Government of Republic of Korea Decides The Tariff Rate on Rice Imports at 513%

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This article is a news release of the Ministry of Agriculture, Food and Rural Affairs, Republic of Korea which was distributed on September 18, 2014. It discusses the tariff rate on imported rice from 2016 when Korea goes to rice import tariffication. http://www.mafra.go.kr/main.jsp

□ Upon setting a tariff rate on rice from 2015, Government of Korea ("The Government") has announced 「Notification to the World Trade Organization ("WTO") Concerning Tariff Rate」 and 「Plans for Stabilization of Farm Household Income and for Rice Industry Development」 on September 18, 2014.

- o In order to prepare for the end of exemption of tariffication, the Government has been receiving opinions from agricultural fields and reviews from professionals since last year. Based on the above data, the Government has prepared notification to the WTO concerning tariff rate and plans for rice industry development.
- * Major Requests from Agricultural Fields: High tariff rate, exclusion of rice from concession related to FTA and TPP, increase in direct payment in order to strengthen farm household income stabilization, continuous support on economies of scale, maintenance of stable basis of production, supporting for encouraging consumption, interest rate reduction on policy fund(政策資金), plans for prevention of illegal import of foreign rice

1. Contents of notification to the WTO

- □ Based on the WTO Agreement, the tariff rate on rice has been set at 513%.
- The domestic price is based on the data from Korea Agro Fisheries & Food Trade Corp. ("aT") and the international price is based on the average import price from the adjacent country, China. The data is based on the figures of 1986 to 1988.
- o Since the international rice price has sharply increased compared to that of the year 1986~1988, *ad valorem* duty (從價稅) is being applied in order to provide better protection.

- * Ad valorem duty applies to a certain tariff rate (for example, 400%) on import price (international price) and thus the protection effect is stronger when the import price is higher. In contrast, specific duty (從量稅) applies tariff rate based on the weight (for example, 341 Japanese yen per 1 kg of Japanese rice) and therefore the protection effect is stronger when the import price is lower.
- * Comparison of International Rice Price:

(Average during 1986~1988) 182\$ per ton (Import price of China, FAO)

- (2013) Average export price of the United States US\$683 per ton, the average export price of China US\$919 per ton (aT=Korea Agro-Fisheries & Food Trade Corporation)
- □ The Special Agricultural Safeguard ("SSG") is available on rice, thus domestic market is protected by increasing the tariff rate in case of rapid increase in import quantity or drop of import price to a certain point.
- □ The obligatory import quota (義務輸入物量) in 2014 of **408,700 tons will be allowed and applied 5% of tariff rate as before**. The original country quota (205,228 tons) will be switched to global quota.
- o Furthermore, provisions applied during tariff exemption concerning the use of tariff rate quota (低率關稅物量) such as **table rice percentage (30%)**, **guarantee for domestic market accessibility** will be deleted and general rules of WTO will be applied.

A thorough response to WTO investigation, maintenance of rice tariff Rate

- □ Since the tariff rate is under the review of WTO member states, the Government will thoroughly respond to WTO investigation based on the logic and data prepared over a long period of time and finalize the tariff rate as notified.
- □ The maintenance of rice tariff rate is as important. Therefore, the Government will continue to provide protection by excluding rice from concession for the FTA (including TPP) in the future.
- The Government has already announced such stance on July 18, 2014. The above has been officially agreed upon between the relevant ministries (Ministry of Agriculture, Food and Rural Affairs, Ministry of Strategy and Finance, Ministry of Trade, Industry and Energy, etc).
- Furthermore, since FTA requires the National Assembly's ratification in order to be put into effect, there is a check and balance between the National Assembly and the Government upon the exclusion of rice from concession.

2. Prevention of illegal distribution and shortcut import of foreign rice

- □ The Government will ban the sale and distribution of mixture of domestic and foreign rice from 2015 in order to prevent foreign rice from camouflaging into domestic rice and to establish healthy distribution order.
- o Currently, four amendments on Grains Management Act (糧穀管理法) have been submitted to the National Assembly concerning prevention of sale and distribution of mixture of domestic and foreign rice. The Government will put efforts in order for the above amendments to be passed within this year's regular session of the National Assembly.
- □ Furthermore, the Government will intensively control illegal distribution of foreign rice by sharing information between National Agricultural Products Quality Management Service, National Police Agency and other relevant institutions.
- □ In order to prevent disturbance of rice industry by shortcut imports and to strictly manage rice import, rice will be included in subjects for assessment(事前稅額審査) by the National Tax Service.
- * Assessment: In principle, tax amount is assessed after import declaration. However, assessment is applied to items in which there is a great difference in price between domestic and foreign products and that they are likely to be intentionally declared at a low price. There are 25 agricultural products under the assessment, namely onions, garlic and beans.
- The Government will analyze all rice products that can be imported, setup a standard, investigate price according to country of origin in order to establish a database and prepare for the assessment on price products.

3. Establishment of plans for the rice industry development

Accomplishments and limits of recent rice policy

- □ After the settlement of the Uruguay Round in 1994, there has been continuous investments in order to improve the competitiveness of rice industry through economies of scale for professional farmers, maintaining production infrastructure, developing distribution of products during the last 20 years of tariffication exemption.
- o Moreover, direct payment system for preserving income is implemented in order to

prepare for expanding the opening of rice market by preserving income for farm households despite the decline in market price.

* In 2010, the rice price during harvest season was 138,231 Korean *won* per 80 kg. However, farm households received 165,305 Korean *won* on average which is 97% of the target price at the time (170,083 Korean *won* per 80 kg).

Accomplishments during the last 20 years concerning the investment on rice industry

Categories	Main Indicator	Year			Miscellaneous
		1995	2005	2013	
Economies of scale for professional	Cultivation area per professional farm household (ha)	2.5	4.2	5.9	Rice Income per professional farmhoushold: 14
farmers	Proportion of professional farm household cultivation area	3	30	50	million Korean won (1995) → 38 million Korean won (2013)
Maintenance of production infrastructure	Drainage improvement (%)	22% (66,000ha)	43% (129,000 ha)	53% 161,000 ha)	Compared to the total constantly flooded area 303,000ha
	Percentage of well- irrigated paddy	33% (403,000ha)	44% (484,000 ha)	59% (573,000ha)	Compared to the total area of rice paddy, percentage of rice paddy protected against the drought of 10-year frequency
	Repair of irrigation and drainage canal	115	4,243	7,634	
Agriculture mechanization	The percentage of mechanization of rice farming (%)	82.9	89.9	94.1	41.5%(1986), 68.3% (1990)
	Labor hours per unit area (hours per 10 a)	34.70	20.81	12.68	
Improvements on distribution	Proportion of RPC distribution (%)	22	47	64	
	Number of RPC places	32(in 1992)	302	234	Since 1991, 324 RPC have been established. Now They were merged to 234 RPCs.
	Percentage of branded head rice (完全米,%)	57 (in 2000)	89	93 (in 2011)	

Rice direct	Amount of money	155,000	166,000	187,000	
Payment	received by farm				
	household (Korean				
	won per 80 kg)				
	Percentage to the	-	97.3	99.7	
	targeted price				

- □ As people's dietary habits diversified, the rice consumption began to decline which led to the shrinking of the rice industry. Such tendency poses as a threat to rice farm household income.
- Despite the efforts on raising professional farmers, 55% of the total farm household yet manages less than 1ha of cultivation area and 56% of those are above 65 years old or older. Since the percentage of small-sized, old-aged farm household remains high, there are limits to prepare for market changes and to reduce the production cost.
- Moreover, the rate of increase of farm household income is slower than that of the nation's average and the proportion of rice in farm household income is getting smaller due to the decrease of farm industry's size and the stagnation of rice price.
- * Farm household income (compared to the nation's average): 31 million Korean won in 2005 (87.7%) → 32 million Korean won in 2010 (73.7%) → 35 million Korean won in 2013 (69.1%)
- * Proportion of rice income in the total farm household income: 24.6% in $2000 \rightarrow 14.8\%$ in $2005 \rightarrow 8.8\%$ in $2010 \rightarrow 10.1\%$ in 2013

Directions for plans of rice industry development

- □ Based on the continuous investments in the rice industry for the last 20 years and the accomplishments therein, a number of improvements were made considering numerous factors such as decrease in consumption and tariffication.
- Increase in fixed direct payment, expansion of two-crop farming and social safety net for small-sized and aged farmers in order to reinforce farm household income stabilization mechanism.
- 2) Improving competitiveness and constitution of domestic rice industry by economies of scale, collectivization, cost reduction and quality improvement.
- 3) Since rice cultivation area and consumption is decreasing continuously, the foundation of production will be maintained around high quality farmland (優良農地) and grounds for demands will be expanded by encouraging consumption and export and raising the processing industry.

- Based on current rate of decline, rice consumption for one person will decrease to 51kg per year by 2024. In order to mitigate the decline to 57kg per year, the Government has set appropriate cultivation area for rice to be 757,000 ha.
- * Rice consumption per one person (kg): 67.2kg (2013) \rightarrow 51 kg (approximation in 2024) \rightarrow 57 kg (targeted amount of consumption in 2024)
- * Rice cultivation area (ha): 849,000 (2013) \rightarrow 673,000 (approximation in 2024) \rightarrow 757,000 (targeted amount of cultivation area in 2024)

Main contents for rice industry development plans

[Stabilization of Farm Household Income]

- □ The amount of direct payment will be increased in order to stabilize farm household income. Furthermore, expansion of two-crop farming will be encouraged in order to increase farm household income and to ameliorate food self-sufficiency. Additionally, social safety net for small-sized and aged farmers will be reinforced.
- ① The amount of fixed direct payment will be raised early in 2015 to 1 million Korean won per ha which was originally planned to be increased in 2017.
- ② Since variable direct payment has an income stabilization effect in case of decrease in rice price, the current system will continue to be carried out.
- In case of continuous oversupply of rice, the Government will discuss with the agricultural field in order to provide variable direct payment for crops other than rice in order to stabilize rice supply and to maintain rice cultivation area.
- ③ In order to stabilize the management of farm households without variable direct payment and large-scale farm households, the implementation of income protection insurance (收入保障保險) will be under consideration. In 2014, map exercise (圖上演習) and research will be held accordingly.
- * Income protection insurance: An insurance in which income of farm households on certain items will be assured not to fall below certain degree (income criteria * degree of protection) despite the decrease in harvest or price
- * This will be applied to farm households which have not received variable direct payment (those with nonfarm income more than 37 million Korean won, new reclaimed land (新規干

- 拓地)) and to large-scale farm households (farmers 30 ha or more, corporation 50 ha or more)
- ④ In order to activate two-crop farming, management system (經營體) with two-crop farming method will be prioritized upon the selection of Field Management System. Additionally, short-period lease of farmland will be allowed for two-crop farming purposes (Amendment for Farmland Act in 2014).
- * Currently, two-crop farming is not a ground for farmland lease and thus, direct payment for two-crop farming was not available. By the above amendment for Farmland Act in 2014, the direct payment will be given to two-crop farming.
- ⑤ In order to stabilize the lifestyle of small-sized and aged farmers, the criteria for income will be increased concerning the support for national pension insurance (850,000 Korean *won* per month in 2014 \rightarrow 910,000 Korean *won* per month in 2015). Furthermore, requirements for the membership of farmland pension will be eased (the couple has to be over 65 years old or older \rightarrow only the joining member has to be 65 years old or older)
- Application age for management transfer direct payment (經營移讓直拂金) will be expanded from 65~70 years old to 65~74 years old.

[Continuous efforts for increasing competitiveness]

- Collectivization and Economies of Scale: Raising professional farmers in economies of scale and Field Management System that manages both large-sized and small-sized farms
- ① Field Management System, which cultivates 200ha of farmland on average, will be expanded from 158 in 2014 to 600 in 2024.
- * Field Management System: A management body that looks over production of collectivized field with the area of more than 50 ha.
- * In 2013, average rice cultivation area is as follows: (i) farm household 1.2 ha; (ii) professional farmers 5.9 ha; (iii) Field Management System 200ha
- When participating in the Field Management System, 11% of production cost will be reduced by joint seeding and pest control. Quality improvement is also expected by raising large-scale single breed (單一品種) and joint shipment through the RPC.
- In order to achieve the above improvements, various economic and systematic support will be provided: (i) scope of support will be expanded regarding machineries and consulting; (ii) the maximum direct payment on rice for the Field Management System will be increased

- (50ha \rightarrow 400ha); (iii) prioritized support will be allotted to the Field Management System with active collective management (2.5 trillion Korean *won* in 2014 \rightarrow 4 trillion Korean *won* in 2015).
- ② By 2024, rice professional farmers with cultivation area of more than 6 ha will be increased to 30,000 units. The proportion of the cultivation area will also be increased to 40% of the entire rice cultivation area.
- In order to achieve the above goal, interest rate for supporting the economies of scale such as purchase of farmland, long-term lease, exchange, division and merge of lands has been decreased from this year $(2\% \rightarrow 1\%)$.
- In order to prevent re-division of lands by inheritance, requirements for agricultural inheritance deduction (營農相續控除) will be eased. Furthermore, the maximum limit for deduction (currently 500 million Korean *won*) will be increased by consulting relevant ministries.
- * Requirement for inheritor: Currently, the inheritor should manage farms two years prior to the date of inheritance and shall dwell at or adjacent to the site of the farmland concerned.

 Irrespective of the address, the inheritor shall manage farms before the reporting period.
- ** The above points are included in this year's tax law which will be submitted to the National Assembly in September and shall be enforced starting 2015.
- 2 Development of cost-reducing technologies and mitigation of farmland management costs by decreasing interest rate for agricultural policy finance (農業政策資金)
- ① Field investment project will be carried out with the farmers in order to develop and distribute cost-reducing technologies such as direct sowing in wet paddy field, seed bed fertilizer (播種床肥料)
- * Direct sowing in wet paddy field: A seeding method in which seeds are directly being put on the field without dibbling of rice seedling at seed raising or rice transplanting stage, using seeding machines. Such method will help reduce production and labor cost.
- ** Seed bed fertilizer(播種床肥料): A type of fertilizer in which seeding and application of fertilizer will be done simultaneously on the nursery bed(苗板), saving the amount of fertilizer and labor power.
- 2 From next year, the interest rate for purchasing agricultural machineries will be reduced from 3% to 2.5% and that of business recovery finance program will be reduced from 3%

- to 1%. Additionally, there will also be a reduction of interest rate for six policies such as the fund for 6th industry establishment and the invigoration of return to farm fund.
- * The cost-saving effect of 11.4 billion Korean won of agricultural machineries and 3.2 billion Korean won of agricultural management recovery is expected.
- 3 Various support for the enhancement and differentiation of the quality of domestic rice to compete against foreign rice
- ① Seed cleaning infrastructure (種子精選施設) will be modernized by fixing seven places every year in order to supply high quality seeds. In order to achieve high value rice production, the rate of special-rice seed distribution rate will be expanded from 30% in 2013 to 75% in 2022.
- ② Farmers will be encouraged to raise uniform quality products on field management level and to distribute to RPC together.
- ③ 「Direct payment for the continuation of organic products」 will be implemented from 2015 in order to expand the organic rice and to differentiate from foreign rice (5.9 billion Korean *won* of new budget is being applied in 2015).
- Currently, the period of direct payment for eco-friendly farming is 5 years. When a farmer continues organic farming after the above period, additional 3 years of direct payment will be provided.
- * Unit cost applied: 50% of that of eco-friendly farming (rice farming 600,000 Korean won per ha, upland 1.2 million Korean won per ha)
- 4 The integration and modernization of RPC, expansion of drying facilities to reinforce distribution capabilities
- ① 234 RPCs in 2013 will be integrated to 120 RPCs in 2024. Incentives such as the size of support for rice purchase fund and preferential interest rate will b given to the integrated RPCs.
- * Currently, 234 RPCs (151 managed by NACF, 83 managed by private) are responsible for 64% of the entire distribution. However, there are many small-sized RPCs and 33% of the entire RPCs marks rate of operation of less than 50% (2012).
- ② Support for the modernization of facilities on deteriorated RPCs will be expanded (3 RPCs in 2012 to 6 RPCs in 2015).

- * RPCs with modernization of facilities: 45 RPCs (2007~2013) > 75 RPCs (after 2020)
- ③ Drying facilities and storage for rice will be expanded. By 2020, drying and storing capabilities will be expanded to 60% of the entire distribution (45.7% in 2013).
- * Drying facilities and storages (total): 1,301 (in 2013) \rightarrow 1,334 (in 2014) \rightarrow 1,361 (in 2015)
- 5 Stabilization of production basis by preserving high-quality fields and expanding agricultural production infrastructure
- ① In order to better preserve and manage high-quality fields, demands for development will be encouraged to be located outside of agricultural development region (農業振興地域) upon the discussion of farm land conversion.
- For the reinforcement of converted land management, the monitoring system which administers the relevant land for five years after the conversion, will be established.
- ② To prepare for drought and localized heavy rain falls upon the climate change, irrigation facilities will be expanded and safety check for original irrigation facilities and embankments will be strengthened (budget for the above will be expanded from 1 trillion 661.8 billion Korean *won* in 2014 to 1 trillion 713.7 billion Korean *won*).
- For water-shortage areas, well-irrigated paddies that are able to endure drought with 10-year frequency will be expanded.
- * Ratio/area of well-irrigated paddies: 59% (573,000 ha in 2012) \rightarrow 75% (652,000 ha in 2024)
- Drainage infrastructures will be reinforced for 303,000ha of constantly flooded area (80% of coverage by 2024).
- * Ratio/area of drainage improvement: 52% (158,000 ha in 2012) \rightarrow 80% (243,000 ha in 2024)
- Old irrigation facilities unable to resist flood will be repaired and reinforced.
- * Repair and reinforcements (aggregate): 1,256 places (from 2013 to 2018) \rightarrow 2,989 places (by 2024)
- Earth canals and old irrigation channels will be renovated to provide convenience for farm households

* 97,000 km of renovation will be completed by 2024 (900km every year).

[Encouragement of rice consumption and expansion of export]

- The Creating new demands for rice consumption to prepare for constant decline due to westernized dietary habits, double-income families, single-person families by encouraging rice consumption, raising the processing industry and exporting
- ① Promotion for rice consumption and related budgets will be reinforced and expanded by developing consumer-centered rice dishes, education of future generations concerning dietary habits.
- * Rice consumption vitalization project: 3.5 billion Korean won (2013) \rightarrow 4 billion Korean won (2014) \rightarrow 5.5 billion Korean won (2015)
- * Rice consumption per person (kg): $67.2 (2013) \rightarrow 51$ (expected in 2024) $\rightarrow 57$ (targeted amount by 2024)
- ② High quality liquors and the second generation of Hetbahn¹ will be developed to raise rice processing industry as high value strategic business (高附加 戰略産業).
- 3 Support for the expansion of rice and rice processed items export will be enlarged.
- Especially, Council for Export Expansion on Rice Processed Items (established on August 2014) will provide systemized support on areas such as research and development, export consulting and writing basic statistics.
- * Participating institutions include the Ministry of Agriculture, Food and Rural Affairs, Rural Development Administration, Korea Food Research Institute, aT, exporting companies, Korean Rice Foodstuffs Association and NH Trading Co., Ltd.
- 2 Establishing a Basis for Rice Checkoff Program (自助金) by Producer-Oriented Consumption Advertisement and Improvement on Production and Distribution
- ① By consulting rice production organization and discussing with professionals, criteria for checkoff program will be eased and other basis for the implementation of the policy will be prepared by applying the distinct characteristics of rice products.
- * Distinct characteristics: There are numerous farm households spread in the country (700,000 households by 2013) and the rate of self consumption is high (about 16%).

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¹ Hetbahn is a famous instant rice produced by CJ CheilJedang Corp.

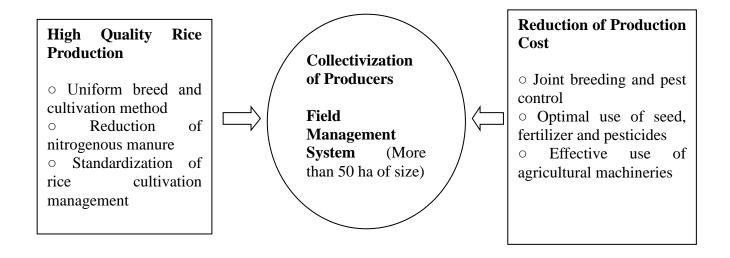
- * Current status of the preparation of checkoff program: 9 for animals (Korean beef, Korean pork, dairies, etc) 25 for horticulture (paprika, kiwi fruit, etc)
- ② Prior to the implementation of checkoff program, education and training program for raising management body for future rice industry will be founded and 5,000 households per year will be educated from 2015 (1.1 billion Korean *won*, new budget for 2015).
- * Contents for Education and Training: Domestic and International Prospects of Rice Industry, Leading Technologies, Business Management, Domestic and International Field Trips, Open Forum between Producer and Consumers

Budget for 2015

- □ Budget for major projects such as increase of farm household income and competitiveness of rice industry has been increased by 156.8 billion Korean *won* compared to that of 2014.
- o The details of increment is as follows: 71 billion Korean won for "Rice Fixed Direct Payment", 14.6 billion Korean won for "Decrease of Interest Rate for Agricultural Funds", 1.1 billion Korean won for "Rice Industry Leading Management Education", 1.5 billion Korean won for "Revitalizing Rice Consumption", 2.7 billion Korean won for "Revitalizing High Quality Rice Distribution" (Including the modernization of RPCs), 5.9 billion Korean won for "Direct Payment for Continuing Organic Production".
- Moreover, investments for expansion of production infrastructure (51.9 billion Korean won) and R&D for new technologies and materials will be strengthened.
- \Box The Government will continue to support the development of rice industry by expanding the budget in 2015 for effective implementation of the above measures.

Expected effects

- □ If the above measures are implemented as planned, the rice industry will not continue to decrease in size and foster stabilized development by slowing down the decrease of rice consumption, stabilized establishment of production infrastructure and steady management of farm households.
- □ By collectivization and systemization of production by raising Field Management System,
- o Joint farm operation and joint purchase of materials will lower the production cost.
- High quality rice production will be possible by deciding the product and cultivation method joint shipment from RPC based on Field Management System.



- □ Producer-oriented development of rice industry by the expansion of professional farmers, implementation of rice checkoff program will promote consumption, adjust supply and demand and improve production and distribution.
- \Box Upon the two-crop farming on winter season (220,000 ha in 2013 \rightarrow 402,000 ha in 2024),
- o Abandoned lands(遊休農地) in winter season, workforce and machineries will be utilized to increase farm household income.
- o Increase in barley and common wheat production and substitution of feed grain to bulky feed will increase the degree of crop self-support.
- □ Collectivization of RPC will help to achieve more efficient management. Since the amount of trading per RPC increases, bargaining power of farm households will increase against the retailers which will stabilize the price of rice.
- * Based on the analysis of collectivized RPC management in 2013, the average total sales increased by 8.3 billion Korean *won* (54% increase) and the average profit increased to 470 million Korean *won* (88% increase) compared to the data before the collectivization.

4. Future plans

- □ Amendment for Schedule of Concessions will be notified to WTO by the end of September. The review process by WTO member states will begin on October.
- □ At the domestic level, statutes related to the implementation of tariffication will be amended and tariffication will be implemented from January 1, 2015.
- □ In line with this, the accorded measures will be amended and developed considering the

discussions with Rice Industry Development Council and the National Assembly.

- * From August 14, 2014, the Rice Industry Development Council has been under operation by farmers, professionals and the Government.
- A thorough preparation will be carried out in order to execute improvements to the policy.

Appendix 1 Expected price of foreign rice at the domestic market, applying 513% of tariff rate

 \square The comparison to the average price in 2013

Categories	Price in 2013	Korean won /	Price of	The Amount	Price at the
	(CIF)	\$, exchange	foreign rice	of tariff	domestic
	(\$/ton, aT)	rate (Bank of	(Korean won	(Korean won	Market
		Korea)	/ 80 kg) (A)	/80kg) (B)	(Korean won
					/ 80kg)
					(A + B)
United States	683	1,095.04	63,303	324,746	388,049
(medium					
grain variety)					
China (short	919	1,095.04	85,177	436,957	522,134
grain variety)					
Thailand	488	1,095.04	45,230	232,029	277,259
(long grain					
variety)					

^{*} Based on data by aT, major trading country's export price (fob) has been converted to the price including insurance rate and shipping cost (cif).

Appendix 2 changes in the rice industry for the past 20 years

☐ Production

Categories	1995	2005	2013
Total Amount of rice production	4,695	4,768	4,230
(1,000 tons)			
Rice cultivation area (1,000 ha)	1,056	980	833

^{**} Average domestic rice price in 2013 and in September 15, 2014 is 174,871 Korean *won /* 80kg, 166,765 Korean *won /* 80kg, respectively.

Production (kg / 10a)(average of	455	492	496
previous five years' production			
except the highest and lowest one)			
Quality (percentage of head	57.4 (2001)	87	93 (2010)
rice, %)			
Percentage in the national	0.99	0.59	0.38 (2012)
economy (Based on GDP, %)			
Farming area by professional Rice	2.5	4.2	5.9
farmers (ha / household)			
Income of professional rice	14,224	22,430	37,958
farmers (1,000 Korean won /			
household)			
Area of development of water uage	403,353	484,293	572,909
(irrigated paddy fields) (aggregate,			
ha)			
Percentage of irrigated paddy	33	44	59
fields (%)			
Area of drainage improvement	65,921	129,286	160,844
(aggregate, ha)			
Percentage of drainage	22	43	53
improvement (%)			
Maintenance of irrigation and	115	4,243	7,634
drainage canal (aggregate, km)			
Mechanization of paddy field	82.9	89.9	94.1
works (%)			
Labor hours per 10a of paddy	34.70	20.81	12.68
fields			
Income per labor hour (Korean	15,531	26,239	50,738
won)			

☐ Consumption

Categories	1995	2005	2013
Rice consumption per person (kg /	106.5	80.7	67.2
year)			
Processed rice consumption on per	5.0	4.1	9.2
person (kg / year, excluding rice			
used for alcoholic beverages)			
Total rice consumption (1,000 tons	5,536	5,210	4,491
/ year)			

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