Food and Agriculture Organization of the United Nations

STRENGTHENING SECTOR POLICIES FOR BETTER FOOD SECURITY AND NUTRITION RESULTS

Trade

POLICY GUIDANCE NOTE | 9

This policy guidance note represents the continuation of a series of eight policy guidance notes that were jointly produced by the Food and Agriculture Organization of the United Nations (FAO) and the Directorate for International Cooperation and Development (DEVCO) of the European Commission, to boost food security and nutrition, sustainable agriculture and resilience. This, and subsequent notes in the series are the sole creation and responsibility of FAO and cannot be considered as a product of any other organization.

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STRENGTHENING SECTOR POLICIES FOR BETTER FOOD SECURITY AND NUTRITION RESULTS

This policy guidance note is part of a series that the Food and Agriculture Organization of the United Nations (FAO) and partners are producing to support policy makers address the food security and nutrition situation in their country. Each note provides guidance on how to sharpen the focus of sector policies in order to achieve sustainable food security and nutrition outcomes.

Contents

Introduction

Trade in agricultural products is expected to continue to increase over the coming decades and will therefore influence the extent and nature of food security and nutrition across all regions of the world. The challenge is how to ensure that the expansion of agricultural trade works for, and not against, the elimination of hunger, food insecurity and malnutrition.

Trade policies affect levels of agricultural trade, which in turn affect availability of food in domestic markets, food prices and incomes, along with other important variables that ultimately affect food security and nutrition outcomes. The impact of trade policies on various aspects of food security and nutrition has given rise to intense debates at the national and global levels and has become central to many trade-related discussions and negotiations.

This guidance note aims to support policy-makers and agriculture sector stakeholders in promoting greater coherence between trade and agricultural policies. It articulates the linkages between trade and the four dimensions of food security, focusing on the sources of risks and potential benefits of an expansion in trade. The note also discusses the appropriateness of different trade and related policy measures in improving food security at different stages of development. Then it addresses the overarching question of how to enhance coherence of trade policies with food security objectives.

Trade in agricultural products has expanded almost threefold in value terms over the past decade, driven by high demand, particularly in emerging economies. With global demand for agricultural products expected to remain strong in the coming decades, the growth of trade is projected to continue to rise, albeit to a lesser degree than in the previous decade.

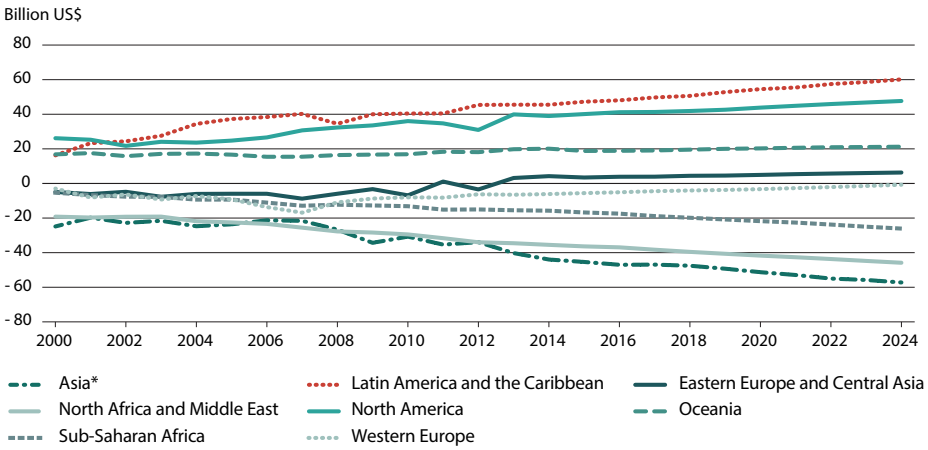
There has been increasing divergence in net trade in agricultural products by region since 2000, which is projected to widen further (Figure 1). This refers to higher reliance on food trade at the global level, with some regions becoming increasing net exporters and others increasing net importers.

Different causes drive the diverging trend of regions becoming net importers/exporters. Asia is the fastest-growing food-importing region, led particularly by China, which is a net importer of several commodities.

Key messages

- The links between trade and food security and nutrition are inherently complex, with several channels of interaction simultaneously affecting the different dimensions of food security: availability, access, utilization and stability.
- Trade can have important benefits for food security and nutrition, but also implies some risks in the short and long terms. It is essential to understand the specific agriculture, trade, food security and nutrition conditions when formulating trade and related policies.
- Trade and related policies must be formulated as part of a broader package of policies that prioritize long-term structural transformation objectives over short-term political or commercial interests, and the instruments of trade policies must be better aligned to country-specific conditions.

FIGURE 1. **Evolution of net trade in agricultural products by region, 2000-2024**



Notes: Net exporters of cereals, oilseeds, sugar crops, meats, fish and dairy products evaluated at 2004-2006 constant international reference price. Data from 2014 onward are projections.
* "Asia" covers all of Asia except for Central Asia and includes Southeast Asia, South Asia and East Asia (including China).

Source: FAO and OECD. 2014. OECD-FAO Agricultural Outlook 2015-2024. Paris, OECD Publishing.

Imports into Sub-Saharan Africa have been increasing mainly due to the population growth of the region, while the Middle East and North Africa are rapidly becoming net importers, as food production lags behind the growing demand for agricultural products. Among net exporting regions, Latin America leads, with production increases outstripping sustained consumption growth. In North America, which follows as the second largest net exporter, the export growth is a result of stagnant consumption in the region, rather than production growth.

This evolution in food trade stems from an evolving global landscape. Some drivers of food consumption patterns include population and income growth, urbanization and shifting preferences from traditional cereal-based diets to more nutritious and diversified diets. At the same time, there is a growing demand for coarse grains, driven by their increasing use for animal feed and biofuel production. In responding to these changes, the market will be replete with more value-added products and robust global value chains (GVCs) with increasing levels of vertical coordination.

Another important trend in agricultural trade is the increasing concentration of exports of agricultural commodities in a few countries, while imports are more dispersed over a large number. The heavier concentration on few suppliers could exacerbate certain types of risks, such as those driven by climate events and sudden changes in trade measures. This concentration could become more worrisome since there is growing food-import dependency in resource-constrained countries. Combined with high food-import dependency, volatile prices of agricultural commodities, such as those that were observed during the price spikes between 2006 and 2011, could introduce market instability and food insecurity.

As a consequence of the growth in food trade, and the changing patterns of food consumption and production, trade will play an increasingly important role in influencing the extent and nature of food security across all regions of the globe. It is in this context that the guidance note reviews the role of trade in improving food security and nutrition, highlighting both the challenges and opportunities posed by greater openness to trade.

Purpose of this guidance note

The purpose of this guidance note is to support policy-makers and agricultural sector stakeholders in sharpening the focus on the implications of trade and trade policies on food security and nutrition. It explores the interrelationships between trade and food security and nutrition, outlining how trade measures influence food security and nutrition outcomes and identifying the policy space within trade agreements for addressing food security concerns and making a case for stronger linkages between the agendas for trade and food security.

Background

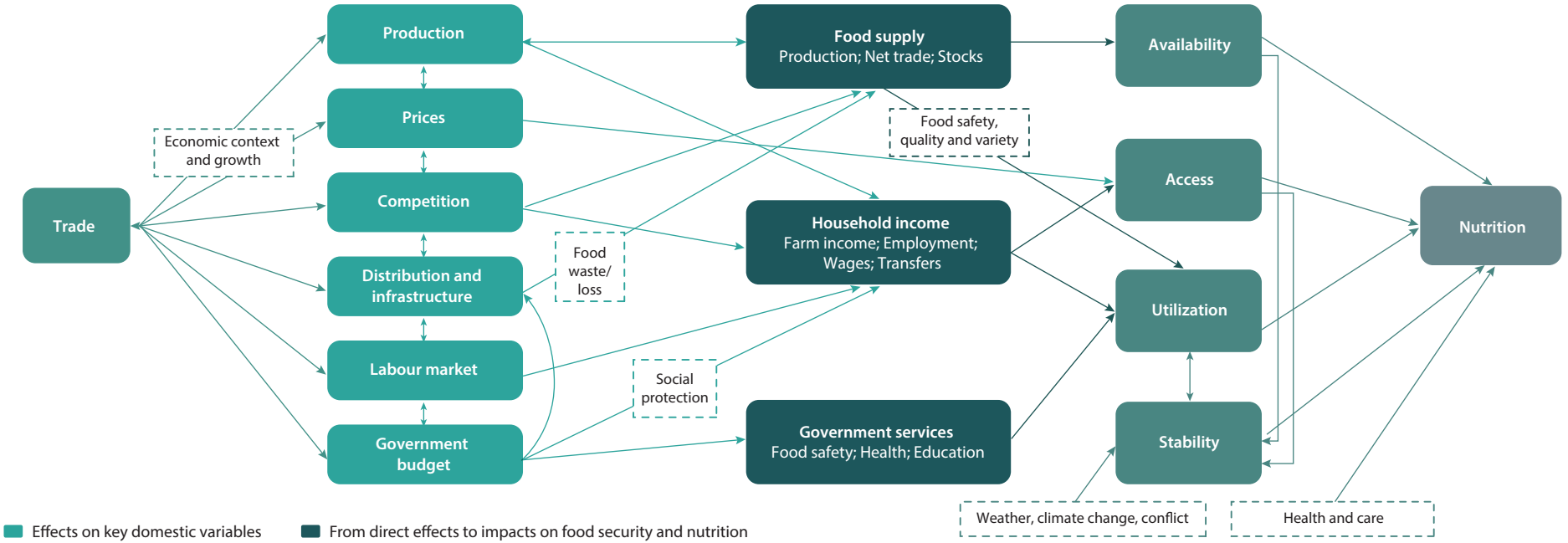
Linkages between trade and food security and nutrition

The links between trade and food security and nutrition are inherently complex, with several channels of interaction simultaneously affecting the different dimensions of food security: availability, access, utilization and stability.

Figure 2 provides a simplified depiction of the linkages between trade and the four dimensions of food security, highlighting three key pathways of interaction between them:

- **Economic context and growth:** trade can affect poverty – which is a key underlying factor of food insecurity – by influencing overall income growth in an economy, as well as the sectoral composition of growth.
- **Effects on key domestic variables:** trade, influenced by the economic context and sectoral composition of growth, directly affects key domestic variables such as food production, prices, employment and government revenues. In the longer run, trade affects competitiveness and the development of marketing channels and distribution networks. It is important to recognize that the level of trade is also affected by these variables.

FIGURE 2. **Pathways between trade and food security and nutrition**



Source: Based on FAO, 2015. The State of Agricultural Commodity Markets 2015-16.

- **From direct effects to impacts on food security and nutrition:** these direct effects translate into changes in food security indicators through three key factors: total food supply, which affects how much and what kind of food is available and how it is distributed across space and time; household income, which affects the access to and utilization of food and therefore the composition of diets; and government revenues and services, which affects all four dimensions of food security. The impact of trade on nutrition will depend on whether diverse, safe and nutrient rich foods that cover people's nutrient needs and promote healthy dietary practices are readily available and accessible for all.

Understanding these linkages will help countries assess the potential implications of trade openness on food security and nutrition and design appropriate responses to problems of undernourishment and malnutrition. The following example illustrates this point. In country A, average dietary energy supply is not sufficient to meet dietary energy requirements, and the level of diversity of available food is low. The resulting undernourishment and malnutrition problems cause a high prevalence of vitamin A deficiency, anemia and stunting. If food supply variability is high, country A is likely to be vulnerable to sudden changes in agricultural food prices. These trends may be explained, at least in part, by the structure of agricultural production and trade in the country, characterized by little diversification of production and high reliance on imports of cereals and other food staples. In this situation, trade and related policies may affect food security and nutrition situations both positively and negatively (Table 1).

The multidimensional nature of both trade and food security makes it difficult to determine a generalizable relationship between the two. Therefore, the challenge is one of ensuring that the expansion of agricultural trade works for, not against, the elimination of hunger, food insecurity and malnutrition in all its forms. This challenge has been at the forefront of the debates and trade negotiations as governments struggle to find a common ground between the benefits of greater trade openness and food security concerns and priorities of individual countries.

TABLE 1. **Potential positive and negative impacts of trade on food security situation in country A**

	Availability	Access	Utilization	Stability
Positive impacts	Trade could boost imports, increasing the quantity and variety of food available.	Crop prices (e.g. for maize) are likely to decrease, while incomes could rise in competitive sectors (e.g. fruits).	Great variety of available food may improve vitamin A, stunting and anemia.	High imports could mitigate production shortages and weather-induced shocks.
Negative impacts	Production may be curtailed due to competing imports (e.g. of meat and cereals).	Incomes may decline in import-competing sectors (e.g. maize, meat, other cereals)	Greater consumption of cheaper, high-calorie food may worsen nutrition and lead to overweight.	Higher cereal import dependence may imply greater vulnerability to changes in trade policy by cereal exporters.

Food availability and trade

As countries become more open to international trade in agricultural products, they import greater volumes of food which could be more diverse than what is produced domestically. Additionally, by diversifying the sources of food, trade can help to ensure that nutritious and safe food is available throughout the year. In the long run, a greater openness to trade can promote greater competition between domestic and international producers, and among domestic producers. This can lead to a greater specialization in production, improved productivity and a boost in production.

On the other hand, in the short run, for net exporting countries in particular, greater openness to trade may facilitate access to more lucrative export markets for domestically produced foods, decreasing their availability in local markets.

Furthermore, greater openness to trade may lead to lower domestic food production through greater competition from sudden increases in volumes of imports (Box 1). Import surges can be disruptive to some sectors if they are frequently exposed to fluctuating levels of imports, and if producers – particularly smallholders – are not adequately equipped to bear the risks associated with such market instability. There are also concerns that the expansion of trade may shift production patterns at the local level in a way that favours cash crops that are intended for export markets. This often occurs at the expense of traditional and indigenous foods, which are often superior from a nutritional perspective. In turn, food production is displaced for family consumption. This leads to less domestic availability, especially when imports are suddenly constrained because of restrictions imposed by exporting countries.

Box 1 Negative consequences of import surges

As countries become more open to international trade in agricultural products, they become more exposed and potentially more vulnerable to sudden changes in global agricultural markets. For example, import surges can hinder the development of agriculture in developing countries if the sector is frequently exposed to fluctuating levels of imports. A case study analysis undertaken by FAO in the mid-2000s provides a number of examples of potential injury resulting from surges in imports. Perhaps most dramatic were those associated with the 1998 collapse of the Russian poultry market – which had previously accounted for a quarter of global poultry imports – following a significant currency depreciation. This collapse resulted in a significant suppression of world market prices (with cuts reaching 32 percent) and trade diversion, causing poultry product import surges into third markets, particularly in Caribbean and several African countries, including Côte d'Ivoire and Ghana. In Côte d'Ivoire, poultry output declined by two-thirds as imports increased six-fold between 1998 and 2004, with 1,500 producers going out of business and 15,000 jobs lost. In Ghana, capacity utilization in poultry processing fell to 25 percent while poultry imports increased from 4,000 tonnes in 1998 to 124,000 tonnes in 2004.

Source: FAO. 2006. Import surges in developing countries: the case of poultry. FAO Briefs on Import Surges: Commodities No. 1. Rome.

However, there is also evidence that increases in imports are largely demand-driven. A recent analysis of production and imports in developing countries by Diaz-Bonilla (2015) indicates that changes in production levels are driving the changes in imports in least developed countries (LDCs) and low-income food-deficit countries (LIFDCs), supporting the hypothesis that trade has a stabilizing effect on supplies: shortfalls in production are compensated by increased imports to stabilize domestic consumption, while imports diminish in periods of abundant domestic output.

Food access and trade

In the short-term, greater openness to trade of food and agriculture products triggers changes in food prices, thereby affecting the extent of physical and economic access to food. For example, trade may lead to lower prices in net-importing countries due to the increased supplies and greater competition between foreign and domestic producers. However, whether these lower prices translate into greater access to safe and diversified healthy diets depends on i) the household income status and ii) the extent to which prices of nutrient-rich food decrease relative to that of nutrient-poor foods. In the long run, trade can boost incomes in competitive sectors, through greater employment and income generation for producers (and farm and food processing workers) due to the increased export opportunities. These incomes can be used to purchase larger quantities, and possibly a wider variety of nutritious food products.

On the contrary, the domestic price of exportable products may rise when exports increase after opening to trade. As a consequence of these higher prices, domestic consumers' access to these products may be lowered. In the longer-run, greater openness to trade may also lead to lower incomes in import competing sectors, if producers and other actors in these sectors do not have access to the appropriate safety nets and opportunities for transitioning to other competitive activities in order to cope with the negative consequences. Therefore, government budgets for social protection and agricultural development would play a key role in preventing food insecurity of those who derive their incomes from these sectors.

Food utilization and trade

Utilization refers to the way the body makes use of various nutrients in the food, and can thus refer to food choices and diversity of diets, food preparation and feeding practices, intra-household distribution of food, and aspects of food safety. Utilization, together with the other pillars of food security (availability, access and stability), as well as other food related determinants (e.g. health, sanitation and hygiene), determine the nutritional status of individuals.

Food production in many developing countries is less diversified than total food availability, which includes imports. In these countries, trade could lead to a more varied diet, which is associated with better nutritional outcomes. However, trade is also associated with shifts in food consumption patterns and the so-called "nutrition transition", by reducing prices and increasing the availability of a variety of foods that include those of low nutritional value. This transition refers to a shift in the diet towards higher intakes of livestock products, as well as sugar, fats and oils, often in the form of convenience and fast food. There are growing concerns that the transition towards an energy-dense and imbalanced diet has contributed to overweight, obesity and diet-related non-communicable diseases (FAO, 2016) (Box 2). Some drivers of this trend include relative price changes, income growth, urbanization, value chain development, investment in infrastructure, transformation of the retail sector and trade policy reforms.

Moreover, trade can affect the safety of food products for human consumption. By promoting the implementation of stricter food safety controls

in domestic production and distribution as a result of wider participation in GVCs, food safety and quality can be improved. More generally, adherence to international standards, such as those established by the Codex Alimentarius, as part of engaging in international trade can help to improve the safety and quality of food available to consumers.

Food stability and trade

The stability of food supplies, food quality and diversity, purchasing power and other key determinants relates to the fourth component of food security and nutrition. With stability of the other food security dimensions, people can have access to food at all times, without risk of sudden shocks or cyclical events disrupting this access.

Taking into account that domestic production in individual countries is typically more volatile than global and regional country aggregates, trade plays an important role in pooling the risks associated with production shortfalls. Moreover, with a large share of the food consumed in developing countries produced domestically, food imports that complement domestic production help to stabilize food prices and ensure year-round access to nutritious foods such as fruits and vegetables. This stabilizing effect of trade in individual countries also extends to global markets, whereby weather-induced production shortages in some regions can be balanced by production surpluses in other regions.

However, greater openness to trade may also present a challenge to a country's stability of food supplies and food prices, exposing the importing countries to shocks associated with sudden changes in trade policies adopted by their trading partners. In addition, it may imply vulnerability to changes in world prices and to import surges in the sectors where production is largely non-commercial, input and output markets are fragmented, and risk management systems are inadequate.

Box 2 Dietary transition in Kingdom of Saudi Arabia

Saudi Arabia provides a case in which the national dietary transition has been a policy concern. The increase in high-energy and -protein food availability, driven by rising oil revenues since the 1970s, has put aggregate food availability above requirements for an active and healthy life. Over-consumption, further encouraged by government subsidies and unbalanced diets favouring meats, fats and fast foods coupled with sedentary lifestyles, have led to increased prevalence of obesity. Diet-related non-communicable diseases now account for 78 percent of deaths.

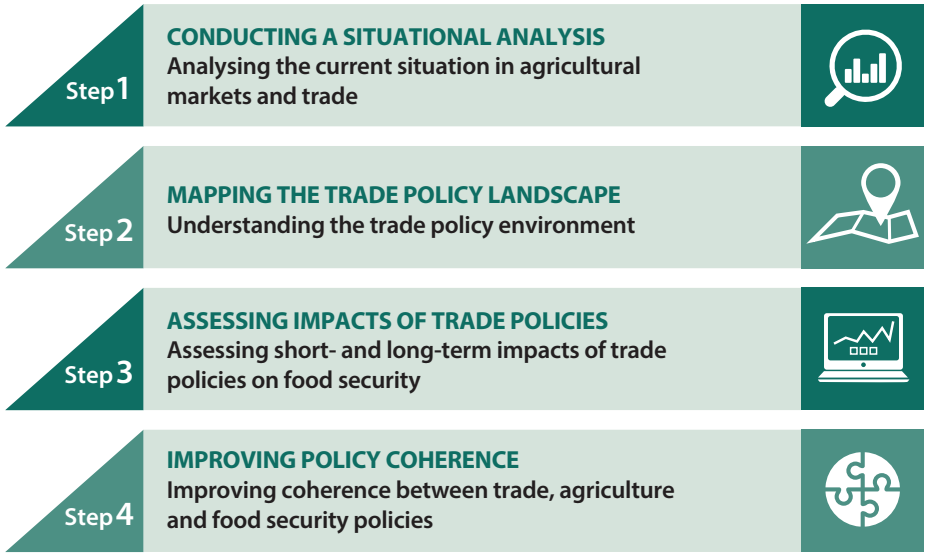
Source: P. Konandreas. 2016. Saudi Arabia's food security policy and nutrition. Presentation at the expert consultation on trade and nutrition, Rome.

Stepwise approach

Facilitating greater coherence between food and nutrition security and trade policies

This note offers a stepwise approach to facilitating greater coherence between agricultural trade and food security and nutrition policy agendas. Step 1 provides guidance for analysing the current situation. Step 2 discusses the trade policy environment, including the frameworks for national and regional/global trade measures, and the policy space available to developing countries for addressing food security and nutrition objectives within international trade rules. Step 3 examines the short- and long-term impacts of trade policies on food security and nutrition. Step 4 identifies ways in which policy reform might be brought about to improve the coherence among trade, agriculture and food security policies.

FIGURE 3. **Four steps for facilitating greater coherence between food and nutrition security and trade policies**



Step 1 CONDUCTING A SITUATIONAL ANALYSIS

The effects of trade policy changes on the food security and nutrition situation of a country are largely context-specific, depending on a wide range of variables (depicted in Figure 2) and other policies in place. Removal of trade barriers can be motivated by the desire to encourage market competition and specialization based on comparative advantage as determined by endowments with respect to land, labour, technology, climate and other resources. In theory, countries engage in trade, exporting the goods which they are comparatively better at producing, and importing the others. This specialization may lead to efficiency gains and more efficient food production, increasing welfare at the global level. However, the advantages and disadvantages of greater openness to trade also depend on the level of

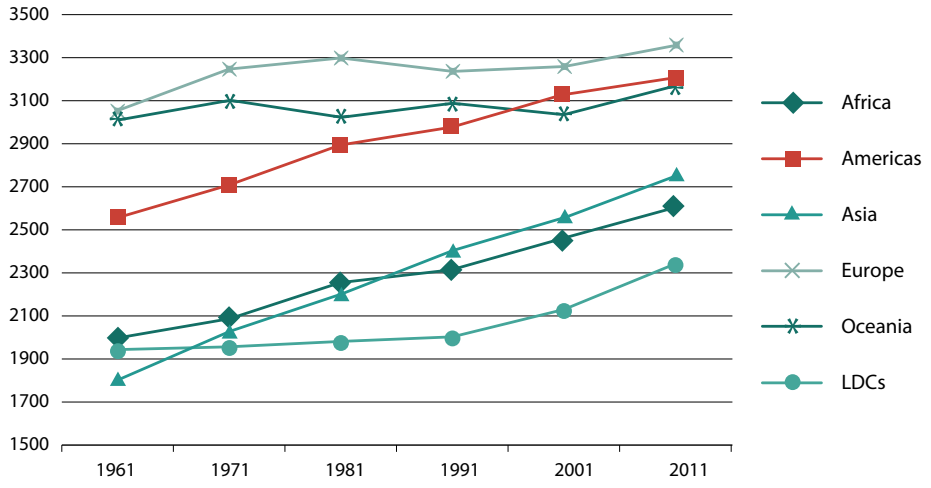
economic development and the role of agriculture in the economy as well as the institutional capacities to take greater advantage of trade opportunities while mitigating the negative effects on some sectors or population groups.

When contemplating trade reforms, it is therefore important to analyse the current situation in a given country, with regard to not only the food security and nutrition situation, but also the level of economic development, maturity of agricultural markets, structure of the agriculture sector, and patterns of trade. In the following analysis, the guidance note enlists selected elements and possible data sources where appropriate, leaving room for each country to consider other related factors.

Production and consumption trends

- **Production:** understanding trends in production of agricultural products contributes to the situation analysis for the agriculture sector in an economy. FAOSTAT provides data on production values and volumes for various food products that are expressed in both total and per capita terms. Additional variables relevant for crop production, such as area harvested, yield and seed use are also available.
  Apart from information on production, FAOSTAT contains data that reveal underlying drivers of trends in agricultural production. These include the use of inputs (such as fertilizers, pesticides and land), investment (on machinery, as well as in the form of credit to agriculture or government expenditure), producer and consumer prices/price indices, land use (arable, under agricultural production and equipped for irrigation), and agricultural science and technology indicators on research and development.
- **Consumption**: another important variable to take into consideration is the total food utilization and food that is available for consumption. Patterns of a country's food and dietary energy supply (total calories, protein and fat) are available from FAO's Food Balance Sheets (FBS). FBS shows the trends in the overall national food supply and reveals the extent to which the food supply of the country as a whole is adequate in relation to nutritional requirements (FAO, 2001). Figure 4 illustrates per capita food supplies available for human consumption in caloric value from 1961 to 2011 by region. It is important to note that the amount of food actually consumed may be lower than the availability, depending on amount of food loss and waste during storage, preparation and cooking (FAO, 2017 b). Europe and Oceania traditionally have been regions with the largest amount of available food, while Asia is fastest growing in expanding food supplies in terms of kilocalories. Per capita food supply has been also rising fast in LDCs since 1991, although the current supply level is still lowest among all the regions.
- **Composition of diets:** growing incomes, urbanization and globalization all contribute to a global trend towards greater consumption of protein-rich products and a more diversified diet. Consequently, this shift in dietary trends leads to a change in the composition of trade.

FIGURE 4. **Food supply (kcal/capita/day) by region, 1961-2011**



Source: FAO Food Balance Sheets.

In developing countries, meats, vegetable oils and sugar now account for 35 percent of the caloric intake per capita, increasing from 30.1 percent in 2002–04 (OECD/FAO, 2015). They are important components in human diets and constitute a crucial source of energy, but at the same time increasing consumption of vegetable oils and sugar in processed and packaged food is raising nutrition concerns. This is why the focus on malnutrition has been sharpened in recent decades, with growing attention to the "triple burden of malnutrition". This term refers not only to chronic undernourishment, but also to micronutrient deficiencies – the "hidden hunger" – and to obesity and health problems associated with being overweight.

Data on the composition of diets can be found in FBS, which provides information on availability of food *per capita* by commodity groups such as alcoholic beverages, animal fats, cereals, fish, meat, fruits, sugar and sweeteners, vegetable oils and vegetables; and by country, regions and special groups (e.g. LDCs, LIFDCs, small island developing states). The FBS data on protein and fat quantity supplied per capita can also be an indication of the diet patterns of a country.

Despite the collection of data on individual food consumption in many countries, including low-income ones, the data are still scarce. This is partially due to lack of data harmonization, which prevents comparisons across periods of time, seasons and geographical locations. Therefore, FAO and the World Health Organization are working together to create a publicly available multipurpose global database on individual food consumption (Global Individual Food consumption data Tool, or GIFT). The collation and harmonization of existing data, collected through national and sub-national surveys on individual food consumption, will contribute to increase the capacity of all stakeholders to monitor food consumption (FAO, 2017a).

- **Characteristics of food-insecure populations:** the distribution and location of food-insecure and malnourished populations play an important role in setting trade policy objectives for enhancing food security and nutrition situations. If most consumers are smallholder producers and account for the predominant share of food-insecure households, measures that provide incentives for increasing agricultural productivity and improving the connection of smallholder farmers to markets, coupled with social protection, play a crucial role. By contrast, if the majority of those suffering from hunger are the urban poor, policies may be targeted toward securing cheaper food that contributes to a healthy diet and covers nutrient needs. For this, greater openness to food imports, combined with targeted policies for the relatively smaller number of producers, could be preferable.

  Food security indicators that are produced by FAO and other international organizations are collected in a single database with the aim of building a more informative system on the food security situations.[1] The indicators include:

  - Adequacy of dietary energy supply, value of food production, share of dietary energy supply derived from cereals, roots and tubers, and average protein supply, as part of availability;
  - Prevalence of undernourishment, share of food expenditure of the poor, and depth of the food deficit, as part of access;
  - Cereal import dependency ratio, arable land equipped for irrigation, value of food imports over total merchandise exports, per capita food production and supply variability, as part of stability; and
  - Percentage of children under five years of age who are affected by wasting, stunting and/or underweight, prevalence of anaemia among pregnant women, and prevalence of vitamin A deficiency in the population, as part of utilization.

[1] http://www.fao.org/economic/ess/ess-fs/ess-fadata/en

Characteristics of the agriculture sector and structural change

In the countries where agricultural production is dominated by smallholder farmers, and rural inhabitants account for a large share of the population, the set of policies will need to be quite different from that in the countries where the agriculture sector is more concentrated in large farms and more capital- and technology-intensive. For these countries, measures that provide opportunities and incentives for increasing production and improving productivity may have a crucial role.

Further, in the context of the increasing importance of standards and the proliferation of supermarkets in developing countries, GVCs are gaining greater significance, and so is the inclusion of smallholder farmers in these value chains. However, smallholder farmers' participation in GVCs is commonly considered to be constrained due to their production, which is characterized by small production volumes of variable quality. Contrary to this view, case studies in different countries and geographical settings show an increasing number of small and poor farmers being included in supply chains, which play a crucial role in technology transfer and productivity growth, with positive direct and indirect implications for food security (Swinnen, 2015). Collective organization of farmers is often a crucial requirement to ensure their successful engagement in value chains. Moreover, even if small farmers are not directly included, improvements in poverty and food security and nutrition can be made through other channels, such as employment.

Thus it is important to look beyond agriculture production, at the broader food sector, including the midstream segment (e.g. food processing, logistics and wholesale) as well as the downstream segment (e.g. food retailing and catering). In other words, an analysis of the food system[2] is needed to make sense of the food security and nutrition situation and to identify possible impacts of policies as well as priorities for responding to food security and nutrition challenges.

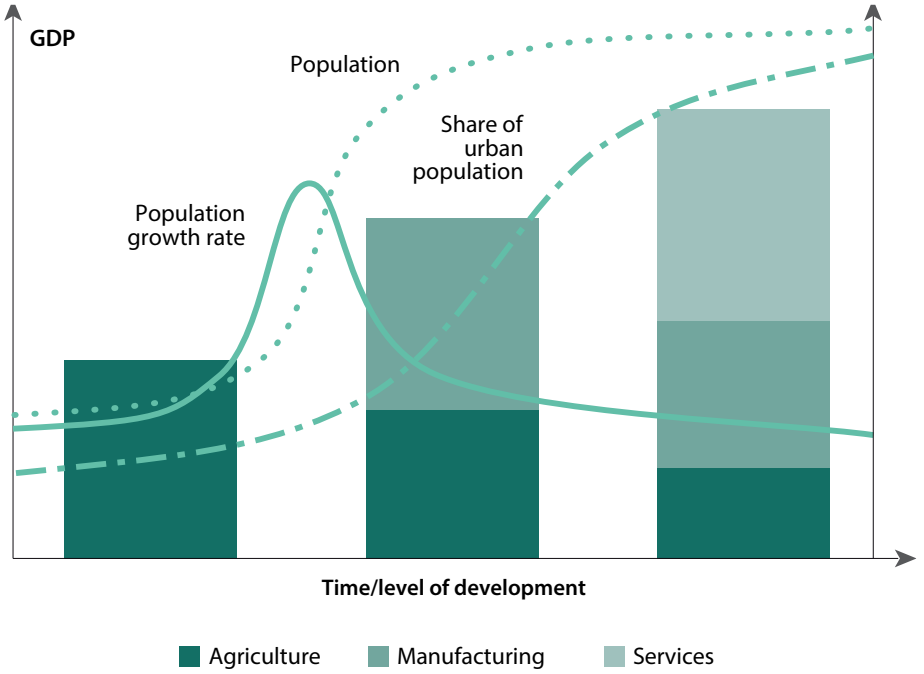
Structural transformation and stages of agricultural development

Structural transformation refers to the reallocation of economic activity and employment across the broad sectors: agriculture, manufacturing and services (Herrendorf *et al.*, 2014). In a standard view of structural transformation, countries at low levels of development start from a position of having a sizeable, non-commercial agriculture sector that accounts for a large proportion of their GDP and an even larger proportion of employment (Figure 5). The agriculture sector is at the core of the structural transformation process in both the short and long terms. In the short term, the majority of the poor depend on agriculture to make their living and face the risks of volatile food prices. In the long term, the agriculture sector becomes increasingly commercialized and competitive (with substantial forward and backward linkages), and the manufacturing sector grows, absorbing more labour and triggering urbanization.

The contribution of the agricultural sector to GDP and total employment (available in the World Development Indicators database) as well as other variables – such as those that capture agricultural incomes, functioning of rural markets, investments in agriculture, infrastructure development, access to information, financing and risk management tools producers – could all provide an indication of the level of agricultural development and structural transformation in an economy. Paying attention to the prevailing agricultural development and economic context can in turn help policy-makers prioritize policy objectives to support their long-term development and food security goals.

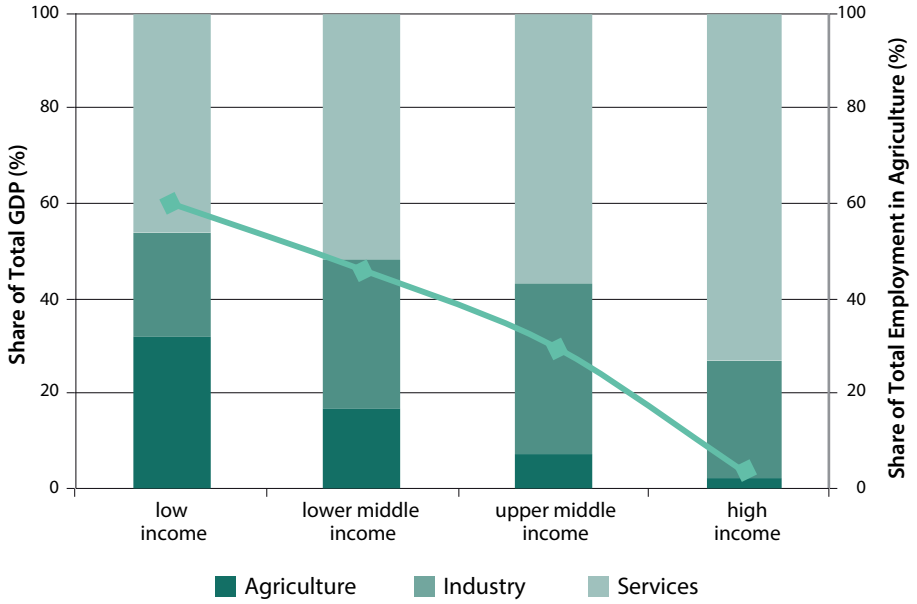
[2] *"A food system gathers all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, distribution, preparation and consumption of food, and the outputs of these activities, including socio-economic and environmental outcomes."* (HLPE, 2014).

FIGURE 5. **Standard understanding of structural transformation**



Source: FAO, 2015. The State of Agricultural Commodity Markets 2015-16.

FIGURE 6. **Role of agriculture in different income groups (share in GDP and total employment, %)**



Source: FAO. 2016. Rural Transformations- Information note No. 7. Rome.

Agriculture not only employs a high proportion of rural and poor populations, but also represents an important share in GDP in low-income countries. As developing economies grow and undergo structural transformation, employment and share in GDP tend to shift away from agriculture into other sectors, such as industry or services, as shown in Figure 6. In addition, agricultural trade can speed up shifts in economic activity from agriculture to other sectors, resulting in asymmetries between sectors in terms of output growth and incomes.

Patterns of trade

For a meaningful discussion on how trade contributes to reducing food insecurity, it is also important to understand the patterns and drivers of trade flows among different countries. Net food-importing and net food-exporting countries differ greatly in their policy priorities and trade negotiating positions, precisely because the implications of more open trade on domestic markets, consumers and the overall economy are very different.

The UN Comtrade database contains standardized official annual trade statistics reported by countries and reflecting international merchandise flows, with coverage reaching up to 99 percent of world merchandise trade. Therefore, it offers a complex panorama of trade values and quantities on goods and services which can be searched by commodity codes such as Standard International Trade Classification and Harmonized System.

Policy-makers may also browse International Trade Centre (ITC) tools, in which data on market access and standards are available. Market Access Map shows tariffs applied by importing countries, tariff rate quotas, trade remedies (anti-dumping and safeguard duties), rules of origin and non-tariff measures. Standards Map offers information on private or "voluntary" standards, including those linked to food safety issues, carbon emissions measures and specific requirements for labour rights and gender issues.

World Integrated Trade System (WITS) of the World Bank provides diverse data on trade, tariff and development indicators, among which some specialized data, such as Revealed Comparative Advantage (RCA) Index, can be found. The objective of this measurement is to help assess a country's export potential and to provide potential trade prospects with new partners. According to the World Bank, the RCA index is often measured by a product's share in the country's exports in relation to its share in world trade. Similarly, WITS also provides an Export Specialization Index that indicates product information on revealed specialization in the export sector of a country. It is calculated as the ratio of the share of a product in a country's total exports to the share of this product in imports to specific markets or partners (World Bank, 2010).

Step 2 MAPPING THE TRADE POLICY LANDSCAPE

Trade policy measures and global governance of trade

In the previous chapters, the note has revisited the evolution in patterns of global trade, linkages between trade and food security and nutrition, and some factors related to agriculture and food security and nutrition that need to be taken into consideration when designing trade policy. This part of the note discusses the different types of national trade policies and international frameworks that affect the formulation of agricultural trade measures. Throughout this guidance note, trade policies refer to government actions or measures that directly or indirectly affect trade flows. These can be divided into border and domestic policy measures.

- **Border measures:** border measures are applied when goods and services cross a country's frontier. These policies include import tariffs and quotas, export subsidies or taxes, quantitative export restrictions, and non-tariff measures such as SPS regulations and customs procedures. The note mainly addresses restrictive measures such as import tariffs/quotas and export taxes/quotas, which are considered to have significant effects on trade flows, as they are applied at the border. Import tariffs can be designed as a percentage of the border price (i.e. *ad valorem* tariff), or as a fixed amount of money per unit of import (specific tariff), while import quotas refer to limits on the quantity that can be imported. An export tax is a levy on goods that are exported, and an export quota is a restriction on the quantity of exports.
- **Domestic measures:** among domestic measures, this guidance note will discuss output subsidies/producer price support measures and input subsidies, as these are common instruments of domestic agricultural support in many countries. Output subsidies/producer price support measures are usually intended to support farmers in import-

competing sectors. This type of policy could take the form of minimum guaranteed prices or subsidies on the quantity produced, paid directly by the government to farmers to raise the price or incomes received by producers. Input subsidies, in the form of credit or applied on fertilizer or other inputs, have the effect of lowering production costs.

Policy space for pursuing food security objectives under trade agreements

Trade agreements are at the heart of the trade and food security debate, as they set out the rules for national trade and agricultural policies, which play a key role in determining food security outcomes. The World Trade Organizations (WTO) Agreement on Agriculture (AoA), which resulted from the Uruguay Round of multilateral trade negotiations in 1995, was the first attempt to agree on a comprehensive set of disciplines on members countries' agricultural trade policies, seeking to reduce the distortions in agricultural markets that were prevailing at the time. Agricultural negotiations continued as part of the Doha Round of multilateral trade negotiations launched in 2001. The relationship between trade rules and food security became an increasingly central element in this round of negotiations.

The contribution that trade can make to a country's food security and nutrition situation is partly determined by the trade disciplines that apply to other countries' policies, but also by the "policy space" that the country itself is granted under WTO rules. In the AoA, specific flexibilities are provided to developing countries to help them pursue their food security goals. However, there is continuing debate on the level and relevance of flexibility available to countries within the AoA, and growing consideration for alternatives to the multilateral trading rules, including regional trade agreements (Box 3).

The AoA imposes limitations on the policy space for agriculture of all WTO members, including developing countries, under each of its pillars: market access, domestic support; and export competition. Although significant

Box 3 Regional trade agreements

An increasing share of global trade is taking place through bilateral, regional and interregional agreements. The number of regional trade agreements (RTAs) has expanded from fewer than 20 in 1990 to the 270 currently in force. Concluding the so-called "mega-regionals" will raise this share further.

While market access provisions remain important for agricultural products, the RTAs of our times usually go beyond these commitments to include "deep" provisions addressing a range of "behind the border" barriers to trade and promoting regulatory convergence and economic integration. Such deep provisions – either of a "WTO-plus" nature providing for additional obligations in areas already subject to commitments in WTO agreements or of a "WTO-extra" nature covering areas outside current WTO coverage – can encompass such matters as Technical Barriers to Trade and SPS measures, services, investments and intellectual property.

RTAs normally lead to the creation of trade among the participating countries. However, with respect to the regulatory aspect, there are concerns about the ability of developing countries to adjust to more rigorous standards and to overcome the increased transaction and administrative costs.

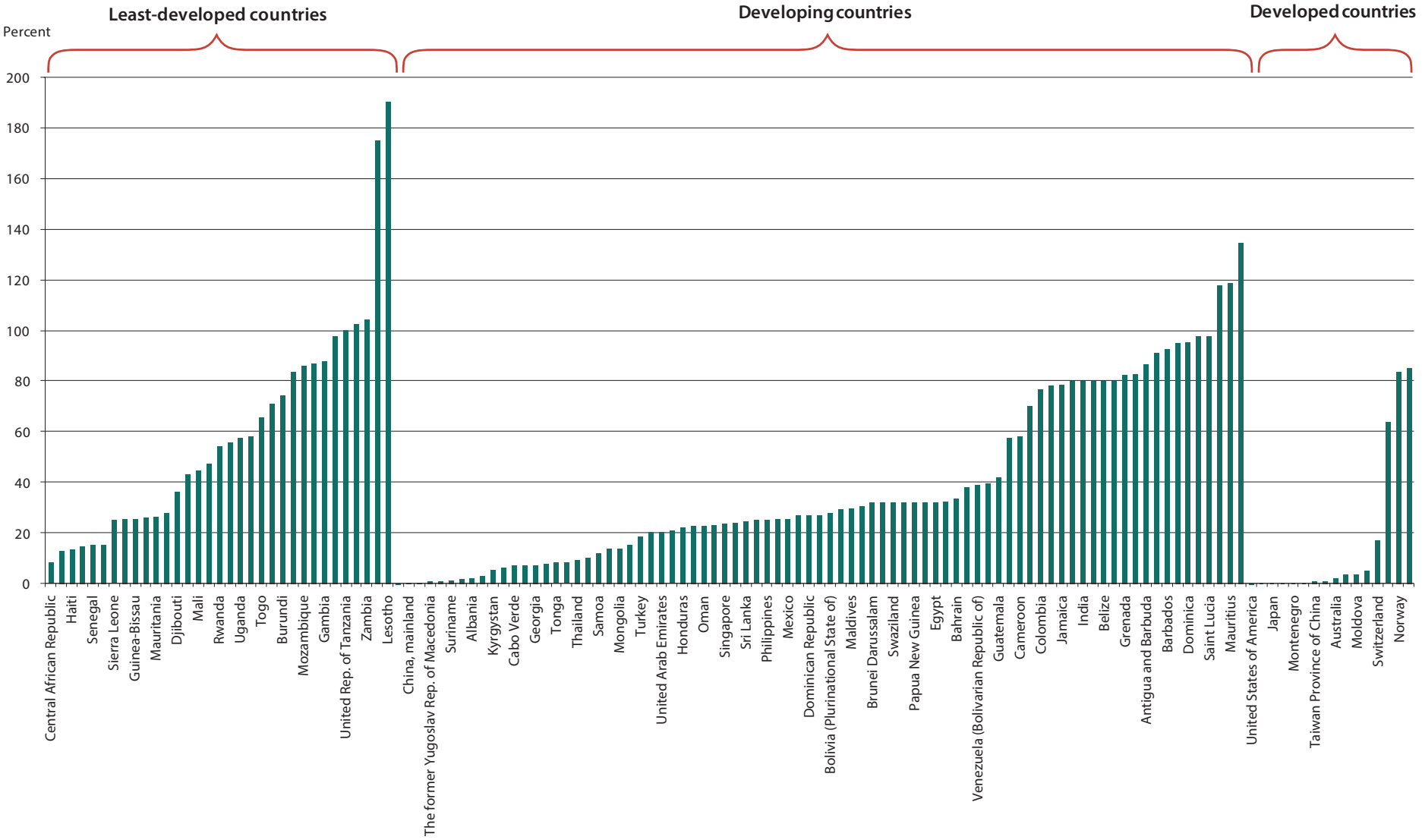
Issues such as subsidies are not included in RTAs, as they can only be negotiated multilaterally, since no country would agree to discipline the use of agricultural subsidies in an RTA context without the assurance that other large countries were accepting similar disciplines.

Moreover, the political challenges of obtaining legislative approval of such agreements may not be much less than those of passing a multilateral trade deal. RTAs also raise systemic issues for the multilateral trading system because, by definition, they discriminate against countries outside the RTA.

flexibilities exist through these provisions, there has been a continuing debate over whether the AoA disciplines more generally are appropriate for developing countries seeking to promote their agricultural development and improve their food security and nutrition situation.

- **Market access:** the market access provisions of the AoA discipline the use of measures such as tariffs and quotas which affect imports. The policy space for import protection is defined by the height of the bound tariffs that WTO members commit to not exceeding. These bound tariffs represent the policy space available to a country because, in principle, a country has the scope or the policy space to raise its tariffs to the bound levels. The policy space may be limited for individual products, which can be an issue for products considered sensitive, or strategic for food security and improved nutrition. Moreover, even if there is scope to increase applied tariffs to the allowed bound level, doing so may be detrimental to domestic consumers, which prevents many countries from actually using the policy space available.
  When tariffs actually applied are examined, there is almost no difference among the three groups: developed and developing countries and LDCs. Consequently, on average, both LDCs and developing countries seem to have considerably more unused policy space (60 percent and 38 percent in 2013, respectively) than developed countries (19 percent) (Matthews, 2015). Figure 7 depicts differences in unused policy space by countries and country groups; within the same group, the unused policy space varies depending on the country, albeit higher on average in LDCs. However, it is important to note that these are average figures, and there can be significant heterogeneity by country and by commodity.
- **Domestic support:** the domestic support provisions discipline the use of measures such as subsidies to farmers under agricultural support programmes. The AoA classifies domestic support measures into two basic categories: those that are not subject to ceiling commitments (i.e. measures meeting the "green box", "blue box" or "development box" criteria); and those that are subject to ceiling commitments ("amber box"). Policies exempted from Total Aggregate Measure of Support (AMS) commitments under the green box include support through policies that meet specific criteria designed in a way that do not distort production and trade, or at most cause minimal distortion (Box 4). In addition, such measures must be government-funded and must not involve price support. Under the blue box, direct payments under production-limiting programmes that meet specific criteria of the AoA are exempt from ceiling commitments. Lastly, the development box contains specific provisions for developing countries that allow them, under specific conditions, to exempt measures to encourage agricultural and rural development.
  For policies that do not meet the criteria of the the green, blue or development box, if the support provided is below certain thresholds ("*de minimis* limits"), this support is also exempted from ceiling commitments. Each of the product- and non-product-specific policies that do not qualify for exemptions from the ceiling commitments are quantified, as measured by the Total AMS. These individual AMSs are then summed up into the Current Total AMS, which must not exceed a certain limit, as specified in a country's schedule of commitments. Most developed countries have an upper limit on their AMS, called the Bound Total AMS, in their schedule of commitments. On the other hand, for most developing countries, trade-distorting support is limited to a zero-Bound Total AMS, in effect obliging them to stay within the *de minimis* amounts.
  The policy space available for domestic support thus depends on which measures countries are allowed to exempt from any disciplines on the level of support, and the limits on AMS expressed as Bound Total AMS.

FIGURE 7. **Unused agricultural tariff policy space by country groups (%), 2013**



Source: A. Matthews. 2015. Food security, developing countries and multilateral trade rules. Background paper for *The State of Agricultural Commodity Markets 2015–16*. FAO, Rome.

Developing countries enjoy a number of exemptions from discipline or limitation of a broad range of policies (such as those falling within the green and development boxes), which can play an important role in enhancing their food security and nutrition situation. Additionally, they can provide non-exempt policies up to the *de minimis* levels.

- **Export competition and export restrictions:** the export competition provisions discipline the use of subsidies and other payments that serve specifically to expand exports. The AoA limits the use of explicit export subsidies by putting ceilings on both expenditures and the quantities of agricultural exports that are subsidized. The Nairobi WTO Ministerial Conference in 2015 reached a decision on export competition whereby WTO Members committed to eliminating export subsidy entitlements with immediate effect, with some exceptions. The policy space for providing export subsidies available to developing countries includes the right to phase out such measures by 2018 rather than with immediate effect, and the right to continue subsidizing marketing and certain transportation costs for agriculture exports until 2023. The poorest and food-importing developing countries enjoy additional time to cut export subsidies until the end of 2030 (OECD/FAO, 2016).

  While the commitment to eliminate export subsidies was a significant breakthrough in the Doha Round of negotiations, the more pressing issue during the recent period of high food prices has been the use of export restrictions, on which the WTO rules could be strengthened. The lack of clear regulations to discipline the use of export restrictions provides considerable amount of policy space for food exporting countries to employ export restrictions to address short-term food security concerns, to the detriment of food-importing countries (Box 5).

Box 4

Examples of developing countries using Green Box measures

Two specific provisions relevant for food security are contained in Annex 2 of the AoA. They are the rules that exempt expenditure on public stockholding for food security purposes and the provision of domestic food aid from domestic support reductions, if these programmes meet certain specified conditions. In practice, programmes in developing countries that provide food at subsidized prices to consumers with the objective of meeting the food requirements of the urban and rural poor are considered to be in conformity with green box criteria.

Further, developing countries with programmes under which stocks of foodstuffs for food security are acquired and released at administered prices are deemed to be in conformity with the AoA, provided that the difference between the acquisition prices and the external reference price is accounted for in the AMS calculation.

Public stockholding for food security purposes is a common policy instrument in many Asian countries, including China, India, Pakistan and Vietnam, but also in some African countries, such as Zambia, which have all notified the WTO on expenditures for public stockholding programmes. China, Pakistan and Vietnam have also notified the WTO of public expenditures on domestic food aid programmes, as have a number of African countries, including Madagascar and South Africa.

Source: FAO. 2017 (forthcoming). E-learning course on Trade and food security and nutrition.

Box 5 How much of the food price rise in 2008-2010 can be explained by export restrictions?

Over the 2008-2010 period, 9 percent of total food trade was covered by export restrictions. If just staple foods are considered, the share of food trade covered by export restrictions increases to 22 percent (Giordani *et al.*, 2012).

Research by the International Food Policy Research Institute (IFPRI) found that restrictions explain as much as 30 percent of the increase in prices in the first six months of 2008 (Von Grebmer, 2011), with price distortions being most significant for rice (24 percent), followed by wheat (14 percent) and barley (9 percent) (Yu *et al.*, 2011)."

Step 3 ASSESSING IMPACTS OF TRADE POLICIES

The complexity of the channels of interaction between trade and food security produces great differences in country experiences of the impact of trade on food security. Trade can have both positive and negative impacts on each of the four dimensions of food security, affecting different economic and social variables in the short term and the medium to long term, as summarized in Table 2.

National agricultural trade measures have different welfare implications for producers, consumers and governments, depending on the types of policy measures that a country employs. The welfare impacts will be dependent on the specifics of the policy package adopted, as explained below.

The market effects of either an import tariff or an import quota are that they reduce the level of imports, raise domestic prices and decrease domestic consumption. Welfare will be essentially transferred from consumers to producers and also to the government through tariff revenue (in the case of quotas, government only gains if it owns the import license). Some of the costs to consumers could be lowered if the government spends the revenue from import tax on programmes that promote access to food. Overall, by affecting the market-determined price, this type of policy also results in a net cost to society ("deadweight loss") which is not captured by any agent.

An export tax leads to a decrease in the domestic price, as producers in exporting countries have a disincentive to sell abroad and an incentive to sell more in the domestic market. On the other hand, an export quota is a restriction on the quantity of exports, which consequently leads to a reduction in domestic prices. In either case, welfare is essentially transferred from producers to consumers and to the government, as opposed to import restrictions (in the case of export quotas, the government only gains if it acts as an exporter).

Under the domestic support measures such as output subsidies/ producer price support measures and input subsidies, welfare is essentially transferred from the government (tax payers) to producers. In the case of a small country, which is a price taker in the world market, there would be no welfare impact on consumers since the consumer price remains the same. The cost of moving from low-cost foreign supply to higher-cost domestic supply represents a net cost to society (i.e. deadweight loss).

TABLE 2. **Possible short-, medium- and long-term effects of trade on the four dimensions of food security**

	Short term	Medium to long term
Availability	**Trade boosts imports** and increases the quantity and variety of food available.	**Food production may increase** due to greater specialization, and **productivity improvements** may be triggered by greater competition.
	Trade may decrease the domestic availability of crops in net food-exporting countries.	**In net food-exporting countries**, domestic availability of staples may decline, as production is diverted toward exports; **in net food-importing countries, some producers are likely to curtail production**, forgoing the multiplier effects of agricultural activities in rural areas.
Access	**Food and input prices are likely to decrease** for net food-importing countries.	**Incomes would rise in competitive sectors**, due to greater market access, and **growth and employment would be supported** by export growth and inflow of foreign direct investment.
	Domestic prices of exportable products may increase for net food-exporting countries.	**Incomes may decline in import-competing sectors**, with some producers transitioning out of agriculture. Also, **unequal distribution of gains** may occur due to enclave developments in export crops, to the detriment of broad-based smallholder food crop production.
Utilization	**Greater variety of food** available may promote a more balanced diet.	**Food safety and quality may improve** if international standards are applied more rigorously.
	There may be greater consumption of food that is cheaper, high in calories and low in nutritional value.	**Prioritization of commodity exports may divert land and resources from traditional and indigenous foods**, which are often superior from a nutritional perspective.
Stability	**Imports mitigate likelihood of shortages** resulting from local production risks.	Global markets **are less prone to policy- or weather-induced shock**.
	Countries may be more vulnerable to changes in trade policy by exporters, such as export bans.	**Sectors at earlier stages of development** may become more **susceptible to price shocks** and **import surges**.

☐ Possible positive impact ■ Possible negative impact

Source: FAO. 2016. Trade policy brief no. 17. Trade and Food Security.

Short-term policies in a period of high food prices and their impacts

There are several cases of trade policies being used to address food security concerns arising from market shocks that affect food availability and prices. However, it is important to look beyond the possible short-term consequences of policy interventions and assess their effectiveness in achieving food security and nutrition objectives in the longer run.

A period of high and volatile prices in 2007-2008 is a good example. During this period a number of short-term policy responses were prompted, due to the waning confidence in global markets as a reliable source of affordable food. In order to mitigate the negative effects of the increasing cost of food on consumers, many countries introduced trade policy changes such as export restrictions (in net exporting countries) or reducing import barriers (in net importing countries) in order to ensure sufficient domestic supplies.

However, while such short-term policies may have helped to achieve short-run national objectives of increasing food availability and lowering food prices, they had significant negative impacts in the medium to long run, at the national and global levels. These included: disincentives for farmers due to an uncertain policy environment; upward pressure on world prices due to tightening of the balance between demand and supply; and

Box 6

Regional experiences of short-term trade policy interventions for food security

Africa - National food security objectives have been primary factors in determining trade and related market policy interventions in many African countries since long before the current global context of increased food price volatility. Many governments are concerned about their ability to source food staples regionally and the consequent increase in domestic food prices if they are unable to do so.

This concern is often compounded by the shortage of information on the physical availability of staples both within countries and regionally at any point in time, meaning that countries often do not know whether sufficient surpluses or stocks will be available when and where they are needed. Further exacerbating this issue is the intervention of many neighbouring countries in the markets for staples, which can effectively negate the opportunity for potential trading partners to source staples from surplus area or countries.

As a consequence, some countries have intervened heavily through trade policy to restrict exports as a way of ensuring that domestic prices do not increase substantially during periods of domestic shortage. However, as the African experience has demonstrated, when exports are restricted, incentives for investments in market development are reduced, limiting the potential for addressing food security concerns through increased regional trade.

Latin America - Experience in Latin America shows that the consistency and transparency of policy played an important role in determining the outcomes of trade policies applied during the period of high global food prices from 2006 to 2008. In some countries, export restrictions were initially put in place temporarily, but were later extended, making it difficult for producers to make informed production and marketing decisions. This contributed to an uncertain policy environment, reducing farmers' incentives and ultimately leading to diversification away from crops affected by frequent policy changes.

Source: FAO. 2015. The State of Agricultural Commodity Markets 2015-16. Rome.

exacerbation of uncertainty and volatility in food markets when several countries introduced export restrictions at the same time. Moreover, many food-importing countries that lowered import tariffs on food items or agricultural inputs during this period saw a limited impact of such measures, since the majority of countries already had low import tariffs on these items. Therefore, it is important to note that the potential medium- to long-run impacts of trade policies pursued towards addressing the immediate concerns can significantly undermine any short-term gains. Box 6 explains the importance of balancing short- and long- run objectives for achieving food security and improving nutrition.

The role of policy support at different stages of development

The note has highlighted the importance of looking beyond static, short-term objectives when designing and implementing trade strategies. Instead, the focus should be on achieving food security in the context of long-term agricultural development and structural transformation. As discussed in Step one, there are different stages of agricultural development, which range from low-productivity to more commercially oriented agriculture. The objectives of policy interventions should be appropriate for the status of agricultural development in a country, and may therefore change over time (Box 7).

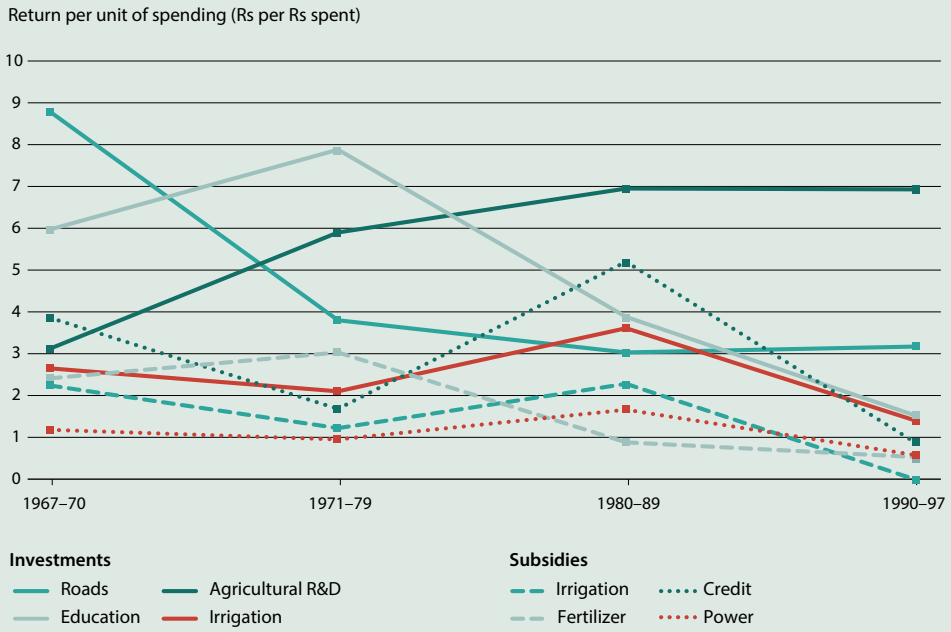
Box 7

Support to agriculture by stage of development

The conceptual framework on stages of development is supported by empirical evidence from India on the returns to agricultural GDP from different types of government expenditure across time. The results show strong evidence of very favourable returns to investments in roads and education in the 1960s and in education in the 1970s, but reduced returns in later years. By contrast, the returns to investments in agricultural research and development are high in the 1980s and 1990s, but much lower in the earlier years. Returns to spending on subsidies are generally lower, although positive, than to spending on investments in roads, education and agricultural research and development. The findings of this study suggest that the rates of return to different types of expenditure differ according to the stage of development.

Source: Data from S. Fan, A. Gulati & Thorat, S. 2007. Investments, subsidies and pro-poor growth in rural India. IFPRI Discussion Paper No. 716, Table 6. Washington, DC, IFPRI.

Agricultural GDP returns to Indian government spending, 1960s to 1990s



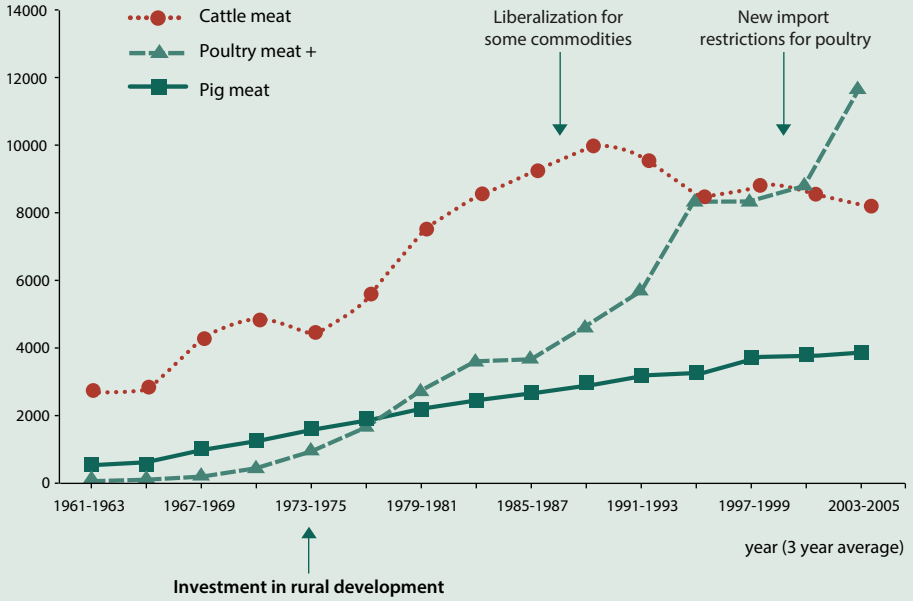
- **At the earlier stages**, when agricultural production systems are rudimentary, critical infrastructure is absent, and producers have limited recourse to risk management instruments, policy support could involve investments in infrastructure and promotion of technology adoption, establishing the basic conditions for agricultural productivity to rise.
- **As the agriculture sector develops**, once producers are able to generate surplus production for markets, some level of government intervention may be necessary to kick-start markets. This may include establishing moderate levels of import protection and export promotion, creating market information systems, providing risk management instruments, and expanding access to finance and input/output markets.
- **At later stages**, as the agriculture sector becomes increasingly commercialized and competitive, governments may withdraw from market activities and allow the private sector to take over the provision of critical market services. Consequently, the role of governments should concentrate on facilitating the absorption of labour and capital released from agriculture to other sectors and promoting overall competitiveness.

The stage of agricultural development is critical for determining policy objectives, which may range from establishing basic market conditions, to improving agricultural productivity and promoting private-sector-led growth. A combination of domestic and border measures is needed to achieve the policy objectives at each stage of agricultural development (Box 8). In practice, the optimum package of domestic and border measures depends on individual country circumstances, and attaining desirable outcomes depends on adequate implementation capacities.

Box 8 Use of border measures at the early stages of development and its impact in Fiji

In Fiji, trade policies during the protectionist period in the 1970s and 1980s contributed to increased availability of meat, as the policies were combined with investments in domestic meat production to reduce high levels of imports. Fiji raised export taxes on locally produced inputs for animal feed, raised import tariffs on meat, and implemented import license controls to reduce the quantity of meat imports. Production of beef and chicken increased steadily in response to these measures.

Production of meat in Fiji, 1961-2007



Source: Thow *et al.* 2011. Trade and the nutrition transition: strengthening policy for health in the Pacific.

When markets eventually become more open, it is vital that trade reforms be coupled with appropriate complementary policies that aim to facilitate the process of transition and adjustment and minimize the negative impacts on potentially disadvantaged groups. The range of sound complementary policies to increase the gains from trade reforms is very wide: from macro-economic policies to sectoral policies such as infrastructure, institutions, competition and safety nets for the poor (Montalbano *et al*., 2015).

Step 4 IMPROVING POLICY COHERENCE

Trade and related policies are expected to play an increasingly important role in supporting the implementation and financing of agriculture and food security strategies and investment plans. Despite their importance, in most developing countries agriculture and trade-related objectives and strategies are identified through separate prioritization, negotiation and coordination processes, associated with agriculture and trade ministries. The situation can result in different perceptions of the national priorities for agricultural trade. This, in turn, can lead to gaps in the country's capacity to design and implement appropriate trade policies that are supportive of agriculture sector development as well as associated food security and nutrition improvements, and therefore partial strategies and weaknesses in identifying the required policy space.

In this context, making trade policies work better for food security and improved nutrition is a political as much as a technical challenge (Box 9). Policy-makers need to balance the interests of diverse groups within and sometimes outside their country's borders to develop coherent packages of policies that prioritize long-term economic and social development. Donors and development partners also play a role encouraging coordination and coherence, rather than exacerbating the sectoral divide by providing support through different departments or agencies that are poorly coordinated.

The gap in sectoral processes should be bridged in such a way that food security and nutrition are mainstreamed into decision-making processes for national trade policy. This will be possible by:

- More fully engaging trade stakeholders, including trade ministries, export promotion boards and industrial associations, in the development of agricultural strategies and investment plans;
- Aligning agriculture strategies and investment plans with trade-related policy and planning frameworks (such as import and export strategies), and both agriculture and trade strategies and investment plans with food security and nutrition objectives;
- Including trade and agricultural experts in the formulation of each other's strategies and investment plans; and
- Connecting the institutional structures attached to sectoral processes where they exist.

However, the bridging of agriculture and trade-related processes will not occur spontaneously. Improving policy coherence requires leadership and political commitment, continuous facilitation through policy dialogue among different stakeholder groups, and institutional strengthening and capacity building. These efforts are to fill knowledge gaps and to increase capacity to analyse coherence, synergies and trade-offs between trade, agriculture, and food security and nutrition policies and goals (as well as the capacity to identify appropriate complementary policies to maximize positive impacts and minimize risks). In supporting national-level processes, it is essential that the global governance systems affecting these processes also be coherent and can ensure that trade-related processes are supportive of countries' pursuit of food security objectives.

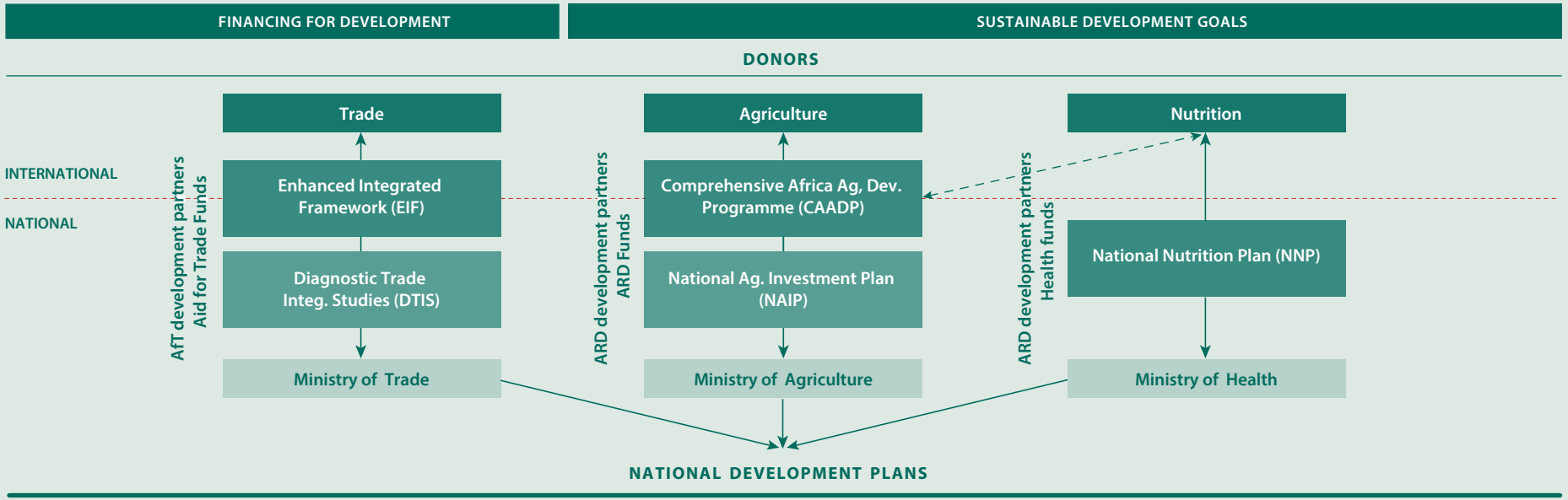
Box 9

Governance of agriculture and trade planning processes in African LDCs

In African LDCs, trade, agriculture and nutrition-related strategies and investment plans are generally framed in separate processes: Enhanced Integrated Framework (EIF) for trade-related technical assistance; Comprehensive Africa Agriculture Development Programme (CAADP) for agriculture; and National Nutrition Plans for nutrition. These processes involve different ministries (trade, agriculture and nutrition, respectively), stakeholders, development partners and sources of financial support.

Poorly articulated linkages between these processes often result in partial strategies. For example, the Diagnostic Trade Integration Studies (DTIS) elaborated under the EIF often focus on export crops at the expense of support to import-competing food crops. By contrast, the National Agriculture Investment Plans (NAIPS) elaborated under CAADP tend to prioritize food crop production and productivity increases without sufficient consideration of opportunities for and constraints to obtaining access to, or competing on, regional and international markets. The inefficient use of resources is evidenced by the presence of specific financing mechanisms to support each process, which are funded by the same donors through different departments and programmes, thus reinforcing the "silos".

Trade, agriculture and nutrition planning processes in African LDCs



Notes: FfD = Financing for Development; SDGs = Sustainable Development Goals; AfT = Aid for Trade; ARD = Agriculture and Rural Development

Source: Adapted from E. Canigiani & Bingi, S. 2013. Connecting food value chains in Africa. GREAT Insights, 2(5). July-August 2013. Maastrich, European Centre for Development Policy Management.

Concluding remarks

Global trade in food products has expanded rapidly and is expected to continue to increase, although at a lower rate than in the previous decades. The reliance on food trade at the global level continues to be high, with some regions becoming increasing net exporters and others increasing net importers. The food import dependency, in particular, is expected to intensify in resource-poor regions.

Amid the increasing importance of agricultural trade, there has been growing attention on its role in improving food security and nutrition outcomes. In seeking to inform the policy-making processes governing both agriculture and trade policies, this guidance note discussed the linkages between trade and the four dimensions of food security (availability, access, utilization and stability), and proposed a step-wise approach for analysis that would feed into trade policy formulation and implementation, highlighting the variables that should be taken into consideration. These include agricultural production, the stage of agricultural and market development, food consumption trends, evolution in diets and trade patterns, among others.

It then provided guidance on the different types of national trade policy measures (border and domestic measures) that are typically applied by countries and the global frameworks within which trade policies are formulated. The note discussed the policy space available to developing countries within multilateral trade rules to pursue their food security and nutrition objectives by briefly describing the provisions and commitments under the three pillars of the AoA: market access, domestic support and export competition.

A core focus of the note was a discussion of the potential impacts of trade policies on a country's food security and nutrition situation, which can be heterogeneous and largely context-specific. It discussed typical welfare implications of different types of national trade policy measures for producers, consumers and governments. It noted that the welfare impacts are dependent on the specifics of the policy package adopted. It also highlighted the need to distinguish between the short- and long-term implications of trade policies on the food security and nutrition situation, taking as an example the period of high food prices in 2007-2008. It noted that the impact of trade on food security needs to be evaluated in the context of the long-term process of agricultural development and structural transformation. On the basis of this discussion, the note asserts that agriculture and trade and related policies must prioritize long-term structural transformation objectives over short-term political or commercial interests, taking into consideration the priorities for agricultural development and food and nutritional security of a country. This requires improving coherence between trade, agriculture and food security and nutrition polices, for which leadership and political commitment are required.

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