

PART II

Chapter 15

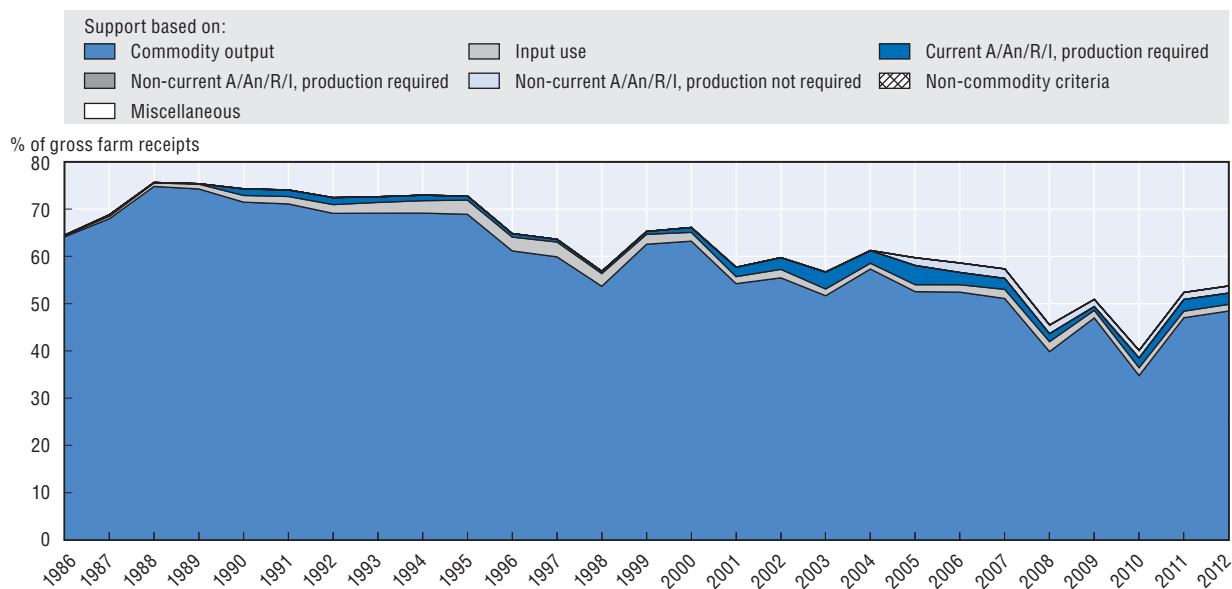
Korea

The Korea country chapter includes a brief evaluation of policy developments and related support to agriculture, contextual information on the framework in which agricultural policies are implemented and the main characteristics of the agricultural sector, an evaluation of support in 2011-12 and in the longer term perspective, and a brief description of the main policy developments in 2012-13.


Evaluation of policy developments

- Overall, there has been some progress towards more market oriented policies with reduction in the producer support since 1986-88, but the level is still 2.5 times higher than the OECD average and the share of potentially most distorting support remains around 90% of total support.
- After a reduction in 2010, the level of support in 2011 and 2012 increased back to the 2009 level, due to a rise in domestic rice prices and the levelling-off in world rice prices. Market price support still dominates in producer support, although the share of support through budgetary payment schemes has gradually increased in most recent years. Most producer support is commodity specific, and concentrates on a small number of products.
- The introduction of a permit and registration system in the livestock business is a strong reaction to the recent outbreak of animal diseases. The effects on the cost and restructuring of the livestock business need to be evaluated in the future. The reform of environmentally-friendly agricultural products certification and expansion of the traceability information system are responses to increasing consumer interest in organic food and food safety.
- In spite of efforts to integrate various direct payment systems so as to improve efficiency of delivery, the reorganised direct payments programme has not yet taken definite form and the discussions stalled in 2012. Further efforts are needed to reduce the level of market price support, improve the targeting of direct payments and establish an efficient delivery system.

Figure 15.1. Korea: PSE level and composition by support categories, 1986-2012



Source: OECD, PSE/CSE Database, 2013.

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Contextual information

Korea is a country with relatively high GDP per capita, dynamic growth and low levels of unemployment. Korea is a land-scarce country with high population density, where only 17% of the area is being used for farming. The importance of agriculture in the economy has been decreasing with its share in domestic GDP declining to 2.7% in 2011, while its share of employment is 6.2%. Korea is one of the largest net agro-food importers in the world. The share of agro-food imports in total imports is around 4.5%, while that of exports is less than 1%. Most farms are small family farms with less than 2 hectares of agricultural land.

Table 15.1. **Korea: Contextual indicators, 1995, 2011***

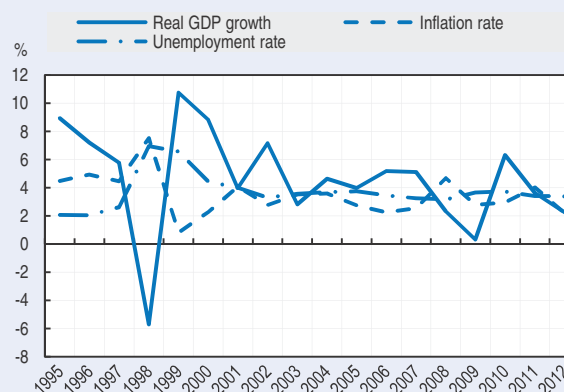
| | 1995 | 2011* |
|--|--------|---------|
| Economic context | | |
| GDP (USD billion) | 531 | 1 117 |
| Population (million) | 45 | 50 |
| Land area (thousand km ²) | 99 | 97 |
| Population density (inhabitants/ km ²) | 449 | 486 |
| GDP per capita, PPP (USD) | 12 803 | 30 286 |
| Trade as % of GDP | 24.5 | 48.3 |
| Agriculture in the economy | | |
| Agriculture in GDP (%) | 6.2 | 2.7 |
| Agriculture share in employment (%) | 11.2 | 6.2 |
| Agro-food exports (% of total exports) | 1.3 | 0.9 |
| Agro-food imports (% of total imports) | 7.0 | 4.7 |
| Characteristics of the agricultural sector | | |
| Agro-food trade balance (USD million) | -7 837 | -19 652 |
| Crop in total agricultural production (%) | 77 | 64 |
| Livestock in total agricultural production (%) | 23 | 36 |
| Agricultural area (AA) (thousand ha) | 2 048 | 1 854 |
| Share of arable land in AA (%) | 87 | 86 |
| Share of irrigated land in AA (%) | 44 | 46 |
| Share of agriculture in water consumption (%) | 48 | .. |
| Nitrogen Balance, Kg/ha | 258 | 215 |

* or latest available year.

Sources: OECD statistical Databases, ITCS, World Development Indicators and national data.

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Figure 15.2. **Korea: Main macroeconomic indicators, 1995-2012**



Source: OECD statistics.


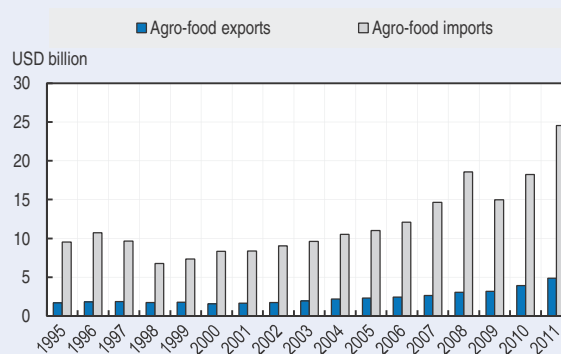

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Figure 15.3. **Korea: Agro-food trade, 1995-2011**



Source: International Trade by Commodity Statistics (ITCS) Database.

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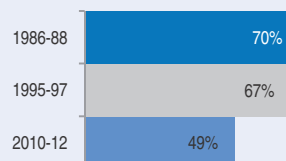
Note: Detailed definitions of contextual indicators and their sources are provided in Annex II.1.

Development of support to agriculture

Over the last 20 years, Korea has reduced its support to agriculture especially in the last decade. However, support remains relatively high and the potentially most production and trade distorting forms of support are still around 90% of the support. Moreover, the level and developments of the MPS reflects fluctuations of the price gap between domestic and world market prices of a few commodities, mainly rice.

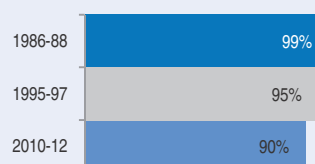
PSE as % of receipts (%PSE)

Korea has reduced its support to agriculture quite substantially between 1995-97 and 2010-12. Despite this reduction the overall support remains relatively high (2.5 times the OECD average) in 2010-12. After a sharp drop in the %PSE to 40% in 2010, the PSE increased in 2011 and 2012 back to the levels before 2010 (54%).



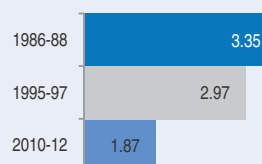
Potentially most distorting support as % of PSE

The potentially most production and trade distorting policies (based on output and unconstrained variable input use) are decreasing gradually but still dominate at around 90% of total support to farmers in 2010-12.



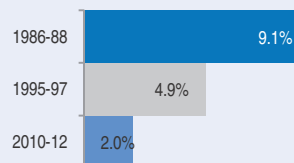
Ratio of producer price to border price (NPC)

The ratio of producer prices to border prices has been gradually reduced. Overall the prices paid to farmers were 1.9 times higher than world prices as measured by the NPC in 2010-12. The highest NPCs are for soybeans and garlic.

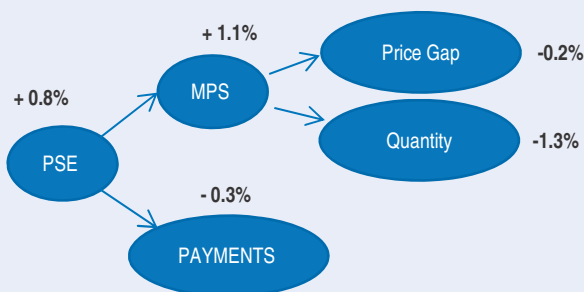


TSE as % of GDP

Total support as a share of GDP was substantially reduced and was 2.0% of GDP in 2010-12. The expenditure on general services represented 12% of the TSE in the same period. The single commodity transfer (SCT) represented 93% of the PSE. The share of the SCT in the commodity gross farm receipt is above 80% for soybeans, and the lowest for eggs at around 10%. For the remaining commodities it is around 40%.



Decomposition of change in PSE, 2011 to 2012



The level of support slightly increased in 2012 due to a rise of market price support, which was partly offset by decreased budgetary payments.

Transfer to specific commodities (SCT), 2010-12

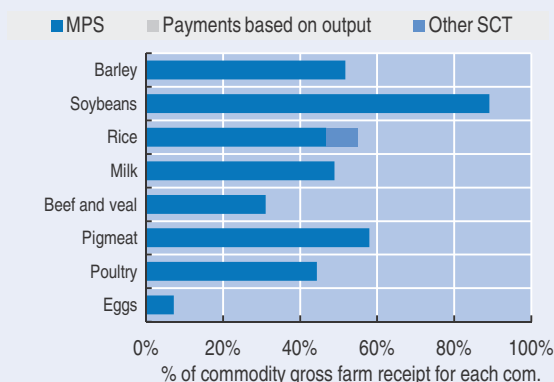


Table 15.2. Korea: Estimates of support to agriculture

KRW billion


| | 1986-88 | 1995-97 | 2010-12 | 2010 | 2011 | 2012p |
|--|---------------|----------------|----------------|----------------|----------------|----------------|
| Total value of production (at farm gate) | 13 624 | 27 747 | 41 200 | 41 677 | 41 308 | 40 615 |
| of which: share of MPS commodities, percentage | 72 | 64 | 61 | 60 | 59 | 64 |
| Total value of consumption (at farm gate) | 14 367 | 30 693 | 52 797 | 45 785 | 58 672 | 53 932 |
| Producer Support Estimate (PSE) | 9 605 | 19 277 | 21 193 | 17 658 | 22 864 | 23 056 |
| Support based on commodity output | 9 511 | 18 199 | 18 873 | 15 313 | 20 525 | 20 780 |
| Market Price Support | 9 511 | 18 199 | 18 873 | 15 313 | 20 525 | 20 780 |
| Payments based on output | 0 | 0 | 0 | 0 | 0 | 0 |
| Payments based on input use | 70 | 871 | 647 | 735 | 606 | 602 |
| Based on variable input use | 23 | 136 | 285 | 332 | 271 | 252 |
| with input constraints | 3 | 11 | 79 | 86 | 76 | 76 |
| Based on fixed capital formation | 44 | 725 | 278 | 319 | 251 | 262 |
| with input constraints | 0 | 70 | 45 | 50 | 42 | 43 |
| Based on on-farm services | 3 | 10 | 85 | 84 | 83 | 87 |
| with input constraints | 0 | 0 | 0 | 0 | 0 | 0 |
| Payments based on current A/An/R/I, production required ¹ | 24 | 206 | 1 002 | 903 | 1 080 | 1 024 |
| Based on Receipts / Income | 24 | 196 | 239 | 253 | 233 | 230 |
| Based on Area planted / Animal numbers | 0 | 11 | 763 | 649 | 847 | 794 |
| with input constraints | 0 | 0 | 48 | 54 | 47 | 44 |
| Payments based on non-current A/An/R/I, production required | 0 | 0 | 0 | 0 | 0 | 0 |
| Payments based on non-current A/An/R/I, production not required | 0 | 0 | 671 | 707 | 653 | 652 |
| With variable payment rates | 0 | 0 | 0 | 0 | 0 | 0 |
| with commodity exceptions | 0 | 0 | 0 | 0 | 0 | 0 |
| With fixed payment rates | 0 | 0 | 671 | 707 | 653 | 652 |
| with commodity exceptions | 0 | 0 | 0 | 0 | 0 | 0 |
| Payments based on non-commodity criteria | 0 | 0 | 0 | 0 | 0 | 0 |
| Based on long-term resource retirement | 0 | 0 | 0 | 0 | 0 | 0 |
| Based on a specific non-commodity output | 0 | 0 | 0 | 0 | 0 | 0 |
| Based on other non-commodity criteria | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous payments | 0 | 0 | 0 | 0 | 0 | 0 |
| Percentage PSE | 70 | 67 | 49 | 40 | 52 | 54 |
| Producer NPC | 3.35 | 2.97 | 1.87 | 1.58 | 1.99 | 2.05 |
| Producer NAC | 3.38 | 3.09 | 1.98 | 1.67 | 2.10 | 2.16 |
| General Services Support Estimate (GSSE) | 1 202 | 2 876 | 3 133 | 3 478 | 2 796 | 3 124 |
| Research and development | 52 | 275 | 723 | 671 | 740 | 757 |
| Agricultural schools | 5 | 47 | 81 | 150 | 43 | 51 |
| Inspection services | 21 | 80 | 122 | 110 | 124 | 131 |
| Infrastructure | 374 | 2 121 | 1 633 | 1 797 | 1 453 | 1 648 |
| Marketing and promotion | 0 | 12 | 70 | 69 | 69 | 72 |
| Public stockholding | 394 | 341 | 504 | 680 | 366 | 464 |
| Miscellaneous | 357 | 0 | 0 | 0 | 0 | 0 |
| GSSE as a share of TSE (%) | 11.2 | 12.8 | 13.1 | 16.4 | 10.9 | 11.9 |
| Consumer Support Estimate (CSE) | -9 425 | -19 748 | -24 843 | -18 527 | -28 871 | -27 131 |
| Transfers to producers from consumers | -9 304 | -17 861 | -18 872 | -15 313 | -20 523 | -20 779 |
| Other transfers from consumers | -181 | -2 148 | -6 020 | -3 261 | -8 394 | -6 404 |
| Transfers to consumers from taxpayers | 59 | 260 | 49 | 48 | 47 | 52 |
| Excess feed cost | 0 | 0 | 0 | 0 | 0 | 0 |
| Percentage CSE | -66 | -65 | -47 | -41 | -49 | -50 |
| Consumer NPC | 2.94 | 2.91 | 1.89 | 1.68 | 1.97 | 2.02 |
| Consumer NAC | 2.93 | 2.89 | 1.89 | 1.68 | 1.97 | 2.01 |
| Total Support Estimate (TSE) | 10 867 | 22 413 | 24 374 | 21 183 | 25 706 | 26 232 |
| Transfers from consumers | 9 484 | 20 009 | 24 891 | 18 574 | 28 917 | 27 183 |
| Transfers from taxpayers | 1 563 | 4 552 | 5 502 | 5 869 | 5 183 | 5 453 |
| Budget revenues | -181 | -2 148 | -6 020 | -3 261 | -8 394 | -6 404 |
| Percentage TSE (expressed as share of GDP) | 9.13 | 4.91 | 1.98 | 1.81 | 2.08 | 2.05 |
| GDP deflator 1986-1988=100 | 100 | 190 | 272 | 268 | 273 | 276 |

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.

Market Price Support (MPS) is net of producer levies and excess feed cost. MPS commodities for Korea are: barley, garlic, red pepper, chinese cabbage, rice, soybean, milk, beef and veal, pigmeat, poultry and eggs.

1. A (area planted) / An (animal numbers) / R (receipts) / I (income).

Source: OECD (2013), "Producer and Consumer Support Estimates", OECD Agriculture statistics (database).

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Policy developments

Main policy instruments

Tariffs and a wide range of tariff rate quotas (TRQs) are applied based on multilateral and bilateral trade agreements. Under the WTO Agreement on Agriculture, rice is the last remaining sensitive product designated by Korea.

Recently, direct payment schemes have been introduced, while maintaining a public stockholding scheme for rice, which is a purchase and release mechanism based on current market price. In 2009, five kinds of direct payment programmes have been implemented with different objectives; including rice income compensation, promotion of environmentally-friendly agriculture, maintain agriculture in less- favoured areas, and rural landscape conservation.

The simultaneous operation of various types of direct payment programmes reduced their effectiveness and caused concerns about fairness as most of the payments were concentrated on rice. To address these problems it was decided in 2009 to reorganise the various direct payment programmes into two major programmes: *Direct Payment for Public Interests* and *Direct Payment for Managerial Stabilization*. Direct Payment for Public Interests aimed to increase the basic income of small and medium-sized farmers, while Direct Payment for Managerial Stabilization focused on full-time farmers by alleviating income risks of farm households. The reorganised direct payment programmes were expected to be implemented by 2012, but the effort to trim and renew the various direct payment programmes has not achieved results yet.

The basic law for agriculture, rural area and food industry was established in 2007 and lays out the basic policy principles in agriculture. In 2009, the *Empowerment Support Project*, the *Local Industry Promotion Project*, and the *Specialized Product Promotion Project* were merged into the *Rural Vitalization Promotion Project*. Korea's rural development policies consist of two categories: improving living conditions of rural residents and enhancing economic vitality of the rural regions. Those involve many ministries and government agencies, encompassing for example education, medical services, roads, dwellings, drinking water supply, and infrastructure for the internet.

Korea gives high priority to enhancing the competitiveness of the food supply chain. A comprehensive plan to develop the food industry was established in December 2008, and announced the action plan which aimed to reduce entry barriers to agriculture for non-agricultural companies. With this strategy, the government intends to promote the supply of safe agricultural products that consumers can rely on, as well as to develop the food export industry.

Domestic policy developments in 2012-13

As a countermeasure to the Foot and Mouth Disease (FMD) found in cows and pigs in November 2010,¹ the Korean government instituted a permit system in the livestock business from December 2012. The new *Livestock Law* introduced a compulsory permit system, defined by the presidential decree, for any size of stock-breeding businesses and incubation businesses and for large livestock farms. The smaller livestock farms that are exempt from the permit system and all the livestock dealers who are frequently visit farms should register to the local governments. In addition, compulsory training programs were introduced for all people who had the permit or registered as livestock business person, farmer or dealer.

A pilot project to establish a new Pigmear Farm Traceability System was initiated in October 2012. The government operates this project with volunteers including 427 pig farms, 13 slaughter houses and 34 retail stores. All participating farms are given an identification number and any pig

that is not marked with the identification number should not be transported or slaughtered. This program is scheduled to expand to cover all stages of pigmeat production and marketing from late 2013.

In May 2012, Korea amended the law regulating the *Environmentally-friendly Agricultural Products Certification* in order to include fishery and food products certifications in the same system and to manage consistently the various certifications which have been applied differently by each category of the products.² It also provides a legal basis to accept other organic food certifications which is made by governments or certification bodies of other countries as equivalent even if these certifications differ from Korea's own or from those used by other countries trading in the same product when they achieve appropriate level of credibility. This law will be implemented from June 2013, but the equivalency clause will be effective from 2014.

The Korean government started a pilot project named the *Low Carbon Agricultural Products Certification* in March 2012 which aims to become a regular program from 2014.³ In 2012, the government invited volunteers from producers of five agricultural products; rice, sesame leaf, lettuce, apples and pears. This certificate is similar to "Carbon labelling" or "Carbon Footprint" which is applied to other industrial products and this project aims to expand product coverage to two percent of total agricultural production by 2020.

Following the comprehensive plan to develop the seed industry established in December 2011,⁴ the *Seed Industry Law* was amended in June 2012. The law was divided into the new *Seed Industry Law* and the *Law for the Protection of New Varieties of Plants*. The former reinforces the legal basis for government to support R&D foundation and investment, and the latter focuses on strengthening the rights of developers of new varieties of plants, to become a member of the International Union for the Protection of New Varieties of Plants (UPOV).

Related with the *Rural Vitalization Promotion Project*, the government helps young farmers to find suitable farms to learn advanced farming skills, and facilitates land trading between preliminary retirees and young farmers. In 2012, the Korea Rural Community Corporation, which is a public corporation that constructs and manages agricultural production infrastructures, offered 2 030 ha to 2 164 young farmers who wanted to start or expand their own farms. The government encourages opening lifelong education classes for people who want to leave the city area to go back to farming. In 2013, twenty nine private agencies will schedule thirty-six back-to-farm classes to meet the increasing need of future farmers.

Trade policy developments in 2012-13

As a result of the WTO rice negotiations in 2004, the TRQ for rice is scheduled to increase by 20 347 tonnes annually, reaching 368 006 tonnes in 2012.⁵

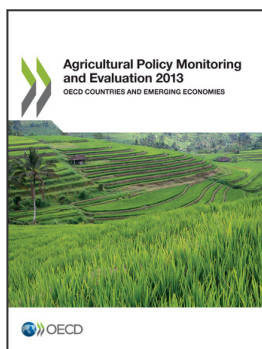
The Free Trade Agreement (FTA) with the **United States** became effective on 15 March 2012. Korea currently has seven other bilateral and regional FTAs with **Chile, Singapore, EFTA, ASEAN, India, EU** and **Peru**. Korea concluded FTA negotiations with **Turkey** in March and with **Columbia** in June 2012. Korea started FTA negotiations with **China** in May, with **Indonesia** in July and with **Viet Nam** in September 2012. The treatment of agricultural commodities was one of the most sensitive issues in the Korea-China FTA. Korea also began negotiations on the Korea-China-Japan FTA and the Regional Comprehensive Economic Partnership in East Asia in November 2012.

The FTA negotiations with **Canada** have struggled to find a way to proceed since March 2008, when the thirteenth meeting was held in Ottawa. The chief negotiators of the two countries exchanged views in July 2012, but the situation remains unchanged. Korea is looking for ways to

resume FTA negotiations with **Australia, New Zealand, Japan, Mexico** and the **Gulf Co-operation Council** (Saudi Arabia, UAE, Oman, Qatar, Bahrain, and Kuwait).

Notes

1. The government culled more than 3 million heads of pig and cattle in an attempt to prevent spreading of the disease as well as prohibited all farms within a 20-kilometre radius of the affected livestock from selling or removing any of their animals from the area, as a preemptive measure. Subsequently, vaccination measures were taken since January 2011.
2. The Environmentally-friendly Agricultural Products Certification consists of three categories: *Organic Agricultural Products*; *Pesticide-free agricultural products*; *Low-pesticide agricultural products*. From 2010 this certification is becoming more restrictive, as there are no new certificates issued for low-pesticide agricultural products and this category of certification will cease to exist in 2015.
3. The Korean government launched the Presidential Committee on Green Growth and set the 5-year Green Growth National Strategy in 2009 and established the Framework Act on Low Carbon and Green Growth including agriculture sector, as a part of policy for low carbon and green growth in April 2010.
4. In December 2011, the government announced the *Golden Seed* project which aims to develop high quality varieties of crops, fruits and livestock breeds with three main strategies: *Enhancing R&D foundation*, *Enlarging R&D investment* and *Encouraging private enterprises*.
5. The WTO Agreement on Agriculture (AA) provided that Korea's minimum market access for rice, known as "special treatment" for the first ten implementing years from 1995 to 2004. The WTO AA allowed that the special treatment could be extended for an additional length of time, but only after individual WTO member countries had the opportunity to negotiate concessions for the extension. In January 2004, Korean government notified the WTO and began negotiating with nine trading countries that officially expressed interest. When the negotiations ended in December 2004, Korea had been granted one more ten-year grace period for *tariffication*, while its TRQ had been doubled from 205 228 tonnes in 2004 to 408 700 tonnes in 2014.



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