

# TRADE POLICY SUPPORTIVE OF FOOD SECURITY AND NUTRITION

## Lesson: Trade Policy Measures and Agricultural Development

*Text-only version*



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## In this lesson

In this lesson .....	1
Learning objectives .....	2
Introduction .....	2
Trade Policy Measures and their impact .....	2
A. Welfare Impacts of Import Restrictions.....	3
B. Welfare Impacts of Export Restrictions .....	4
C. Welfare Impacts of Output Subsidies/ Producer Price Support .....	5
D. Welfare Impacts of Input Subsidies .....	6
E. Considerations for the Design and Implementation of Trade Policy Measures .....	7
Short-Term Trade Policy Interventions and Food Security.....	8
A. Short-Term Trade Policy Interventions during 2007-2008 .....	9
B. Short-Term National Impacts.....	9
C. Medium-to Long-Term National and Global Impacts .....	10
D. Regional Experiences of Short-Term Trade Policy Interventions .....	11
E. Agricultural trade and policy responses during COVID-19 in 2020.....	12
Trade and Long-Term Structural Transformation Objectives.....	15
A. What is structural transformation? .....	15
B. Role of Agricultural Development in Structural Transformation.....	16
C. Objectives of Policy Intervention by Stage of Agricultural Development .....	18
D. Role of Domestic and Border Policy Measures in Achieving Policy Objectives .....	19
Lesson Summary .....	22

## Learning objectives

In this lesson you will:

- identify different types of trade policy measures and describe their welfare effects;
- distinguish between short – term and long – term implications of trade policy interventions for food security;
- identify the key policy objectives by stage of agricultural development; and
- discuss the role of domestic and border measures for meeting these policy objectives.

## Introduction

In this lesson you will learn about different types of policy measures, and understand the distinction between policy objectives that focus on short-term food security concerns, and those that focus on the longer – term process of structural transformation.

1. Trade Policy Measures and Agricultural Development
2. Short term trade policy Interventions and Food Security
3. Trade and Long-term Structural Transformation Objective

## Trade Policy Measures and their impact

"Trade policy" refers to a broad set of policies affecting agricultural trade, which includes border measures and those domestic measures that can affect trade flows. Within this frame we will examine specific types of trade policy measures in terms of their market effects and their welfare impacts.

Among **border measures**, we will examine:

- import restrictions (through tariffs or quotas); and
- export restrictions (through tariffs or quotas).

Since they are applied at the border, these measures are likely to have significant effects on trade flows.

Among **domestic measures**, we will examine:

- output subsidies/ producer price support measures; and
- input subsidies.

These policies can have significant effects on production and trade because they introduce a gap between domestic prices and prices that would prevail in the absence of such measures.

***Why don't all domestic measures affect production and trade to the same extent?***

Support that is provided to the overall agricultural sector is considered relatively less distorting of production and trade. These types of measures include:

- public investments in infrastructure, research or market development, services, or regulation and standards; and
- creating enabling environment for private provision of infrastructure, research or extension facilities.

For more information how trade policies are defined, review **Lesson “Defining and Measuring Trade, Food Security and Nutrition”**.

In this first section of the lesson, we will focus **on the welfare impacts of trade policy measures for producers, consumers and governments at the national level**:

- A. Welfare Impacts of Import Restrictions
- B. Welfare Impacts of Export Restrictions
- C. Welfare Impacts of Output Subsidies/ Producer Price Support
- D. Welfare Impacts of Input Subsidies
- E. Considerations for the Design and Implementation of Trade Policy Measures

## A. Welfare Impacts of Import Restrictions

### IMPORT RESTRICTIONS

**Import restrictions like import tariffs** can be designed as a percentage of the border price (i.e. **ad valorem tariff**<sup>1</sup>), or as a fixed amount of money per unit of import (**specific tariff**). **Import quotas** are limits on the quantity that can be imported. These measures tend to raise the domestic price of the good.

The **market effects** of either an import tariff or a quota are the same: they raise domestic prices, decrease domestic consumption and reduce the level of imports.

The **welfare impacts** are as follows: welfare is essentially transferred from consumers to producers, and, in the case of a tariff, to government.

Overall, by distorting the market price, this type of policy also results in a net cost to society ("deadweight loss") which is not captured by any agent. Some of the costs to consumers could be

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<sup>1</sup> Import tariffs designed as a percentage of the border price.

lowered if the government spends the import tariff revenue on programmes that promote access to food.



Producers receive a higher price and may produce more. Therefore the welfare impact is a gain.



Consumers pay higher prices and may consume less. Therefore the welfare impact is a loss.



With regards to tariffs, the government collects taxes on each unit of import. Therefore the welfare impact is a gain. With regards to quotas, rent from the imports is collected depending on who owns the import license. These owners can be the importer or retailer, the foreign supplier, or the government. Therefore, if the import license is not owned by the government, it does not collect revenue and does not necessarily gain.

## B. Welfare Impacts of Export Restrictions

### EXPORT RESTRICTIONS

**An export tax is a levy on goods that are exported**, leading to a decrease in the domestic price as producers have the incentive to sell more of their produce domestically. **An export quota or ban is a restriction on the quantity of exports**, which also encourage sales in the domestic market and consequently leads to a reduction in domestic prices.

The **market effects** of an export tax or quota are the same: they lower the domestic price, increase domestic consumption, and lower exports.

The **welfare impacts** are as follows: welfare is essentially transferred from the producers to the consumers, and, in the case of an export tax, to the government. However, as with import restrictions, there is a net cost to society ("deadweight loss") associated with the distortion to the market price.



An export tax creates disincentives for selling to international markets. This leads to greater availability of the product in the local market, which lowers domestic prices. Producers receive lower prices and production is reduced. The overall welfare impact is a loss.



Consumers pay lower prices and consume more. Therefore the welfare impact is a gain.



With regards to export taxes, government acquires tax revenue for each quantity exported. Therefore there is a welfare gain. With regards to export quotas, the rent from the exports depends on who owns the export license. This could be the exporter, or the government. Therefore there is potentially no impact on government revenues if other agents own the export license.

### C. Welfare Impacts of Output Subsidies/ Producer Price Support

#### OUTPUT SUBSIDIES/ PRODUCER PRICE SUPPORT

These policies are usually intended to support farmers in import-competing sectors. They could take the form of programmes whereby governments purchase from producers at **minimum guaranteed prices, or subsidies paid to farmers on the quantity produced.**

For a country which is a net importer of the product:

- In the case of an **output subsidy, linked to the volume of production**, producers receive higher incomes leading to greater levels of production. The market price remains unchanged, and therefore the surplus is essentially transferred from taxpayers to producers.
- In the case of **market price support**, the producers receive higher prices set by the government. Since the price is higher, there is a surplus transfer from both consumers and taxpayers to producers.

For both types of support, the cost of moving from low-cost foreign supply to higher-cost domestic supply represents a net cost to society (i.e. deadweight loss).



**For output subsidies:** producers receive higher incomes and produce more. Therefore the producer surplus is going up.

**For market price support:** producers receive higher prices and produce more. Therefore the producer surplus is going up.



**For output subsidies:** in a small country, which is a price taker in the world market, there would be no loss in consumers' surplus, since the consumer price remains the same.

**For market price support:** consumers pay higher prices and consume less. Therefore, there is a loss in the consumer surplus.



**For output subsidies:** the cost of the subsidy equals the total volume of domestic production subsidized times the amount of the subsidy per unit. This adds to government expenditures. Furthermore, there is a loss in terms of reduced tariff revenues.

**For market price support:** the costs incurred are for procurement and storage of the acquired quantities. Some of these costs can be offset by the disposal of stocks either nationally or to international markets. Furthermore, there is a loss in terms of reduced tariff revenues.

## D. Welfare Impacts of Input Subsidies

### INPUT SUBSIDIES

These policies could take the form of **credit, fertilizer or other input** subsidies, each of which has the effect of lowering production costs.

**The market effect** of an input subsidy is to lower production costs.

**The welfare effects of an input subsidy** are essentially the same as for an output subsidy: welfare is transferred from government (taxpayers) to producers. The cost of moving from low-cost foreign supply to higher-cost domestic supply represents a net cost to society i.e. deadweight loss.



Producers pay less for inputs and produce more. Therefore, the welfare impact is a gain.



In 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.



Governments (taxpayers) incur the cost of the subsidy. Therefore, the welfare impact is a loss.

### E. Considerations for the Design and Implementation of Trade Policy Measures

As countries design and implement these trade policies, they should focus on defining the policy objectives, and strive to do no harm to other countries. The following sections in this lesson will discuss these considerations in detail.

#### DEFINING THE POLICY OBJECTIVES

There is a need to assess whether trade policy measures are being used to address short-term concerns or long-term objectives, and who would be the winners and losers. In the context of food security, attention is often on the use trade policy to address short-term concerns. However, distinguishing between the short- vs. long-term implications of trade policy interventions is vital for achieving food security.

#### DEFINING NO HARM TO OTHER COUNTRIES

In designing and implementing these policies, the right balance needs to be struck between national food security considerations in order to serve the national interests and commitments undertaken as part of trade agreements.

The design and implementation of trade policy measures will be discussed in detail in **Lesson “Designing and Implementation of Trade Policy Measures”**.

#### *Situation: trade policy intervention*

"The government implements a producer price support program whereby a government buys output from producers at guaranteed intervention prices."



The expected welfare impacts of such policy is that producers receive higher prices and produce more, and government incurs a loss not only in providing the market support, but also additional costs in the storage and disposal of surplus production. Government would also incur a loss equal to the total volume of domestic production times the difference between the intervention and market price.

### *The key points to remember*

- ① There are different types of trade policy measures that countries can use to achieve their food security objectives. Examples of border measures that were presented include import restrictions and export restrictions. Examples of domestic support measures that were presented include output subsidies/ price support measures and input subsidies.
- ② Each of these policy measures has different welfare implications for producers, consumers and governments. Moreover, these policies can be implemented in combination with one another, making the overall welfare implications dependent on the specifics of the policy package adopted.
- ③ The design and implementation of these policy measures should be based on a clear identification of policy objectives and within the existing trade commitments.

## Short-Term Trade Policy Interventions and Food Security

In this course, "**short-term trade policy interventions**"<sup>2</sup> are defined as those trade policy interventions that are implemented to address short-term food security concerns at the global and national levels.

- A. Short-Term Trade Policy Interventions during 2007-2008
- B. Short-Term National Impacts
- C. Medium-to Long-Term National and Global Impacts
- D. Regional Experiences of Short-Term Trade Policy Interventions
- E. Agricultural trade and policy responses during COVID-19 in 2020

<sup>2</sup> Short-term trade policy interventions are policy interventions that are implemented to address short-term food security concerns at global and national level.

## A. Short-Term Trade Policy Interventions during 2007-2008

The period of high and volatile food prices in 2007 – 2008 is emblematic of the food security concerns of developing countries, as well as the short-term policy responses that were triggered by such concerns. The concerns of policy makers in the wake of high food prices were mostly related to their ability to stabilize prices and to guarantee the availability of affordable food in their domestic markets. These concerns were worsened by the inaccuracy of official supply and demand balances for individual crops in some countries, and weak monitoring systems for prices and food security.

**The set of policy instruments employed depended mainly on whether the country was a net importer or a net exporter of the product.**



### *Common responses from both importers and exporters*

A few elements were common in the responses of both importers and exporters:

- They **aimed to boost domestic food supplies and stabilize prices.**
- **Border measures were generally preferred to domestic support measures** (although these were also used), because they were a quick way to contain the negative effects of global price increases on domestic consumers.
- The border measures employed were typically **concentrated in products that made up the basic consumption basket**, typically cereals, and determined by the composition of the country's exports and imports.

## B. Short-Term National Impacts

### NET IMPORTING COUNTRIES

In net food importing countries, what were the food security concerns in 2007-08, the typical trade policy responses adopted, and their short-term national impacts?

**Food Security concerns** - Increasing food prices eroded the purchasing power of the poor.

Therefore **governments were concerned about the availability of sufficient supplies at affordable prices** to meet the needs of the poor, including agricultural producers who could be net food consumers.

**The trade policy response and their short-run national impacts** - **The trade policy response of net food-importing countries was to reduce import tariffs** on food items, agricultural inputs and

equipment. These are tariffs which would otherwise inflate domestic consumer prices relative to world prices, and reduce imports. **The short-run national impact of this policy on domestic prices was minimal**, because tariffs on food products were already low in many net food-importing countries.

### NET EXPORTING COUNTRIES

In net food exporting countries, what were the food security concerns in 2007-08, the typical trade policy responses adopted, and their short-term national impacts?

**Food Security concerns** - High world prices meant that exporting countries were **concerned about their ability to guarantee sufficient grain stocks and supplies for domestic markets**. They were also **concerned about the high level of domestic food prices**.

**The trade policy response and their short-run national impacts** - **The trade policy response of some net-exporting countries was to introduce export restrictions**, so as to guarantee sufficient supplies in domestic markets in the short term. These could take the form of export taxes or quantitative limitations (including export bans). **The short-run national impact** of such a policy was to **increase supplies in the domestic market, thereby temporarily constraining the increase in domestic prices**.

### C. Medium-to Long-Term National and Global Impacts

What were the medium-to-long term impacts of the trade policy measures adopted during the period of high food prices in 2007-2008? These impacts are discussed at both the national and global levels.

#### ➡ NATIONAL LEVEL

The 2007-08 experience has shown that having greater supplies available in the country through curtailed exports in exporting countries, and greater imports in importing countries put **downward pressure on producer prices**. In the medium-long term, the expectation of lower domestic prices created **disincentives for producers in these countries to expand production**, which in turn led to lower supplies within the country.

#### ➡ GLOBAL LEVEL

Globally, the simultaneous imposition of export restrictions by several exporters **reduced supplies in the world market**, while global reduction in import barriers by several importing countries led to **increased demand for food**. In the medium-to-long term, the tightening of the balance between demand and supply put **upward pressure on world prices**, thus resulting in sharp increases in domestic food prices.

## D. Regional Experiences of Short-Term Trade Policy Interventions



### Latin America: Regional experiences of short-term trade policy interventions

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 recent years of higher global food prices. 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, Trade and food security: achieving a better balance between national priorities and the collective good.** Page 35, Part III. Rome, Italy.*

[www.fao.org/publications/soco/the-state-of-agricultural-commodity-markets-2015-16/en/](http://www.fao.org/publications/soco/the-state-of-agricultural-commodity-markets-2015-16/en/)

### Africa: Regional experiences of short-term trade policy interventions

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 domestic food price increase 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 compounding this issue is the intervention of many neighboring 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.

Source: FAO (2015). *The State of Agricultural Commodity Markets, Trade and food security: achieving a better balance between national priorities and the collective good*. Page 37, Box 12. Rome, Italy.

[www.fao.org/publications/soco/the-state-of-agricultural-commodity-markets-2015-16/en/](http://www.fao.org/publications/soco/the-state-of-agricultural-commodity-markets-2015-16/en/)

### Situation

What are the possible impacts of such policy intervention?

Country X is a net exporter of wheat. The price of wheat is high in the world market, and it has been rising for the last few months. Country X is concerned that given the higher world market price, producers have incentive to export greater volumes of wheat to international markets.

In the short run there are greater food supplies available in the country, which also puts downward pressure on food prices. However in the medium- to long-term, lower prices can create disincentives for producers to expand production.

## E. Agricultural trade and policy responses during COVID-19 in 2020

The COVID-19 pandemic and its potential effects on agricultural value chains and the global trading system induced concerns over food security and food safety worldwide, leading countries to implement policy measures to curb potentially adverse impacts on their domestic markets. The trade policy responses covered a wide range of measures, including export restrictions, lowering of import barriers, and domestic measures.

- **Trade restrictive measures:** some major exporting countries imposed export bans or quotas on specific commodities. A few countries imposed import restrictions or introduced requirements for certificates attesting negative COVID-19 test results for the shipments. In most cases, such measures were temporary in their application.
- **Lowering of import barriers:** to ensure the availability of critical food items and contain potential food price increases, many countries lowered existing import tariffs and/or implemented measures to facilitate trade. These included the acceptance of electronic

phytosanitary and veterinary certificates on a temporary basis, and simplified import-licensing procedures for selected products.

- **Measures to support producers:** in high-income economies, policies were largely aimed to protect incomes of farmers and processors through direct transfers and loans and promoted food procurement for domestic food aid. In developing countries, policies were aimed to support specific groups of farmers through input subsidies or direct transfers to ensure sufficient domestic availability by expanding food reserves, and to support consumers through domestic price controls and stock release from national reserves.

Overall, effects on global trade in food and agriculture remained limited to short-term disruptions at the very beginning of the pandemic. The efforts of governments and agricultural sector stakeholders worldwide to keep agricultural markets open and trade in food flowing smoothly have contributed to remarkably resilient agricultural commodity markets.

Source: FAO. 2021. Agricultural trade & policy responses during the first wave of the COVID-19 pandemic in 2020. Rome <https://www.fao.org/3/cb4553en/cb4553en.pdf>

### *The key points to remember*

- ① The period of high food prices in 2007-2008 provides examples of the food security concerns of many countries, and the short-term policy measures they adopted to address these concerns. Short-term measures may have helped to contain the negative effects of high food prices on consumers at the national level in the beginning.
- ② Short-term policy interventions may have had negative consequences for food security in the medium-to-long term, at both the national and global levels.
- ③ An overview of the potential national and global impact of short-term policy interventions, such as those adopted those adopted during the 2007-2008 period, is presented next.

**FOOD SECURITY CONCERNS**

Higher food staple prices

Domestic availability of food and the ability to stabilize prices

**EXAMPLES OF TRADE POLICY RESPONSES**

**Net Exporters:** Export restrictions (export taxes, bans or limits).

**Net Importers:** Reduction of import tariffs on food and production inputs

**POTENTIAL IMPACTS****✓ Short-term/National**

In net exporting countries: higher domestic supply and greater potential for price stabilization. In net importing countries: lower consumer prices and potentially higher production (due to lower cost of inputs).

**✓ Short-term/Global**

When put in place by several countries simultaneously, reduction in import barriers leads to greater global demand, while export restrictions reduce global supplies.

**✓ Medium-term/National**

Lower producer prices and uncertain policy environment create disincentives for expanding production and investing in market development.

**✓ Medium-term/Global**

Tightening of the balance between demand and supply puts upward pressure on world prices.

**✓ Long-term/National**

Producers diversify away from crops affected by frequent policy changes.

**✓ Long-term/Global**

Exacerbation of uncertainty and waning confidence in global markets as a reliable source of food lead to volatility in global food markets.

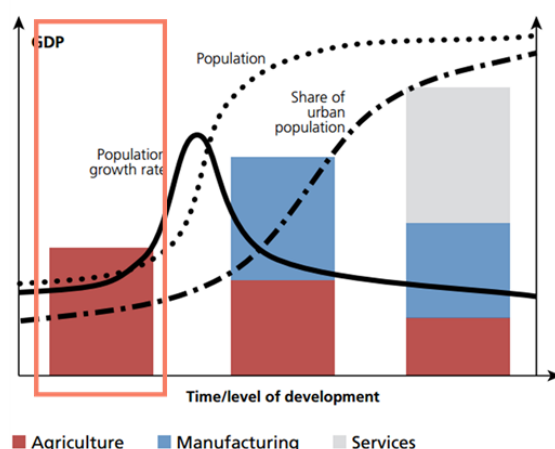
## Trade and Long-Term Structural Transformation Objectives

When designing and implementing trade strategies, it is important to look beyond static, short-term objectives, and policy measures to achieve those objectives. Instead, the focus should be on achieving food security in the context of long-term agricultural development and structural transformation. In this final section we will examine the following:

- A. What is structural transformation?
- B. Role of Agricultural Development in Structural Transformation
- C. Objectives of Policy Intervention by Stage of Agricultural Development
- D. Role of Domestic and Border Policy Measures in Achieving Policy Objectives

### A. What is structural transformation?

**Structural transformation**<sup>3</sup> refers to the reallocation of economic activity, such as GDP and employment, across the broad sectors: agriculture, manufacturing and services. 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.



Source: FAO (2015). *The State of Agricultural Commodity Markets 2015 – 2016*. Page 40. Rome, Italy.

[www.fao.org/publications/soco/the-state-of-agricultural-commodity-markets-2015-16/en/](http://www.fao.org/publications/soco/the-state-of-agricultural-commodity-markets-2015-16/en/)

<sup>3</sup> The reallocation of economic activity, such as GDP and employment, across the broad sectors: agriculture, manufacturing and services.



## B. Role of Agricultural Development in Structural Transformation

The **agriculture sector is at the core of the structural transformation process** in both the short and long term.

### SHORT TERM

In the **short term**, the majority of the poor depend on agriculture to make their living, and face the risks of volatile food prices.

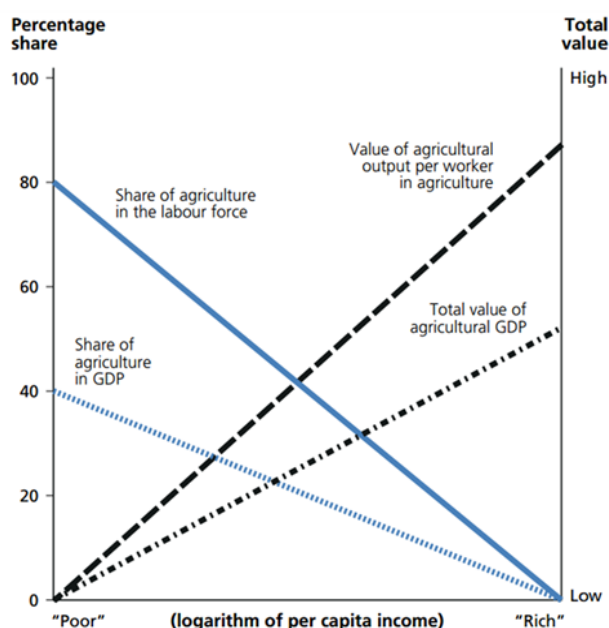
### LONG TERM

In the **long term**, the agriculture sector becomes increasingly commercialized and competitive (with substantial backward and forward linkages), and the manufacturing sector grows, absorbing more labor and triggering urbanization.



### *Changes in agricultural GDP and employment during structural transformation*

Initially, manufacturing may be based on agriculture through processing and agribusiness. However, manufacturing and the economy will ultimately become diversified, and agriculture will account for a diminishing share of the economy as growth continues. During this process of transformation, the proportion of the labour force engaged in agriculture remains above the share of agriculture in GDP, with important implications for labour productivity and for continued growth in agriculture production as resources shift to other sectors of the economy.



This graph identifies the stylized trends in output per agricultural workers and agriculture as a share of the labour force and GDP during structural transformation.

Source: FAO (2015). *The State of Agricultural Commodity Markets 2015 – 2016*. Page 40. Rome, Italy.

[www.fao.org/publications/soco/the-state-of-agricultural-commodity-markets-2015-16/en/](http://www.fao.org/publications/soco/the-state-of-agricultural-commodity-markets-2015-16/en/)

Some studies have drawn attention to several critical dimensions of structural transformation.

Understanding the below considerations can help policy makers prioritize policy objectives to support their long-term development and food security goals.

### 1. ➡ Stage of development and role of agriculture

The first consideration is the **stage of development** and **role of agriculture in an economy**. A dynamic agriculture sector can make significant contributions to broader development. The World Bank (2009) noted that in developing countries, GDP growth originating in agriculture is at least twice as effective in reducing poverty as GDP growth originating outside agriculture. This is because 75% of the population lives in rural areas and depends on agriculture for their livelihoods. However, the relative importance and nature of these contributions vary in different country situations, and as the importance of the agriculture sector declines within the overall economy.

### 2. ➡ Importance of agricultural productivity improvement

The second consideration is the importance of **agricultural productivity improvement**. Rapid growth in agricultural productivity is increasingly recognized as an essential element in countries' overall development strategies. It is also critical in reducing levels of food insecurity. Increasing agricultural productivity is essential, first for fostering investment in agriculture itself, and then for releasing surplus capital and labour to other sectors of the economy. However, it must occur with sustained participation by smallholder farmers where they are a significant part of the production structure.

Low productivity growth can lead to lower earnings in agriculture compared to other sectors, and the urban–rural income gap widens during early stages of transformation.

### 3. ➡ Balance between market forces and government intervention

The last main consideration is the **balance between market forces and government intervention**.

Markets are central to the successful management of structural transformation, but the process of structural transformation has never been driven by market forces alone. The challenge for governments

is to determine when and how much to intervene. These decisions will differ in each country and will change over time

### C. Objectives of Policy Intervention by Stage of Agricultural Development

Understanding the context of the agriculture sector is key to setting policy objectives to support long-term development and food security goals. Achieving long-term food security objectives requires a combination of policies, including social protection, agricultural support and border measures that promote sustained agricultural productivity increases.

#### ***When and how should countries open their agriculture sectors to greater competition?***

There are different stages of agricultural market development that range from low-productivity to more commercially oriented agriculture. The objectives of policy intervention should be appropriate for the status of agricultural development in a country, and may therefore change over time.

For the purposes of this course, the potential policy objectives by stage of agricultural development are simplified in the phases as depicted.

#### **Phase # 1: Subsistence production/Policy objectives: Establishing the basics**

When agricultural production systems are rudimentary:

- critical infrastructure is absent, and,
- producers have limited recourse to risk management instruments.

The objectives for policy intervention may include establishing the basic conditions for agricultural productivity to rise.

#### **Phase # 2: Diversified production/Policy objectives: Kick-starting markets**

Once the basic conditions are in place, rapid agricultural transformation needs to be kick-started by targeted government programs that improve the functioning of markets. This allows farmers to generate surpluses for markets as a business decision. Policy objectives may include addressing market distortions, facilitating productivity improvements and improving infrastructure.

#### **Phase # 3: Commercial production/Policy objectives: Withdrawal**

Eventually the economic case for state support is reduced. This happens when farmers have become used to the new technologies; volumes of credit, input demand, and of produce supply have built up;

transaction costs per unit of production are falling. Policy objectives may include withdrawal from market activities. This promotes private sector participation in the provision of critical market services. It also facilitates greater linkages with world markets, and nationally, with other sectors of the economy.

#### **D. Role of Domestic and Border Policy Measures in Achieving Policy Objectives**

During each of these phases of agricultural development, both domestic measures and border measures have a role to play in achieving the policy objectives. A simplified depiction of the role that each of these policies can play.

#### **PHASE # 1: Policy Objectives: Establishing the basics**

##### **Role of Domestic Measures**

- ✓ **Connecting producers to input and output markets.** For example, through the development of infrastructure, such as: transportation links, irrigation, and communication systems.
- ✓ **Providing access to finance and risk mitigation instruments** to a larger number of farmers, so that they can react positively to incentives.
- ✓ **Promoting better outcomes in most dimensions of food security.** For example, through social protection programs.

##### **Role of border Measures**

Border measures have a limited role to play at the initial stages of agricultural development. At this point, basic conditions are absent and production is not sufficient to supply markets.

Once the basic conditions are in place, trade policy can:

- help reduce production risks,
- provide the stability needed for producers to make productivity-enhancing investments, and,
- generate surplus for markets as a business decision.

#### **PHASE # 2: Policy Objectives: Kick-starting Markets**

##### **Role of Domestic Measures**

- ✓ **Providing incentives to initiate productivity improvements.** For example:
  - through investments in R&D, training and extension,
  - risk management through improving access to and use of market information systems and managing price and weather risks; and
  - providing farmers with access to input and output markets at low cost and low risk.

- **Promoting better outcomes in most dimensions of food security.** This may still require government interventions such as social protection programs to alleviate the impacts on the vulnerable.

#### Role of Border Measures

- ✓ For underdeveloped agriculture sectors, moderate level of border protection may be appropriate. For example, as part of a common external tariff with partner countries at similar levels of development.
- ✓ More developed sectors are in a position to compete but producers may still have limited access to risk management instruments. In these sectors, lower levels of trade protection coupled with safeguard mechanisms may provide adequate risk mitigation to allow the necessary investments to be made.

### PHASE # 3: Policy Objectives: Withdrawal

#### Role of Domestic Measures

- ✓ **Withdrawing from unnecessary market interventions, and instead promoting private sector participation.** For example, withdrawal of subsidized risk mitigation instruments, the persistence of which could lead to inappropriately high levels of investment and excess production.

#### Role of Border Measures

- ✓ **Border measures can play a role in releasing further growth potential.** For example through the liberalization of trade policy, such that input, credit and output markets function more efficiently. This occurs once agricultural productions systems are more mature.

#### Policy priorities for improving nutritional outcomes by stage of development

Reducing all forms of malnutrition remains a priority for many countries. The Global Nutrition Report 2015 proposed a classification of food systems based on a set of indicators for assessing their performance in terms of key food security and nutrition related outcomes. Some of these indicators include: agriculture productivity, food supply diversity, economic accessibility of food, natural resource use and level of urbanization. This assessment exercise has resulted in the following policy implications:

- the priorities for **industrial** food system are to increase consumption of fresh food and reduce consumption of animal source foods;
- similarly, **mixed** food systems (characterized by moderate agriculture productivity and urbanization) need to focus on reducing consumption of packaged foods;
- **transitioning** food systems (less productive and less urbanized than the above) need to increase, at the same time, agriculture productivity and diversification;

- **emerging** food systems need to tackle the double burden of malnutrition;
- **rural** food system need to tackle the food security and productivity issue.

Source: International Food Policy Research Institute (2015). **Global Nutrition Report 2015: Actions and Accountability to Advance Nutrition and Sustainable Development**. Washington, DC.

[www.ifpri.org/publication/global-nutrition-report-2015](http://www.ifpri.org/publication/global-nutrition-report-2015)



#### **CASE STUDY: The Changing Role of Domestic Policy Measures: Examples from India**

This case study on India presents an example of the changing role of policy across different phases of agricultural development. This study focuses on domestic policy measures. The analysis shows that rates of return to different types of expenditure differ according to the stage of transformation, and that the returns to some forms of spending increase much later than others.

##### **Returns to investment in roads, education and agricultural research and development**

**(ag. R&D):** there is evidence of very favourable returns to these expenditures in the 1970s, but reduced returns in later years. By contrast, returns to investments in ag. R&D are much lower in earlier years, but high in the later decades of then 1980s and 1990s.

**Returns to spending in subsidies on irrigation, credit, fertilizer and power:** returns to subsidies on fertilizer were positive in the earlier years of the Green Revolution, but then declined, whereas returns to subsidies on irrigation and credit showed a mixed trend. Returns to spending on all subsidies are very low in the last decade in the 1990s.

Source: FAO (2015). **The State of Agricultural Commodity Markets 2015 – 2016**. Page 43.

Rome, Italy. [www.fao.org/publications/soco/the-state-of-agricultural-commodity-markets-2015-16/en/](http://www.fao.org/publications/soco/the-state-of-agricultural-commodity-markets-2015-16/en/)

#### **The key points to remember**

- ① The stage of agricultural development is critical for determining policy objectives, which may range from establishing basic market conditions, to improving agricultural productivity, to promoting private-sector led growth.
- ② A combination of domestic and border measures is needed to achieve the policy objectives at each stage of agricultural development.

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- ③ In practice, the optimum package of domestic and border measures depends on individual country circumstances. Attaining desirable outcomes will also depend on adequate implementation capacities.

## Lesson Summary

### In this lesson you have learnt that:

- Different trade policy measures can have different welfare implications for consumers, producers and government revenues.
- Trade policy measures pursued towards addressing short-term food security concerns can have different implications in the short-term vs. in the medium-to-long term.
- When designing and implementing trade policies, the focus should be on achieving food security in the context of long-term agricultural development and structural transformation.
- There are different stages of agricultural market development that range from low-productivity to more commercially oriented agriculture.
- Achieving long-term food security objectives requires a combination of policies, including social protection, agricultural support and border measures that promote sustained agricultural productivity increases.