

Chapter 2

Trends and evaluation of agricultural policy in the Philippines

This chapter describes the main objectives that have guided the design of Philippine agricultural policy since the beginning of the 1990s and the institutional structures established to implement that policy. It provides a systematic overview of domestic and trade policies targeting agriculture, followed by an assessment of the level and structure of support provided to the Philippine agricultural sector over the period 2000-14.

2.1. Introduction

This chapter examines agricultural policy and the support provided to agricultural producers in the Philippines since 2000. Achieving food self-sufficiency, in particular in rice production, has been the main agricultural policy objective over the past decades, and price support and input subsidies have been the main policy tools. The Department of Agriculture (DA) leads the development and implementation of agricultural policies, in which several other departments and Government-Owned and Controlled Corporations play important roles. On the policy level, since 2011, inputs subsidies have been replaced by roll-over schemes to encourage adoption of high-yielding seed varieties. Expenditure on irrigation accounts for a third of annual government spending on agriculture. Tariff protection remains the main tool of trade policy and until recently has remained at high level. Trade liberalisation has mainly occurred within regional trade agreements, particularly the ASEAN Free Trade Area.

The level of support to producers as measured by the ratio of policy-related transfers from taxpayers and consumers to gross farm revenues (the percentage Producer Support Estimate, %PSE) averaged 25% in 2012-14, above the OECD average of 18%. Support for rice and sugar producers is the highest across all commodities. The total value of transfers arising from support to agriculture was equivalent to 3.3% of GDP in 2012-14, which is close to the levels in the People's Republic of China (hereafter "China") (3.0%) and Indonesia (3.4%), but much higher than the OECD average (0.7%).

2.2. Agricultural policy framework

This section provides an overview of the policy objectives for agriculture, the key stages of agricultural policy reform, the framework for policy implementation and the institutional arrangements for administering agricultural policy.

Agricultural policy objectives

Agriculture is of paramount importance to the Philippines, both in terms of food production and income generation. The main agricultural policy objectives over the past few decades have focused on food security and poverty alleviation, to be achieved by guaranteeing a stable supply of food at affordable prices (NEDA, 2014a). Food **self-sufficiency**, particularly in rice, has been the major policy goal of all governments.

The 1997 Agriculture and Fisheries Modernization Act (AFMA, Republic Act, RA 8435), to date the most important framework law for the agricultural sector, states the following core objectives for agricultural policy: poverty alleviation and social equity; food security; rational use of resources; global competitiveness; sustainable development; empowerment of people; and protection from unfair competition (Aquino et al., 2013a). These objectives have been broadly continued in subsequent policy planning documents, including the Philippine Development Plan for 2011-16, but new objectives have also been added such as improving sector's resilience to risks, in particular those related to climate change (Chapter 3), and food safety.

Basic stages of agricultural policy reform

1970-86: Heavy government involvement

Up to the end of the 1970s, the **macroeconomic policies** of the Philippines did not favour the development of the agricultural sector. The import tariff and export tax structures were biased against agriculture and agricultural trade and favoured import-competing, non-agricultural industries. This industrialisation strategy resulted in an artificial increase in prices for manufactured goods and relative reduction in prices for food and raw materials. The policy was supported by an overvalued exchange rate arising from foreign exchange and import controls (Piadozo, 2012).

Moreover, a sequence of unfavourable weather events in the beginning of the 1970s led the government to take **monopoly control** over rice and maize trade. The National Grains Authority was established in 1972, and was later renamed as the National Food Authority (NFA) which still operates today (Intal and Garcia, 2005). Sugar trade was also nationalised under the National Sugar Trading Corporation.

At the same time as heavy government intervention in markets, high-yielding rice technology was developed which increased production as part of the **green revolution**. In 1973, the new technology was disseminated under the *Masagana 99* production programme, the purpose of which was to help the Philippines attain self-sufficiency in rice and eventually become a net rice exporter. Farmers were encouraged to use new high-yielding varieties of rice as well as fertilisers and pesticides. Public spending was increased (particularly on irrigation), financed by a mix of taxes on major agricultural exports and foreign loans (David et al., 2012). Access to credit and to extension services was facilitated; for example, financial institutions were legally obliged to provide 25% of their loans to the agricultural sector (DA, 2015). The *Masagana 99* programme lasted for 15 years and led to a substantial increase in rice production. Rice self-sufficiency was achieved and the Philippines became a net-exporter of rice over the period 1978-83 (Hernandez, 2013; Galero et al., 2014).

1986-2000: Towards liberalisation

Although world market commodity prices had started to fall by the late 1970s, the Marcos administration maintained policies and measures originally implemented in the period of high world market prices. The end of the Marcos administration in 1986 saw **liberalisation** of agricultural policies. A range of reforms undertaken in the 1990s aimed at improving services provided to agriculture, particularly extension services, and infrastructure and the private sector assumed a greater role in agricultural credit policy. Market interventions were also reduced, as were tariffs and non-tariff measures on agro-food imports, and export taxes and the coconut export ban were abolished. The responsibilities of the NFA were reduced and the Sugar Trading Corporation was replaced by the Sugar Regulatory Administration, which had no power to engage in direct marketing operations (David et al., 2009).

The Comprehensive Agrarian Reform Program (CARP), a government initiative aimed at granting landless farmers and farmworkers ownership of agricultural lands, was launched in 1988. The scope of land covered by the reform evolved over time, but it is estimated that about 7.9 million ha, or about three-quarters of total agricultural land, was covered. The original deadline for completion was 1998, but it has been extended twice. While the distribution of land has almost been completed, the economic and social effects of the reform are mixed (Chapter 1).

Efforts to liberalise trade policy such as through the removal of quantitative restrictions on imports of agricultural commodities were halted by the adoption of the Magna Carta for Small Farmers in 1991 which imposed restrictions on agricultural imports that were deemed to compete with domestic production (David et al., 2009).

The policy of self-sufficiency in rice continued. Several programmes to **enhance rice productivity** were launched by the DA. The strategy involved the provision of input subsidies to farmers, mainly fertilisers and certified seeds of inbred high-yielding rice varieties, but also credit facilitation and support to public services for agriculture, like investments in irrigation and farm-to-market roads. Public expenditures on input subsidies declined substantially in the late 1990s, due to the tight fiscal policies adopted in the aftermath of the 1997 Asian Financial Crisis (Bordey, 2010).

At the beginning of the 1990s, the Philippines also negotiated a number of **trade agreements**. The country was one of the founding members of the ASEAN Free Trade Area (AFTA) in 1992. In 1995, the Philippines joined the WTO and committed itself to removing quantitative restrictions on imports of sensitive agricultural products, with the exception of rice, and to a gradual liberalisation of agriculture. In the early 1990s, the Philippines also launched consecutive unilateral Tariff Reform Programs to reduce tariffs and remove quantitative trade restrictions. The government adopted the AFMA budget and action plan in 1997, which provided safety nets to facilitate farmers' adjustment to changes in trade policy. One strategic objective of the AFMA was to transform Philippine agriculture from being resource-based to becoming technology- and market-driven. However, it also made self-sufficiency in rice official government policy.

The programmes of liberalisation, reform and production support did not bring the expected increase in productivity, nor were they successful in modernising Philippine agriculture. Several researchers (Habito and Briones, 2005; Cororaton and Corong, 2009) argue that one of the main reasons was that agriculture remained penalised by macroeconomic policies and that support was still concentrated on input subsidies and financing mostly private goods and services, with promised expenditures on public services such as farm-to-market roads, irrigation, and post-harvest facilities lower than planned (Habito and Briones, 2005). High protection against rice imports resulted in higher prices in the Philippines than on world markets, yet because the increase in rice production could not keep pace with consumption growth, rice imports increased to meet the gap.

2000 to present: Increasing public support to agriculture

During the 2000s, the government undertook some policy measures to further **reduce market interventions** in agriculture. In particular, subsidised credit programmes were terminated and private traders allowed to import rice, albeit at very limited levels.

However, the focus on food (rice) self-sufficiency was further reinforced. Various programmes were instituted under AFMA to increase rice productivity (Cororaton and Corong, 2009). The composition of budgetary support to agriculture in the first half of the 2000s was increasingly biased towards rice: the share of the total agricultural budget devoted to supporting rice production increased from about 40% in 2000 to nearly 60% in 2005. Yet despite efforts to increase rice production, the government was not able to reduce dependency on rice imports.

After the global food price crisis in 2008, **budgetary spending on agriculture increased** substantially. The government concentrated on intensifying rice production enhancement programmes, increasing public expenditure on irrigation and input subsidies to achieve self-sufficiency in rice by 2013 (later changed to 2016).

The new **National Development Plan for 2011-16** aimed to address the major challenges facing the agricultural sector, namely the high cost of agricultural inputs, inefficient supply chain and logistics systems, inadequate provision of irrigation infrastructure, low rate of adoption of technologies, and limited access to formal credit (WTO, 2012).

The **Food Staples Sufficiency Program (FSSP)**, launched in 2011, reflected the food security policy. The FSSP retained a strong focus on rice and other staples such as white corn, banana (saba), cassava and sweet potato, but shifted the emphasis away from input subsidies towards public services to agriculture such as extension and infrastructure (e.g. farm-to-market roads).

The **Food Safety Act (RA 10611)**, adopted in 2013, unifies all food safety regulations in the Philippines. The objectives of the law are to protect consumer health; enhance industry and consumer confidence in the food regulatory system; and promote fair trade practices and a sound regulatory foundation for domestic and international trade. In 2015, the implementing rules and regulations were signed by Secretaries of DA and Department of Health.

Framework for policy implementation

Laws and regulations

The **1987 Philippine Constitution** is the ultimate law of the Philippines. The Congress of the Philippines (*Kongreso ng Pilipinas*) is the national legislative body. Laws passed by the Congress are titled as **Republic Acts (RA)**. Every bill passed by both chambers in identical form and signed by the President becomes a law. In the case of the exercise of a Presidential veto, Congress can override the veto with a two-thirds majority in both chambers (voting separately), after which the bill becomes law. Laws can only be changed, revoked or amended by an Act of Congress. The executive branch, through its regulatory agencies and departments, can issue **orders** that have the force and effect of a law, though they are not officially laws but simply rules or administrative regulations to facilitate implementation of laws enacted by Congress. The President, as the chief executive, signs these orders that can be: executive orders (EO), administrative orders, proclamations, memorandum orders, memorandum circulars or general or specific orders, depending on their substance and in accordance with the Administrative Code of the Philippines. These orders regulate or direct behaviour of firms and individuals, but may be revoked, amended or changed by the succeeding President. Local governments may issue ordinances or local executive orders that pass through an approval process at local councils. The list of major laws regulating the agricultural sector is presented in Table 2.A1.1.

The most important legal document guiding Philippine agriculture is the **AFMA**, adopted in 1997. The AFMA was created to provide the policy framework and support measures to enhance competitiveness and the modernisation of the agricultural sector. The law was driven by the government's commitment to provide safety nets for farmers to help them cope with trade reforms undertaken under the WTO. AFMA is financed through the General Appropriations Act (GAA), the official document indicating the allocation of funds by the Philippine government.

Implementation of AFMA, which started in 2001, is based on the Administrative Order No. 6 from 1998 Implementing Rules and Regulations (IRR) issued by the DA.

The AFMA has been implemented through the **Agricultural and Fisheries Modernization Plan**, which integrates all development plans and agricultural policy measures for the modernisation of the agricultural sector. The plan covers a wide range of agricultural policy areas: the agriculture and fisheries modernisation plan, human resource development, research development and extension, rural non-farm employment, trade and fiscal incentives, production and marketing support services, infrastructure (including post-harvest infrastructure), credit, the basic needs programme, irrigation, training, product standardisation and consumer safety. Also under AFMA, the **Agro-industry Modernisation Credit and Financing Program (AMCFP)** provides credit assistance to small and medium size enterprises and makes credit accessible to all, regardless of economic status (NAFC, 2007).

Strategic Agriculture and Fishery Development Zones are one of AFMA's key implementation tools intended to concentrate agricultural development in pre-defined areas and redirect urban development away from those areas. All lands suitable for agriculture are to be identified, set aside, and protected from future conversion to competing uses, e.g. urban development. Agricultural production should also be maximised without causing irreversible environmental problems (Briones, 2005). The zones are intended to focus government resources on areas where they can have the greatest impact on agricultural productivity and poverty reduction. Strategic Agriculture and Fishery Development Zones cover 10.64 million hectares (SEPO, 2014), including irrigated or irrigable agricultural lands, that is, almost all areas currently classified as agricultural land.

National development plan

The National Economic and Development Authority (NEDA) formulates national and regional **development plans** and **public investment plans** in the Philippines. The NEDA Board is the government's highest socio-economic planning body, chaired by the President. There are three types of development plans in the Philippines: the national-level Medium-Term Philippine Development Plans (MTPDPs); the Regional Development Plans (RDPs); and the Local Development Plans. In addition, the Medium-Term Public Investment Programs and Regional Development Investment Programs are prepared by taking the targets, goals and strategies specified in the MTPDPs and the RDPs and translating them into specific, time-bound activities in the form of programmes and projects (Ohno and Shimamura, 2007).

Philippine Development Plans serve as a guide for formulating policies and implementing development programmes for **six years** (coinciding with the presidential term) and are updated and revised in their third year. The plans provide cost estimates for the proposed strategies or programmes. Indicative budgetary allocations are reflected in the Public Investment Plan, developed in conjunction with the National Development Plan to set out in more detail key programmes, activities, and projects. However, these have no binding effect on the subsequent investment selection and budgeting process.

The **Philippine Development Plan 2011-16** aims to promote a framework of inclusive and sustained growth that generates mass employment and reduces poverty. The agricultural sector is seen to play important role in developing and improving living conditions. To

achieve competitiveness and sustainability in the agricultural sector, the medium-term update of the Development Plan sets out three priorities: increase productivity; increase forward linkages with the industry and services sectors; and improve sector resilience to risks, including climate change (NEDA, 2014a). To achieve these objectives, the following actions are planned:

- Increase investments for **research and development** as well as extension services; speed up Agrarian Reform (distribution of individual land titles to provide greater security of tenure and improve access to finance for agrarian reform beneficiaries).
- Provide **training** for farmers in terms of value-adding, agri-business development and value chain management; strengthen farmers' groups and co-operatives; and encourage public-private sector partnerships to finance infrastructure or certain postharvest facilities.
- Encourage **diversity of production** and livelihood sources; strengthen the insurance system; and adapt the community-based employment programme to function as a social protection mechanism (NEDA, 2014a).

Institutional arrangements for administering agricultural policy

The agricultural sector is governed at both the national and local levels. Four key departments of the Philippine government are responsible for rural and agricultural development: the DA, the Department of Environment and Natural Resources (DENR), the Department of Agrarian Reform (DAR) and the Department of Interior and Local Government (DILG) (Figure 2.1). Additionally, the Department of Science and Technology (DOST) has an important role in co-ordinating agricultural research.¹

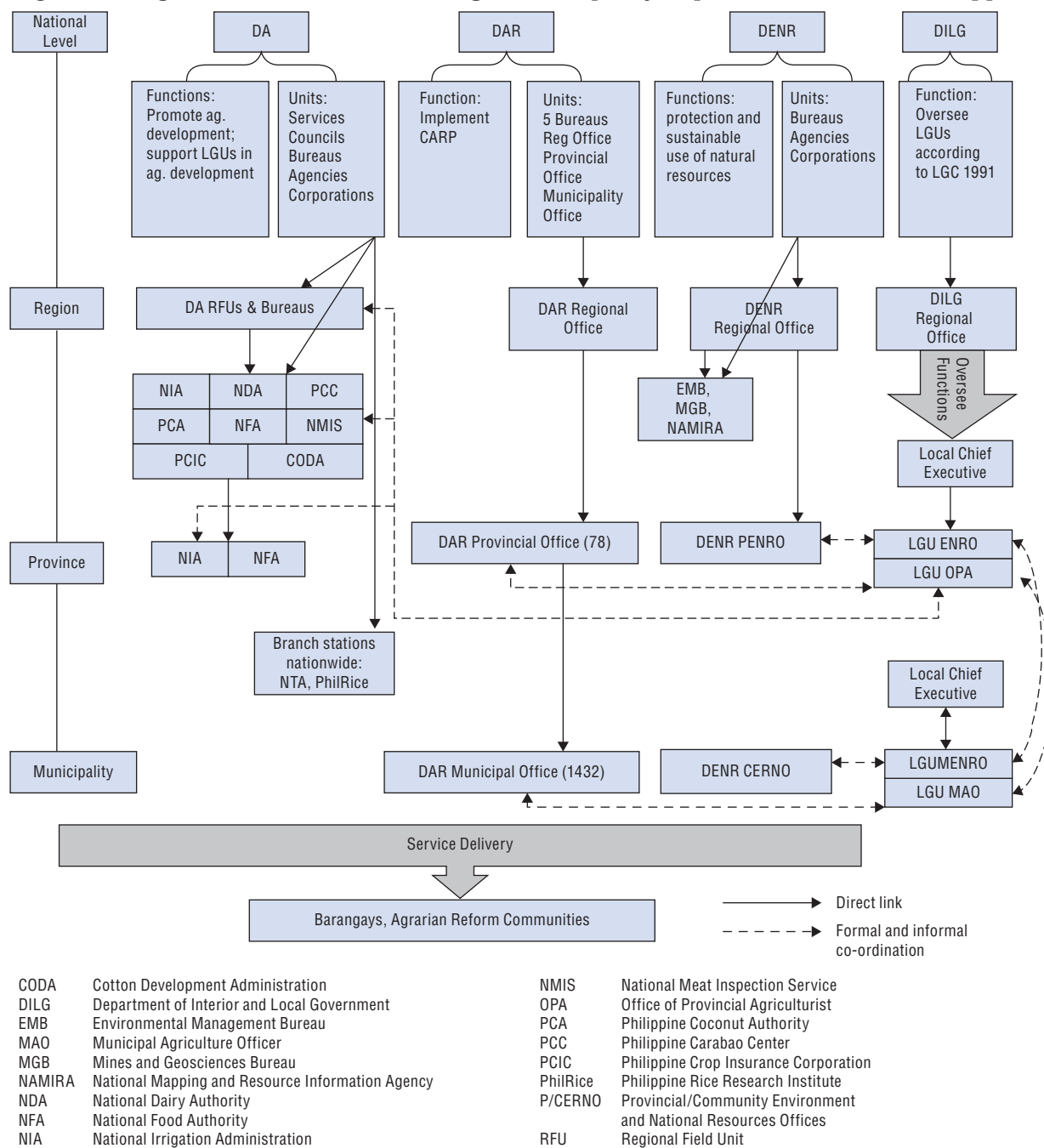
Department of Agriculture

At the national level, the **Department of Agriculture** is the main agency responsible for the promotion of agricultural development and growth. It provides the policy framework, public investments and support services needed for domestic and export-oriented business enterprises. The organisational structure of the DA is complex; as at early December 2016 it consisted of ten services, 15 regional offices, six bureaus, seven attached agencies (Table 2.A1.2) and seven Government-Owned and Controlled Corporations (GOCCs) that represent a mix of commodity and function-focused structures (Table 2.1). The bureaus are core units of the DA and are generally responsible for undertaking or providing specialist and technical functions and services.

Attached agencies and corporations may have single functions, i.e. rice research (PhilRice); market or technical regulations (National Food Authority, NFA; Fertiliser and Pesticide Authority, FPA); infrastructure development (National Irrigation Administration, NIA); or a whole range of functions, i.e. research, extension, marketing and other regulatory functions (Philippine Coconut Authority, PCA; Sugar Regulatory Administration, SRA; National Tobacco Administration, NTA; National Dairy Authority, NDA) (David, 1997).

In addition to functions at the national level, the DA also has 15 regional offices that mainly deliver extension services. Agricultural policy measures are implemented by local governments as the DA does not have local representation at the provincial or municipal level (Figure 2.1).

Figure 2.1. **Organisational framework of agricultural policy implementation in the Philippines**



Source: Lange (2009).

The DA has two attached councils:

- The **Philippine Council for Agriculture and Fisheries (PCAF)** was initially established in 1987 as the National Agricultural and Fishery Council (NAFC) to serve as an advisory body at the regional, provincial, and municipal levels to promote private sector participation in agricultural and fishery development through consultation, advocacy, planning and monitoring and project evaluation. In 2004, the NAFC and the Livestock Development Council

were merged to form what is now the PCAF, with the aim of moving from sector-specific to more holistic coverage of agriculture and fisheries issues. The main role of PCAF is to serve as consultative and feedback mechanism on the policies, plans and programmes of the DA.² The tasks of PCAF also include AFMA monitoring, assisting the DA in mobilising and evaluating the contributions of government agencies to agriculture and fishery modernisation, and promoting consensus on national and local budgets for agriculture and fisheries.

- **The Agricultural Credit Policy Council (ACPC)** was created in 1986. It plays a unique strategic role in improving the access of small farmers to formal credit. It is the only agency with the legal authority to synchronise all government agricultural credit policies and financing programmes. The ACPC is mandated to formulate credit policies and programmes and oversee the implementation of AMCFP. Among the tasks of ACPC is to provide certification of eligibility of bonds and other debt securities, and accreditation of non-bank rural financial institutions under the Agri-Agra Reform Credit Act (RA 10000 from 2009), the purpose of which is to enhance the access of agricultural sector to financial services and programmes. The Act mandates all banking institutions to set aside at least 25% of their total loanable funds for agriculture and fisheries credits, of which at least 10% should be for agrarian reform beneficiaries. ACPC has also begun to participate in the management of certain credit programmes. ACPC's commitment under the Philippine Development Plan (PDP) 2011-16 is to further increase formal borrowing in the sector from 57% in 2008 to 85% by 2016, requiring an annual increase in formal borrowing of 4% until 2016.

Government-Owned and Controlled Corporations

The most influential GOCC is the **National Food Authority (NFA)**. Created in 1981, it took over the tasks of the National Grains Authority, which was responsible for promoting the growth of the grains industry (rice, maize, wheat and feed grains as well as their substitutes such as mung beans, soybeans and cassava). The NFA is mandated to strengthen the development of the food industry and ensure the adequate and continuous supply of food items at reasonable prices. Soon after its foundation in 1985, along with the deregulation of prices and markets³, the NFA's responsibilities were limited to rice and maize, including exclusive authority to import rice. However, in 1997, the NFA was given the right to stabilise sugar prices as necessary (EO No 398, 2007). Following El Niño in 1998, the NFA's responsibilities were further extended to include interventions to stabilise the prices and supply of basic food items (rice, sugar, cooking oil, milk, coffee, sardines and noodles) as necessary (SEPO, 2006).

Today, the **NFA's main role** is to ensure national food security and stabilisation of supply and prices of staple cereals at both farm and consumer levels. Its main activities are the procurement of paddy rice (*palay*) from farmers and their organisations, buffer stocking, processing activities, and distribution of paddy rice and milled rice to strategic locations and to various marketing outlets (SEPO, 2006). NFA also grants import permits for rice. In addition, it has a number of tasks related to market regulation: monitoring grain storage; seizing stocks in case of hoarding; establishing and enforcing standards in grading, sampling and inspection; registering, licensing and supervising warehouse, mills and other businesses related to grains; and controlling export of grains. The NFA also regulates rice-related processing and servicing activities by issuing licenses, including: mechanical trying, threshing and other post production processes, transportation, milling, warehousing, manufacture of rice-based and maize-based products, grains packaging, retailing, wholesaling, importing, exporting and indenting (Briones and de la Peña, 2015).

Under its mandate, the NFA has to fulfil two **contrasting tasks**: to buy paddy rice from farmers at higher-than-market prices and sell rice to consumers at a price lower-than-market prices. Hence, the activities of the NFA are very costly. The NFA is financed from the national budget at PHP 4.25 billion (USD 96 million) annually (2013-14), but it is also authorised to borrow from commercial banks backed by a government guarantee and is exempt from all kinds of taxes, duties and fees. The NFA has consistently incurred **losses** since 1999, but a large part of its debt was incurred over 2007-10 due to increased rice imports and the “food price crisis”, when world market prices of rice surged (Briones, 2014). NFA’s outstanding debt reached PHP 170 billion (USD 3.8 billion) in 2010 and had only decreased to PHP 155 billion (USD 3.7 billion) by 2013 (Montes et al., 2015). As budgetary allocations are only sufficient to cover cost of public stockholding, debt servicing in recent years has been financed from sales of imported rice at lower-than-domestic-market – but much higher than international market – prices (Figure 2.9 below). Several attempts have been made to reform the NFA in order to increase its efficiency and streamline or privatise certain activities. In addition, authority over the NFA has been transferred between the Office of President and the DA several times, most recently to the Office of Cabinet Secretary at the Office of the President (Table 2.A1.3).

Table 2.1. **Major Government-Owned and Controlled Corporations, November 2016**

Name	Activities
National Food Authority, NFA	The NFA is the state trading enterprise, created in 1981. It controls rice trade, has the right to intervene in the domestic rice market and holds public rice stocks.
National Irrigation Administration, NIA	The NIA is responsible for irrigation development and management. Created in 1963, its main tasks include: investigating and developing all available water resources for irrigation purposes; planning and constructing all types of irrigation projects; operating and maintaining all national irrigation systems; and supervising the operation of communal and pump irrigation systems.
Sugar Regulatory Administration, SRA	The SRA was created in 1986. Its main objective is to promote the growth and development of the sugar industry through greater participation of the private sector and to improve working conditions. Since 2006, when the Biofuels Act was adopted, the SRA has also been responsible for developing and implementing policies supporting the Philippine Biofuels Program and ensuring security of the domestic sugar supply. The SRA has been self-financing since 2007 and receives no subsidies from the government.
Philippine Coconut Authority, PCA	The PCA is responsible for developing the coconut and other palm oil industry. Created in 1973, it implements nationwide coconut planting and replanting, fertilisation and rehabilitation, and other farm productivity programmes. The PCA conducts research and extension works on farm productivity and process development for product quality and diversification. It also establishes quality standards for coconut and palm products and by-products and develops domestic and foreign markets.
Quedan Corporation, QuedanCor	The Quedan Guarantee Fund Board (QGFB) was created in 1978 to accelerate the flow of investment and credit into the countryside through the various quedan (Box 2.2) credit and guarantee programmes. In 1992, the QGFB was reorganised into QuedanCor. 60% of the QuedanCor is government-owned and the remaining 40% is owned by farmers, fishermen and private investors. QuedanCor has 14 Regional Offices. Presently, it is implementing the QuedanCor Agricultural Credit Guarantee for Rural Productivity, Agri-fishery and Livelihood Projects.
National Dairy Authority, NDA	The NDA, created in 1995, is the DA’s primary agency overseeing and supporting the development of the dairy sector with a special emphasis improving local supply of fresh milk. The NDA aims to accelerate dairy herd build-up and milk production, enhance the dairy business through delivery of technical services, increase coverage of milk feeding programmes and promote milk consumption. The NDA also holds the dairy functions of the Livestock Development Council, the Dairy Division of the Bureau of Animal Industry and the Livelihood Corporation’s Laguna Processing Center.
National Tobacco Administration, NTA	The NTA was created in 1987 to improve the economic and living conditions of tobacco farmers including those who depend upon the industry for their livelihood; and to promote the balanced and integrated growth and development of the tobacco industry to help make agriculture a solid base for industrialisation. The NTA: i) provides financial support to registered farmers; ii) assists tobacco farmers in developing alternative farming systems; iii) provides scholarships for dependents of tobacco farmers; and iv) undertakes studies concerning technologies and methods to reduce the risk of dependence on or injury from tobacco product usage and exposure, as well as research into the development of alternative uses of tobacco.
Philippine Crop Insurance Corporation, PCIC	The PCIC was created in 1978 as the implementing agency for the government’s agricultural insurance programme. PCIC provides insurance protection to farmers and fishermen against losses arising from natural calamities, plant diseases and pest infestations. The PCIC also provides insurance protection against damage to or loss of non-crop agricultural assets, including machinery, equipment, transport facilities and other related infrastructures.
Philippine Rice Research Institute, PhilRice	PhilRice was created in 1985 to help rice self-sufficiency by increasing the productivity and profitability of rice farmers. Its task is to develop high-yielding and cost-reducing rice production technologies. It has six branch stations and liaises with a network of 57 agencies and 70 seed centres strategically located nationwide.
Philippine Fisheries Development Authority (PFDA)	The PFDA was created in 1976 to monitor and promote the development of fishing industry. It focuses on the provision of post-harvest infrastructure facilities and other services to enhance quality and efficiency in the handling and distribution of fish and fishery products.

Source: DA (2016).

The Department of Environment and Natural Resources

The DENR is responsible for ensuring the sustainable use of natural resources and environmental protection. It has regulatory power over natural resources and land and is mandated to protect and promote the environmental resources of the Philippines. It consists of a variety of offices and attached agencies as well as offices at the regional, provincial and municipal levels.

The Department of Agrarian Reform

DAR is responsible for implementing the Comprehensive Agrarian Reform Program (CARP) (Chapter 1), which includes interventions in sustainable agriculture, rural infrastructure, rural industrialisation, investment and marketing assistance, credit assistance and community-based resource management. Established under CARP, the Agrarian Reform Fund finances both the cost of land acquisition and distribution, and the provision of complementary support services to agrarian reform beneficiaries. DAR has 7 services, 5 bureaus, 15 regional offices and 79 provincial offices (DAR Provincial Agrarian Reform Offices). Furthermore, DAR maintains Municipal Agrarian Reform Offices in key municipalities and cities throughout the country.

Department of Interior and Local Government

The DILG supervises the activities of the local government units (LGUs). In 1991, a Local Government Code was enacted that **decentralised** the administration of local public goods from the national level to the LGUs. Many functions of the DA were devolved to LGUs, among them agricultural extension, communal irrigation systems and farm-to-market roads. The move towards decentralisation was further strengthened by adoption of the AFMA, which emphasised local agricultural development planning, provided more resources to LGUs and ensured more operational links between provincial and municipal agricultural plans and programmes. However, LGUs have remained partly dependent on fiscal transfers from the national government to cover local development expenditures.

Local governance is allocated at three levels in the Philippines: provincial, municipal (city) and *barangay*, the smallest administrative unit (David, 1997). The **responsibilities of LGUs** include:

- **Barangay level:** agricultural support services; planting material distribution system; operation of farm produce collection and buying stations.
- **Municipality level:** agricultural extension and on-site research services; distribution of livestock and poultry; distribution of rice, maize and vegetable seeds to farms; seedling nurseries; demonstration farms; quality control of copra; improvement of local distribution channels; small-scale inter-*Barangay* irrigation systems; and public markets and slaughterhouses.
- **Province level:** agricultural extension and on-site research services; prevention and control of plant and animal pests and diseases; dairy farms, livestock markets, animal breeding stations and artificial insemination centres; assistance in organisation of farmers' co-operatives⁴.

Department of Science and Technology

The DOST is responsible for promoting and assisting scientific and technological research in priority areas, including agriculture, and for co-ordinating funding of the National Science and Technology Plan. The Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) under DOST is responsible for research in agriculture.

Other institutions involved in agricultural policy implementation

Beyond the five key institutions discussed above, a large number of other institutions are involved in the implementation of agricultural policy in the Philippines. The most important are:

- **Office of the Presidential Assistant for Food Security and Agricultural Modernisation (OPAFSAM).** This was a cabinet-level position under the Office of the President created on 5 May 2014 by President Benigno Aquino III to oversight the largest four GOCCs: the National Food Authority (NFA), the National Irrigation Administration (NIA), the Fertiliser and Pesticide Authority (FPA) and the Philippine Coconut Authority (PCA) with respect to the implementation of policies, programmes, projects and activities. In July 2016, Executive Order No. 1 placed NFA and PCA under the Office of the President. While as at early December 2016 there was no official document defining the affiliation of the FPA and NIA, it is presumed that they remained under the Office of the President.
- **Food Security Committee.** The committee meets quarterly (or as often as needed) to assess the supply-demand situation for rice and makes recommendations on rice imports to the Council of NFA, who in turn makes a recommendation for approval by the President. The Committee was established in 2014 and is chaired by the Secretary of NEDA. It replaces the previous Inter-Agency Committee on Rice and Corn.
- **Land Bank of the Philippines (LBP).** A governmental financial institution, the LBP was originally the agency for implementing CARP; today, it has become the largest formal credit institution in rural areas and has evolved to a full service commercial bank. It is also responsible for implementing the government's credit assistance programmes to small farmers.

Farmers' organisations

Farmers' organisations (FOs) provide a variety of **services** to their members such as input purchases, extension advice, marketing, export, and certification. The Magna Carta for Small Farmers (RA 7607 from 1992) gives farmers' organisations the right to be represented on the boards of government agencies, including PCA, NIA, NFA and PCIC.

Financing agricultural policies

The General Appropriations Act (GAA) is a **budget law** signed annually by the President and approved by Congress. The Department of Budget Management (DBM) is responsible for preparation, execution and control of expenditures for all three levels of government – national government departments and agencies, GOCCs and LGUs. Expenditures for the agricultural sector are considered funds of the following institutions: the DA and its attached agencies and corporations; DAR; the LBP; the budget from the Agrarian Reform Fund⁵ and the Philippine Council for Agriculture and Resources Research and Development (PCARRD). Historically, the DA accounted for the largest share of public spending on agriculture, but a sizable component is under direct control of the Office of the Secretary of Agriculture (Briones, 2013).

In 2012, the government started implementing a **bottom-up-budgeting** process to involve communities and local governments in crafting the budget. The programme was initially targeted to the poorest municipalities and cities to develop local poverty reduction programmes and projects but in 2015, it was extended to all municipalities and cities. The DA is one of the participating agencies and finances activities related to agriculture.

2.3. Domestic policies

This section discusses domestic agriculture related policy measures, including price support, input subsidies, credit policy, agricultural insurance systems and support to infrastructure development.

Price support measures

Rice and maize

The government's price support policy has multiple stated goals: to safeguard farmers from severe price fluctuations, particularly during peak harvest months; to assure farmers a ready market at a price that guarantees a fair return on investment; to encourage production and post-production efficiency; and to serve as guidance to grain traders on price levels (DA, 2015). Price support policy in the Philippines mainly affects **rice**, but may be extended to maize if necessary, and the prices of sugar and other basic food items may also be subject to intervention⁶. Price support policy is implemented by the NFA through the following mechanisms: support price, release price, government procurement, and import restrictions. The NFA may also accumulate buffer stocks of rice to stabilise consumer price levels and ensure adequate and continuous supply (Box 2.1).

The government support price is applied by the government when buying from farmers. The Food Security Committee recommends a support price to the Secretary of Agriculture and NFA management, which is then submitted to the President of the Philippines for final approval (DA, 2015).

The NFA buys rice from farmers and farmer organisations at a government-set support price. Farmers are not obliged to sell their paddy rice to the NFA; they can also sell it directly to millers and traders. Under the Farmers Option Buy Back Scheme, the farmer has the option to buy back the same volume of rice at the same price within the following six months, to benefit from any price increase above the NFA support price (WTO, 2012). When the market price falls under the set support price, the NFA begins **procurement**, concentrated in 37 major rice-surplus provinces. The volume of procurement depends upon the magnitude of production and the prevailing market situation (DA, 2015). During the past twenty years, the volume of procurement as a share of total paddy rice production has varied between 0.1% in 1995 to 5.4% in 2000 (Figure 2.2). The government's procurement price has exceeded the market price for most years, but since 1990, there have been 7 years in which it was lower (Figure 2.3). The gap between the NFA's support price for paddy rice and the market price was largest in 2008, when a sharp increase in the support price (Figure 2.3) resulted in the highest level of procurement since 1980 (Briones and de la Peña, 2015). However, during the whole 1995-2015 period, both the NFA support price and the producer price for paddy rice were significantly higher than the border reference price for rice adjusted to the farm gate level, indicating a high level of market price support for rice producers (Figure 2.2 and Section 2.5).

In addition to the support price, the NFA provides three types of **procurement incentive payments**: a drying incentive, a delivery (or transport) incentive, and a co-operative incentive. The drying incentive reduces farmers' drying costs and improves storability of the paddy rice. The delivery incentive is paid when grain is delivered directly to the NFA warehouse. The co-operative incentive is provided to FOs that sell to NFA. The co-operative incentive is not paid to the FOs immediately after the delivery of the paddy rice to NFA; rather it is accumulated in a Cooperative Development Incentive Fund, which can be used when FO buy equipment, inputs or services, or make an investment (SEPO, 2010).⁷ The procurement of **maize** has been minimal, ranging between 0% and 1.6% of the total production of maize.

Box 2.1. Public stockholding

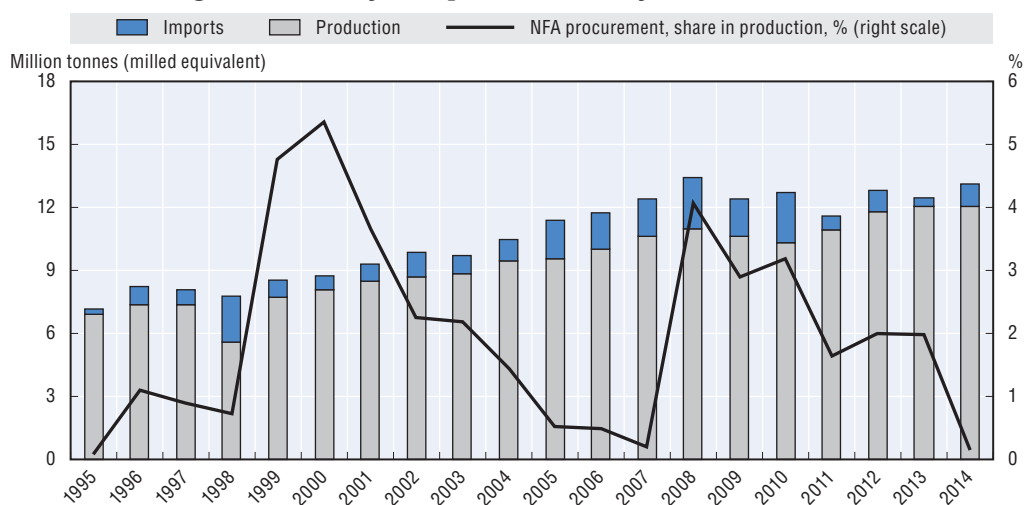
The **government buffer stock** is kept for both food security and price stabilisation purposes. The NFA is responsible for maintaining the stock, which is accumulated through direct purchases of paddy rice from farmers at the government-set support price. Paddy rice is stored and then milled with enough lead time before planned distribution of rice in the market. The rice is sold in the market when commercial prices rise (DA, 2015).

There are four different mandatory levels and timeframes for buffer stock holding in the Philippines:

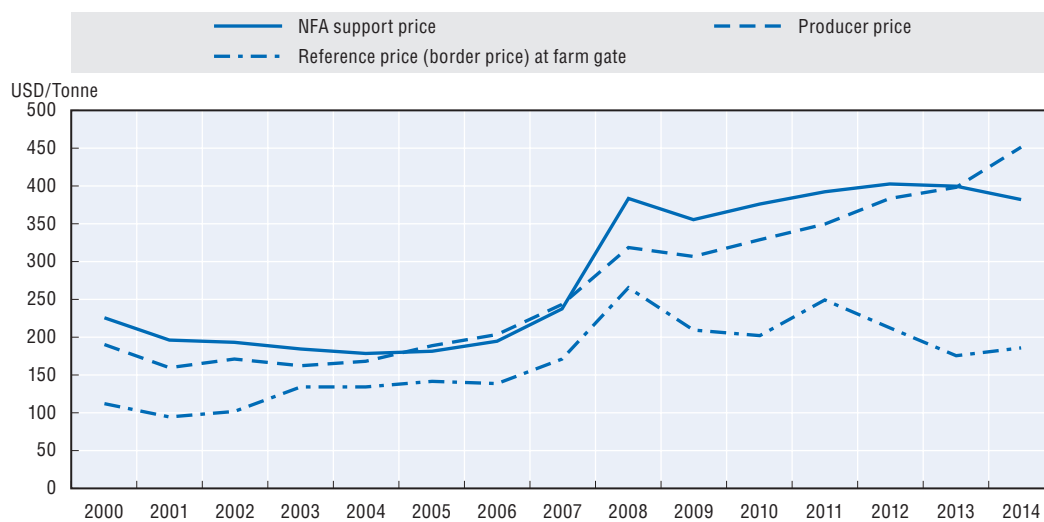
- **Strategic Rice Reserve:** Equivalent to a minimum of 15 days of national rice consumption. This reserve is maintained year round in government warehouses for food security purposes in case of calamities or emergencies.
- **Government Rice Buffer Stock:** Equivalent to at least 30 days of national rice consumption that should be available by 1 July every year, including the 15-day Strategic Rice Reserve for stabilisation purposes in deficit areas and during lean periods. The NFA, however, follows the government's decision that the national stock should be equivalent to 90 days' consumption, comprised of government stocks (30 days) and the balance being held by households and private warehouses (SEPO, 2010).
- **ASEAN Plus Three Emergency Rice Reserve:** After the food price crisis in 2008, ASEAN approved the ASEAN Integrated Food Security Framework, with the ASEAN Plus Three Emergency Rice Reserve as one of its main components. Signed in 2011 between ten members of ASEAN plus China, Japan and South Korea, countries committed to the principles of mutual assistance during times of food emergency, including information sharing, earmarking, and stockpiling. This new framework built on the previous Agreement of the ASEAN Food Security Reserve established in 1979, increasing the size of the reserve from the previous 50 000 to 787 000 tonnes (Briones, 2011). The Philippines committed to maintain 12 000 tonnes of rice at any given time for the use of other ASEAN member countries in case of an emergency.
- **Emergency Relief Operations:** The NFA provides rice to relief agencies such as the Department of Social Welfare and Development and the National Disaster Coordinating Council, and may also release rice to LGUs and others participating in relief operations (DA 2015).

The NFA has adopted a monitoring system called the **Commercial Stock Survey** which it uses to generate estimates on commercial rice and maize stock inventories held by the commercial sector at the national, regional and provincial level. The survey is a regular undertaking conducted over the last two days of each month and the first two days of the next month (DA, 2015).

The NFA is the only institution authorised to **import rice**, and imports only take place when there is an actual or projected shortage of rice. The Food Security Committee regularly evaluates the country's supply and demand situation. The NFA Council assesses their evaluation and submits a recommendation to the President on the probable volume of rice to be imported. After Presidential approval has been given, the NFA organises public bidding. Rice imports without public bidding are allowed under the Government-to-Government Procurement Scheme. NFA can allocate rice imports under the Minimum Access Volume (Section 2.4) to licensed private importers. These volumes are announced annually in major newspapers and are allocated to licensed importers on a first-come first-served basis, upon payment of Advanced Customs Duties via the LBP.

Figure 2.2. **Paddy rice procurement by NFA, 1995-2014**

Source: DA (2015).

StatLink <http://dx.doi.org/10.1787/888933452416>Figure 2.3. **Government-set procurement price and producer price of paddy rice, 2000-14**

Source: DA (2015), OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database.

StatLink <http://dx.doi.org/10.1787/888933452429>

Sugar

Price support and market regulation for sugar has a long history in the Philippines. The sugar trade was monopolised under the authority of the Philippine Exchange Inc. (later National Sugar Trading Corporation) in 1974. In 1985, the sugar monopoly was dismantled, government-owned sugar mills were privatised and market forces restored (FAO, 1997). The Sugar Regulatory Administration (SRA) was created in 1986. Today, sugar production, trade and domestic prices are largely governed by the SRA. The role of SRA includes developing the sugar industry (including research and development), regulating inventory levels and allocating production quotas (Box 2.2) (David et al., 2009).

Box 2.2. Sugar production quotas

At the start of each crop year, the SRA issues a central policy (known as Sugar Order No. 1) on production and marketing of sugar, determining how much production will be allocated to the domestic and export markets, and to reserves. This order is adjusted later in the season if necessary.

Most sugar in the Philippines is produced and marketed under the *quedan* (warehouse receipt) system. After processing the sugar, the mill issues a warehouse receipt, a *quedan*, to the farmer representing farmer's 70% share of the processed sugar (Section 1.9). It can also be used in paying for the processing of the cane. The *quedan* is a negotiable instrument and the owner may use it to withdraw their stocks at any time, giving rise to a secondary market for *quedans*. Sugar farmers usually sell the *quedans* to local traders, who in turn sell them to larger traders who sell them in large quantities to wholesalers, distributors or processors who then withdraw sugar from the mills. The processors use the sugar as an input for food and beverages while the wholesalers and distributors sell their sugar to major retailers.

There are five different types of *quedans*. "A" sugar is allocated to exports to the US, the largest export market for Philippine sugar. "B" sugar is allocated to the domestic market and "B-1" sugar is for food processors. "C" sugar is categorised as reserve, and may subsequently be converted to either A or B, depending on the market situation. "D" sugar is destined for the world market.

SRA determines the allocation of sugar volumes across various types of *quedans*. Within the current production volumes, only A and B *quedans* are allocated to farmers. The volume of "A" sugar is based on the volume of the preferential tariff rate quota allocated to the Philippines by the US government and on projected volume of production in a given crop year. This is usually less than 10% of total domestic output. The rest of the output is classified as "B" sugar. For the latest crop year (2015/16) SRA allocated all sugar production for the domestic market. However, in order to fulfil the US export quota, SRA allowed a partial reallocation of "B" sugar for exports to the United States. Correspondingly, imports of the same amount of sugar from the world market were allowed to satisfy the domestic demand.

Source: USDA (2015).

Within its WTO commitments, the Philippines maintained import quotas and **high tariffs** on raw and refined sugar imports (in-quota tariff of 50% and out-of-quota tariff of 65%) (Table 2.A1.6). However, in 2010, in line with a commitment undertaken within the AFTA, the Philippines agreed to lower the preferential tariff on imports of sugar from AFTA countries from 38% to 5% by 2015.⁸

The Sugarcane Industry Roadmap (2011-16) aims to prepare the sugarcane industry for reduced tariffs on imported sugar and to increase the productivity of domestic sugar production. One of the proposed measures is instituting **block farming** to encourage small farms (less than 10 ha) to consolidate into minimum block farms of 30-50 ha through various schemes, such as contract growing, joint ventures, partnerships, profit-sharing and hiring of professional farm managers. The roadmap supports identification of possible expansion areas suitable for sugarcane production, research and development, building farm-to-market roads, farm mechanisation and irrigation. Implementing partners include the DA, DAR and SRA. The DAR monitors selected block farms⁹, the SRA oversees programme implementation and provides technical assistance, and the DA is responsible for infrastructure investments. In addition, the Sugarcane Industry Development Act was adopted in 2015 to promote and support the competitiveness of the sugarcane industry. The government allocated PHP 2 billion (USD 44 million) for infrastructure, research and development, credit, grants to co-operative farms and scholarships to support sugar producers.

Reduction of input costs

Support for variable inputs

Following a calamitous harvest in 1972¹⁰, a number of programmes, mainly targeting rice producers, were implemented that relied heavily on **input subsidies** to increase rice production. Since then, each new presidential administration has re-issued essentially the same framework under a different name, targeting self-sufficiency and using largely the same strategy (Table 2.A1.4). In the mid-1990s, other priority crops were added and the range of supported activities was broadened. These sets of commodity-specific policy measures have been named banner programmes. They contain a uniform set of services provided to producers of a particular commodity. Their main focus is on easing farmers' access to inputs, but they also include expenditures on extension, research, irrigation, roads, and preferential credits (Box 2.3).

Box 2.3. Banner programmes of the DA

DA implements a considerable part of agricultural policy through commodity-specific banner programmes, which have been the core of its overall strategic policy framework over the past decades. On average, about half of the budgetary expenditure on agriculture is spent through these programmes. Of this amount, more than 60% is allocated to rice farmers.

Currently, DA implements the following commodity programmes: National Rice Program, National Corn Program, National High Value Crop Program, National Livestock Program, National Fisheries Program and National Organic Agriculture Program. These programmes contain various services:

- *Production Support Services* include mainly input support such as: distribution of seeds, planting materials, fingerlings, animals, fertilisers and other soil ameliorants.
- *Market Development Services* include events or set-ups to promote the entry, sale or consumption of agricultural products in domestic and international markets.
- *Extension Support, Education and Training Services* include training, information, advisory services, and technology demonstration.
- *Research and Development Services* include commercialisation of technologies, establishing or maintaining research facilities, funding research and development activities.
- *Irrigation Network Services* include investments in large- and small-scale irrigation projects.
- *Farm-to-Market Road Network Services* involve construction of farm-to-market roads.
- *Agricultural Machinery, Equipment and Facilities Support Services* include distribution of farm production-related machinery (tractors, harvesters), establishing production facilities, distribution of postharvest equipment and machinery (e.g. threshers, dryers), and establishment of postharvest facilities.
- *Regulatory Services* include formulation and enforcement of product standards, prevention of disease and pest infestation, quarantine and inspection, issuance of certifications, licences etc.

Source: DA (2015).

In the 2000s, the *Ginintuang Masaganang Ani* (Golden and Bountiful Harvest) was the main policy framework providing support to rice producers within the **rice banner programme** (Table 2.A1.4). High yielding rice varieties and fertilisers were subsidised to encourage

farmers to adopt certified inbred and hybrid seeds. Within this framework, the government launched the Hybrid Rice Commercialisation Program (HRCP) in 2001 followed by another programme applied in 2008-10, in response to the 2008 food price crisis, called Fertiliser, Irrigation and other rural infrastructure, Extension and education, Loans, Dryers and other post-harvest facilities and Seeds (FIELDS). Three elements of support were provided through the HRCP: procurement of seeds at a guaranteed price; distribution of the procured seeds to participating farmers at half the procurement price¹¹; and payments to participating farmers to help cover fertiliser costs (Cororaton and Corong, 2009).

Under the HRCP, budgetary allocations on **seed subsidies** were already high, but they increased strongly under FIELDS to a point where they accounted for about 20% of its total budget.¹² In spite of sizable budgetary resources allocated to both programmes, the adoption of hybrid seeds remained low and rice yields did not increase as much as expected (Chapter 1). Following a change in leadership in the DA in 2010, such input subsidies were terminated on the basis of being too costly and ineffective (Mariano and Giesecke, 2014).

In 2011, a framework called *Agrikulturang Pilipino* or **Agri-Pinoy** was introduced to guide various programmes of the DA over 2011-16. *Agri-Pinoy* is based on four principles: food security and self-sufficiency, sustainable agriculture, natural resource management and local development. To achieve self-sufficiency in food staples the **Food Staples Self-Sufficiency Program** (FSSP) was launched in 2011 under the *Agri-Pinoy*. The aim of the FSSP 2011-16 is to secure food supply for the population while ensuring a decent and rising standard of living for farmers. Productivity growth is prioritised as the main tool to achieve self-sufficiency, especially in rice, but also in a number of other staples such as white maize, root crops (cassava and sweet potato) and *saba* bananas. As within the previous rice programmes, farmers are encouraged to use high-yielding seed varieties combined with more fertilisers and extension of irrigation systems (Sombilla and Quilloy, 2014). However, a major difference is that the free provision of seeds to farmers was discontinued and replaced by a Community Seed Bank and, later, High Yielding Technology Program that provides seeds (and fertilisers) within roll-over or conditional assistance schemes (Box 2.4).

In addition to rice, currently active banner programmes under the *Agri-Pinoy* framework include maize, high value crops, livestock and organic products (Box 2.3). To promote diversification of agricultural production, budgetary expenditures on high-value crops¹³ and livestock banner programmes were substantially increased in the 2010s.

Although the provision of seed subsidies was reorganised in 2011, the government continues to regulate seed prices. The **selling and buying prices of seeds** are declared by a DA Administrative Order. The price is determined for inbred and hybrid rice seeds for different seed classes as a guide to different agencies involved in the seed programme as well as to the seed growers and farmers (Hernandez, 2013). The DA also determines seed prices for maize, vegetables, legumes and plant materials. According to Sombilla and Quilloy (2014), these prices are below the private sector competitive price and do not provide enough incentive for seed producers to enhance production.

While coconuts are not explicitly covered by banner programmes, the Philippine Coconut Authority (PCA) implements the **National Coconut Program** with two sub-programmes: the Salt Fertilisation Program and the Accelerated Coconut Planting and Replanting Project, both partly based on the provision of subsidised inputs. After 2013, when the coconut farms were severely hit by Typhoon Haiyan, funds appropriated by the government to programmes implemented by the PCA increased substantially. These programmes are targeted to improve

coconut yields and alleviate the high incidence of poverty among coconut farmers (Box 1.2). Under the Salt Fertilisation Program, coconut farmers are provided with common salt or sodium chloride to increase coconut productivity and improve resistance to pest and diseases. The Accelerated Coconut Planting and Replanting Project is composed of several components, including the Coconut Seedlings Dispersal Project and the Participatory Coconut Planting Project¹⁴, both of which provide input subsidies to coconut farmers (PCA, 2012).

Box 2.4. Programmes for rice farmers under Agri-Pinoy

With the introduction of the FSSP the DA phased out the former rice seeds subsidy programme and replaced it with a **Community Seed Bank Program** (Ferrer, 2014). The new programme is intended for farmers who cannot afford to buy quality seeds or have difficulty accessing them. It also aims to maintain a **buffer stock of seeds** equivalent to 10% of planting requirement in the wet season and 5% in dry season to ensure availability during calamities and crop failure. Community Seed Banks are managed by the Irrigators Associations (IAs), FOs and non-government organisations. The programme encourages organised farmer groups and co-operatives to produce their own certified or inbred rice seeds out of the registered rice seeds distributed to them for free. The DA distributes an initial starter of at least 20 kg of registered seeds to qualified farmer groups, co-operatives and IAs for this purpose. Farmers benefiting from the seeds are required to pay back in-kind to the community seed bank, to maintain a buffer stock of seeds. Farmers may choose to pay back the borrowed seeds in the form of 1.5 kg of clean and dry seeds per kilogram of borrowed seeds if payment is outright; or 2 kg if after the harvest. The seeds produced by farmers out of the initial amount of seeds distributed by the DA are expected to be used for at least four cropping seasons. After that, the DA will provide another set of registered seeds. Under the programme, the government also supports the repair of existing storage facilities and warehouses managed by farmer groups (DA, 2011).

In 2015, the government introduced a **High Yielding Technology Adoption Program**, a sub-programme of the DA's National Rice Programme implemented by the DA's Regional Field Offices, to support the adoption of high yielding rice varieties (hybrid, certified inbred seeds and Green Super Rice) in more than 560 000 hectares. DA Regional Offices will be in charge of distributing the seeds to farmer groups, along with fertilisers and soil ameliorants under a **roll-over or conditional assistance schemes**. In order to guarantee the repayment of inputs given to farmers or increase yields resulting from the distributed seeds, Regional Offices may design reward systems. Farmers who achieve excellent results under the programme will be rewarded with hand tractors with trailers, four-wheel drive tractors, threshers, water pumps, warehouses, combine harvesters and dryers (DA website, 2015).

Support for fixed inputs

The level of farm mechanisation in the Philippines is relatively low (Chapter 1). Under the FSSP rice self-sufficiency strategy, the government launched the **Rice Mechanization Program** in 2011, with the aim of improving production operations and reducing national average post-harvest losses by at least 5% by end-2016. The programme is aimed at facilitating rice farmers' access to appropriate production and post-production systems as well as to increase their income by at least 15% as a result of more efficient production, drying and milling operations. The programme has on-farm and off-farm components. On-farm components include the provision of farm mechanisation facilities and equipment to FOs. An off-farm mechanisation programme is intended to improve drying capabilities of FOs and enhance the modernisation of the rice milling industry in the Philippines.

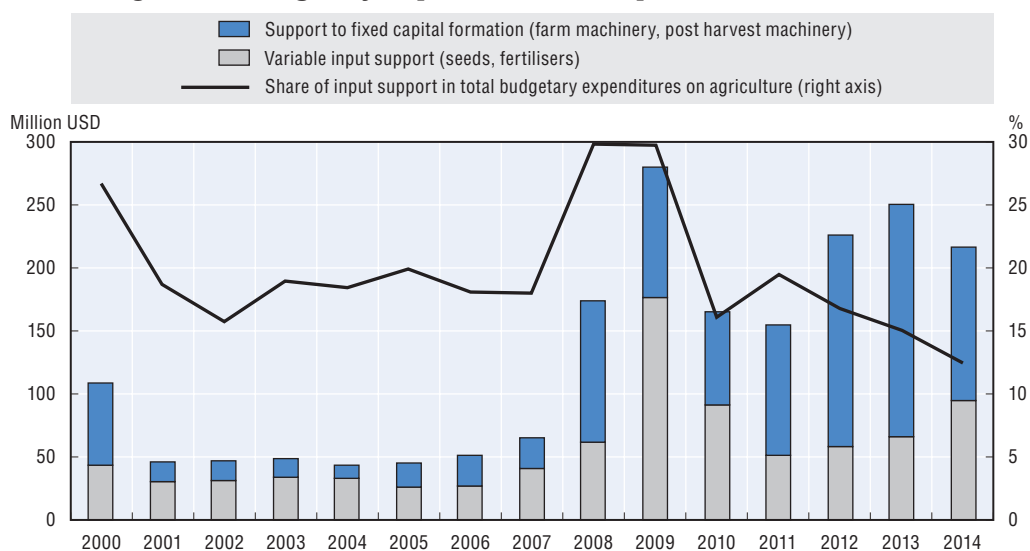
For the on-farm component, the government covers 85% of the cost of farm machinery to qualified farmer organisations, while the remaining 15% is paid by farmer groups. The main items provided under the programme are: mechanical dryers, hand tractors, four-wheel tractors, paddy rice threshers, rice drum seeders, rice cutters and rice combine harvesters. Farmer associations act as service providers: they deliver on-farm operations like irrigation, land preparation, seeding, harvesting and threshing to the small farmers, co-operatives and FOs at a reasonable fee. **Budgetary expenditures** for the Rice Mechanisation Program amounted to PHP 16 billion (USD 369 million) for 2011-16. By 2016, the programme aims to procure and distribute 7 000 postharvest units and 90 000 units of on-farm machinery (Tobias et al., 2012).

In 2013, the Agricultural and Fisheries Mechanization (AFMech) Law was adopted¹⁵ to improve farm mechanisation and contribute to the country's food sufficiency goals. A five-year National Agri-Fishery Mechanization Program will be implemented over 2016-22 to improve the level of farm mechanisation. The Philippine Center for Postharvest Development and Mechanization (PhilMech) was assigned to set technical standards to help manufacturers provide the appropriate products to farmers.

Budgetary support for input subsidies

Until 2008, the **budgetary spending** on input support programmes, both variable and fixed, was stable at around PHP 2.5 billion annually (USD 50 million), although the names of the programmes changed frequently (Figure 2.4, Table 2.A1.4). There was a sharp increase in public expenditures on input subsidies in 2009, as a response to the food price crisis in 2008, to encourage rice productivity (FIELDS programme). In absolute terms, expenditure fell in succeeding years but began to increase again in 2012, focusing mainly on support to farm and postharvest machinery. However, a relative decline in importance of subsidies provided to variable and fixed inputs has been noticeable, from an average of 30% of total budgetary support to agriculture in 2009 to 12-15% in 2013-14 (Figure 2.4). This is a positive trend as input subsidies are considered as one of the least effective ways of supporting farmer incomes, and the decline allows the reallocation of these expenditures to other, more effective ways of supporting agricultural productivity in the longer term, such as infrastructure (Section 2.5).

Figure 2.4. **Budgetary expenditures for input subsidies, 2000-14**



Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database, DA (2015).

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Irrigation

Historically, irrigation has been a major factor in increasing rice productivity in the Philippines. The National Irrigation Administration (NIA), a GOCC, is responsible for irrigation development and management. The major principle governing the development of irrigation systems in the Philippines is the **Participatory Approach Program**, which enables all farmers to be involved in the process of irrigation development and management (planning, designing, construction and operation). The participatory approach was initiated in the 1970s with the goal of eventually turning operation and maintenance (O&M) responsibilities over to farmer groups (Ofrecio, 2006). In order to participate in irrigation development, farmers are organised to formal groups called Irrigator Associations (IA).

Total potentially **irrigable land** in the Philippines amounts to 3 million ha, of which 1.7 million ha (57%) have been covered by irrigation facilities (NIA, 2015a). There are three basic types of irrigation systems in the Philippines:

- **National Irrigation Systems (NIS)** are large, with a service area of 1 000 ha or more. They are owned by the government through the NIA, but jointly managed with the IAs (Box 2.5). Farmers have to pay a per-hectare Irrigation Service Fee for the delivery of water. The NIA operates 285 such systems with a total service area of 755 000 ha, covering 44% of total irrigated area in 2015 (OPAFSAM, 2016).
- **Communal Irrigation Systems (CIS)** are smaller, with a service area less than 1 000 ha. In 1991, the development and management of CIS was transferred from the national government to LGUs. CIS are farmer-owned (through IAs), but the government assists in their planning and construction. IAs contribute about 10% of construction costs and amortise the remaining costs financed by the government for a period not exceeding 50 years at a 0% interest rate. The repayment scheme is pre-arranged and has to be accepted both by the NIA and IAs. Operation and maintenance of CIS is fully handed over to the concerned IAs. In 2015, 8 990 CIS operated on 616 000 ha, 36% of total irrigated area (OPAFSAM, 2016).
- **Private Irrigation Systems** are owned by private individuals or corporations. They are established by individual farmers or small groups of farmers at their own initiative and effort. They are constructed without government's assistance and are managed independently (Labiano, 2014). Their total number is large at 16 675, but their importance is relatively small in terms of area coverage as they operated on 188 000 ha in 2015, 11% of total irrigated area (NIA, 2015a).¹⁶

Various studies have shown that the performance of the NIS has been much weaker than expected; operation and maintenance fails to distribute water efficiently and equitably and irrigation systems are deteriorating rapidly (David et al., 2012). Reasons for the **underperformance of irrigation systems** could include: overoptimistic assumptions in developing the service areas, which tend to be larger than the available water resources; inadequate operation and maintenance; limited farmer participation; and deterioration of existing systems, mainly due to natural calamities (Delmo, 2013).

Budgetary expenditures on irrigation have accounted, on average, for about 36% of annual budgetary spending on agriculture (Figure 2.5). Nearly all of the budgetary allocations are spent on gravity systems suitable mainly for rice production. Up to the mid-1980s, 95% of irrigation investments were spent for NIS, with CIS at only 5%. In the mid-1990s the share of CIS in total irrigation investments had increased to more than 40% as a result of the government's decision to allocate resources to CIS from the

Agrarian Reform Fund of the CARP. By the late 1990s, however, irrigation investments again began to focus on NIS, with 90% of the NIA's budget allocated to NIS in 2007-08 (David et al., 2012).

Box 2.5. Management of National Irrigation Systems

Government policy is to cover the construction costs of irrigation projects¹, but farmers who are in the service area of the NIS have to pay the Irrigation Service Fee (ISF). The ISF is collected by NIA to generate revenues sufficient to cover operation and maintenance costs (NIA, 2015b).² The rate of ISF depends on the type of irrigation system (run-off-the-river, reservoir and pump), crops planted, and season. These are denominated in kind: in cavans (1 cavan = 50 kg) of paddy rice per hectare; however, cash payments are encouraged. Rates for pump systems are higher as the cost of power for pump operation is included and vary across systems as power rates are location-specific. Farms with a rice yield of 40 cavans per hectare or below are exempted from ISF payment (NIA, 2015b). In 2012, the ISF per hectare was 150 kg of rice or PHP 2 250 (USD 53) in the dry season and 100 kg of rice or PHP 1 500 (USD 35) in the wet season (Stoutjesdijk, 2012). The ISF makes up more than half of the NIA's revenues; however, it does not cover capital costs nor the full cost of operation and maintenance. The ISF average collection rate was 63-67% over 2013-15 (OPAFSAM, 2016).

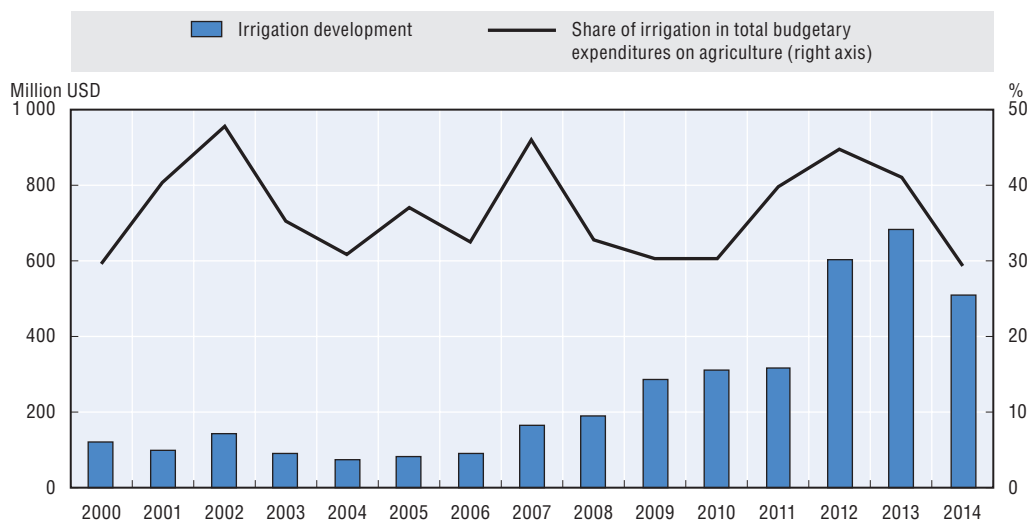
The Irrigation Management Transfer programme, dating from the end of the 1990s, was implemented to strengthen the participatory approach system. The NIA and IAs agree on "joint system management" whereby the responsibilities for the operation, management, and repair of damaged systems are defined in a contract. While in the past, the collection and division of the ISF was negotiated and usually split 50:50, the new system aims to increase the role of IAs relative to the NIA. The programme was expected to decrease the operation and management expenditures of the government, encourage users and increase their satisfaction through beneficiary participation, increase water use efficiency and increase productivity (Ofrecio, 2006). IAs can choose among four models when entering into an Irrigation Management Transfer contract, varying according to the extent of management and O&M responsibilities transferred to the IA (OPAFSAM, 2016):

- Model 1: NIA continues to manage the entire irrigation system, but transfers specific O&M activities to the IA, such as canal maintenance and discharge monitoring. ISF collection may be an added responsibility depending on capacity and willingness of the IA.
- Model 2: NIA manages the main system, but transfers the management of the laterals, sub-laterals, and lateral facilities to the IA.
- Model 3: NIA manages the headworks and portion of the main canal up to the junction of the first lateral canals, and transfers the management of all remaining canals and facilities to the IA.
- Model 4: NIA transfers the management of the entire system to the IA.


At the end of 2015, Model 2 was most popular accounting for 49% of IAs followed by Model 1 with 46%. Models 3 and 4 accounted for just 3% and 2%, respectively (OPAFSAM, 2016).

1. NEDA Resolution No. 20, series of 1978.

2. Operation and maintenance include operation of storage and diversion dams; running of pumps; operation of gates, turnouts and drainage ditches; preparation and implementation of cropping and irrigation schedules; maintenance of the physical facilities including service and access roads, and repairs on minor damages caused by floods and typhoons (NIA, 2013).

Figure 2.5. **Budgetary expenditures on irrigation, 2000-14**

Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database.

StatLink  <http://dx.doi.org/10.1787/888933452441>

Credit policies for farmers

Credit policies for the agricultural sector have changed significantly during the past few decades. Up until the mid-1980s, credit policy was supply-led, commodity-specific and used as a major instrument for agricultural development. Loans were highly subsidised and interest rates were set by the government. During this period, the number of commodity-specific **directed credit programs (DCPs)** increased rapidly and non-financial government agencies, including the DA, undertook direct lending (DA, 2015).

Financial reforms initiated in the mid-1980s to liberalise and deregulate financial markets were unsuccessful. One reason was that, although subsidised credit programmes were terminated for agriculture, they continued in non-agricultural sectors, leading to successful lobbying for restoration of subsidised credit for agriculture. By 1999, there were 86 government credit programmes implemented by 21 government agencies (DA, 2015). The programmes had low outreach, suffered from poor management and large defaults; financially unsustainable, they led to large fiscal losses. These developments undermined the government's market-oriented credit and financial policy as well as the viability of formal rural financial markets (Geron and Casuga, 2012).

Agriculture Modernisation Credit and Financing Program

Another effort to introduce a market-oriented financial system in agriculture was undertaken in the mid-1990s. AFMA served as the basis of the reform. Its credit policy lays down core principles: a greater role for private sector; non-participation of government non-financial agencies; market-determined interest rates; and sustaining efforts to phase out DCPs.

The current framework is still based on AFMA. The main role of the government is to provide an enabling policy environment and support services that encourage lending and investment to agriculture by the private sector. The government's non-financial institutions are no longer allowed to lend directly to farmers; along with private banks, only government financial institutions, such as the LBP, are allowed to lend directly to farmers. Agricultural

DCPs were terminated and their remaining loanable funds and receivables were consolidated into the **AMCFP** (Agro-industry Modernisation Credit and Financing Program). Interest rates are market-determined to ensure recovery of lending costs and sustainability of credit funds. Interest rate concessions and subsidies are not allowed (DA, 2015).

In addition to AFMA, agricultural credit policy is influenced by: the National Strategy for Microfinance (1997), Social Reform and Poverty Alleviation Act (1997); Executive Order 138 (1999), which directed government agencies to implement credit programmes and to adopt the National Credit Council's Credit Policy Guidelines¹⁷; and the General Banking Act (2000). In 2009, the Agri-Agra Reform Credit Act (RA 10000) stipulated that all banking institutions (government and private) must set aside at least 25% of their total loanable funds to agricultural credit, and at least 10% of this for agrarian reform beneficiaries (Aquino et al., 2014).

The AMCFP, which came into effect in 2003, is a key financing and credit guarantee programme for small-scale farmers. Loans are provided to activities within the agricultural value chain: production, processing, trading and marketing (WTO, 2012). The ACPC has administered the AMCFP since 2009.

There are two modes of credit delivery under AMCFP:

- **Wholesaler-retailer approach:** ACPC partners with government's financing institutions and other financing institutions serve as AMCFP wholesalers. Wholesalers lend to rural-based credit retailers composed of qualified private banks, farmers' co-operatives and non-government organisations. Retailers grant loans to eligible small farmers.
- **Depository scheme:** credit funds are placed as special time deposits in partner co-operative banks, eliminating the need for a wholesaler and reducing interest rates for small farmers (NEDA, 2014b).

Initially, the AMCFP was financed from loan repayments of terminated directed credit programs (DCPs) that were consolidated to AMCFP. In 2013, the government allocated PHP 1 billion (USD 23.6 million) to AMCFP to implement the Agriculture and Fisheries Financing Program (AFFP). In 2015, an additional PHP 2 billion (USD 44.4 million) was granted to AMCFP. Between 2003 and 31 May 2015, credit programmes under the AMCFP had released more than PHP 8.0 billion (USD 168 million) in loans to 232 371 small farmers. Loans are provided through the LBP, the Peoples Credit and Finance Corporation (PCFC) and accredited co-operative banks (DA, 2015).

Currently, the AMCFP includes the following credit programmes: the Cooperative Banks Agricultural Lending Program; the Sikat-Saka Program; the Agricultural Microfinance Program; the Agri-Fisheries Financing Program; and the Calamity Assistance Program (Table 2.2, Box 2.6) (DA, 2015).

Agricultural Competitiveness Enhancement Fund

The **Agricultural Competitiveness Enhancement Fund (ACEF)** is a loan and grant programme created by the Agricultural Tariffication Act (RA 8178) in 1995 as a safety net for farmers and fishermen affected by trade liberalisation. ACEF is funded by import tariff revenues from the minimum access volume (MAV) of sensitive agricultural products, except rice. However, due to the lack of guidelines it was implemented only from 2000 (Israel, 2012). The Fund was supposed to expire in 2007, but this date has been changed several times and is currently 2020.

Table 2.2. **AMCFP amount of loan releases, 2003-15, USD million**

	2003-07	2008	2009	2010	2011	2012	2013	2014	2015 (Jan-May)	Cumulative (2003-15)
On-Going Programmes	0	0	1	3	9	26	55	141	19	255
Cooperative Banks Agricultural Lending Program ¹					5	22	16	20	3	65
Agricultural Microfinance Program ¹			1	3	5	3	3	2	0	18
Sikat-Saka Program ¹						1	7	20	6	34
Calamity Assistance Program ¹							1	2	0	3
Agri Fishery Financing Program								1	2	3
Completed/Terminated Programmes	20	20	12	11	1	0	0	0		56
Cooperative Bank Agriculture Lending Program ²		10	11	10						31
Cooperatives Agricultural Lending Program						0				0
Agri-Fishery and Microfinance Program		0	0	0	0					1
Fisheries Financing Program			0		0					0
AMCFP-Tomato		1	1	1	1					3
AMCFP-Tobacco		1	1							1
QuedanCor Lending Windows (Countryside Lending, Corn and Fishery Program, Micro-Credit, Tomato Program and Tobacco Program) ³	14									14
Rural Household Business Financing Program	1	0								2
Special Agricultural Financing Window ⁴	4									4
TOTAL	20	20	14	14	10	26	55	141	19	311

Note: Releases in AMCFP started in 2003.

1. AMCFP lending facilities (loanable funds sourced from collection under DCPs).

2. Effective 30 June 2010, the wholesaler-retailer mode of credit delivery was replaced by a depository mode scheme.

3. Programme ended in 2007.

4. Starting 2005, it has been implemented under the regular lending window of the LBP.

Source: DA (2015), ACPC database.

Box 2.6. Credit programmes under the Agriculture Modernisation Credit and Financing Program

The aim of the **Cooperative Banks Agricultural Lending Program** is to provide funding support to co-operative banks that lend to small farmers in the form of short-term deposit placements (special time deposits). Banks in turn use the proceeds of these and their own funds to lend to individual small farmers. Eligible end-borrowers are farms of not more than 7 hectares, or backyard poultry or livestock raisers or agricultural workers. Loans are provided for crop, livestock or high-value crop production as well as for off-farm activities of agricultural households. The programme is to be implemented in 2011-16 at a total cost of PHP 400 million (USD 9 million).

The **Sikat-Saka Program** is a credit support programme of the DA's FSSP which provides loans at a lower interest rate (maximum of 15% per annum) to small paddy rice farmers through irrigator associations (IAs). The programme is jointly implemented by the LBP and the DA's attached agencies and corporations, namely: (i) the ACPC, which provides credit funds and conducts programme evaluations; (ii) the Agriculture Training Institute (ATI), which provides extension services and training for farmers; (iii) the NFA as one of the purchasers of farmers' produce; and (iv) the National Irrigation Administration (NIA), which mobilises and assists IAs in becoming credit consolidators. Only new borrowers and small paddy rice farmers who own 1-5 ha of irrigated land are eligible for loans under this programme. Farmers are required to have bank account with LBP and a marketing contract with the NFA or other buyers. Loans are based on the farm budget estimate, but cannot exceed the LBP loan ceiling of PHP 37 000 (USD 876) for inbred varieties and PHP 42 000 (USD 995) for hybrid varieties. Farmers are provided crop insurance at full premium support and credits are provided with a guarantee of 85% under the Agricultural Guarantee Fund Pool (AGFP) Program. The total cost of the project is PHP 400 million (USD 9 million), shared by the ACPC and the LBP. Programme implementation is foreseen for 2012-17.

**Box 2.6. Credit programmes under the Agriculture Modernisation
Credit and Financing Program (cont.)**

The **Agricultural Microfinance Program** for small farming households was launched in 2009 as AMCFP's microfinance facility for agriculture, providing short-term loans for income-generating livelihood activities on-farm, off-farm and for non-farm rural households. The aim is to contribute to poverty reduction and improve the quality of life of marginalised farmers through the provision of microloans for agricultural value chain activities (e.g. production, processing and marketing of agricultural commodities) and other income generating activities of agricultural households such as *sari-sari* (convenience) stores, ambulant vending, backyard poultry or livestock raising. Credit is provided according to the wholesaler-retailer approach by the People's Credit and Finance Corporation (PCFC) to microfinance institutions under a credit fund and sharing arrangement with ACPC. Eligible end-borrowers are spouses, household heads or adult working members of small farmer households with at least a one-year track record as microfinance sub-borrowers. Eligible projects include new farm, off-farm, non-farm income generating activities and rehabilitation of agricultural projects damaged by El Niño and other natural calamities. Loans are limited to PHP 150 000 (USD 3 463) per borrower.

The **Agri-Fishery Financing Program** is a flexible credit facility targeted to non-ARB (agrarian reform beneficiaries) small farmers registered in the Registry System for Basic Sectors in Agriculture (RSBSA). RSBSA farmers are provided crop insurance at full premium subsidy. The aim is to contribute to inclusive growth through financial inclusion of sectors in agriculture that are unbanked or underbanked. There are two schemes. Under the first, LBP provides loans directly to small farmers. FOs are responsible for identifying individual borrowers. Under the second, PCFC provides wholesale loans to accredited microfinance institutions, like rural banks, co-operatives and NGOs that in turn relend to small farmers. Loans under the LBP facility are intended for the production of priority agricultural commodities including coconut, maize, livestock and high-value crops. Loans under PCFC facility are intended for agri-microfinance and loans. The total cost of the project is PHP 1 billion (USD 22 million); the implementation period is 2014-19.

The **Calamity Assistance Program** provides financing to supplement existing resources of the DA and the ACPC in providing calamity loan assistance to farmer families in typhoon-affected areas for the rehabilitation of their livelihoods. The ACPC provides zero-cost interest rate to eligible conduits under a fund management arrangement. In turn, these disburse loan funds to affected families at 0% interest. Eligible end-borrowers are small farmers or their household members who are existing borrowers of the DA or ACPC. Cooperative banks act as credit retailers that utilise the special time deposits from the programme and their equivalent own funds to increase their loans to eligible small farmers' households. The total cost of the project is PHP 131 million (USD 3 million) and the implementation period is from 2013 to 2018.

Source: DA (2015).

The ACEF targets farmers, small- and medium-size enterprises, co-operatives, LGUs, and state universities. Its main objective is to increase the productivity of farmers and cut their costs through loans aimed at income generating and competitiveness enhancing projects. Since 2008, the Fund has provided grants without any collateral or security to LGUs, state universities and colleges, or other government institutions involved in the research and development of agricultural products. The Fund's initial budget allocations were focused on loans to agricultural production and processing (70% of total), followed by research and development (20%), and scholarship programmes for agriculture, forestry, fisheries and veterinary medicine (10%) (Israel, 2012).

Operations of the fund were suspended in 2011 due to problems concerning management and misuse of funds as well as low repayment (Israel, 2012). The **average repayment rate** in 2009 was as low as 21%. The moratorium on operations was lifted a year later with

PHP 1.9 billion (USD 42 million) allocated to the Fund. In 2016, new guidelines were agreed: the share of credit was increased to 80% of the fund for the acquisition of agricultural production and post-production machinery, equipment and establishment of facilities. LBP is responsible for managing the credits. The remaining 20% will be equally divided between grants for research and development of agricultural products and grants for agricultural education.

Debt restructuring and write off

Debt write-offs are not allowed for loans from government funds subject to state audit. Restructuring of the loans of ACPC's partner financing institutions may be granted, provided that reasons for non-repayment are due to natural disasters or calamities (DA, 2015).

The ACPC is still collecting loan receivables from DCPs that form part of the AMCFP funds. In 2015, loan receivables including past due loans from terminated DCPs amounted to PHP 6.35 billion (USD 141 million). Of this amount, ACPC has already collected PHP 1.68 billion (USD 37 million) (26%), leaving PHP 4.67 billion (USD 104 million) to be collected. About PHP 4.1 billion (USD 91 million) is considered to be non-performing loans, i.e. receivables aging five years and above (DA, 2015).

Credit guarantee

Currently, the credit guarantee programme for the agricultural sector is the **Agricultural Guarantee Fund Pool (AGFP)** of the DA. The AGFP was established in May 2008 to facilitate the provision of credit in agriculture by mitigating the risks involved in lending to the sector. The AGFP started operations in August 2008 with seed funding of PHP 4.48 billion (USD 101 million) drawn from government revenues and surplus funds of GOCCs and finance institutions. The objective is to encourage banks, co-operatives and other lending institutions to increase their loans to small agricultural borrowers, particularly new borrowers, or expand their lending to existing borrowers. This is also expected to enhance food production activities by lowering the lenders' risks in agricultural non-collateralised lending (DA, 2015).

The AGFP provides guarantee cover up to 85% of unsecured loans provided by financial institutions and other eligible lenders to small farmer borrowers engaged in rice or other food production activities. The AGFP guarantee covers all types of default risks, including weather, pest and diseases and other events, except wilful default and fraud. In case of default or non-repayment for any of the valid reasons, the AGFP shall pay the lending institution 85% of the unpaid loan and the participating lender must pay a guarantee fee of 2% per annum of the outstanding loan amount. Collection of unpaid loans, even if already paid by the guarantee programme, remains the responsibility of the financial institution. By end-December 2014, 653 lenders composed of banks, co-operatives, SMEs and FOs had benefited from the guarantee coverage for loans of 609 689 farmers amounting to almost PHP 25 billion (USD 563 million) (DA, 2015).

Quedan guarantee system

The **Quedan Guarantee Fund Board (QGFB)** was created in 1978 to accelerate the flow of investments and credit resources into the countryside through the various *quedan* credit and guarantee programmes. When the *quedan* guarantee system started, surpluses in rice production were occurring due to the successful implementation of the *Masagana 99* programme. During peak harvest, the paddy rice price is at its lowest, and this affects

the income of marginalised farmers. To help them wait for prices to go up and still be able to finance the new cropping season, the *quedan* guarantee system was set up. When the farm gate price is at its lowest, a farmer stores his or her produce in a NFA warehouse and gets a corresponding *quedan* receipt from the warehouse owner as evidence of his or her stored commodity.

Using the warehouse receipt *quedan as collateral*, the farmers can apply for a loan from QGFB accredited banks to finance a new planting season. When paddy rice prices go up, the farmers can sell their stored commodity, realise a better income and pay their loan back to the bank. The guarantee system later expanded to other commodities and consequently, additional programmes were created to fit the agency's services to the changing needs of people in the agricultural sector.

The successful implementation of the *quedan* system through the QGFB encouraged the government to expand the agency into a corporation with wider authority and expanded resources. In 1992, the QGFB was reorganised into **QuedanCor**, of which the government owns 60% and farmers and private investors the remaining 40%. QuedanCor introduced its agri-credit and guarantee programmes and services on a national level, through the creation of Regional Offices located in strategic locations across the Philippines. As at 2016, QuedanCor had 14 Regional Offices. Currently, QuedanCor is implementing the QuedanCor agricultural credit guarantee for rural productivity, agriculture and livelihood projects. This is a guarantee-financing programme that supports the marketing of various agricultural commodities by extending credit-guarantee assistance to farmers and entrepreneurs.

Agricultural insurance system

Agricultural insurance in the Philippines has two objectives: as a safety net for farmers (Section 3.3) and a credit risk management tool. Insurance is accepted as 'surrogate' collateral to financial institutions that allows farmers to participate in government credit programmes. Agricultural insurance is a regular component of credit programmes under the AMCFP (DA, 2015). The Philippine Crop Insurance Corporation (PCIC) is a GOCC responsible for implementing government insurance programmes.

Agricultural insurance programmes in the Philippines are divided into **regular and special insurance programmes**. Under the regular programmes, a farmer pays the full amount of an insurance premium. Special insurance programmes are fully subsidised by the government (Box 2.7).

Over recent years the PCIC has developed **index-based crop insurance schemes** (Box 3.4) in collaboration with bilateral development agencies, particularly the United Nations Development Program (UNDP), the World Bank (WB) and the German Corporation for International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit, GIZ). In 2011, Area-Based Yield Index Insurance was launched and Weather Index Based Crop Insurance (with support from the WB) started in 2014. In these insurance schemes, claims are filed and indemnities are paid based on agreed weather indices or yield threshold, rather than on actual damage suffered by producers. The PCIC is set to introduce these products on a broader scale in the coming years (DA, 2015).

The **total crop area insured** increased continuously in the period 2005-14, as shown in Figure 2.6, amounting to 792 200 ha in 2014, almost 12 times higher than the 68 600 ha covered in 2005 but only 7% of total agricultural land. Correspondingly, the number of

farmers provided with insurance protection increased seventeen-fold from 53 883 in 2005 to 917 814 in 2014. Government budgetary expenditure on insurance programmes has also been increasing rapidly: total government expenditure allocated to insurance was PHP 1.2 billion (USD 27 million) in 2014 compared to PHP 57 million in 2005 (USD 1 million) (DA, 2016).

Box 2.7. Regular and special insurance programmes

The following regular programmes are implemented by PCIC:

- For farmers producing rice, maize and high-value commercial crops, insurance protection is provided against losses in crops due to natural disasters, plant pests and diseases.
- Insurance to livestock farmers covers protection against loss of their animals to accidental death or disease.
- Insurance of non-crop agricultural assets provides protection against loss of assets like warehouses, rice mills, irrigation facilities and other farm equipment due to fire and lightning. Related perils such as typhoon, flood and earthquake may also be covered, subject to approval by PCIC Head Office.

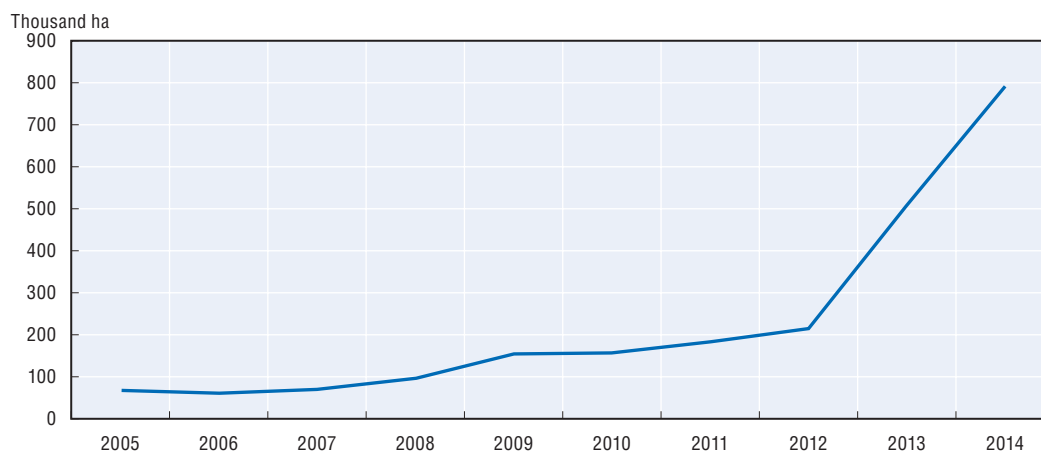
In addition, there are three schemes of credit and life insurance:

- Agricultural Producers Protection Plan: insurance protection that covers death of the insured due to accident, natural causes, and murder or assault.
- Loan Repayment Protection Plan: insurance protection that guarantees the payment of the face-value or the amount of the approved agricultural loan upon the death or total permanent disability of the insured borrower.
- Accident and Dismemberment Security Scheme: insurance protection that covers death or dismemberment of the insured due to accident (DA, 2015).

Special agricultural insurance programmes implemented by PCIC are:

- Agricultural Insurance Program for subsistence farmers registered in the Registry System for Basic Sectors in Agriculture (RSBSA). Under the General Appropriation Act of 2015, the government provided PHP 1.3 billion (USD 28 million) for PCIC to be used for Government Premium Subsidy (GPS). This GPS is used to cover the full cost of insurance premiums (100%) of subsistence farmers registered in the RSBSA for insuring crops (rice, corn, high value crops), livestock, fisheries or non-crop agricultural assets.
- Agricultural Insurance Program for subsistence farmers located in the Typhoon Haiyan affected areas. The PCIC provided subsidised insurance premiums for the insurance coverage of farm investments of subsistence farmers in the provinces of Western Visayas, Eastern Visayas and in municipalities in the northern part of Cebu that were directly affected by Typhoon Haiyan in November 2013.
- Agricultural Insurance Programs for agrarian reform beneficiaries (ARBs). Since June 2013, PCIC has been providing subsidised insurance premiums to ARBs, who have received agricultural loans from the Agrarian Production Credit Program (APCP) and Credit Assistance Program for Program Beneficiaries Development of the DA, DAR, and LBP.
- Sikat-Saka provides insurance protection to rice farmers who qualify for a production loan under the direct lending facility of the LBP. The PCIC has provided subsidised insurance premiums to Irrigator Associations who received loans under the LBP's Sikat-Saka programme since 2012.
- The WARA programme provides support to rice farmers who plant in weather adverse rice areas (WARA). Support is provided through the Food Staple Sufficiency Program of the DA since 2013, which covers the full cost of the insurance premium (100%) for rice planted in weather adverse rice areas.

Source: DA (2015).

Figure 2.6. **Area covered by insurance programmes, 2005-14**

Source: DA (2016).

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Preferential tax policies for farmers

In 1997, AFMA¹⁸ introduced an exemption from the payment of **import duties** for agricultural enterprises on all types of imported agricultural inputs, equipment and machinery, provided that the imported agricultural input or equipment was for the exclusive use of the importing enterprise. The exemption included fertilisers, insecticides, tractors, hybrid seeds, farm implements and machinery, packaging machinery and materials. Initially planned to last until 8 February 2003, in 2004, the duty-free privilege was extended until 31 December 2015.¹⁹ By end-2016 no legislation had been enacted to extend this privilege.

Domestic sale or imports of unprocessed agricultural commodities are exempt from the **value-added tax** of 12% (WTO, 2012). Sales and importation of fertilisers are also exempted from the national VAT, but other chemicals for agricultural use, like pesticides, are not.²⁰ Food processors must pay VAT when purchasing agricultural products as inputs as well as on the value added in processing, with potentially adverse impacts on their competitiveness.

In 2010, the Organic Agriculture Act (RA 10068) exempted organic farmers from **income tax** for seven years starting from the date of registration for organic food and organic inputs or produce (WTO, 2012).

Agro-environmental policy measures

Environmental concerns arise from the inappropriate use of modern farm techniques, deforestation, conversion of prime agricultural lands and cultivation of marginal upland areas (Briones, 2005). The main laws focusing on policies to improve land resources are the Ecological Solid Waste Management Act (RA 9003), the Organic Agriculture Act (RA 10068) and Strategic Agricultural and Fisheries Development Zones under AFMA. The Climate Change Act was adopted in 2009 (RA 9729) (Chapter 3). DA implements a number of measures to mitigate the adverse environmental impacts of agriculture and to protect production.

Developing the **organic food sector** in the Philippines is seen as a potential path to enhance high-value agricultural exports. The Philippine Organic Agriculture Act, signed in 2010, is geared towards ecologically sustainable, environmentally friendly and safer

production systems, and aims to expand the availability of safer and more nutritious staple foods and to increase farm productivity and income opportunities for farmers (DA, 2015). In 2011, new rules and regulations obliged the DA to direct 2% of its annual expenditure towards supporting policies and programmes to promote organic agriculture (Oxford Business Group, 2012). The National Organic Agriculture Program of 2012-16, implemented by the DA's Bureau of Soils and Water Management (BSWM), envisages that at least 5% of Philippine agricultural farm areas will practice organic farming by 2016 (DA, 2015).

Sustainable Corn Production on Sloping Areas is targeted under the DA's *Agri-Pinoy* Program. It aims to educate farmers on appropriate ways of tilling maize-planted sloped lands by practicing contour farming and planting permanent trees and leguminous plants. The DA is also encouraging farmers to stop the indiscriminate use of glyphosate herbicide on lands that slope greater than 18 degrees. By 2014, a total of 6 technology demonstration sites had been established located in CAR, Cayagan Valley, Calabarzon and Mimaropa and Western Visayas (DA, 2015).

The DA is responsible for formulating guidelines for the **re-use of wastewater for irrigation** and other agricultural uses and for the prevention, control and abatement of pollution from agricultural and aquaculture activities. The policy states that the re-use of wastewater for irrigation, fertilisation, and aquaculture, and other agricultural purposes shall require a certification from the DA. The law requests monitoring to determine the impact of wastewater use on surface and ground waters and the responses of plants to the results of the analysis (DA, 2015).

General services

Farm-to-market roads

AFMA mandated the construction and upgrading of **farm-to-market roads** (FMRs) as a priority infrastructure intervention due to their significant impact on increasing agricultural productivity and reducing postharvest losses. The DA is responsible for co-ordinating with LGUs and resident farmers to identify priority locations for FMRs, taking into account the number of farmers and their families benefiting from the road, the amount and type of agricultural products produced, and the importance of agricultural production in a given area. LGUs are required to cover at least 10% of the project costs.

Off-farm postharvest facilities

Postharvest facilities are defined under AFMA as those facilitating threshing, drying, milling, grading, storage and handling of produce as well as stripping, inspecting, chipping and washing. To minimise postharvest losses, the DA has developed several **postharvest facility projects** jointly implemented with the DA within banner programmes (Table 2.3). Regional Field Units (RFUs) of the DA validate the appropriateness of the number and type of the identified postharvest facilities needed in specific locations and are responsible for procurement of the postharvest facilities required. Funds for projects are provided directly to RFUs by DA. The Philippine Center for Postharvest Development and Mechanization (PhilMech) provides monitoring and technical support for projects for grains and high-value crops. The Bureau of Animal Industry oversees projects concerning livestock and poultry. The Agribusiness and Marketing Assistance Service handles projects related to the provision of marketing facilities (food terminals and cold storage) (Manalili et al., 2015).

Table 2.3. **Programmes of the DA for establishment of postharvest facilities in 2014¹**

Commodity	Programme	Budgetary expenditures		Description of the programme
		PHP bln	USD mln	
Rice	Rice Mechanisation Program: Postharvest facilities component	2.10	47	Provision of combine harvesters, threshers, flat bed dryers, multi-purpose drying pavements, rice mills, warehouse construction and expansion, and rice processing centres.
	Rice Mechanisation Program: Rice Processing Center	0.87	19	Four rice processing centres established with the help of the Korean International Cooperation Agency.
Maize	Agri-Pinoy Maize Program: Postharvest facilities component	0.62	14	Maize postharvest processing and trading centres.
Highland vegetables	Tramline System ²	0.09	2	Systems installed in highland areas (mostly Benguet, Abra).
Poultry		0.06	1	Liquid egg processing plant.
High-value crops	Agri-Pinoy Trading Center Program	1.04	23	Establishment of regional trading centres for fruit and vegetables, and other high-value crops.
High-value crops, meat	National Cold Chain Program	0.02	0.4	Provision of refrigerated transport and storage facilities, refrigerated displays etc.

1. Budgetary allocations by GAA in 2014; covers ongoing and completed projects.

2. A hauling facility using cable and pulleys to transport agricultural produce and inputs from mountainous production areas to the nearest accessible road to reduce the time and cost of transportation, hence a reduction in postharvest losses.

Source: Manalili et al. (2015).

Research and development

The organisation of agricultural research and development (R&D) in the Philippines is complex with a **multi-level institutional structure**. Three departments (DOST, DA, DENR) have roles in technology creation within the agricultural sector. The main body is the PCAARRD under the DOST which acts as a central co-ordinating body and provides support to 132 R&D agencies, collectively called the National Agriculture and Resources Research and Development Network, as well as to 14 region-based consortia (Stads et al., 2007) (Table 2.4). The main task of PCAARD is to formulate policies, prioritise research topics and allocate state funds for R&D.

AFMA emphasised the importance of agricultural modernisation and strengthened the role of DA in agricultural R&D. It also created the Council for Extension, Research and Development in Agriculture and Fisheries to provide an effective linkage between research and extension. The main agency under the DA responsible for co-ordinating agricultural R&D is the **Bureau of Agricultural Research (BAR)**. Several attached agencies to the DA are involved in R&D, including the Philippine Carabao Center, the Philippine Fibre Industry Development Authority, and GOCCs like PhilRice or the Philippine Coconut Authority.

More than half of the research agencies focused on agriculture in the Philippines conduct **research on crops** (Stads et al., 2007). R&D in rice is privileged. The Philippine Rice Research Institute (PhilRice), a government-owned and controlled research centre, was created in 1985 to develop rice technologies and innovations that address specific production problems in the Philippines. PhilRice co-ordinates the national R&D programme for rice and rice-based farming systems. Rice R&D activities are implemented through the network of 57 agencies composed of PhilRice experiment stations, regional agricultural research centres and state universities. PhilRice has strong research collaboration with the International Rice Research Institute (IRRI) – the oldest and largest international agricultural research institute in Asia. As IRRI pursues a global mandate and is financed by foreign governments, development agencies and foundations, its research efforts do not correspond to specific technology needs of the Philippines alone. Consequently, PhilRice adapts many of IRRI's innovations to local conditions (Bordey, 2010).

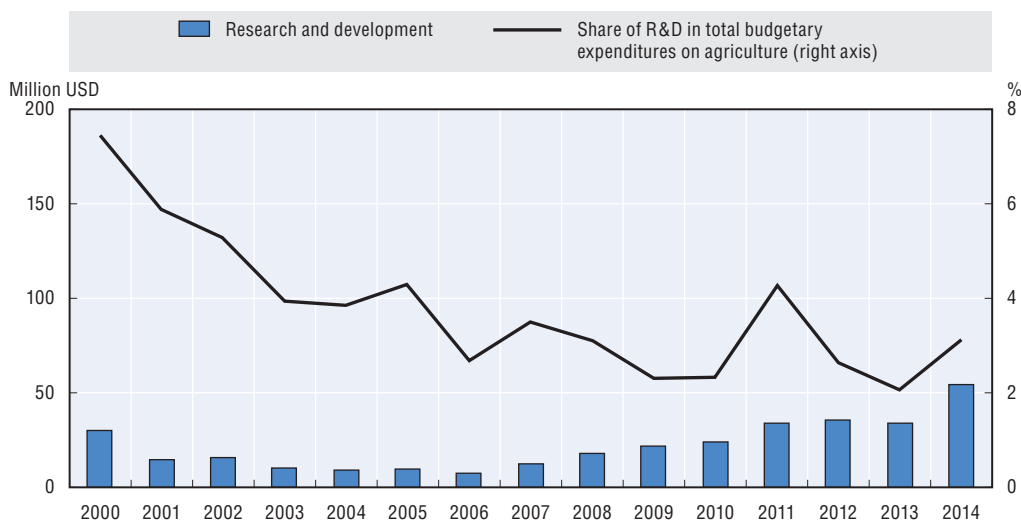
Table 2.4. **Institutions belonging to the National Agriculture and Resources Research and Development Network**

Network level	Institutions	Assignments
Multi-commodity R&D centres (4)	Central Luzon University, University of the Philippines Los Baños, Visayas State University, University of Southern Mindanao.	Basic and applied research on a wide range of economically important commodities and disciplines.
National Single Commodity R&D centres (8)	Cotton Development Administration, National Tobacco Administration, Forest Products Research and Development Institute (under DOST), Ecosystems Research and Development Bureau (under DENR), Philippine Coconut Authority, Sugar Regulatory Administration, Philippine Rice Research Institute, Philippine Carabao Center.	Basic and applied research on a single commodity or theme.
Regional R&D centres (21)	21 centres located in strategic places representing the basic agro-climates and based mostly at state colleges or universities, while others are under the DA.	Applied research on commodities of major importance to the regions in which they are located.
Co-operating Stations (90)	90 co-operating stations that are a part of the DA, DENR, state colleges and universities, or private research centres located in various parts of the country.	Provide facilities for adaptive trials or field experiments, taking micro-environmental differences into account.
Specialising Agencies (9)	9 specialised agencies include also private institutions with research facilities specialised for their commodity responsibilities. Three of the agencies are under DA: Bureau of Plant Industry, Bureau of Soils and Water Management, Agricultural Credit Policy Council.	Applied and adaptive research and development on a specific commodity or commodity mix under a given sector.


Source: Stads et al. (2007).

Although by number of researchers, the Philippines has **one of the largest agricultural research systems** in Asia, budgetary expenditures on agricultural research have been low, particularly during the 1990s and 2000s (Stads et al., 2007; Aquino et al., 2013a). In 1997, AFMA stipulated that R&D should receive 10% of the annual budget for agriculture, but actual spending averaged around 4% until the end of the 2000s. Since 2010, government expenditure on agricultural R&D has increased substantially in absolute terms (Figure 2.7): PCAARRD and BAR received significant increases in their budgets during 2010-13. PCAARRD expanded its budget for R&D and technology delivery services, while BAR increased funding for national programmes on rice, maize, high value commercial crops and the promotion and development of organic agriculture (Aquino et al., 2013a). However, expenditure on R&D as a share of total budgetary expenditure on agriculture decreased to 3% over 2010-15, well below the 10% target (Figure 2.7).

Figure 2.7. **Budgetary expenditures on agricultural research and development, 2000-14**



Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database.

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Extension

The extension system in the Philippines is **fragmented**. It consists of six types of service providers: 1) national departments led by the DA and their respective bureaus and agencies; 2) LGUs; 3) state colleges and universities; 4) farmer associations such as co-operatives, irrigator associations and agrarian reform communities; 5) non-government and other civil society organisations; and 6) private sector e.g. agribusiness and banks. A major change was the adoption of the Local Government Code in 1991 that devolved government extension services to LGUs. The act abolished the DA's Bureau of Agricultural Extension and transferred its functions and staff to the LGUs at the provincial and municipal levels. The DA's responsibilities are limited to training of extension workers in the Agricultural Training Institute (ATI).

One of the weaknesses of the extension systems after the devolution is a weak link between R&D and the extension network (SEPO, 2009). Extension offices located in the LGUs are autonomous and have no vertical or horizontal linkages to each other, to ATI and to research institutions such as PhilRice, IRRI, DA Regional Agricultural Research Centers and state colleges and universities (Bordey, 2010). Another major weakness has been a longstanding underfinancing of extension services by the LGUs.

The importance of a strong extension system was highlighted by AFMA. ATI was reorganised to integrate and co-ordinate extension activities at the local level and link these activities with technology developers and private providers of extension services. Several programmes of the DA have an extension component and it is the ATI's responsibility to co-ordinate the delivery of an extension service with the bureau, agency, or relevant LGU responsible for a given programme's implementation.

AFMA stipulated allocation of 10% of the agricultural budget to extension services, but actual allocations remained low until the end of the 2000s (Bordey, 2010). Moreover, the actual level is difficult to assess as aggregated data on budgetary expenditures at the LGU level are rarely available. One indication of the weakness of the current extension system in the Philippines is a fall in the number of extension workers from about 17 000 in 1991 to 10 000 in 2015 (ATI, 2016).

Consumer measures

The 1992 **Price Act** (RA 7581) allows price ceilings to be imposed on certain goods and commodities in times of national emergency declared by the President. The Act also declares that cartels, hoarding and profiteering from the supply, distribution, marketing and pricing of basic food necessities, especially during periods of calamity or emergency, are illegal. The DA conducts daily monitoring of prices of beef and poultry meat, rice, maize, cooking oil, fresh, dried fish and other marine products, fresh eggs, fresh and dried pork, fresh milk, fresh fruit and vegetables, root crops, sugar, coffee, fresh dairy products and pesticides, fertilisers (chemical and organic) and herbicides, poultry, swine and cattle feeds and veterinary products for poultry, swine and cattle (WTO, 2012).

The NFA is responsible for price stabilisation of rice through imports and stock releases. It also intervenes in the consumer rice market through its **rice distribution programme**. The government release price is the price at which the NFA sells rice. It is set at a level that allows accredited retailers to buy rice stocks from the NFA at "reasonable" prices and still earn profit, despite the gradual policy shift of the NFA to adjust its release prices closer to those in the domestic market. The rice release price is set at two levels: wholesale and retail.

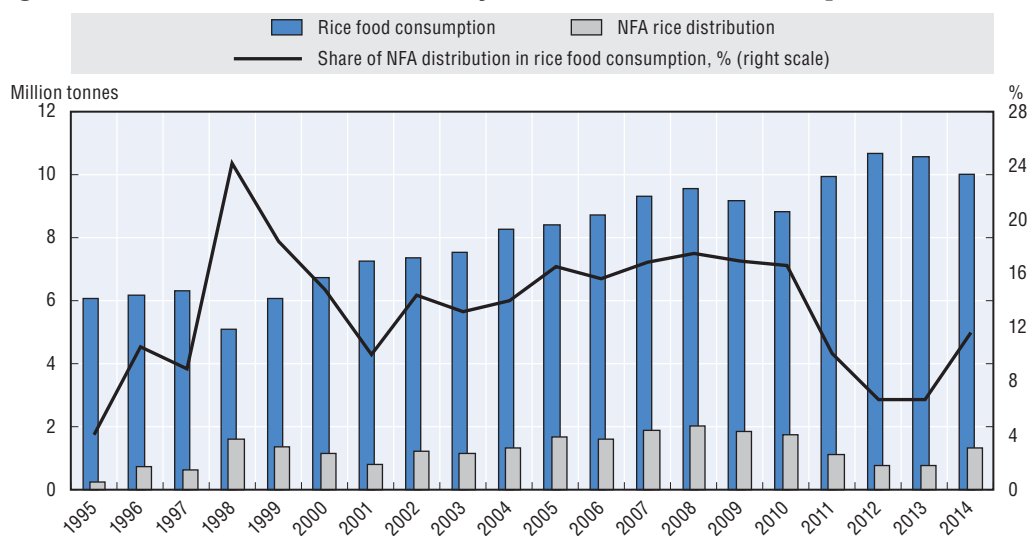
At the wholesale level, the mandatory price is the price at which rice is sold by the NFA to licensed and accredited retailers only. At the retailer or consumer level, the mandatory price is the price at which the NFA sells rice directly to end-consumers and non-retailers (DA, 2015).

The share of rice sold by NFA through the rice distribution programme in total rice consumption (as food) averaged 13% over the past twenty years (Figure 2.8). NFA focuses rice distribution to the rice-deficit provinces and provinces classified under the Accelerated and Sustainable Anti-Poverty Program (ASAPP). Compared to the NFA's activities in procurement of paddy rice (Figure 2.2), the scale of its intervention and impacts on consumer prices are more pronounced (Figure 2.9). Over 1990-2014, the government's wholesale and retail prices were more than 20% lower, on average, compared to the respective domestic market prices (Figure 2.9). However, the NFA's quasi-monopoly power over rice imports kept domestic prices, both "market" and government-set, much above world market prices, even during the 2008 food crisis. This shows the strong implicit taxation of Philippine rice consumers by the current policy settings (Section 2.5).

Despite inclusion of provinces covered by the ASAPP, the NFA rice distribution programme is not well-targeted.²¹ In fact, anyone can buy NFA rice sold in the accredited retail stores without needing to be prequalified (Fernandez and Velarde, 2012). According to Fernandez and Velarde (2012), the rice distribution programme reached 47.7% of poor households in 2009 despite being implemented for about fifty years. The programme is also costly: it costs USD 2.2 to provide USD 1 of subsidy to consumers (Jha and Mehta, 2008).

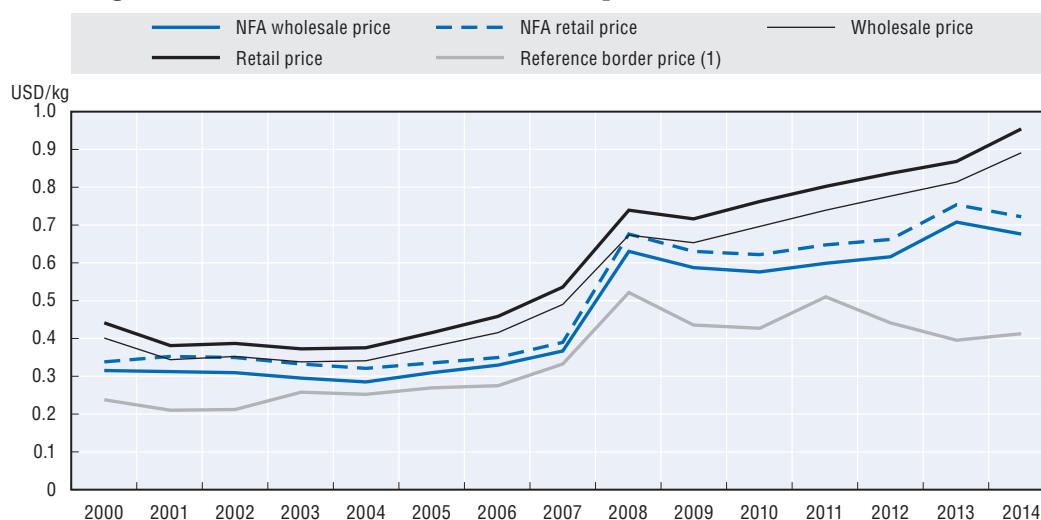
Since 1997, various **school food programmes** have been implemented by the Department of Education. In 2005, a Food for School Program was implemented that provided one kilogram of rice to eligible families for every day that their children attended school. The current programme, called the School-Based Feeding Program, was introduced in 2010 and is targeted at families suffering from severe hunger. Under the programme, children are provided a meal in school for 100-120 days during the school year (Albert et al., 2015).

Figure 2.8. **Share of rice distribution by NFA in total rice consumption, 1995-2014**



Source: DA (2015).

StatLink  <http://dx.doi.org/10.1787/888933452479>

Figure 2.9. **Government-set and market prices of milled rice, 2000-14**

1. Viet Nam FOB price adjusted to the Philippine border.

Source: DA (2015), Philippine Statistics Authority, OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database.

StatLink  <http://dx.doi.org/10.1787/888933452482>

2.4. Trade policies affecting agro-food trade flows and agricultural commodity prices

The objectives of agro-food trade policy in the Philippines are closely related to the overall agricultural policy objectives: namely, to achieve food self-sufficiency, particularly in rice, and to ensure sufficiently high and stable food prices to enhance farm incomes and alleviate rural poverty (WTO, 2012). This section provides an overview of reforms of the trade system, currently applied import and export policy measures as well as multilateral and bilateral trade relations affecting Philippine agro-food trade.

Overall reforms of the trade system

Until the mid-1980s the trade policy of the Philippines was **protective**. Trade policy instruments included government monopoly control over international trade and domestic marketing operations, import bans, quantitative trade restrictions, import licensing, export taxes and export bans (David et al., 2009). The first steps towards liberalisation were taken in the 1980s with the Tariff Reform Program (TRP) and Import Liberalization Program. The TRP was launched as part of the World Bank's structural adjustment loan package in 1981 (David et al., 2009). Its first phase (TRP I) consisted of three components: tariff reductions, import-liberalisation and realignment of indirect taxes. Over 1981-85, tariffs were compressed from a range of 0-100% to 10-50%. However, the Import Liberalization Program, aimed at lifting quantitative restrictions on imports, was abandoned in 1983 due to a balance of payments crisis, but resumed in 1986 (Manzo, 2007). Liberalisation did not cover imports of agricultural commodities, but did cover fertiliser and wheat imports and removal of agricultural export taxes.

In the 1990s, three major **trade liberalisation** developments took place: implementation of the subsequent phases of TRP; initiation of the AFTA in 1992; and the Philippines' accession to the WTO in 1995.

TRP II was launched in 1991 and consisted of efforts to cluster tariff rates within the 10-30% range by 1995. Conversion of quantitative restrictions into tariff equivalents started in 1992, but was stopped by the adoption of the Magna Carta for Small Farmers (RA 7607) which stated: “Importations shall not be allowed of agricultural products that are produced locally in sufficient quantity”. Accordingly, tariff quotas were introduced in 1993 for maize, pork, poultry, but not for beef and sugar (Piadozo, 2012).

TRP III started in 1995 with the goal of developing a four-tier tariff schedule: 3% for raw materials and capital equipment not available locally; 10% for raw materials and capital equipment available from local sources; 20% for intermediate goods; and 30% for finished goods (Piadozo, 2012). The same year the Philippines **acceded to the WTO** and committed to gradually remove quantitative restrictions on imports of sensitive agricultural imports, with the exception of rice (Cororaton, 2008). However, over 2004-08, protection of the agricultural sector barely decreased, largely due to the introduction of a tariff quota system under the WTO minimum access volume (MAV) clause for sensitive agricultural products. While relatively high tariff rates were imposed on imports up to a minimum access level (in-quota rate), even higher rates were levied beyond the minimum import level (out-of-quota tariff rate) (Piadozo, 2012; Table 2.A1.6). Three measures contributed to the preservation of a relatively high agricultural protection: the “tariffication” of non-tariff barriers into high tariffs; the retention of quantitative restrictions on rice imports; and Sanitary and Phytosanitary (SPS) measures on the issuance of import permits (WTO, 2005).

The goal of TRP IV (1998-2000) was to enhance the country’s global competitiveness. The previous tariff structure was replaced with a more flexible structure and the average nominal tariff declined from 13% to 8% during 1998-2000 (Manzo, 2007). Over 2005-15, the government continued to pursue a high import-protection policy and made efforts to retain MAV for rice, which has now been extended to 2017. Those said, steps were taken within the ASEAN Free Trade Area to lower tariffs and abolish quantitative restrictions, except for highly sensitive commodities.

Import policy measures

Tariffs

Tariffs are the main instrument of Philippine trade policy. The current trade policy for agricultural products is based on the 1996 Republic Act 8178, “An act replacing quantitative restrictions on agricultural products, except rice, with tariffs, creating the Agricultural Competitiveness Enhancement Fund and for other purposes”. The act has been referred to as the **Agriculture Tariffication Act**. Upon its adoption, a number of previous laws prohibiting the importation of different agricultural products were repealed. After its implementation, all agricultural products can be imported without quantitative restrictions, except for rice, which is controlled by the NFA (Aquino et al., 2013b).

In general, the Philippines applies tariffs in agriculture far below their bound levels (Table 2.5). In 1999, the simple average applied MFN on agricultural products (HS 1-24) was 14.8%. It decreased to 10.2% by 2003 and since then declined only marginally to 9.9% in 2014. All tariff lines applied are *ad valorem* and range from 0-65%, with the highest applied to sugarcane (Table 2.5 and Table 2.A1.5). High protection is also applied to sensitive products like rice, maize, pork and poultry meat, potatoes, onions, garlic and coffee. Tariffs are reviewed every 5 years to assist business sectors in their long-term strategic plans (WTO, 2012).

Table 2.5. **Final bound and applied MFN tariffs on agricultural products in 2009 and 2014**

	Final bound rates		MFN applied 2009		MFN applied 2014	
	Average	Maximum	Average	Maximum	Average	Maximum
Animal products	36.5	50	20.8	45	20.5	45
Dairy products	27.2	40	3.9	7	3.9	7
Fruit, vegetables, plants	37.3	60	9.8	40	9.7	40
Coffee, tea	41.2	50	14.9	45	15.7	45
Cereals and preparations	37.7	50	10.8	50	10.2	50
Oilseeds, fats and oils	36.7	60	5.6	15	5.4	15
Sugars and confectionery	42.8	80	15.2	65	20.4	65
Beverages and tobacco	44.8	50	8.2	15	8.2	15
Cotton	10.0	10	2.6	3	2.6	3
Other agricultural products	24.9	50	3.4	35	3.6	35

Source: UNCTAD (2014), *World Tariff Profiles*.

Maize is protected by high in- and out-quota tariff rates (35% and 50% respectively) (rice is discussed separately below). Within ASEAN Trade in Goods Agreement (ATIGA) the tariff on maize has been reduced to 5%. Relatively high border protection undermines the competitiveness of the animal production.

Tariff quotas

The Agricultural Tariffication Act (RA 8178) converted all trade barriers into tariffs, as agreed in WTO accession negotiations. As part of the tariffication package, the Philippines was required to maintain current import access opportunities at levels corresponding to those existing during the 1986-88 base period. For sensitive agricultural products, the **minimum access volumes (MAVs)**, calculated as a share of domestic consumption in the base period, had to increase from 3% in 1995 to 5% in 2004. This involved introduction of tariff quotas for 14 agricultural products with in-quota tariffs ranging from 30-50% and out-of-quota tariffs from 40-100% in 1996 (Tables 2.A1.6 and 2.A1.7). MAVs had gradually been increased by the mid-2000s in line with WTO commitments, but subsequently remained unchanged. While in-quota tariffs have remained unchanged for most products since 1996, out-of-quota tariffs had been reduced by 2005, but have remained unchanged since then. As a result, by 2005, the in-quota and out-of-quota tariffs had been equalised for several commodities such as potatoes, onions, garlic and poultry, but the overall level of tariffs for the 14 products covered by the quota system remained high, ranging from 30% (in-quota tariff for live swine, live sheep and pork meat), to 65% (out-of-quota tariff for sugarcane) (Table 2.A1.6).

The **system of administering tariff quotas** is complex, a possible reason why quotas are often under-filled (Manzo, 2007). A MAV Management Committee chaired by the Secretary of Agriculture issues MAV licences to importers. Tariff quotas are allocated twice a year and priority is given to importers who have not surrendered their previous year quota; the remaining volume is distributed to interested applicants on a first-come-first-served basis (WTO, 2005).

Special treatment clause for rice

Upon joining the WTO in 1995, the Philippines benefited from a **special treatment clause** (Article 5 of the Agreement on Agriculture) which allowed it to maintain quantitative restrictions on rice imports on the basis of the government's stated aim of food security until 2005. That said, the Philippines had to guarantee a MAV in the form of a progressively increasing import quota.

Initially, the quantity of rice imports under the **MAV**, valid until 2005, was small, at 59 730 tonnes (Table 2.6), compared to annual rice imports by the Philippines varying from 0.3 to 2.4 million tonnes over 1995-2014. At the Philippines' request, the special treatment clause on rice was extended from 2005 to 2012. As a concession, the Philippines had to increase the MAV for rice to 350 000 tonnes and reduce its in-quota tariff to 40%, while the out-of-quota tariff remained at 50%. In 2012, the Philippines requested a new extension of its special treatment for rice through a waiver until 2017. The waiver was granted in July 2014 on the condition that the Philippines increased the MAV to 805 200 tonnes, lowered the in-quota tariff to 35% and that, after 30 June 2017, its importation of rice would be subject to ordinary customs duties established on the basis of a tariff equivalent to be calculated in accordance with the guidelines defined in the WTO Agreement on Agriculture (WTO, 2014a). Under the MAV, country-specific quotas are provided to Australia, China, El Salvador, India, Pakistan, Thailand and Viet Nam (Table 2.7).

Table 2.6. **Minimum access quotas for rice negotiated in WTO, 1995-2017**

	Size of quota and in-quota tariff rate		Out-of-quota tariff rate
	tonnes	%	%
1995	59 730	50	50
1999	119 460	50	50
2000 – June 2005	238 940	50	50
July 2005 – 30 June 2012	350 000	40	50
1 July 2012 – 30 June 2013	350 000	40	50
1 July 2013 – 30 June 2014	645 134	40	50
1 July 2014 – 30 June 2015	805 200	35	50
1 July 2015 – 30 June 2017	805 200	35	50

Source: WTO (2014a).

Table 2.7. **Country-specific rice quotas, 2013-17**

WTO Member	Annual country specific quotas until 30 June 2017 (in tonnes and on a milled basis)			
	1 July 2013 –30 June 2014	1 July 2014 –30 June 2015	1 July 2015 –30 June 2016	1 July 2016 –30 June 2017
Australia	15 000	15 000	15 000	15 000
China	40 000	50 000	50 000	50 000
El Salvador	4 000	4 000	4 000	4 000
India	40 000	50 000	50 000	50 000
Pakistan	40 000	50 000	50 000	50 000
Thailand	228 067	293 100	293 100	293 100
Viet Nam	228 067	293 100	293 100	293 100

Source: WTO (2014a).

State trading

The NFA is a state trading enterprise of the Philippines (Section 2.2). In the 1970s, during a surge in world commodity prices, the government's monopoly control over trade was expanded from rice and maize to wheat, soybeans, soybean meal, ruminant livestock and beef. Monopoly controls, except for rice and maize, were lifted in the mid-1980s. If needed, the NFA also has the authority to stabilise sugar prices. When there is a shortfall in the domestic market of maize and sugar, the NFA can import them to stabilise prices. In practice, the NFA has not been involved in sugar importation thus far. Another role of the NFA is to issue export permits when the domestic demand for maize has been met (WTO, 2012).

The NFA has the power to establish rules and regulations governing the importation of rice. It is also tasked with issuing import licences, and imposing and collecting fees and charges on rice imports to equalise the selling price of imported rice with that on the domestic market. The volume of rice imports is determined by the NFA Council using projections of paddy rice production and the supply-demand gap and approved by the President. Imports of rice are allowed to cover the annual shortfall in production, which substantially exceeds the Philippines' WTO MAV commitment. During recent years, the private sector has been allowed to import rice equal to the MAV commitment; all out-of-quota rice is imported by the NFA (WTO, 2012).

In the 1990s, private sector imports were small (about 50 000 tonnes), but in 2015, for example, had increased to 612 400 tonnes. The NFA conducts the import bidding process (Cororaton, 2013), and each importer is allowed to bid for a maximum of 20 000 tonnes (Tobias et al., 2012). Quota is allocated on a first-come-first-served basis, based on the date and time of the advance payment of import tariff to the LBP (NFA memorandum circular AO-2014-01-001).

Import licences

Regulated by the Tariff and Customs Code of 1978, **import licensing** is intended to safeguard public health, national security and welfare and to meet international treaty obligations. Licences are also used to manage agricultural tariff rate quotas. There are two types of import licence: regular licences, issued annually for tariff quotas at the start of a quota year, and special licences, which are issued for quotas reallocated from the surrendered volumes during the quota year. Processing special licences takes about one month. Importers generally need to register with the Bureau of Customs (under the Department of Finance) but some goods (e.g. coconut products, coffee, fish products, plants, and sugar), have additional requirements, such as SPS accreditation from the DA. Under ASEAN, the Philippines is required to implement a “national single window” to expedite trade.

SPS on imports

The DA manages the implementation of the **Sanitary and Phytosanitary (SPS) Agreement** and maintains an SPS Notification Authority and Enquiry Point and an SPS Information System. From the entry into force of the WTO-SPS Agreement in 1995 until mid-September 2016, the Philippines had made about 350 notifications to the WTO Committee on Sanitary and Phytosanitary Measures, covering a wide range of measures, including imposition of temporary import restrictions, on grounds of food safety, animal health, plant protection and their termination.²² The Philippines is a member of the standard setting bodies of the WTO-SPS Agreement, namely *Codex Alimentarius*, OIE (World Organisation for Animal Health) and IPPC (International Plant Protection Convention).

The Food Safety Act of 2013 delineates the jurisdiction of the DA and the Department of Health for the safety of food: the former for primary and post-harvest food and the latter for processed and pre-packaged foods.

The **regulatory agencies** of the DA are responsible for ensuring food, animal and plant safety through imposition of SPS measures. Any importer who desires to import any agricultural and fish and fishery/aquatic products, as well as fertilisers, pesticides and other agricultural chemicals, veterinary drugs and biological products into the Philippines must secure an SPS Import Clearance (SPS-IC), pre-market or prior to importation from any of the following agencies: (a) Bureau of Animal (BAI) for animals, animal feeds and feeds ingredients,

animal products and by-products including meat and meat products, eggs, milk, dairy, veterinary drug and biological products; (b) Bureau of Fisheries and Aquatic Resources (BFAR) for fish, fishery/aquatic products, and fish intended for feeds and products used in fish propagation; (c) Bureau of Plant Industry (BPI) for plant and plant products; (d) Fertilizer and Pesticides Authority (FPA) for fertiliser, pesticides and other agricultural chemicals.²³ The decision to issue an SPS-IC is based on a risk analysis performed by these agencies.

Imports of agricultural products, live animals, plants, their products and by-products must be accompanied by several documents, including the SPS-IC, and an international sanitary, phytosanitary or health certificate from their country of origin and are subject to inspection upon arrival by the DA Border Inspector. The SPS permit clearance is valid for one shipment and is not transferrable to other persons. Generally, only SPS considerations are taken into account when issuing certificates. However, in some cases, domestic supply is also considered (WTO, 2012), presumably leading to alleged discriminatory treatment due to non-science-based requirements, mainly for animal products.

The DA Border Inspector performs quarantine and product safety and quality inspection, documentation and clearance. The BAI of the DA is responsible for preventing the entry and spread of exotic and communicable **animal** diseases and safeguarding animal health and industries, as well as control measures for feeds and feedstuff. All meat and meat products require a Foreign Meat Inspection Certificate signed by an authorised veterinarian. Imports of meat and meat products are also subject to inspection and require a Veterinary Quarantine/SPS Import Clearance issued by the BAI prior to shipment: meat imports must originate in a foreign establishment recognised as an exporting entity by the Veterinary Administration and accredited in the Philippines (DA, 2015). The National Meat Inspection Service (NMIS), also under the DA, promulgates and implements policies, procedures, guidelines, rules and regulations governing post production flow of livestock and meat and meat products (both locally produced and imported). Thus, while the BAI inspects the shipments at the border, the NMIS inspects meat and meat products at the cold storage (or so called “second border”) level (DA, 2016).

Imports of **fish and fish products** require an SPS-IC issued by BFAR under the DA. Fish imports are subject to a physical examination and microbiological analysis upon arrival. If considered safe, a Fishery Sanitary and Phytosanitary Certificate is issued to release imports. Imports of live exotic species and live shrimp and prawns have been prohibited, based on an import risk analysis (DA, 2015; WTO, 2012).

The BPI is responsible for measures related to protecting **plant** health. It conducts pest risk analysis, issues phytosanitary certificates, implements measures regulating the international and domestic movement of plants and plant products, and maintains the official pesticide residue analysis laboratories. BPI is also responsible for approving biotechnology-derived plants for food and feeds. Importers of plants and plant products must register with the BPI National Plant Quarantine Services Division before applying for a Phytosanitary Certificate. Commodities with no record of previous importation are subject to pest risk analysis (DA, 2015).

All **genetically modified** (GM) imported plants and plant products must be authorised by the BPI and must be accompanied by a declaration of GM content issued by an authorised body in the country of origin or by an accredited laboratory (Administrative Order No. 8 from 2002). BPI issues an Approval Registry for plants and plant products that have undergone an approval process and these plants require only a phytosanitary certificate for release from

customs. BPI randomly checks imported plant products to assess GM content, particularly for commodities known to be genetically modified overseas (DA, 2015). Following a petition by environmentalists, the Philippine Supreme Court declared AO 8 null and void in December 2015. Applications for contained use, field testing, propagation, commercialisation and importation of GM products were prohibited until a new Administrative Order is issued (PIDS, 2016). In response, a Joint Department Circular (JDC) was drafted and approved by five Departments in March 2016 replacing AO 8 and designed to improve transparency in the approval process for permits to plant, import and commercialise GM products, including enhanced regulations on risk assessment.²⁴ In July 2016, the Philippine Supreme Court upheld the JDC as addressing all issues raised in its declaration of December 2015 and ruled that the JDC reflects the existing regulatory framework for GM products, superseding AO 8.

Export policy measures

All export taxes on agricultural products ended in 1996 and the Philippines has not used export subsidies. Export activities are mainly undertaken by the private sector, with minimum assistance from the government.

Several agricultural commodities are subject to **export controls** and may require permits and agency approval: rice, grains and grain products, sugar and molasses. Exports of rice and maize remain restricted and, in principle, controlled by the NFA and may only be exported if there is a surplus. Any exports require a permit from the DA, and a sanitary certificate, both granted on a per-shipment basis (DA, 2015). Minimum export prices continue to apply for rice and maize; however, these are generally based on world prices (WTO, 2012).

The President may, upon NEDA's recommendation, **impose an export quota** on any good, taking into account factors such as domestic demand, the world price, and preferential treatment granted to Philippine exports by foreign governments. Exports of sugar are subject to bilateral restraints: the Philippines' sugar exports to the United States are subject to quota restrictions. The Sugar Regulatory Administration is responsible for the administration of sugar export quotas (WTO, 2012).

For plant products, the **export certification procedures** and phytosanitary certification system is based on the IPPC standards. For meat and meat products, issuance of export certificates is based on the requirements of the importing country. Two government agencies separately issue International Veterinary Certificates and Official Meat Inspection Certificates for exports. All exports must be covered by either an export declaration issued by the Bureau of Customs or through the one-stop export documents centres, or electronically through the Single Administrative Document. Certificates of origin are required for exports under the WTO Generalised System of Preferences and AFTA. Other permits and licences may be required for exports that are regulated or prohibited (DA, 2015).

Trade relations

WTO

The Philippines is a founding member of the WTO in 1995. The **main commitments** of the Philippines under the WTO are:

- Removal of quantitative restrictions (QR) and conversion of QRs into their tariff equivalents (tariffication).
- Reduction of tariffs on agricultural products: reduce average tariffs by 24% with a minimum 10% cut per tariff line from 1995-2004.

- Implement a TRQ or MAV system.
- Bind tariffs for almost all tariff lines in agriculture to specified rates. Initial bound tariff rates for most sensitive agricultural tariffs were 95% to 100% in 1995, to be reduced to 10-50% by 2004.
- Prohibit additional non-tariff measures, i.e. such as import licencing, variable import levies, import quotas and import bans (Manzo, 2007).

Although the Philippines agreed to reduce **domestic support**, in practice, it did not have to make reductions because the aggregate measure of support for government expenditures on fertiliser subsidies, certified seeds and planting materials and the price support for rice, maize and sugar fell below the *de minimis* level of 10% of the value of production applied to developing countries (NAFC, 2007). That said, the Philippines is precluded from future use of such support beyond the *de minimis* level.²⁵

In addition, important commitments were made by the Philippines on the harmonisation of SPS measures with international standards, and on putting in place a *sui generis* system of plant variety patent registration and protection (Manzo, 2007).

ASEAN

The Philippines is a founding member of the Association of Southeast Asian Nations (ASEAN) together with Indonesia, Malaysia, Singapore and Thailand. The **ASEAN Free Trade Area (AFTA)** was initiated in 1992 to reduce Common Effective Preferential Tariffs (CEPT) among ASEAN members to 0-5% and to abolish quantitative restrictions and other non-tariff barriers by 2010 (Piadozo, 2012). The 2009 ASEAN Trade in Goods Agreement (ATIGA) required 98-100% of all tariff lines for all countries to be included in CEPT by 2015. Philippine tariffs on maize and sugar for AFTA members had fallen to 5% by 2015; however, rice had only been reduced to 35%, under a waiver in the ATIGA Protocol to Provide Special Consideration for Rice and Sugar.²⁶

The **ASEAN Economic Community** was established in 2015. The Community consists of three pillars: political-security, socio-cultural and economic and seeks to establish a single market based on free movement of goods, free flow of investment, freer flow of capital and free movement of skilled labour. A blueprint adopted in the end of 2015 sets out a timeline and targets for advancing the economic pillar from 2016 to 2025. Goals include: 1) a highly integrated and cohesive economy; 2) a competitive, innovative and dynamic ASEAN; 3) enhanced connectivity and sectoral co-operation; 4) a resilient, inclusive people-oriented and people-centred ASEAN; and 5) a global ASEAN (ASEAN, 2015).

In addition to trade agreements between ASEAN and individual countries (Korea, China, Australia and New Zealand, India), the Philippines has a **bilateral trade agreement** with Japan (Table 2.8). Not all commitments under these agreements are yet in effect, as many have transition periods until 2016 and 2020, although significant trade liberalisation has taken place under AFTA (Table 2.9). In 2016, the Philippines signed a trade agreement with the European Free Trade Area (EFTA) and started negotiations on an agreement with the European Union (EU).

Table 2.8. **Philippine commitments under Free Trade Agreements**

FTA and members	Entry into force	Liberalisation commitments
ASEAN Free Trade Agreement (AFTA): ASEAN Members	1992	Under the Common Effective Preferential Tariff (CEPT), ASEAN members apply a tariff rate between zero and 5% for all products, including those previously deferred on countries' sensitive and highly sensitive lists.
ASEAN – Korea Free Trade Agreement: Korea and ASEAN members	2008	Tariffs for sensitive products will be reduced to 0-5% by 2016. Tariffs for highly sensitive products will be capped at 50%, and reduced by 50% or 20% by 2016.
ASEAN – Japan Comprehensive Economic Partnership Agreement: Japan and ASEAN members	2008	Progressive elimination of substantially all discrimination between ASEAN and Japan. From 2018 97.1% of tariff lines will be duty free
Japan – Philippines Economic Partnership Agreement: Japan and Philippines	2008	From 2018, 98.6% of all tariff lines will be duty free; of the remaining duties the highest (47.2%) will remain on vegetable products after the transition period.
ASEAN – China: ASEAN members and China	2007	Tariffs for sensitive products will be reduced to 0-5% by 2018. Tariffs for highly sensitive products to be reduced to not more than 50% by 2015. 28 tariff lines excluded from reduction.
ASEAN-ANZ: ASEAN members, Australia, New Zealand	2010	By 2020, 94.59% of all Philippine tariff lines will be duty free. The highest remaining tariff will be applied to maize.
ASEAN – Indian FTA: ASEAN members and India	2011	From 2022, 87.5% of tariff lines will be duty free; highest tariff rates will be applied to meat, preserved or prepared pork, turkey and geese, onions, sweet potatoes, cabbages and coffee.

Source: WTO (2012).

Table 2.9. **Summary of the Philippines' MFN and preferential tariff averages, 2016**

	No. of lines	MFN applied, %	ASEAN Common Effective Preferential Agreement, %	ASEAN-Korea FTA, %	ASEAN-China FTA, %	ASEAN-Australia New Zealand FTA, %	ASEAN-India FTA, %	ASEAN-Japan Comprehensive Economic Partnership Agreement, %	Philippines-Japan EPA, %
Animal products	162	23.15	1.08	5.67	11.45	7.92	16.05	4.89	3.48
Dairy products	38	2.95	-	-	-	0.76	2.06	0.66	0.89
Fruit, vegetables, plants	348	9.80	0.09	2.28	3.58	1.10	4.87	1.82	0.95
Coffee and tea	43	17.02	-	1.51	-	2.44	7.11	3.14	3.05
Cereals and preparations	189	10.65	1.88	0.64	2.86	0.57	4.53	1.53	1.19
Oil seeds, fats and oils and their products	198	7.28	-	1.48	-	0.05	2.45	1.23	1.06
Sugars and confectionery	35	16.86	1.14	0.80	10.09	-	3.64	0.92	3.77
Cotton	5	2.60	-	-	-	-	1.00	-	-
Other agricultural products	194	4.74	-	0.31	1.54	0.15	1.55	0.54	0.37

Notes: Calculations exclude in-quota rates and exclusions from concessions, but for more complete commodity coverage it can be added that in-quota tariff on rice was 35% in 2016 for all agreements except for ASEAN-China FTA where it was 50%. Out-quota tariff on rice was 50% in all cases, except for ASEAN Common Effective Preferential Agreement, where it was 35%.

Source: Tariff Commission, Republic of the Philippines (2016).

2.5. Evaluation of support to agriculture

This section presents a **quantitative evaluation of support** provided to agriculture through the domestic and trade policies for the period 2000 to 2014. The evaluation is based on the indicators of agricultural support developed by the OECD, including the Producer Support Estimate (PSE), Consumer Support Estimate (CSE), General Services Support Estimate (GSSE), Total Support Estimate (TSE) and others (Box 2.8).

Box 2.8. OECD indicators of support to agriculture

INDICATORS OF SUPPORT FOR PRODUCERS

Producer Support Estimate (PSE): The annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on farm production or income.

Percentage PSE (%PSE): PSE transfers as a share of gross farm receipts (including support).

Producer Nominal Assistance Coefficient (producer NAC): The ratio between the value of gross farm receipts (including support) and gross farm receipts valued at border prices (measured at farm gate).

Producer Nominal Protection Coefficient (producer NPC): The ratio between the average price received by producers at farm gate (including payments per tonne of current output), and the border price (measured at farm gate). The producer NPC is also available by commodity.

Producer Single Commodity Transfers (producer SCT): The annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policy measures directly linked to the production of a single commodity such that the producer must produce the designated commodity in order to receive the transfer.

Producer Percentage Single Commodity Transfers (producer %SCT): The commodity SCT expressed as a share of gross farm receipts for the specific commodity (including support).

INDICATORS OF SUPPORT TO CONSUMERS

Consumer Support Estimate (CSE): The annual monetary value of gross transfers from (to) consumers of agricultural commodities, measured at the farm gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on consumption of farm products. If negative, the CSE measures the burden (implicit tax) on consumers through market price support (higher prices), that more than offsets consumer subsidies that lower prices to consumers.

Percentage CSE (%CSE): CSE transfers as a share of consumption expenditure on agricultural commodities (measured at farm gate), net of taxpayer transfers to consumers.

Consumer Nominal Assistance Coefficient (consumer NAC): The ratio between the value of consumption expenditure on agricultural commodities (at farm gate) and that valued at border prices (measured at farm gate).

Consumer Nominal Protection Coefficient (consumer NPC): The ratio between the average price paid by consumers (at farm gate) and the border price (measured at farm gate).

Consumer Single Commodity Transfers (consumer SCT): The annual monetary value of gross transfers from (to) consumers of agricultural commodities, measured at the farm gate level, arising from policy measures directly linked to the production of a single commodity.

INDICATORS OF SUPPORT TO GENERAL SERVICES FOR AGRICULTURE

General Services Support Estimate (GSSE): The annual monetary value of gross transfers to general services provided to agricultural producers collectively (such as research, development, training, inspection, marketing and promotion), arising from policy measures that support agriculture regardless of their nature, objectives and impacts on farm production, income, or consumption. The GSSE does not include any transfers to individual producers.

Percentage GSSE (%GSSE): GSSE transfers as a share of Total Support Estimate (TSE).

INDICATORS OF TOTAL SUPPORT TO AGRICULTURE

Total Support Estimate (TSE): The annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures that support agriculture, net of associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products.

Percentage TSE (%TSE): TSE transfers as a percentage of GDP.

A detailed description of the **OECD methodology** to estimate agricultural support (the “PSE Manual”) and a comprehensive database for OECD and selected non-OECD countries including the Philippines are available from <http://oe.cd/pse>. The methodology applied in this study is fully consistent with that used for other countries as presented in OECD reports that monitor and evaluate agricultural policies (OECD, 2016). Box 2.9 provides basic information on how this methodology has been applied in the case of the Philippines.

Box 2.9. The Philippine’s PSEs: What and how?

Period covered: 2000-14.

Products covered: Rice, maize, coconuts, bananas, sugarcane (centrifugal), mango, pineapple, beef and veal, pigmeat, poultry and eggs. These 11 commodities account for 88% on average of the total value of gross agricultural output (GAO) in the Philippines during the entire fifteen-year period 2000-14. The seven crop products account for 76% of the value of total crop production in 2012-14, while the four animal products represent on average 94% of total animal production. For the purposes of calculating market price gaps, five commodities are treated as exported: coconut, banana, sugarcane, mango and pineapple. The remaining six are considered imported.

Market Price Support

Producer prices: Average prices received by producers, sourced from the Philippine Statistics Authority.

Price gap estimates: For all the above listed products relevant data have been collected and price gaps calculated. For three exported products (bananas, mangos and pineapple), no export subsidies nor other market price policies either supporting or taxing producers have been identified. Consequently, in line with the OECD methodology, and as applied for other countries, the price gaps for these products have been set to zero. For pork, beef, poultry and eggs, the annual average tariff rates were used to estimate the price gaps as trade flows for these commodities have been very small and it was not possible to identify consistent reference prices. External reference prices were used for remaining four products: rice, maize, sugarcane and coconuts.

External reference prices: Milled rice export price quotes of Viet Nam adjusted to the Philippine border is used for rice. The average import unit value at the Philippine border is applied for maize. For coconuts the average export unit value of crude coconut (copra) oil at the Philippine border is used. For sugarcane the average export unit value of centrifugal sugar at the Philippine border is applied.

Marketing margins: The marketing margin indicates processing, handling and transportation costs for a given commodity. Margins between the farm gate and wholesale market were calculated as the absolute difference between the farm gate price and the average wholesale price provided by the PSA, ensuring that prices are expressed on the same processing level (sugar, coconuts). In case of coconuts, the marketing margin was assumed to be 6.1% based on the analysis of the coconut value chain by Pabuayon, et al. (2009). Transportation costs from border to wholesale market are assumed to range from 1% to 5% of the order reference price.

Quality adjustments: No quality adjustments were made.

Budgetary Support

Budgetary information for the period 2000-14 originates from DA and DBM. It covers budgetary expenditures undertaken by DA, DAR and GOCC. It incorporates transfers to local governments for agricultural programmes. However, it does not include local co-financing, as there is no data on this.

Support to agricultural producers

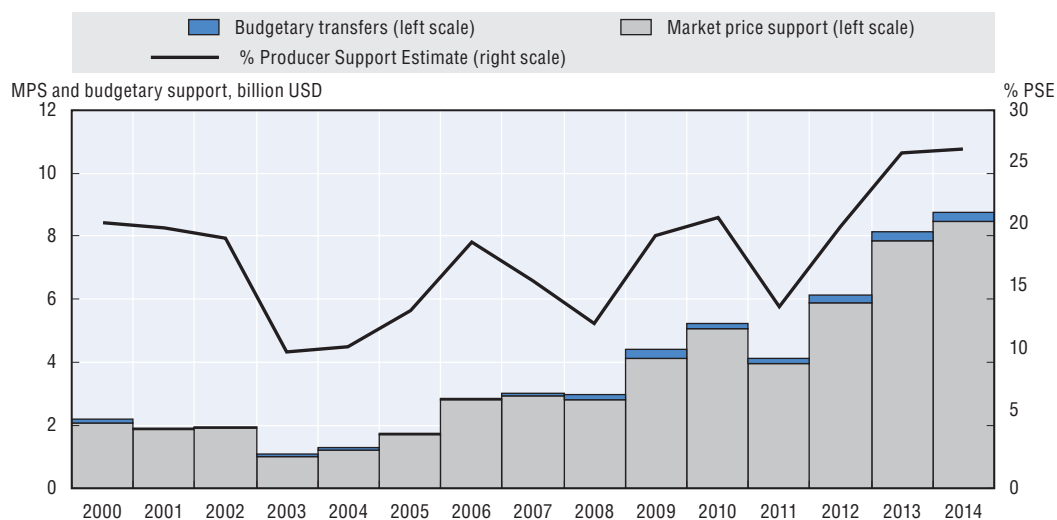
Level of producer support

The percentage Producer Support Estimate (%PSE) is the OECD's key indicator to measure the level of support provided to the agricultural sector. It expresses the monetary value of support transfers to agricultural producers as a share of gross farm receipts. Because it is not affected by inflation or the size of the sector, it allows comparisons of the level of support to be made over time and between countries. The level of support is important because it provides insights into the burden that agricultural support policies place on consumers (MPS) and taxpayers (budgetary transfers).

The Philippine's %PSE averaged 25% in the three-year period 2012-14, indicating that one-fourth of gross farm receipts were generated by support policies (Tables 2.10 and 2.11). This represents a slight increase compared to the 2000-02 average of 21%. Over the observed period, the nominal value of support increased from about USD 2 billion in the early 2000s to USD 6-8 billion in 2012-14, but as gross farm revenues (including those from support) increased at almost the same rate, the %PSE increased only marginally (Figure 2.10).

As seen in Figure 2.10, the %PSE has fluctuated markedly between 11% and 27%. These variations are driven almost exclusively by changes in relative levels of domestic and international prices, as measured by MPS. For example, a fall in support in 2008 and again in 2011 was the result of a large increase in international prices for grains, only partly transmitted to the domestic market. Budgetary transfers, the second major component of PSE, also fluctuated, but overall tended to increase, in particular in recent years. However, the share of budgetary transfers in the total PSE averaged just 3.7% during 2000-14, indicating that the bulk of support in the Philippines is provided by transfers from consumers.

Figure 2.10. Level and composition of Producer Support Estimate in the Philippines, 2000-14



Note: Percentage PSE (%PSE) is the monetary value of support transfers to agricultural producers as a share of gross farm receipts.

Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database.


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Table 2.10. Estimate of support to agriculture in the Philippines, PHP million

	2000-02	2012-14	2012	2013	2014
Total value of production (at farm gate)	475 034	1 317 503	1 235 225	1 286 910	1 430 373
<i>of which: share of MPS commodities (%)</i>	<i>89.2</i>	<i>87.9</i>	<i>88.3</i>	<i>86.7</i>	<i>88.7</i>
Total value of consumption (at farm gate)	486 371	1 361 050	1 274 612	1 310 181	1 498 357
Producer Support Estimate (PSE)	98 151	330 679	258 595	345 436	388 006
Support based on commodity output	94 657	319 705	248 804	333 369	376 941
<i>Market Price Support¹</i>	<i>94 657</i>	<i>319 705</i>	<i>248 804</i>	<i>333 369</i>	<i>376 941</i>
<i>Payments based on output</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Payments based on input use	3 196	9 926	9 536	10 621	9 620
<i>Based on variable input use</i>	<i>1 687</i>	<i>3 158</i>	<i>2 462</i>	<i>2 798</i>	<i>4 215</i>
<i>with input constraints</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Based on fixed capital formation</i>	<i>1 509</i>	<i>6 768</i>	<i>7 075</i>	<i>7 823</i>	<i>5 405</i>
<i>with input constraints</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Based on on-farm services</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>with input constraints</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Payments based on current A/An/R/I, production required	65	817	84	1 184	1 184
<i>Based on Receipts / Income</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Based on Area planted / Animal numbers</i>	<i>65</i>	<i>817</i>	<i>84</i>	<i>1 184</i>	<i>1 184</i>
<i>with input constraints</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Payments based on non-current A/An/R/I, production required	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	0	0	0	0	0
<i>With variable payment rates</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>with commodity exceptions</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>With fixed payment rates</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>with commodity exceptions</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Payments based on non-commodity criteria	0	0	0	0	0
<i>Based on long-term resource retirement</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Based on a specific non-commodity output</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Based on other non-commodity criteria</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Miscellaneous payments	232	231	170	262	262
Percentage PSE (%)	20.5	24.8	20.8	26.6	26.9
Producer NPC (coeff.)	1.29	1.34	1.27	1.38	1.38
Producer NAC (coeff.)	1.26	1.33	1.26	1.36	1.37
General Services Support Estimate (GSSE)	11 861	57 279	47 106	58 608	66 125
Agricultural knowledge and innovation system	2 694	11 250	8 587	12 070	13 095
Inspection and control	672	1 836	1 302	2 692	1 513
Development and maintenance of infrastructure	7 521	36 850	30 449	36 020	44 081
Marketing and promotion	298	1 368	1 455	1 668	982
Cost of public stockholding	607	4 167	4 000	4 250	4 250
Miscellaneous	69	1 808	1 313	1 909	2 203
Percentage GSSE (% of TSE)	10.8	14.8	15.4	14.5	14.6
Consumer Support Estimate (CSE)	-103 048	-346 075	-271 225	-354 138	-412 862
Transfers to producers from consumers	-105 538	-336 180	-259 003	-357 122	-392 416
Other transfers from consumers	-7 204	-25 447	-21 223	-17 612	-37 507
Transfers to consumers from taxpayers	0	0	0	0	0
Excess feed cost	9 695	15 552	9 000	20 596	17 061
Percentage CSE (%)	-21.2	-25.3	-21.3	-27.0	-27.6
Consumer NPC (coeff.)	1.30	1.36	1.28	1.40	1.40
Consumer NAC (coeff.)	1.27	1.34	1.27	1.37	1.38
Total Support Estimate (TSE)	110 011	387 959	305 701	404 044	454 131
Transfers from consumers	112 743	361 627	280 226	374 734	429 923
Transfers from taxpayers	4 473	51 778	46 698	46 922	61 715
Budget revenues	-7 204	-25 447	-21 223	-17 612	-37 507
Percentage TSE (expressed as share of GDP)	3.0	3.3	2.9	3.5	3.6
GDP deflator 2000-02 = 100	100	163	159	162	167

NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient. A (area planted), An (animal numbers), R (receipts), I (income). MPS commodities for the Philippines are: rice, maize, coconuts, bananas, sugarcane, mango, pineapple, beef and veal, pigmeat, poultry and eggs. Market Price Support is net of producer levies and Excess Feed Cost.

Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics (database).

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Table 2.11. Estimate of support to agriculture in the Philippines, USD million

	2000-02	2012-14	2012	2013	2014
Total value of production (at farm gate)	9 733	30 594	29 250	30 316	32 216
<i>of which: share of MPS commodities (%)</i>	<i>89.2</i>	<i>87.9</i>	<i>88.3</i>	<i>86.7</i>	<i>88.7</i>
Total value of consumption (at farm gate)	9 961	31 598	30 183	30 864	33 747
Producer Support Estimate (PSE)	2 014	7 667	6 123	8 137	8 739
Support based on commodity output	1 941	7 412	5 892	7 853	8 490
<i>Market Price Support¹</i>	<i>1 941</i>	<i>7 412</i>	<i>5 892</i>	<i>7 853</i>	<i>8 490</i>
<i>Payments based on output</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Payments based on input use	67	231	226	250	217
<i>Based on variable input use</i>	<i>35</i>	<i>73</i>	<i>58</i>	<i>66</i>	<i>95</i>
<i>with input constraints</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Based on fixed capital formation</i>	<i>32</i>	<i>158</i>	<i>168</i>	<i>184</i>	<i>122</i>
<i>with input constraints</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Based on on-farm services</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>with input constraints</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Payments based on current A/An/R/I, production required	1	19	2	28	27
<i>Based on Receipts / Income</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Based on Area planted / Animal numbers</i>	<i>1</i>	<i>19</i>	<i>2</i>	<i>28</i>	<i>27</i>
<i>with input constraints</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Payments based on non-current A/An/R/I, production required	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	0	0	0	0	0
<i>With variable payment rates</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>with commodity exceptions</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>With fixed payment rates</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>with commodity exceptions</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Payments based on non-commodity criteria	0	0	0	0	0
<i>Based on long-term resource retirement</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Based on a specific non-commodity output</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Based on other non-commodity criteria</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Miscellaneous payments	5	5	4	6	6
Percentage PSE (%)	20.5	24.8	20.8	26.6	26.9
Producer NPC (coeff.)	1.29	1.34	1.27	1.38	1.38
Producer NAC (coeff.)	1.26	1.33	1.26	1.36	1.37
General Services Support Estimate (GSSE)	244	1 328	1 115	1 381	1 489
Agricultural knowledge and innovation system	56	261	203	284	295
Inspection and control	14	43	31	63	34
Development and maintenance of infrastructure	155	854	721	849	993
Marketing and promotion	6	32	34	39	22
Cost of public stockholding	12	97	95	100	96
Miscellaneous	1	42	31	45	50
Percentage GSSE (% of TSE)	10.8	14.8	15.4	14.5	14.6
Consumer Support Estimate (CSE)	-2 113	-8 021	-6 423	-8 342	-9 299
Transfers to producers from consumers	-2 167	-7 795	-6 133	-8 413	-8 838
Other transfers from consumers	-148	-587	-503	-415	-845
Transfers to consumers from taxpayers	0	0	0	0	0
Excess feed cost	202	361	213	485	384
Percentage CSE (%)	-21.2	-25.3	-21.3	-27.0	-27.6
Consumer NPC (coeff.)	1.30	1.36	1.28	1.40	1.40
Consumer NAC (coeff.)	1.27	1.34	1.27	1.37	1.38
Total Support Estimate (TSE)	2 259	8 995	7 239	9 518	10 228
Transfers from consumers	2 315	8 382	6 636	8 828	9 683
Transfers from taxpayers	91	1 200	1 106	1 105	1 390
Budget revenues	-148	-587	-503	-415	-845
Percentage TSE (% of GDP)	3.0	3.3	2.9	3.5	3.6
GDP deflator 2000-02 = 100	100	163	159	162	167

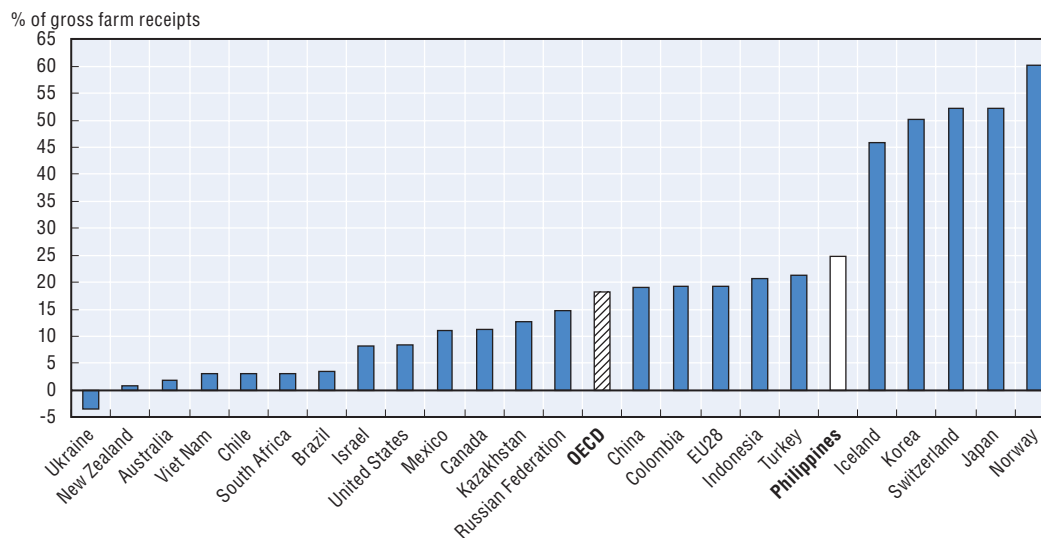
NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient. A (area planted), An (animal numbers), R (receipts), I (income). MPS commodities for the Philippines are: rice, maize, coconuts, bananas, sugarcane, mango, pineapple, beef and veal, pigmeat, poultry and eggs. Market Price Support is net of producer levies and Excess Feed Cost.

Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics (database).

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The average level of support in the Philippines is **higher than the OECD average** of 18% and the highest among emerging economies over 2012-14 (Figure 2.11). Compared to the other Asian countries in the sample, the level of support to producers in the Philippines is much lower than in Japan (52%) and Korea (50%), both high-income net importers of food products; is relatively close to Indonesia (21%) and China (19%), middle-income net importers of food; but more than eight times higher than in Viet Nam (3%), a strongly export-oriented and competitive for a wide range of crops (OECD, 2015).


Figure 2.11. **Producer Support Estimate in the Philippines and selected countries, 2012-14**



1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

2. The OECD total does not include the non-OECD EU member states.

Source: OECD (2016), "Producer and Consumer Estimates", *OECD Agriculture Statistics Database*.

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Composition of producer support by policy category

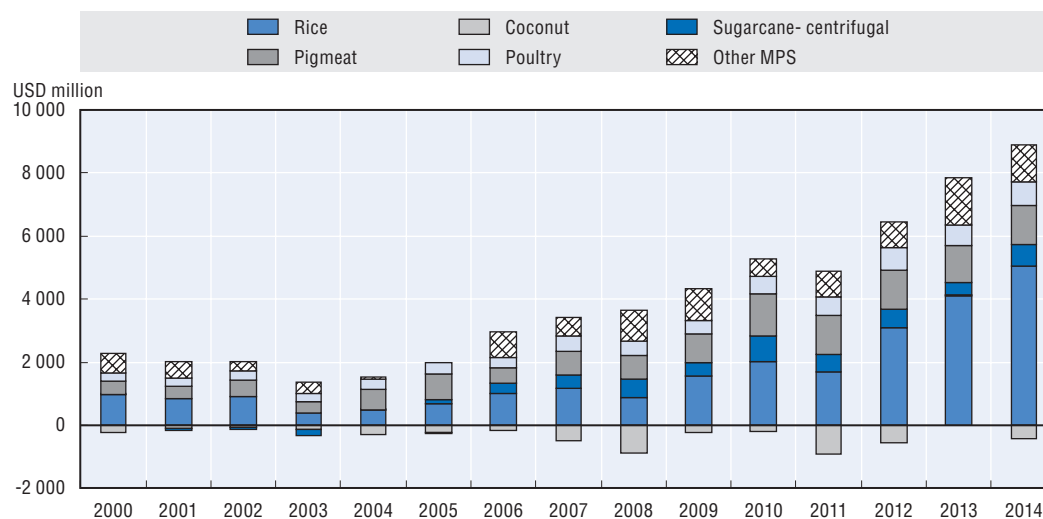
In addition to the level of support, it is also important to analyse the way in which that support is provided to producers. The **composition of support** shows how support is provided and thus the impact on the agricultural sector and on the distribution of benefits across society. For example, market price support can have a large effect on production and trade, but it imposes additional and regressive costs on domestic consumers, is not effective in improving farm income and can have negative effects on the environment. On the other hand, income support not based on current commodity production is much more effective at improving farm income with fewer spill-over effects. Policies that directly target non-commodity criteria such as landscape elements, environmental performance or traditional breeds of animals are also typically more effective at reaching these societal objectives. While targeted policies are likely to be more politically sustainable as they can be clearly explained, higher implementation costs (the costs associated with designing, implementing, monitoring and evaluating policy measures) make the move towards targeted policies more challenging (van Tongeren, 2008; Martini, 2011).

MPS is the dominant component of producer support in the Philippines. Its aggregate value is the outcome of a positive price gap for a majority of the commodities indicating price support (positive MPS) and implicit taxation through negative price gaps for few other commodities (a negative MPS) (Figure 2.12). Annual variations depend on movements in world prices, domestic prices and exchange rates, as well as changes in production levels. In 2011-14, the nominal value of MPS almost doubled due to a widening of the price gap between domestic and border prices (domestic prices increased and border prices decreased) and the ongoing appreciation of the PHP (Chapter 1).


The level and fluctuations of **MPS for rice** have a major impact on the level and changes of the total MPS. This is due to the high share of rice in the total value of agricultural production (at about one-fourth) and the highly protective measures separating domestic prices for rice from those on international markets. In particular, in 2012-14 rice import controls through the state trading enterprise (NFA) protected rice producers from the decrease in international rice prices. As a result, the share of rice MPS in total MPS increased to 55% in 2012-14 (Figure 2.12).

Sugarcane and animal products are the other agricultural sectors that receive substantial market price support. Both sectors are protected through high tariffs. Production and trade of sugar are also regulated by the Sugar Regulatory Administration. The price gap for coconuts was negative throughout the period, due mainly to poorly functioning marketing channels and poor infrastructure.

Figure 2.12. **Level and composition of Market Price Support in the Philippines, 2000-14**



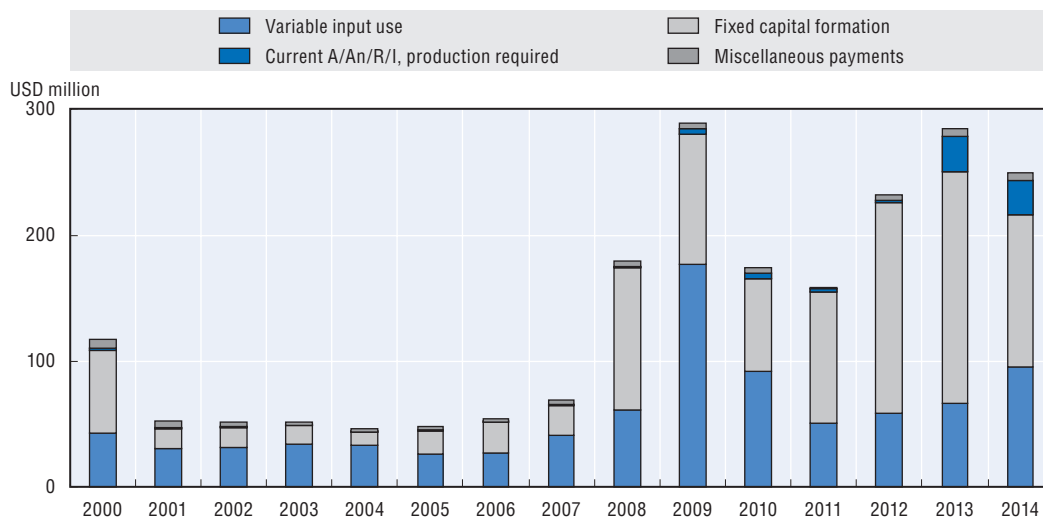
Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database.

StatLink  <http://dx.doi.org/10.1787/888933452534>

Budgetary support to agricultural producers has increased from about USD 50 million annually in 2001-07 to USD 250 million in 2014. As a share of gross farm receipts, it has increased from about 0.5% in the early 2000s to around 0.8% in 2012-14. Budgetary expenditures on agriculture surged in 2008-09, when the country was hit by the global food price crisis (Figure 2.13). Over the whole period, budgetary support has been primarily provided in the form of payments based on input use. During the 2000s, expenditures were mainly allocated to subsidising use of variable inputs, such as high yielding seeds, fertilisers

and other agricultural inputs. From 2011 onwards, the importance of subsidies for farm mechanisation strongly increased, both in absolute and relative terms. During 2013-14, support to insurance schemes also increased considerably.

Figure 2.13. **Level and composition of budgetary transfers in the Philippines, 2000-14**



Note: A (area planted), An (animal numbers), R (receipts), I (income).

Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database.

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Commodity profile of producer support

Producer Single Commodity Transfers (SCT) is an indicator of the extent to which agricultural policies are commodity-specific, or the flexibility that policies allow producers in their choices of product mixes. For example, payments designated for a specific commodity require recipient farmers to produce that commodity. Alternatively, payments may be provided for any commodity in a designated group (for example, any crop within a cereal group), or simply to any commodity without distinction. The latter payments give freedom to those who receive support to define their production mix, and producers become more responsive to market signals. The SCT corresponds to the first type of support and includes MPS and payments provided for the production of only a specified individual commodity. The SCT can be expressed in relative terms as a percentage of gross receipts for a given commodity. A figure of 33%, for example, indicates that the value of transfers that are specific to that commodity is equivalent to one-third of gross farm receipts for that commodity.

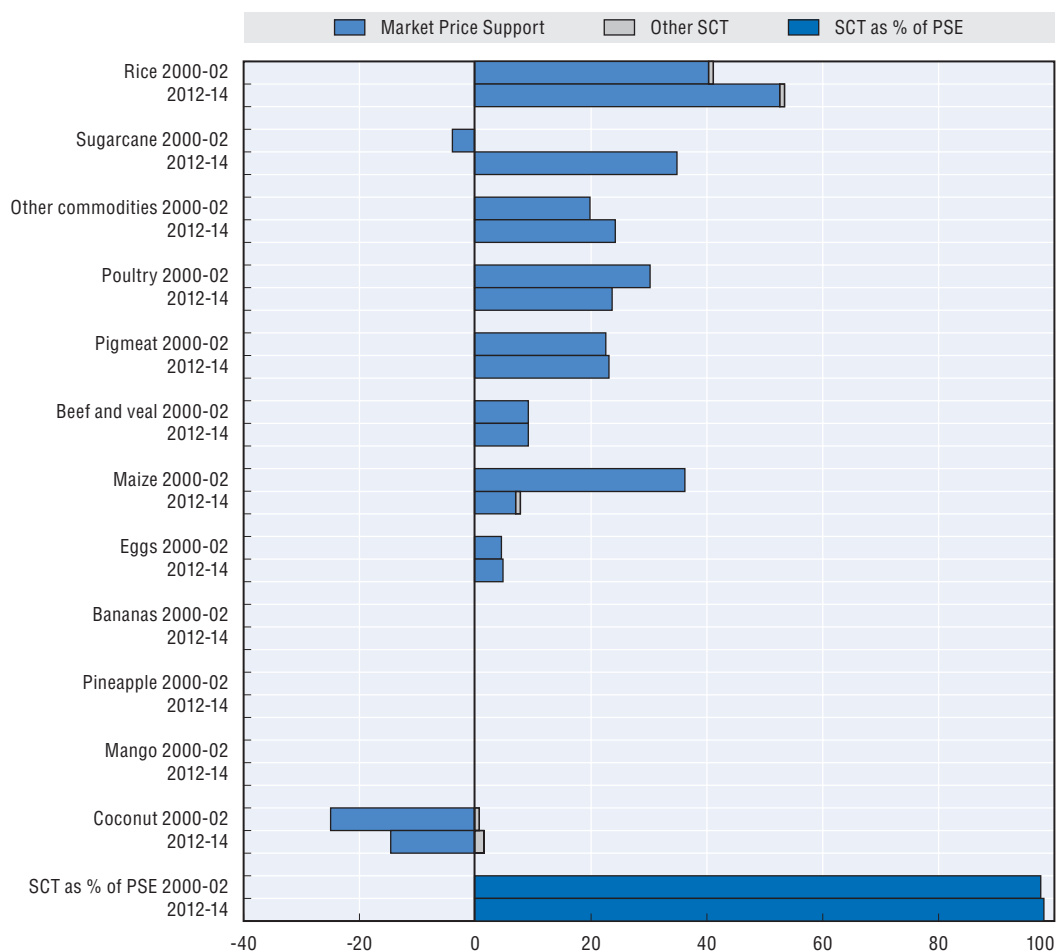
Overall, commodity-specific transfers dominate in the Philippines, as shown by the 98% share of SCT in total PSE during the whole period (Figure 2.14). Such policies limit the flexibility of farmers in their production decisions. Producer SCT as a share of commodity gross farm receipts (%SCT) is **highest for rice**, with the value of transfers representing more than half of gross farm receipts in 2012-14. The high %SCT for rice reflects the government's rice self-sufficiency policy, which is mainly implemented through the state trading agency with market price support as the main policy support measure. Rice producers have also been eligible for payments based on input use (Other SCT). During the period under review,

the %SCT for rice has increased from 40% in 2000-02 to 53% in 2012-14, indicating the increasing efforts of the government to provide protection to rice farmers.

Sugarcane %STC is the second highest, at 35% in 2012-14. Similarly to rice, the %SCT for sugarcane increased considerably between 2000-02 and 2012-14 due to increased transfers through market price support. For poultry, the %SCT has decreased from 30% in 2000-02 to 24% in 2012-14; the %SCT for pigmeat remained stable at around 23% of commodity gross farm receipts over the same period. The %SCT for maize fell quite substantially from 36% in 2000-02 to 7% in 2012-14.


The %STC for coconuts was constantly negative in 2000-14. The negative SCT means that producers receive prices that are below world prices. In the case of the Philippines, as for many other developing and emerging economies, it is not correct to interpret the implicit taxation of these products exclusively as a policy outcome. Particularly for the coconut sector, poor market infrastructure (such as poor physical infrastructure and lack of access to formal credit) can impede market adjustment and therefore contribute to the implicit taxation of producers (Box 1.2).

Figure 2.14. **Producer SCTs by commodity in the Philippines, 2000-02 and 2012-14**



Note: Commodities are ranked according to 2012-14 levels. SCT: Single Commodity Transfers.

Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database.

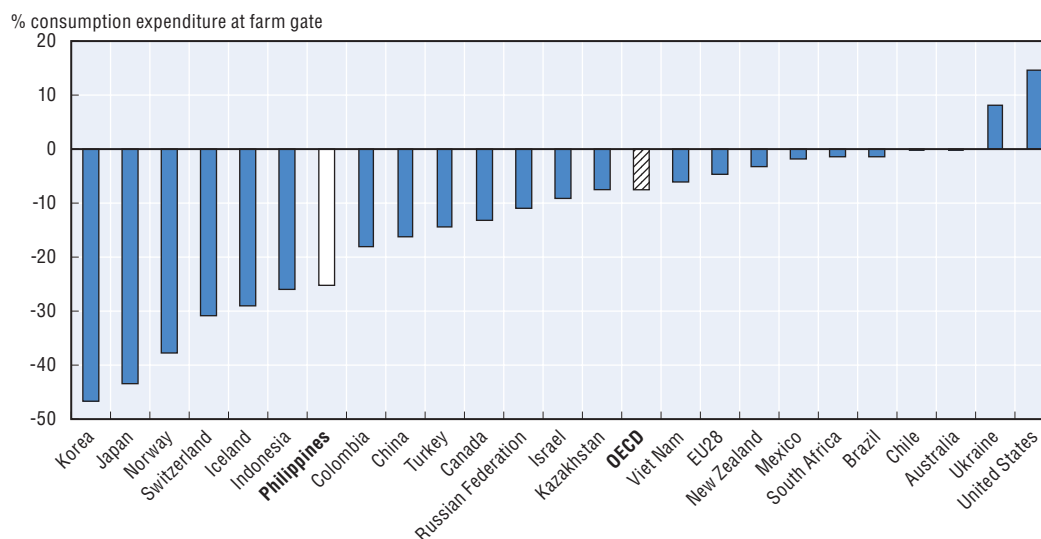
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Support to consumers of agricultural products

The Consumer Support Estimate (CSE) is a related indicator measuring the **cost to consumers** arising from policies that support agricultural producers by raising domestic prices. In the OECD methodology, the consumer is understood as the first buyer of these products. A negative CSE indicates that consumers are paying more than they would in comparison to border prices (an implicit tax); when it is positive, consumers are able to purchase the product more cheaply on domestic market (an implicit subsidy). In the majority of countries monitored by the OECD, consumers are taxed but may be partly compensated, e.g. through direct budgetary subsidies to processors or various forms of food assistance.

Similar to the PSE, the CSE can be expressed in relative terms as a percentage of consumption expenditures (%CSE). In 2012-14, Philippine consumers were implicitly taxed through agricultural policies at a **relatively high level**, with a %CSE of -25%; this indicates that policies to support farm prices increased consumption expenditures by 25% on aggregate (Figure 2.15). The implicit tax on consumers is much higher than the OECD average of 8%. Compared to other countries, the %CSE in the Philippines is lower than in Korea, Japan, Norway, Switzerland and Iceland, and at about the same level as in Indonesia.

Figure 2.15. **Consumer Support Estimate in the Philippines and selected countries, 2012-14**



1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

2. The OECD total does not include the non-OECD EU member states.

Source: OECD (2016), "Producer and Consumer Estimates", *OECD Agriculture Statistics Database*.

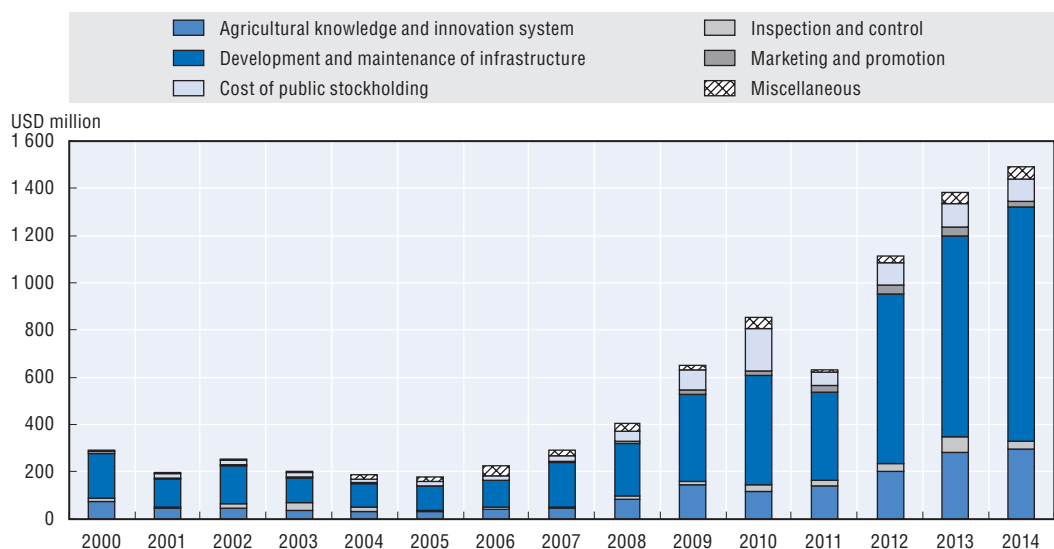
StatLink <http://dx.doi.org/10.1787/888933452569>

Support to general services for agriculture


In addition to support provided to individual producers, the agricultural sector is assisted through the financing of activities that provide general benefits, such as agricultural research and development, training, inspection, marketing and promotion, and public stockholding. The **General Services Support Estimate (GSSE)** indicator measures this support. The provision of common, as opposed to individual, benefit is what distinguishes the general services support from that measured by the PSE.

In the Philippines, expenditure on general services started to rise sharply at the end of the 2000s (Figure 2.16). In absolute terms, it rose more than five-fold from USD 245 million in 2000-02 to USD 1 329 million in 2012-14. The most important GSSE category is the development and maintenance of infrastructure, of which a major share is investments in irrigation systems. Over 2000-13, investment in irrigation represented about 80% of expenditure on infrastructure, but fell to 50% in 2014. The remaining expenditure on infrastructure has mostly been on farm-to-market roads. Expenditure on agricultural knowledge and innovation system are the second most important GSSE category. In absolute terms, they have grown steadily along with the increase in total expenditure on GSSE, thus their share in total GSSE has been at around 20% throughout the period. Following the 2008-09 food crisis, expenditure on public stockholding increased substantially, but its relative importance subsequently declined (Figure 2.16).

Figure 2.16. **Level and composition of General Services Support Estimate in the Philippines, 2000-14**



Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database.

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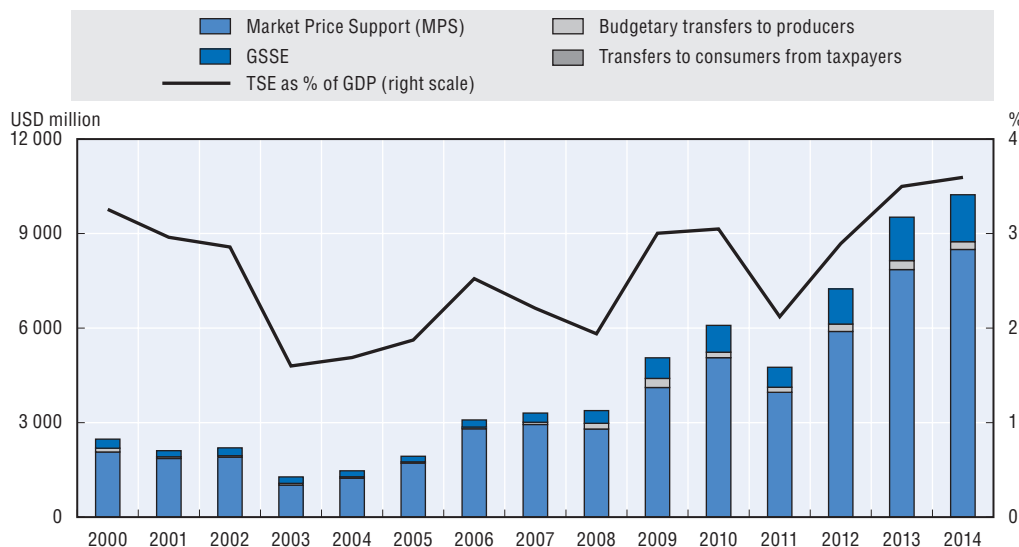
The share of GSSE in total support (%GSSE) indicates the relative importance of these transfers within support to the agricultural sector. During the period under review, %GSSE in total support rose from 11% in 2000-02 to 15% in 2012-14 (Table 2.10), which is slightly above the OECD average of 14% in 2012-14. The growing share of support that is provided to the agricultural sector as a whole rather than to individual producers is a positive phenomenon, but more needs to be done to re-orient agricultural support spending to forms that can bring benefits to both producers and consumers, with potentially smaller production and trade distortions.

Support to the agricultural sector as a whole

The **Total Support Estimate (TSE)** is the broadest indicator of support, representing the sum of transfers to agricultural producers individually (PSE) and collectively (GSSE), and direct budgetary transfers to consumers. Expressed as a percentage of GDP, the %TSE provides an indication of the cost that support to the agricultural sector places on the overall economy. Its value depends on the degree to which the agricultural sector is supported in a country, the size of this sector and its importance relative to the overall economy.


The Philippine's TSE averaged PHP 388 billion (USD 9 billion) per year in 2012-14, representing 3.3% of GDP. Over 2000-14, the %TSE fluctuated at around 2-3%, mainly because of variations in MPS (Figure 2.17). The largest fluctuations, above 3%, were for the %TSE at the beginning of the 2000s and in 2012-14. The falls in the %TSE in 2008 and 2011 were caused by a fall in MPS resulting from narrowing the price gap between domestic and international prices.

Figure 2.17. **Level and composition of Total Support Estimate in the Philippines, 2000-14**



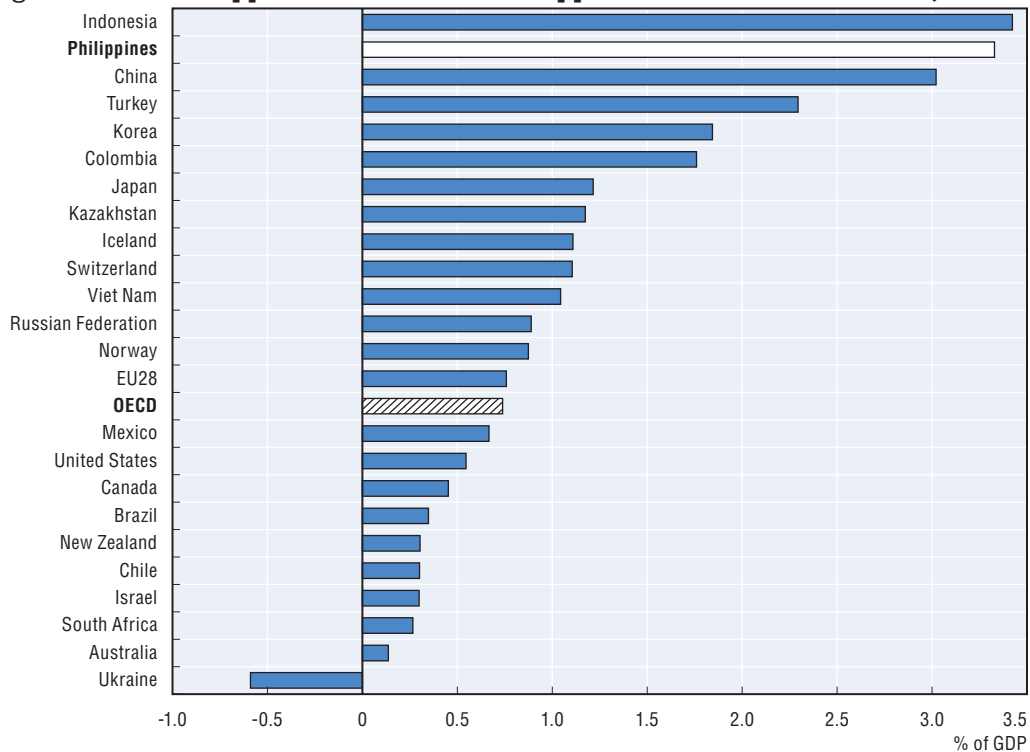
Note: GSSE: General Services Support Estimate; TSE: Total Support Estimate.

Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database.

StatLink  <http://dx.doi.org/10.1787/888933452582>

The level of total support to the Philippine agricultural sector in 2012-14, equivalent to 3.3% of GDP, is almost **five times the OECD average** of 0.7% (Figure 2.18). Only Indonesia has a %TSE higher than the Philippines, at 3.4%. This high %TSE shows that for developing countries with a large agricultural sector, the cost of agricultural support to the economy can be relatively high. It also shows the potential burden of the current policy mix on consumers and taxpayers and highlights the need to ensure that this support is effectively used to achieve policy objectives.

While the %TSE provides a good assessment of the burden agricultural support places on the economy, it is important to indicate that in emerging economies support is dominantly provided through market price support and that the relative importance of budgetary support for countries' agricultural sector is relatively small. Figure 2.19 depicts a ratio of all types of budgetary support to agriculture, both payments provided to farmers individually and to the agricultural sector as a whole (GSSE), to agricultural value added. It shows that in the Philippines this ratio is at just 0.05, slightly higher than in Indonesia at 0.03, but almost five times lower than the OECD average at 0.23. The highest ratio of budgetary support to agricultural value added is in Switzerland, reaching 0.94 in 2012-14.

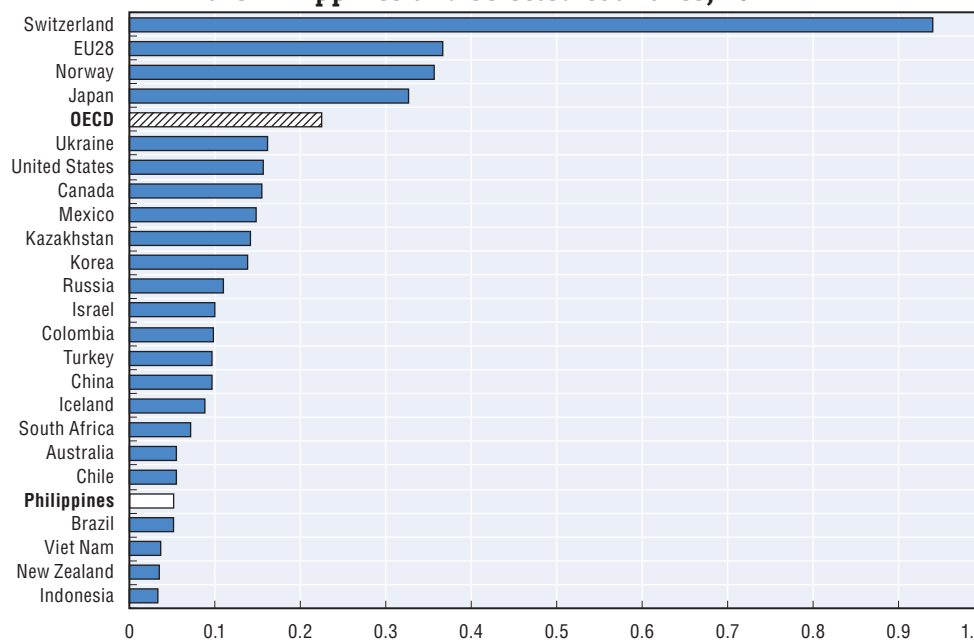
Figure 2.18. **Total Support Estimate in the Philippines and selected countries, 2012-14**

1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

2. The OECD total does not include the non-OECD EU member states.

Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database.

StatLink <http://dx.doi.org/10.1787/888933452597>

Figure 2.19. **Budgetary support to agriculture relative to agricultural value added in the Philippines and selected countries, 2012-14**

1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Source: OECD (2016), "Producer and Consumer Estimates", OECD Agriculture Statistics Database.

StatLink <http://dx.doi.org/10.1787/888933452603>

2.6. Summary

Attaining **food self-sufficiency**, in particular in rice production, has been the Philippines' key agricultural policy objective over the past decades. In recent years, in addition to increasing the sector's productivity, emphasis has been placed on linking agriculture with industry and service sectors, food safety as well as improving the sector's resilience to risks, including those triggered by climate change.

The Agricultural and Fisheries Modernisation Act adopted in 1997 integrates all agricultural policy measures into one framework and remains the most important law for the agricultural sector. However, the design and implementation of agricultural policies is fragmented among several institutions. The Department of Agriculture is the main agency overseeing key agricultural policy issues. The Department of Agrarian Reform is responsible for supporting the agrarian reform beneficiaries. The Department of Environment and Natural Resources has regulatory power over natural resources and land. Several policy measures are implemented by Local Government Units. Government-Owned and Controlled Corporations also implement policies in selected areas, with the National Food Authority and National Irrigation Administration being the most influential.

Price support, tariff protection, input subsidies and expansion of the irrigated area have traditionally been the main policy instruments to achieve food self-sufficiency. Tariff protection remains the key tool of trade policy and until recently remained at a high level. Trade liberalisation has mainly occurred within regional trade agreements, particularly the ASEAN Free Trade Area. Credit is provided under the umbrella of the Agriculture Modernisation Credit and Financing Program and is targeted mostly to small-scale farmers. Crop insurance has become one of the key tools to increase the sector's resilience to risks. The area covered by various insurance schemes has increased substantially over recent years.

The **level of support to producers** as measured by the %PSE (Producer Support Estimate as a share of gross farm revenues) averaged 25% in 2012-14: above the OECD average (18%) and close to the level of support provided to producers in China (19%) and Indonesia (21%). Over the period 2000-14 the level of support fluctuated markedly, ranging between 11% and 27%, driven by changes in relative levels of domestic and international prices. Budgetary transfers fluctuated and remained low, but have tended to increase, in particular in recent years.

Producer support in the Philippines is based predominantly on **market price support**, one of the most distorting forms of support. The high level of MPS has the effect of taxing consumers and the food processing industry, as measured by the %CSE (Consumer Support Estimate as a share of consumption expenditures). In 2012-14, the Philippine's %CSE averaged -25% which indicates that policies to support farm prices increased consumption expenditures by 25% on aggregate.

Budgetary support has been primarily provided in the form of payments based on input use. During the 2000s, expenditures were mainly allocated to subsidise use of variable inputs, such as high-yielding seeds, fertilisers and other agricultural inputs. Since 2011, input subsidies for seeds and fertilisers have partly been replaced by roll-over schemes to encourage adoption of high-yielding seed varieties and subsidies for farm mechanisation have strongly increased, both in absolute and relative terms.

The highest level of support is provided to **rice and sugar producers**. The National Food Authority is the regulatory body for the rice market. Its main tasks are price stabilisation and food security through rice procurement, import controls and buffer stocking. Price stabilisation includes ensuring low and stable prices for consumers and keeping the farm

price of paddy rice above the market price. The Sugar Regulatory Administration manages sugar production quotas and foreign trade. The value of transfers from consumers and taxpayers to rice producers represented more than half of their gross farm receipts in 2012-14, while transfers to sugarcane producers represented slightly more than a third. Transfers to coconut producers were negative over 2000-14, meaning that the producers received prices below world prices.

Expenditure on **general services** to agriculture started to rise sharply at the end of the 2000s. The most important category is development and maintenance of infrastructure, in particular expansion of irrigation systems. Over 2000-14, about 36% of the annual budgetary expenditure to support agriculture was dedicated to investments in irrigation, almost entirely to the benefit of rice producers. Budgetary spending on infrastructure investments has increased recently, particularly to farm-to-market roads and post-harvest facilities. However, the extension system has long suffered from low financing and fragmented structure, as well as a weak link to technology developers.

Total support to agriculture, both to farmers individually and to general services to agriculture, is high relative to the Philippines' Gross Domestic Product and is comparable to that in Indonesia and China, but much higher than the OECD average.

Notes

1. In 2014, Office of the Presidential Assistant for Food Security and Agricultural Modernization (OPAFSAM), a cabinet level position, was created to oversee the four largest agencies responsible for agricultural policy implementation that were previously under the DA.
2. The consultative bodies of PCAF for private sector participation include Agriculture and Fishery Councils at regional, provincial and municipal levels. There are 16 Regional Agricultural and Fishery Councils, 82 Provincial Agricultural and Fishery Councils, 19 Independent Component City Agricultural and Fishery Councils and Highly Urbanised City Councils, and 1 611 Municipal Agricultural and Fishery Councils and City Agricultural and Fishery Councils. To reflect sector-specific concerns, National Sectoral Committees serve as the venue for consultation between the DA and other agencies, national industry groups and civil society organisations. At present, there are eight National Sectoral Committees: Agricultural and Fishery Mechanization, Climate Change, Commercial Crops, Fisheries and Aquaculture, Food Staples, Fruits and Vegetables, International Trade, and Poultry, Livestock and Feed Crops.
3. The price of milled rice was deregulated; importation of wheat and distribution of flour was opened to private sector. The importation and distribution of fertilisers were also opened to private sector (SEPO, 2006).
4. Local Government Code, 1991, RA 7160.
5. The Agrarian Reform Fund was created in 1972 to support agrarian reform.
6. Executive Order No. 398 from 31 January 1997 and Executive Order No. 22 from 9 September 1998.
7. In 2015, the drying and delivery incentives were 0.20 PHP/kg of paddy rice (0.004 USD/kg), bringing the paddy rice price for the individual farmer up to PHP 17.40/kg (0.38 USD/kg). The co-operative incentive fee was 0.3 PHP/kg of paddy rice (0.007 USD/kg), which meant that farmers' groups were able to receive PHP 17.70/kg of paddy rice (0.39 USD/kg).
8. Executive Order No. 892.
9. DAR is involved in monitoring only those block farms where the agrarian reform beneficiaries are participating.
10. The rice crisis resulted from poor weather, pest infestation in 1971 and the Great Central Luzon flooding in 1972 that reduced rice output by 17%.
11. The government paid 50% of the actual market price of the rice seeds upfront. Farmers paid half of the price in cash and repaid the government the remainder after the harvest. When the farmer paid fully in cash, the price was lowered. The plant-now-pay-later scheme was abolished in 2005 as the payment rates after harvest remained very low.

12. Initial budgetary allocations on the FIELDS programme were as follows: provision of subsidised fertiliser and micronutrients, PHP 0.5 billion (USD 11 million); rehabilitation and restoration of irrigation facilities, PHP 6 billion (USD 135 million); farm-to-market roads and other rural infrastructure, PHP 6 billion (USD 135 million); extension, education and training, and research and development, PHP 5 billion (USD 113 million); agricultural credit, PHP 15 billion (USD 338 million); post-harvest facilities, PHP 2 billion (USD 45 million); hybrid and certified seed production and subsidy, PHP 9.2 billion (USD 208 million) (Balisacan et al., 2010).
13. High-Value Crops Development Act was adopted already in 1995 (RA 7900). The Act lists a number of incentives for farmers of high value crops: distribution of good seeds and planting materials, crop insurance, credit assistance, credit guarantee, market development and technical assistance, post-harvest facilities. Budgetary spending on High Value Crops Development Program has increased more than twofold since 2008.
14. Cash for work program where each farmer is paid PHP 20 (USD 0.44) per seedling sown in his nursery and another PHP 20 (USD 0.44) after it is planted and grown in the farm.
15. RA No 10 601.
16. About 9% of irrigated area is operated by other government-assisted irrigation systems.
17. The Guidelines include: non-participation of government non-financial agencies in the implementation of credit programmes; government financial institutions to be the main vehicle in implementation of government credit programmes; adoption of market-based financial and credit policies; increased participation of private sector in the delivery of financial services.
18. Section 109 of RA 8435.
19. Amendment of the AFMA (RA 9281).
20. Section 109 of the Tax Code (RA 8424).
21. Much more effective in this respect is a conditional cash transfer programme called the Pantawid Pamilyang Pilipino Program (Pantawid Pamilya) launched in 2007 and gradually rolled out since 2008. It is a highly successful programme and currently provides financial grants to 4.4 million poor families with children 0-18 years across the country, subject to compliance with education and health requirements related to their children (Hayakawa et al., 2015).
22. WTO document G/SPS/N/PHL series.
23. DA AO No. 9/2010, Department of Agriculture Administrative Order Amending DA AO No. 8 series 2009, "Rules and Regulations Governing The Importation of Agricultural and Fish and Fishery/Aquatic Products, Fertilizers, Pesticides and Other Agricultural Chemicals, Veterinary Drugs and Biological Products Into the Philippines".
24. DOST-DA-DENR-DOH-DILG Joint Department Circular No. 1, series of 2016 on Rules and Regulations for the Research and Development, Handling and Use, Transboundary Movement, Release into the Environment, and Management of Genetically-Modified Plant and Plant Products Derived from the Use of Modern Biotechnology.
25. In WTO parlance, these kinds of subsidies are referred to as "amber box". Based on a traffic light analogy, this refers to support that is trade-distorting and subject to commitments to phase-out over time, as opposed to "green box" measures which were deemed to be minimally trade distorting and not subject to similar reduction commitments.
26. EO No. 894, 2010, Tariff Commission of the Philippines.

References

- Albert, J.R., A.M. Tabunda and I. Angeles-Agdeppa (2015), "Feeding Severely Wasted Children in School: Examining Process in DepED's School Feeding Program", Policy Notes No. 2015-01, Philippine Institute for Development Studies, <http://dirp4.pids.gov.ph/webportal/CDN/PUBLICATIONS/pidspn1501.pdf>.
- Aquino, A.P., A.B. Ani and A.B.D. Correa (2014), "Republic Act No. 1000: Providing Agricultural and Agrarian Reform Credit", http://ap.fftc.agnet.org/ap_db.php?id=216.
- Aquino, A.P., P.A.B. Ani and M.A. Festejo (2013a), "An Overview of Policies and Public Sector Investments in Philippine Agriculture", http://ap.fftc.agnet.org/ap_db.php?id=65.
- Aquino, A.P., J.A. Deriquito and A.B. Ani (2013b), "Agricultural Tariffication Act: Tariff in Lieu of Quantitative Import Restriction", www.fftc.agnet.org/files/ap_policy/78/78_1.pdf.

- ASEAN (2015), "ASEAN Economic Community Blueprint 2025", ASEAN Secretariat, Jakarta.
- ATI (2016), *The National Extension Agenda and Programmes, 2017-2022. Empowering Communities Towards Globally-Competitive and Climate-Resilient Agriculture and Fisheries Sector Through Harmonized and Unified Extension Service Delivery*, Agricultural Training Institute, Quezon City.
- Balisacan, A.M., M.A. Sombilla and R.C. Dikitanan (2010), "Rice Crisis in the Philippines: Why did it Occur and What are its Policy Implications?", in *The Rice Crisis Markets, Policies and Food Security*, eds. Dawe, D., FAO, Earthscan, <http://www.fao.org/3/a-an794e.pdf>.
- Bordey, F.H. (2010), "The Impacts of Research on Philippine Rice Production", Dissertation, University of Illinois at Urbana-Champaign, www.ideals.illinois.edu/bitstream/handle/2142/16072/1_Bordey_Flordeliza.pdf?sequence=2.
- Briones, N.D. (2005), "Environmental Sustainability Issues in Philippine Agriculture", *Asian Journal of Agriculture and Development*, Vol. 2, Nos. 1&2, http://ageconsearch.umn.edu/bitstream/165781/2/AJAD_2005_2_1%262_6Briones.pdf.
- Briones, R. (2014), "Public Stockholding in Southeast Asia: Review and Prospects", Paper presented at the FAO Expert Meeting on Stocks, Markets and Stability, FAO Headquarters, Rome, 30-31 January, www.fao.org/fileadmin/templates/est/meetings/stocks/Briones_public_stockholding_in_southeast_asia.pdf.
- Briones, R.M. (2013), "Impact Assessment of the Agricultural Production Support Services of the Department of Agriculture (DA) on the Income of Poor Farmers/Fisherfolk: Review of the Evidence", Philippine Institute for Development Studies, www.dbm.gov.ph/wp-content/uploads/DBM%20Publications/FPB/ZBB-2012/f.pdf.
- Briones, R.M. (2012), "Trade Agreements, Food Security and the Philippines: From Import Substitution Industrialisation to Import Substitution Agriculture", in *Regional Trade Agreements and Food Security in Asia*, RAP publication 2012/15, www.fao.org/docrep/018/i3026e/i3026e.pdf.
- Briones, R.M. (2011), "Regional Cooperation for Food Security: The Case of Emergency Rice Reserves in the ASEAN Plus Three", *ADB Sustainable Development Working Paper Series*, No. 18, November 2011, www.adb.org/sites/default/files/publication/29275/adb-wp18-regional-cooperation-food-security.pdf.
- Briones, R.M. and B.M. de la Peña (2015), "Competition Reform in the Philippine Rice Sector", *Discussion Paper Series No. 2015-04*, Philippine Institute for Development Studies, <http://dirp3.pids.gov.ph/webportal/CDN/PUBLICATIONS/pidsdps1504.pdf>.
- Cororaton, C.B. (2013), *Updates on Philippine WTO Domestic Support Notification*, Global Issues Initiative, Institute for Society, Culture and Environment Virginia Polytechnic Institute and State University, www.gii.ncr.vt.edu/docs/PhilippineUpdates%20Final.pdf.
- Cororaton, C.B. (2008), "The Philippines: Shadow WTO Agricultural Domestic Support Notifications", *IFPRI Discussion Paper No. 00827*, December 2008, <http://econpapers.repec.org/paper/ifpri/827.htm>.
- Cororaton, C.B. and E.L. Corong (2009), "Philippine Agricultural and Food Policies. Implications for Poverty and Income Distribution", *Research Report 161*, IFPRI, www.ifpri.org/publication/philippine-agricultural-and-food-policies.
- DA (2016), Unpublished Policy Information and Data Submitted for the OECD by the Department of Agriculture, November.
- DA (2015), Background Paper on Agricultural Policy Framework in Philippines During 1995-2015, prepared for the OECD Review of Agricultural Policies in the Philippines.
- David, C. (1997), "Philippine Agriculture's Institutional Structure of Governance: A Critique", *Discussion Paper Series No. 97-12*, Philippine Institute of Development Studies, <http://dirp3.pids.gov.ph/ris/dps/pidsdps9712.pdf>.
- David, C., R. Briones, A. Inocencio et al., (2012), "Monitoring and Evaluation of Agricultural Policy Indicators", *Discussion Paper Series No. 2012-26*, Philippine Institute of Development Studies, <http://dirp3.pids.gov.ph/ris/dps/pidsdps1226.pdf>.
- David, C., P. Inta and A. Balisacan (2009), *Distortions to Agricultural Incentives in Asia*, Anderson, K. and W. Martin (eds.), The International Bank for Reconstruction and Development/The World Bank, http://siteresources.worldbank.org/INTTRADERESESEARCH/Resources/544824-1146153362267/Asia_e-book_0209.pdf.
- Delmo, G. (2013), "Is the Philippine Irrigation System Running Dry?", *Far Eastern Agriculture*, www.fareasternagriculture.com/crops/agriculture/is-the-philippine-irrigation-system-running-dry.
- EO No 61 (2011), "Modifying the Nomenclature and the Rates of Import Duty on Various Products Under Section 104 of the Tariff and Customs Code of 1978", www.tariffcommission.gov.ph/eo-61.

- Ferrer, A.R.S. (2014), "More Rice, Less Pork: Community Seed Banks in the Rice Seed Production Program", *Searice Review*, Volume 7, Issue 1, 2014, <http://searice.org/ph/wp-content/uploads/2014/06/Searice-2014-Edited-5with-ISSN1.pdf>.
- Galero, S., S. So and M. Tiongco (2014), "Food Security Versus Rice Self-Sufficiency: Policy Lessons from the Philippines", Paper presented at the DLSU Research Congress 2014, De La Salle University, Manila, Philippines, 6-8 March 2014, www.dlsu.edu.ph/conferences/dlsu_research_congress/2014/_pdf/proceedings/FNH-II-011-ft.pdf.
- Geron, P.S. and M.S. Casuga (2012), "Credit Subsidy in Philippine Agriculture", *Discussion Paper Series No. 2012-28*, PIDS, <http://dirp3.pids.gov.ph/ris/dps/pidsdps1228.pdf>.
- Habito, C.F. and M. Briones (2005), "Philippine Agriculture Over the Years: Performance, Policies and Pitfalls", Paper presented at the conference "Policies to Strengthen Productivity in the Philippines", Makati, 27 June, 2005, <http://siteresources.worldbank.org/INTPHILIPPINES/Resources/Habito-word.pdf>.
- Hayakawa M., R.J.E. van den Brink and A. Posarac (2015), "Why Does the Conditional Cash Transfer Program Matter in the Philippines? A Governance Perspective", *Philippine Social Protection Note No. 7*, October, The World Bank and Australian Aid.
- Hernandez, J.E. (2013), "Strengthening of Palay Seed Systems in Southern Tagalog and Bicol Regions", *Bangko Sentral ng Pilipinas Professorial Chair Lecture* presented on 5 March 2013, at Crop Science, UPLBCA, www.bsp.gov.ph/events/pcls/downloads/2013s2/BSP_6a_hernandez_paper.pdf.
- Intal, P.S. and M.C. Garcia (2005), "Rice and Philippine Politics", *Discussion Paper Series No. 2005-13*, Philippine Institute of Development Studies, <http://dirp4.pids.gov.ph/ris/dps/pidsdps0513.pdf>.
- Israel, D.C. (2012), "Use of the Agricultural Competitiveness Enhancement Fund (ACEF) by the Department of Agriculture", *Discussion Paper Series No. 2012-14*, Philippine Institute of Development Studies, <http://dirp4.pids.gov.ph/ris/dps/pidsdps1214.pdf>.
- Jha, S. and A. Mehta (2008), "Effectiveness of Public Spending: Case of Rice Subsidies in the Philippines", *ADB Economics Working Paper Series No. 138*, <http://www.adb.org/sites/default/files/publication/28378/economics-wp138.pdf>.
- Labiano, B.S. (2014), "Agricultural Water Management Systems in the Philippines: Current Status and Policy Directions", <http://www.agnet.org/library.php?func=view&id=20140304162637>.
- Lange, A. (2009), *Philippines: A Study on Results Based Planning in the Philippine Rural Development Sector*, Asian Development Bank, Project No. 41060, www.adb.org/sites/default/files/project-document/65121/41060-phi-dpta.pdf.
- Manalili, N.M., K.F. Yaptenco and A.A. Manilay (2015), "Rapid Appraisal of the Postharvest Facilities Projects in the Philippines", *Discussion Paper Series No. 2015-31*, Philippine Institute of Development Studies, <http://dirp3.pids.gov.ph/webportal/CDN/PUBLICATIONS/pidsdps1531.pdf>.
- Manzo, P. (2007), *Implementation of Tariff Rate Quotas in the Philippines*, Dissertation, Kansas State University, Manhattan, Kansas, 2007, <http://krex.k-state.edu/dspace/bitstream/handle/2097/289/PrecelesManzo2007.pdf?sequence=1&isAllowed=y>.
- Mariano, M.J.M. and J.A. Giesecke (2014), "The Macroeconomic and Food Security Implications of Price Interventions in the Philippine Rice Market", *Economic Modelling* No. 37, 2014.
- Martini, R. (2011), "Long Term Trends in Agricultural Policy Impacts", *OECD Food, Agriculture and Fisheries Papers*, No. 45, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5kgdp5zw179q-en>.
- Montes, M.F., R.M. Briones and A.C. Cuevas (2015), *Midterm Assessment of the Food Staples Sufficiency Program 2011-2013*, Department of Agriculture, Quezon City.
- NAFC (2007), *AFMA Review, Final Report*, National Agricultural and Fisheries Council, June 2007.
- NEDA (2014a), *Philippine Development Plan 2011-2016. Midterm Update. With Revalidated Results Matrices*, National Economic Development Authority, <http://faolex.fao.org/docs/pdf/phi140998.pdf>.
- NEDA (2014b), *2011-2016 Revalidated Public Investment Program*, National Economic Development Authority, www.neda.gov.ph/publicationsopac/public-investment-program/.
- NIA (2015a), *Construction of Irrigation Systems*, www.nia.gov.ph.
- NIA (2015b), *Operation and Maintenance of National Irrigation Systems*, www.nia.gov.ph.
- NIA (2013), *Annual Report*, National Irrigation Administration, www.nia.gov.ph.
- OECD (2016), *Agricultural Policy Monitoring and Evaluation*, OECD Publishing, Paris, http://dx.doi.org/10.1787/agr_pol-2016-en.

- OECD (2015), *Agricultural Policies in Viet Nam 2015*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264235151-en>.
- Ofreco, B.P. (2006), "Participatory Development and Management: A Cornerstone of Philippine Irrigation Program", *Journal of Developments in Sustainable Agriculture*, No. 1 (2006), www.jstage.jst.go.jp/article/jdsa/1/1/1_1_1/_pdf.
- Ohno, I. and M. Shimamura (2007), *Managing the Development Process and Aid – East Asian Experience in Building Central Economic Agencies*, GRIPS Development Forum, www.grips.ac.jp/forum-e/pdf_e03/AidMgt.pdf.
- OPAFSAM (2016), Background documents submitted for the OECD Review of Agricultural Policies in the Philippines, Quezon City, June.
- Oxford Business Group (2012), *The Report: The Philippines 2012: Agriculture*, www.oxfordbusinessgroup.com/philippines-2012/agriculture.
- Pabuayon, I.M, R.D. Cabahug, S.V.A. Castillo et al., (2009), "Key Actors, Prices and Value Shares in the Philippine Coconut Market Chains: Implications for Poverty Reduction", *Journal of ISSAAS*, Vol. 15, No. 1: 52-62, <http://issaas.org/journal/v15/01/journal-issaas-v15n1-pabuayon.pdf>.
- PCA (2012), P 838 497 M allotted to PCA's Planting/Replanting and Fertilisation Programs, www.pca.da.gov.ph/pr030112c.php.
- Piadozo, M. (2012), "Background on the Philippine Rice Trade Policies", Paper delivered during the Seminar on Philippine Trade Policies and Rice Security: Future Directions, AIM Conference Center, Makati City, 26 September 2012, www.philrice.gov.ph/wp-content/uploads/2014/09/Proceedings_TradeLibSeminar_2015.pdf.
- PIDS (2016), "Risks, shocks, building resilience: Philippines", *Economic Monitor 2015-2016*, http://dirp3.pids.gov.ph/websitcms/CDN/PUBLICATIONS/pidsepm2015_prepress_rev2.pdf.
- Reyes, C. (2009), "Incorporating Regional Rice Production Models in Rice Importation Simulation Models: a Stochastic Programming Approach", *Discussion Paper Series No. 2009-28*, Philippine Institute of Development Studies, <http://dirp3.pids.gov.ph/ris/pjd/pidspjd09-1riceimportation.pdf>.
- SEPO (2014), "National Land Use Policy: Protecting Prime Agricultural Lands", Policy Brief, Senate Economic Planning Office, Philippines, www.senate.gov.ph/publications/SEPO/PB_prime%20agri%20lands_final.pdf.
- SEPO (2010), "Subsidising the National Food Authority: Is it a Good Policy?", Policy Brief, Senate Economic Planning Office, Philippines, www.senate.gov.ph/publications/PB%202010-12%20-%20Subsidizing%20the%20NFA.pdf.
- SEPO (2009), "Financing Agriculture Modernization: Risks and Opportunities", Policy Brief, Senate Economic Planning Office, Philippines, www.senate.gov.ph/publications/PB%202009-01%20-%20Financing%20Agriculture%20Modernization.pdf.
- SEPO (2006), *A profile of Selected Government-Owned and -Controlled Corporations (GOCCs)*, SEPO, UNDP, www.senate.gov.ph/publications/A%20Profile%20of%20Selected%20GOCCs.pdf.
- Sombilla, M.A. and K. Quilloy (2014), "Strengthening the Philippine Rice Seed System", Policy Note No. 10, ReSAKSS Asia facilitated by IFPRI, www.ifpri.org/publication/strengthening-philippine-rice-seed-system.
- Stads, G-J., P.S. Faylon and L.J. Buendia (2007), "Agricultural R&D in the Philippines: Policy, Investments and Institutional Profile", *ASTI Country Report*, International Food Policy Research Institute and Philippine Council for Agriculture, Forestry and Natural Resources Research and Development, www.ifpri.org/publication/agricultural-rd-philippines.
- Stoutjesdijk, J. (2012), "Irrigation Management Transfer in the Philippines", *FAO Investment Days*, Rome, 17 December, 2012, www.fao.org/fileadmin/templates/tci/pdf/Investment_Days_2012_1st_day/Session_III/JoopStoutjesdijk.pdf.
- Tobias, A., I. Molina, H.G. Valera, K.A. Mottaleb and S. Mohanty (2012), *Handbook on Rice Policy in Asia*, International Rice Research Institute (IRRI), Philippines, http://books.irri.org/9789712202858_content.pdf.
- Tolentino, V.B.J. (2002), "The Globalisation of Food Security: Rice Policy Reforms in the Philippines", *Philippine Journal of Development*, Number 54, Vol. XXXIX, No. 2, Second Semester 2002, <http://dirp3.pids.gov.ph/ris/pjd/pidspjd02-2foodsecurity.pdf>.
- Tolentino, V.B.J. and B.M. de la Peña (2011), "Stymied Reforms in Rice Marketing in the Philippines, 1980-2009," in *Built on Dreams, Grounded in Reality: Economic Policy Reforms in the Philippines*, The Asia Foundation, 2011, <https://asiafoundation.org/resources/pdfs/FRONT.pdf>.
- UNCTAD (2014), *World Tariff Profiles*, [http://unctad.org/en/pages/publications/World-Tariff-Profiles-\(Series\).aspx](http://unctad.org/en/pages/publications/World-Tariff-Profiles-(Series).aspx).

- USDA (2015), "Philippines, Sugar Annual Situation and Outlook", *Gain Report*, USDA Foreign Agricultural Service, http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Sugar%20Annual_Manila_Philippines_4-16-2015.pdf.
- van Tongeren, F. (2008), "Agricultural Policy Design and Implementation: A Synthesis", *OECD Food, Agriculture and Fisheries Papers*, No. 7, OECD Publishing, Paris, <http://dx.doi.org/10.1787/243786286663>.
- WTO (2014a), *Decision on Waiver relating to Special Treatment for Rice of the Philippines*, WT/L/932, https://docs.wto.org/dol2fe/Pages/FE_Search/DDFDocuments/126136/q/WT/L/932.pdf.
- WTO (2014b), *Notification, G/AG/N/PHL/43*, https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S009-DP.aspx?language=E&CatalogueIdList=126942,126509,126421,126023,126027,126038,125672,125590,124779,124742&CurrentCatalogueIdIndex=8&FullTextHash=.
- WTO (2012), *Trade Policy Review of the Philippines*, WT/TPR/S/261/Rev.2, 9 May 2012, www.wto.org/english/tratop_e/tpr_e/tp361_e.htm.
- WTO (2005), *Trade Policy Review of the Philippines*, WT/TPR/S/149, www.wto.org/english/tratop_e/tpr_e/tp249_e.htm.

ANNEX 2.A1

Policy tables

Table 2.A1.1. Major laws affecting agro-food sector

Statute	Title	Objectives
RA 10659, 2015	An Act Promoting and Supporting the Competitiveness of the Sugarcane Industry and for Other Purposes	The Act aims to promote the competitiveness of the sugarcane industry, improve incomes of farmers and farm workers through productivity improvement programmes such as block farming, farm support programmes, preferential credit, farm mechanisation, research and development, infrastructure support, sugar supply monitoring, classification and regulation of the supply of sugar and 0% VAT on refined sugar for exports.
RA 10 611, 2013	Food Safety Act	The act aims to strengthen the food safety regulation system, to protect consumer health and facilitate market access of local foods and food products.
RA 10601, 2012	An Act Promoting Agricultural and Fisheries Mechanisation Development in the Country	The Act aims to develop and promote appropriate agricultural machinery and other agricultural mechanisation technologies to bring about agricultural mechanisation in the countryside, to enhance farm productivity and efficiency in order to achieve food security and safety and increase farmers' income.
RA 10068, 2010	An Act Providing for the Development and Promotion of Organic Agriculture in the Philippines and For Other Purposes	The law intends to promote, disseminate, develop and implement organic agriculture in the country. It provides incentives to farmers engaged in organic agriculture.
RA 10000, 2010	An Act Providing for an Agriculture and Agrarian Reform Credit and Financing System through Banking Institutions	The law enhances access of the rural agricultural sector to financial services and programs. It mandates all banking institutions to set aside at least 25% of their total loanable funds for agriculture and fisheries credit, of which at least 10% of the loanable funds be made for agrarian reform beneficiaries. Further, the law expands modes of compliance to enhance the sector's absorptive capacity and maximise compliance.
RA 9729, 2009	Climate Change Act	The law creates the Climate Change Commission, which serves as the sole policy making body of the government tasked to co-ordinate, monitor and evaluate the programmes and action plans of the government relating to climate change.
RA 9700, 2009	Comprehensive Agrarian Reform Program Extension with Reform Law (CARPER)	The law provides augmentation of funds to accomplish the final acquisition and distribution of all remaining un-acquired and undistributed agricultural lands.
RA 9367, 2006	Biofuels Act	The law aims to ensure the availability of alternative and renewable clean energy without detriment to the natural ecosystem, biodiversity and food reserves of the country.
RA 9296, 2004	An Act Strengthening the Meat Inspection System in the Country, Ordaining for this Purpose a Meat Inspection Code of the Philippines and for Other Purposes	The law strengthens the National Meat Inspection Commission into the National Meat Inspection Service (NMIS) which performs functions related to all matters relating to meat and meat product inspection and meat hygiene.
RA 9281, 2004	An Act to Strengthen Agriculture and Fisheries Modernisation in the Philippines by Extending the Effectivity of Tax Incentives and Its Mandated Funding Support, Amending for this Purpose Sections 109 and 112 of Republic Act 8435	The Act re-establishes the duty-free importation of agricultural inputs, equipment and machinery up to 2015. It provides for continuous funding of at least PHP 17 billion (USD 303 million) annually for the implementation of agriculture and fisheries modernisation programmes.
RA 9168, 2004	Philippine Plant Variety Protection Act	The Act seeks to institutionalise a <i>sui generis</i> system of intellectual property rights protection for plant varieties and create the National Plant Variety Protection Board. The law encourages research and investment in plant breeding and at the same time ensure the availability of high yielding varieties that will increase incomes of farmers.
RA 9147, 2001	Wildlife and Resources Conservation and Protection Act	The Act strengthens the country's regulation on bio-prospecting. It also includes provision on prior informed consent from indigenous communities as a requisite for bio-prospecting.

Table 2.A1.1. **Major laws affecting agro-food sector (cont.)**

Statute	Title	Objectives
RA 8800, 2000	Safeguard Measures Act	The law puts in place a special safeguard mechanism allowing the imposition of additional duties or quantitative restrictions whenever volumes or import prices of tariffied agricultural products with the SSG designation exceed their respective trigger levels as provided in the WTO Agreement on Agriculture.
RA 8752, 1999	Anti-Dumping Act	The law provides protection to Philippine domestic industry which is or is likely to be materially injured by the dumping of articles imported into or sold in the Philippines.
RA 8751, 1999	Countervailing Duties Act	The law aims to protect domestic industries from unfair trade practice of employing subsidies on a country's export products. The Act aims to provide a better mechanism for implementing countervailing duties and align such mechanism without WTO commitments.
RA 8532, 1998	Strengthening the Comprehensive Agrarian Reform Law	The Act provides augmentation fund for the CARP.
RA 8485, 1998	Animal Welfare Act	The Act promotes the welfare of all animals in the Philippines by supervising and regulating the establishment and operations of all facilities utilised for breeding, maintaining, keeping, treating or training of all animals for either for trade or household purposes.
RA 8435, 1997	Agriculture and Fisheries Modernisation Act	AFMA aims to modernise the agriculture and fisheries sectors by transforming these sectors from a resource-based to a technology-based industry. The Act requires identification of strategic agricultural and fisheries development zones; formulation of an agriculture and fisheries modernisation plans; and provisions of funding for the following support services: irrigation, post-harvest facilities and rural infrastructure, credit, research, marketing and information, training and education, capacity building for LGUs and FOs, and duty-free incentives for the importation of agricultural inputs, equipment, and machinery. The Act grants duty-free imports of agricultural inputs for a period of five years.
RA 8178, 1996	Agricultural Tariffication Act	The Act replaces quantitative restrictions on agricultural products, except rice, with tariffs and creates the ACEF. The law employs the use of tariffs in lieu of non-tariff import restrictions to protect local producers of agricultural products from unfair trade practices, except rice, which will continue to have quantitative import restrictions. An equitable and transparent mechanism for allocating the Minimum Access Volume (MAV) of agricultural products shall be developed and established. The proceeds of funds from the MAV shall be used for ACEF.
RA 8048, 1995	Coconut Preservation Act	The Act provides for the regulations for the cutting of coconut trees, their replenishment; and penalties.
RA 7900, 1995	High Value Crops Development Act	The act creates the High Value Crops Development Fund and provides for incentives in the HVCC sector. Incentives include crop insurance, credit assistance, credit guarantee, tax exemptions provided to agriculture co-operatives, market linkage assistance, technical and infrastructure support, provision of postharvest facilities, among others.
RA 7884, 1995	National Dairy Development Act	The Act created the National Dairy Authority.
RA 7607, 1992	Magna Carta for Small Farmers	The Law promotes the development of agriculture through the empowerment of small farmers. The law provides and identifies numerous farmers' rights to enhance their knowledge and skills, increase field production and to develop their capabilities. It also provides support services in terms of infrastructure and farm inputs; farm machinery and equipment; water management and irrigation facilities; agricultural credit; incentives and price support; and research and extension services.
RA 7581, 1992	Price Act	The Act provides protection to consumers by stabilising the price and supply of basic necessities and prime commodities and by prescribing measures against undue price increases especially during emergency situations. Prime commodities include rice, maize, fresh, dried and canned fish and other marine products, fresh pork, beef and poultry meat, fresh eggs, fresh and processed milk, fresh vegetables, root crops, coffee, sugar, cooking oil and others.
RA 7308, 1992	Seed Industry Development Act	The Act promotes and accelerates the development of the seed industry and creates the National Seed Industry Council.
RA 7160, 1991	Local Government Code	Devolves agricultural extension services and workers from the Department of Agriculture to LGUs.
RA 6657, 1988	Comprehensive Agrarian Reform Law	The law pursues a Comprehensive Agrarian Reform Program (CARP) which redistributes lands to farmers and farmworkers.
Presidential Degree 717, 1975	Agri-Agra Law	The Law mandates banks and financial institutions to allocate 25% of their loanable funds for agriculture (15%) and agrarian reform (10%) sectors.

Source: DA (2015).

Table 2.A1.2. **Units of Department of Agriculture, November 2016**

Group	Unit
The Secretary of Agriculture	The Secretary of Agriculture 6 Undersecretaries 7 Assistant Secretaries
Office of the Secretary of Agriculture	1. Internal Audit Service 2. Administrative Service 3. Agribusiness and Marketing Assistance Service 4. Field Operations Service 5. Financial and Management Service 6. Information and Communication Technology Service 7. Legal Service 8. Planning and Monitoring Service 9. Policy Research Service 10. Project Development Service
Regional Offices	15 Regional Field Offices (RFO)
Bureaus	1. Agricultural Research (BAR) 2. Agricultural Training Institute (ATI) 3. Agricultural and Fishery Standards (BAFS) 4. Animal Industry (BAI) 5. Plant Industry (BPI) 6. Soils and Water Management (BSWM)
Attached Agencies	1. Agricultural Credit and Policy Council (ACPC) 2. Bureau of Fisheries and Aquatic Resources (BFAR) 3. Philippine Council for Agriculture and Fisheries (PCAF) 4. Philippine Fibre Industry Development Authority (PFIDA) 5. National Meat Inspection Service (NMIS) 6. Philippine Carabao Center (PCC) 7. Philippine Center for Postharvest Development and Mechanization (PhilMech)

Source: DA (2016).

Table 2.A1.3. **Policy changes concerning NFA**

Period	Policy change	Related developments
1972	The National Grains Authority created to promote the integrated growth and development of the grains industry (rice, maize, wheat and other grains).	
1981	In 1981, the National Grains Authority transformed into the NFA. Wider commodity coverage: in addition to grains other food items like raw, fresh and manufactured food products.	Debt crises
1985	Deregulation of trading in food grains and related agricultural inputs. NFA's non-grain stabilisation and trading activities terminated, as well as importation of wheat and the distribution of flour. NFA retains the exclusive authority to import rice when necessary and when authorised by the President. Government support reduced to GOCC, including to NFA.	
1987	NFA detached from the Office of the President and realigned under the DA.	
1998	NFA authorised to intervene in the stabilisation of price and supply of basic food items. NFA transferred from the DA to the Office of the President.	WTO accession, Philippine rice crises in 1995, AFMA adoption
2000	NFA transferred from the Office of the President to the DA.	
2001	NFA transferred from the DA to the Office of the President.	
2002	In 2002, NFA transferred from the Office of the President to the DA. Opening rice trade to the private sector. NFA starts to pay tariffs on rice imports, initially using loan proceeds.	Extension of exemption of rice from tariffication
2008	NFA adjusts paddy rice support price upward. Improvements in targeting of beneficiaries of subsidised rice.	International food price crises
2014	NFA transferred from the DA to the Office of the President.	
2016	NFA transferred from the Office of the President to the Office of the Cabinet Secretary at the Office of the President.	

Source: Tolentino (2002); DA (2015) and DA (2016).

Table 2.A1.4. Rice production and food security frameworks, 1973-2015

Name of the framework	Years	Commodities	Supported activities	Objectives
<i>Masagana 99</i> (Bountiful 99)	1973-85	Rice	Production and promotion of inbred high-yielding varieties. Distribution of fertilisers at subsidised prices. Establishment of pest surveillance network. Non-collateral credit scheme for organised farmers, supervised by farm technicians who also provide extension services.	Rice self-sufficiency and making the country a rice exporter
Grains Productivity Enhancement Program	1988-90	Rice, maize	Seed and fertiliser exchange scheme. Expanded rice credit programme of the LBP. Establishment of small water impoundments (a dam to hold back water).	Increase production of paddy rice
Rice Action Program	1990-92	Rice	Fertiliser subsidy to farmers and tariff exemption for fertiliser imports. Establishment of certification laboratories. Rehabilitation of existing large-scale irrigation systems, and improving of maintenance and management of irrigation systems.	Stabilise prices and promote productivity in addition to increasing paddy rice production
Key Production Areas, Grains Production Enhancement Program	1993-95	Rice and other priority commodities	Input subsidy on seeds and fertilisers. Establishment of five-year special credit assistance. Construction of farm-to-market roads, bridges, ports. Research to improve rice technology package. Development and dissemination of education materials.	Increase production, stabilise prices and ensure productivity and profitability
<i>Gintong Ani</i> (Golden Harvest)	1996-98	Rice, maize, livestock, fisheries, high value crops and marginal areas	Abolition of direct production subsidies, but seeds and fertilisers still promoted through technology demonstration. Provision of special credit window coupled with guarantee and crop insurance. Intensified training on Integrated Pest Management using the Farmers' Field School. Construction of small-scale irrigation systems and rehabilitation of existing national irrigation systems.	Stabilise prices, transform farmers into viable entrepreneurs, and enhance farm incomes
<i>Agrikulturang Makamasa</i> (Agriculture for the Masses)	1998-2000	Rice, maize, livestock, fisheries, coconut, sugar, tobacco and high-value crops	Introduction of balanced fertilisation strategy approach. Support for on-farm postharvest and bulk-handling facilities. Construction of farm-to-market roads. Development of location-specific, cost-reducing and environment-friendly technologies. Training support through establishment of more Farmers' Field Schools. Production and distribution of education campaign materials. Generation of business information database.	Food-security, reduce poverty incidence, increase farm income, ensure sustainability and empower people
<i>Ginintuang Masaganang Ani</i> ¹ (including Hybrid Rice Commercialisation Program and FIELDS ²)	2001-10	Rice, maize, livestock, fisheries, coconut, sugar, tobacco, high-value crops	Promotion of organic fertiliser production. Seed subsidy for the use of certified and hybrid seeds. Intensified extension services covering farmers, seed growers, agricultural technologists, trainers and rice specialists. Construction of new and rehabilitation of existing national and communal irrigation systems. Provision of post-harvest facilities and other farm equipment through cost-sharing arrangements. Access to production loans by eligible irrigator's associations.	Achieve rice sufficiency while generating more employment in the agricultural sector
<i>Agrikulturang Pilipino</i> (Agri-Pinoy) (includes Food Staples Sufficiency Program)	2011-present	Rice, maize, livestock, high-value crops	Establishment of community seed banks. Replacing free distribution of seeds and fertilisers with roll-over schemes. Promotion of varieties adapted to adverse conditions. Promotion of integrated crop management through training and dissemination of information materials. Construction of large-scale but quickly gestating irrigation facilities, as well as small-scale irrigation facilities. Reduction of rice wastage and promotion of brown rice consumption. Creation of direct lending scheme for rice farmers (<i>Sikat-Saka</i>). Conduct of research activities for continuous industry growth. Diversification of staples.	Initially: self-sufficiency in food staples (rice) by 2013. First target was not met – new self-sufficiency target was set to 2016 and achieving competitiveness was added

1. *Ginintuang Masaganang Ani* (Golden and Bountiful Harvest) – Countrywide Assistance for Rural Employment and Services.

2. FIELDS: Fertiliser, Infrastructure and Irrigation, Extension and Education, Loans, Drying and other post-harvest facilities, Seeds. FIELDS was implemented over 2008-10.

Sources: DA (2015); Tolentino and de la Peña (2011); Bordley (2010); Mariano and Giesecke (2014).

Table 2.A1.5. **Applied MFN tariff averages by HS2 Code, 2011**

Code	Description	No. of lines	Average tariff (%)	Range (%)
01	Live animals	37	13.9	1-40
02	Meat and edible meat offal	69	23.3	3-40
03	Fish and crustaceans, molluscs and other aquatic invertebrates	159	7.9	1-15
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	48	4.0	1-10
05	Products of animal origin, not elsewhere specified or included	31	2.7	1-3
06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	26	5.5	1-15
07	Edible vegetables and certain roots and tubers	93	15.6	1-40
08	Edible fruit and nuts; peel of citrus fruit or melons	73	8.5	3-20
09	Coffee, tea, maté and spices	49	13.2	3-40
10	Cereals	25	21.4	0-50
11	Products of the milling industry; malt; starches; inulin; wheat gluten	38	9.1	1-40
12	Oil seeds and oleaginous fruits; misc. grains, seeds and fruit; industrial or medicinal plants; straw and fodder	61	4.0	1-15
13	Lac; gums, resins and other vegetable saps and extracts	19	2.5	1-7
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	7	3.3	3-5
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	150	7.5	1-15
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	59	21.4	3-45
17	Sugars and sugar confectionery	28	14.7	1-65
18	Cocoa and cocoa preparations	16	5.5	3-7
19	Preparations of cereals, flour, starch or milk; pastry cooks' products	45	11.3	1-15
20	Preparations of vegetables, fruit, nuts or other parts of plants	73	9.3	1-15
21	Miscellaneous edible preparations	44	9.8	1-45
22	Beverages, spirits and vinegar	59	9.9	3-15
23	Residues and waste from the food industries; prepared animal fodder	33	8.0	1-35
24	Tobacco and manufactured tobacco substitutes	29	6.6	3-10

Source: WTO (2012).

Table 2.A1.6. **In-quota and out-of-quota tariff rates on commodities under Minimum Access Volume, 1996-2015**

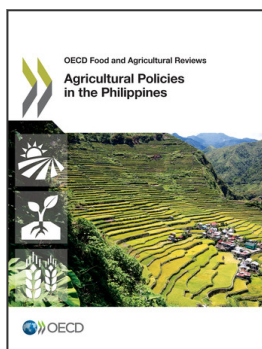
		1996	2000	2005	2015
Live swine	In-quota	30	30	30	30
	Out-quota	60	45	35	35
Live sheep and goat	In-quota	30	30	30	30
	Out-quota	60	45	40	40
Live poultry (2 kg or more)	In-quota	40	40	35	35
	Out-quota	80	50	40	40
Pork meat	In-quota	30	30	30	30
	Out-quota	100	60	40	40
Sheep and goat meat	In-quota	30	30	30	30
	Out-quota	60	40	35	35
Poultry meat	In-quota	50	45	40	40
	Out-quota	100	60	40	40
Potato	In-quota	50	45	40	40
	Out-quota	100	60	40	40
Onions	In-quota	30	30	40	40
	Out-quota	100	60	40	40
Garlic	In-quota	30	30	40	40
	Out-quota	100	60	40	40
Coffee	In-quota	50	45	30	30
	Out-quota	100	60	40	40
Sugarcane	In-quota	50	50	50	50
	Out-quota	100	65	65	65
Maize	In-quota	35	35	35	35
	Out-quota	100	65	50	50
Rice	In-quota	50	50	40	40
	Out-quota	50	50	50	50

Source: Piadozo (2012); EO No. 61 (2011); DA (2015).

Table 2.A1.7. **Minimum access volume allocation and utilisation rates (%), 1999-2015**

HS heading	Description	1999	2000	2002	2004	2006	2008	2010	2012	2013	2014	2015
0101	Horses (head)	57.00	57.00	57.00	57.00	57.00	57.00	57.00	57.00	57.00	57.00	57.00
	Utilisation rate	100	100	100	100	100	100	100	100	100	0	0
0102	Live bovine animals (thousand head)	15.37	16.27	18.08	19.89	20.34	20.34	20.34	20.34	20.34	20.34	20.34
	Utilisation rate	100	100	100	100	50	19	3	100	71	97	100
0103	Live swine (head)	2 570	2 570	2 570	2 570	2 570	2 570	2 570	2 570	2 570	2 570	2 570
	Utilisation rate	100	50	54	100	100	40	11	9	0	0	0
0104	Live goats (thousand head)	62.17	65.83	73.15	80.46	82.29	82.29	82.29	82.29	82.29	82.29	82.29
	Utilisation rate	0	28	0	1	3	1	0	8	0	0	0
0105	Live poultry (thousand head)	7 188	7 611	8 456	9 302	9 513	9 513	9 513	9 513	9 513	9 513	9 513
	Utilisation rate	25	24	30	9	25	1	0	9	0	0	0
0201	Beef (thousand tonnes)	4.61	4.79	5.13	5.48	5.57	5.57	5.57	5.57	5.57	5.57	5.57
	Utilisation rate	100	0	33	100	100	100	7	100	1	0	0
0203	Pork (thousand tonnes)	40.96	43.37	48.19	53.01	54.21	54.21	54.21	54.21	54.21	54.21	54.21
	Utilisation rate	45	45	18	21	8	58	84	100	34	40	45
0204	Sheep and goat (thousand tonnes)	0.85	0.90	1.00	1.10	1.12	1.12	1.12	1.12	1.12	1.12	1.12
	Utilisation rate	0	0	48	29	56	41	0	72	0	3	0
0207	Poultry (thousand tonnes)	17.75	18.79	20.88	22.97	23.49	23.49	23.49	23.49	23.49	23.49	23.49
	Utilisation rate	91	63	82	100	97	86	96	100	100	100	100
0701	Potatoes (tonnes)	1 171	1 240	1 380	1 550	1 550	1 550	1 550	1 550	1 550	1 550	1 550
	Utilisation rate	39	83	100	100	100	100	100	100	100	100	100
0901	Coffee beans (tonnes)	1.13	1.13	1.32	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
	Utilisation rate	98	96	100	100	100	100	100	100	100	100	100
1005	Maize (thousand tonnes)	163.91	173.55	192.83	212.12	216.94	216.94	216.94	216.94	216.94	216.94	216.94
	Utilisation rate	99	100	100	10	100	47	5	65	6	34	70
1006	Rice (thousand tonnes)	111.99	119.46	164.27	224.01	238.94	350	350	350	350	350	805.20
	Utilisation rate	100	100	100	100	100	82	82	100	100	100	100
1701	Sugar (thousand tonnes)	48.39	51.42	56.93	64.05	64.05	64.05	64.05	64.05	64.05	64.05	64.05
	Utilisation rate	100	100	100	82	100	40	2	48	2	1	6

Source: DA (2015).



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