization", the general thrust of modern trade policy has been to reduce barriers, and otherwise facilitate trade.

Despite the links between trade, food security and nutrition, the harmonization of objectives between policies designed to liberalize trade, enhance food security, and improve nutrition has historically been weak. This begs the question: are the objectives of trade policies coherent with the objectives of nutrition action? That is, are they designed to help ensure that actions taken to achieve different policy objectives support rather than undermine each other (OECD, 2014)?

Trade policies can be said to support nutrition when they have objectives synergistic with the objectives of nutrition action. That is, they are coherent with actions that enable and motivate:

- All people – including infants & young children between six months and two years – to consume adequate, safe, nutritious, diverse, healthy diets and safe drinking water all year round.
- Mothers to breastfeed their babies exclusively for the first six months with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond.
- All people, especially at periods of specific nutrient needs such as pregnancy, to have an adequate

Table 1: Examples of implications of trade for nutrition through four food security pathways

	Pathway	Potential food security impact	Condition for (+ve or –ve) nutrition impact
Potential for positive impact	Stability of supply and prices	Facilitates availability of staples during emergencies	Provisions are in place for the food to reach people who lack food during the emergency and the food is of the nutrient quality that matches need
	Lower prices	Lower prices of ingredients used as inputs for ready-to-use supplementary foods	Provisions are in place to ensure ready-to-use supplementary foods reach children experiencing moderate acute malnutrition and are used appropriately
	Diversity of supply	Greater availability of fruits and vegetables and in counter-seasonal periods in importing countries	Programmes are in place to ensure that fruits and vegetables are not just consumed by people who already consume sufficient quantities.
	National and household income	Government revenues are raised	Revenues are directed to support the delivery of breastfeeding support through the health system
Potential for negative impact	Stability of supply and prices	More stable trading environment encourages investment by companies manufacturing high calorie snacks and drinks	Companies aggressively promote these products leading to excessive consumption
	Lower prices	High calorie snacks and drinks become cheaper	People respond to lower prices by consuming more of these foods
	Diversity of supply	Imported grains of poorer nutrient quality displace local production of more nutritious grains (e.g. milled rice replaces millet)	People who previously consumed the nutritious grains have no alternative sources
	National and household income	Employment opportunities reduce possibility of exclusive breastfeeding for 6 months	There are no maternity leave protections in place

Source: Author.

intake of micronutrients such as Vitamin A, iron, iodine, etc.

- People who are malnourished and/or sick are treated through healthcare platforms and programmes.

As for trade itself, the evidence indicates that it is difficult to generalise about the links between trade, food security and nutrition. As described further by Hawkes (2015), there are four core needs to enhance coherence:

- Context-specific analysis of the coherence between trade policy and the nutrition policies and programmes in place in national and local settings.
- Identification of complementary policies and actions to enhance coherence in order to transfer the benefits of trade to the populations who need it, and to mitigate risks (e.g. through consumers and social protection).
- Build capacity for cross-sectoral policy making.
- Improve governance of policy-making processes.

a) Analysis of (in)coherence

It is evident that there are challenges in analysing the degree of alignment between the objectives and outcomes of trade policy and nutrition action. The development of an analytical tool could thus better enable policy-makers to identify the benefits and risks of trade policy for nutrition action – and vice versa – in the context of the full range of national food security policies. This type of analysis is needed for international and regional trade agreements, but, most importantly,

at the national level at which both trade policies and nutrition actions are developed and implemented – and where malnutrition in its different forms is experienced by different populations. A standard analytical tool could enable countries to better analyze coherence between trade policy and nutrition action in a way that also takes into account the international nature of trade policy. The tool should *work backwards* from national nutrition objectives to identify how trade policy would influence the attainment of nutrition objectives along the chain of potential outcomes. Along with identifying potential for coherence and/or incoherence, a second role of the tool would be to identify the complementary policies needed to enhance the synergies and manage the risks of trade policy for nutrition action.

b) Complementary policies

The Table indicates the potential for complementary policies to enhance positive impacts of trade and manage negative outcomes. For example, if a benefit of trade is greater availability of fruit but this is not reaching low-income people, targeted subsidy programmes could be introduced. If trade is displacing local production of more nutritious foods, greater investment in developing stronger market linkages for domestic production to local consumers could be made. If children are adopting unhealthy dietary habits, laws can be put into place to restrict exploitative promotional activities. If women are stopping breastfeeding because of new employment opportunities, maternity leave could be strengthened and enforced. The challenge here is to build sufficient capacity among the relevant stakeholders to identify, implement and advance these policies as part of trade reforms and the food security policy mix.

c) Building capacity

Evidence from research and practice in the area of trade policy and health suggests significant capacity is needed to better integrate trade, food security and nutrition. For example, as noted by Walls *et al.* (2015, p. 1) in the context of incorporating health consideration into trade negotiations "at all stages the capacity needed is expensive, skill-intensive and requires considerable infrastructure, which smaller and poorer states especially struggle to find. It is also a task generally underestimated." In an analysis of policy coherence between trade and health in Asia, Baker *et al.* (2015) identified lack of capacity for engagement between multilateral agencies and between government ministries as a key barrier. A relatively rare reported case of successful coherence between trade policy and health – from Thailand – found that capacity building was essential to the process (Thaiprayoon and Smith, 2014). Mechanisms that can be used to build capacity include political and financial support for trade-nutrition/health programmes in the relevant multilateral, regional and national institutions; technical assistance for developing countries; training programmes and the development of guidelines; trade–nutrition monitoring systems; and legal expertise.

d) Improving governance

Enhancing capacity in turn implies a need for stronger governance. One area that has received particular attention from a nutritional perspective is the need for institutional governance mechanisms to promote coordination between trade and nutrition decision makers at the national, regional and international level (Walls and Smith, 2015). Relevant existing cross-government mechanisms often already exist – such as those to enhance coordination between trade and agriculture – which could be levered to engage nutrition and health stakeholders, improve understanding of nutrition issues, encourage dialogue, while also building trade capacity among the health community so that it can evaluate and understand the potential impacts of trade policy on nutrition. Analysis by Blouin (2007) suggests that these types of mechanism are important not just for formal discussions but also to promote mutual understanding between the trade and nutrition/health communities. Trade and nutrition decision makers come from different epistemic communities, who may not share beliefs about cause and effect: nutrition and health actors may view trade only as a threat to population health, with little consideration for trade objectives; trade actors with their focus on economic objectives, may assume these automatically benefit nutrition and health.

Areas for further work: actions to enhance coherence

Policies to open trade are likely to continue into the future. So are policies designed by countries to promote national food security. Placing nutrition at the centre of this food security–trade nexus is arguably long overdue. Greater coherence between different sectors' policies could enhance efficiency in meeting shared objectives. To do so, governments need to name and treat nutrition as a national development priority and a shared challenge across sectors, as now reflected in the SDGs. Without this step it will be difficult to motivate increased coherence between trade and other economic development policies designed to improve food security, and nutrition.

Further areas in need of development are:

- Governments should promote policy dialogues between sectors in which common goals and shared priorities are agreed. Relevant cross-government coordination mechanisms often already exist – such as those between trade and agriculture – which could be leveraged to engage nutrition and health stakeholders, encourage dialogue and improve understanding of nutrition issues. These mechanisms could also serve to build trade capacity among the health community so that it can better evaluate and understand the potential impacts of trade policy on nutrition.

- Researchers should engage in the development of a standard, clear and useable analytical tool for policy makers to use to assess coherence between trade policy and nutrition action. Researchers should also examine how existing data sources could be used in novel ways to assess coherence in outcomes between trade policies and nutrition actions.

- Government nutrition agencies/health ministries should establish a process for assessing the coherence between their national trade policies and their nutrition actions. The focus should be national priorities for nutrition outcomes among specific groups and/or for particular nutritional problems. The process should aim to identify what complementary policies and/or multilateral action is needed to leverage opportunities and manage risks.

- International donors and funders should support capacity building for nutrition action and for coherence between trade policy and nutrition action.

- Civil society should contribute to the process of identifying areas of (in)coherence between trade policy and nutrition action by reporting examples experienced by people in communities to the attention of both trade and nutrition policy makers. They should also benchmark and monitor progress by policy makers in advancing policy coherence.

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