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Outcome and Improvement Direction of Complementary Measures for Domestic Industry in Response to FTAs

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◇ Abstract ◇

- With the conclusion of the Free Trade Agreements with the US and the EU, the South Korean government established complementary measures amounting to 28.8 trillion won (2008-2020) for its domestic market, in order to compensate for damages to farmers and improve conditions and competitiveness of agriculture.
 - From 2008 to 2013, a total of 13.3279 trillion won of the investment and loan budget was allocated to the complementary measures for the domestic agricultural sector in response to the FTAs, and among the budget, 12.9467 trillion won has been used so far.
 - Over the past six years, 46.8 percent (6.053 trillion won) and 27 percent (3.4943 trillion won) of the total financial support for the agricultural sector have been assigned to enhance the competitiveness of the livestock industry and to promote the customized agricultural policies, respectively.
- Investment and loan projects related to the scale expansion and modernization of livestock and orchard facilities have contributed to reducing farming costs and enhancing the productivity and quality of products.
 - Compared to non-beneficiary farms, those (raising cattle on feed) supported by the facility modernization project produce 2.9 percent more first-class beef and 2.1 percent heavier cattle on average at the point of sales; their mortality rate of livestock is also 15.4 percent lower; and their average per capita daily working hours per unit area are also 0.8 percent shorter.
 - In 2012, compared to 2003, fruit production per unit area increased by 13.2 percent; working hours were reduced by 11.4 percent; and income per 10 ares of orchard (based on real price) increased by 42.1 percent.
- Projects such as the restaurants' country-of-origin labeling system, the livestock product traceability system and the HACCP certification secure the transparency of the distribution process and consolidate consumer trust in domestic agricultural products.
 - Farmlands purchased through various projects related to the purchase and reserve of farmland, the direct payment system for the transfer of management and the farmland pension, have been mostly rented out or transferred to professional farmers or those in their 20s and 30s, thereby contributing to stabilizing post-retirement lives of farmers, reallocating and expanding farmland resources and enhancing the self-sufficiency rate of food.
 - As the number of target items and the range of coverage of the agricultural disaster insurance have expanded, the number of policy-holding farmers has been on the rise. The insurance has been settled as a method for risk management and income stabilization of large-scale farms.
 - Farms which have bought the agricultural disaster insurance (more than once) in the past five years are estimated to have earned 9.1 percent more agricultural income (and 3.8 percent more farm income) on average compared to those without insurance.
- In order to differentiate the current agricultural policies and the FTA complementary measures, it is necessary to review the feasibility of each project and evaluate the performance of the complementary measures, and reflect the result on the readjustment of the investment and loan plan.
 - It is essential to shift projects related to the renovation of production infrastructure that is less related to the FTAs to general agricultural projects, and implement investment and loan projects closely related to the expansion of demand and consumption base of domestic agricultural products as complementary measures in response to the FTAs.
- In order to enhance the effectiveness of the FTA complementary measures and increase the satisfaction level of farmers towards related policies, it is necessary to lower the loan interest rate, ease the collateral requirements, expand the support for loan guarantee and rationalize the unit payment.
 - In terms of the short-term measure to compensate damages to farmers, it is important to legalize the import contribution ratio system, increase the damage compensation rate (90 → 100%) and restrict the use of livestock facilities of a farm that shut down its livestock business.

1. Establishment and Implementation of Complementary Measures for Domestic Industry in Response to FTAs

1.1. Establishment of FTA Complementary Measures for Domestic Industry

☐ Since the Korea-Chile FTA was implemented, the South Korean government has designed and implemented FTA complementary measures for the domestic agricultural industry in response to the expanding opening of the agricultural market.

- After the signing of the Korea-Chile FTA in 2004, the Korean National Assembly enacted the Special Act on Assistance to Farmers, Fishermen, Etc. Following the Conclusion of Free Trade Agreements (hereinafter referred to as “FTA Assistance Special Act”).
- In accordance with this act, the government raised FTA funds amounting to 1.2 trillion won from 2004 to 2010, and launched the investment and loan plan to compensate damages to orchards and strengthen the competitiveness of farms.¹⁾

1) A total of 1.0255 trillion won of investment and loans have been used for the Korea-Chile FTA funding project for seven years: 787.8 billion won to support the enhancement of the competitiveness of domestic fruit products, and 237.7 billion won to support the cessation of orchard businesses.

□ After the conclusion of the FTAs with the US and the EU, the government developed FTA complementary measures amounting to 28.8 trillion won (2008-2020) to compensate damages to farmers, improve the conditions of agriculture and enhance the competitiveness of the domestic agricultural industry.

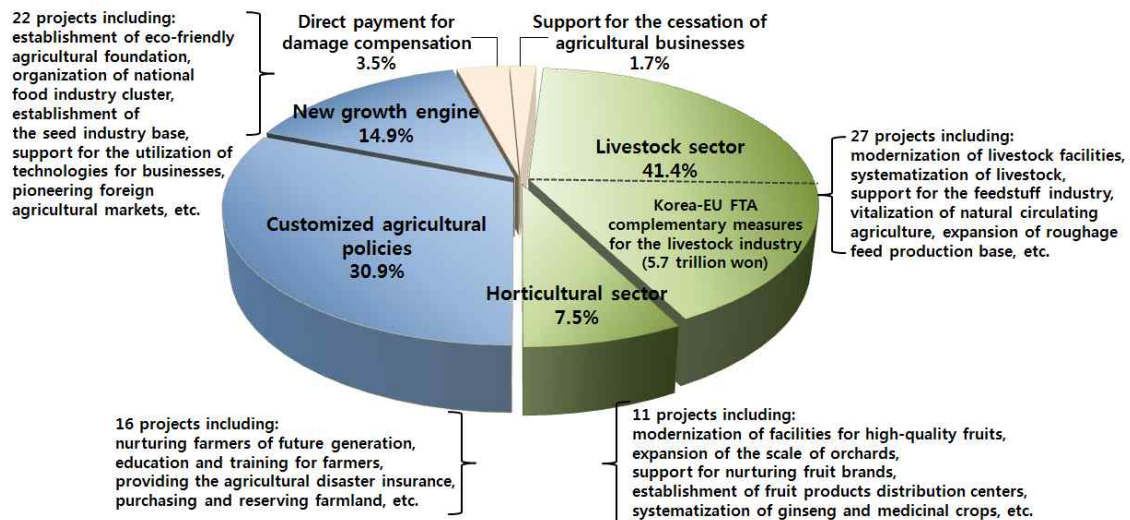
○ Undergoing the settlement (April 2007) and the re-negotiation (December 2010) of the Korea-US FTA and its ratification in the national assembly (January 2012), the Korean government came up with the domestic complementary measures in response to the Korea-US FTA, which amounted to 23.1 trillion won.

- The Korea-US FTA was implemented in March 2012, but several projects as part of complementary measures were reflected on the budget in advance and carried out from 2008 to strengthen the competitiveness of the domestic agricultural industry.

○ In addition, before the effectuation of the Korea-EU FTA, the Korean government presented the Korea-EU FTA complementary measures amounting to 10.8 trillion won, which consisted of the originally designed support plans (including the livestock industry development plan) for the period from 2011 to 2020 and additional 2 trillion won, for the livestock industry that would be hit hardest by the FTA from November 2010.

- Several projects of the Korea-EU FTA complementary measures were also included in the Korea-US FTA complementary measures, so if overlapped budget for these projects was excluded in the calculation, the newly allocated investment and loan budget for the Korea-EU FTA complementary measures was 5.7 trillion won.

Figure 1. The Scale of the Investment and Loan Plan for the Agricultural Sector in Response to the FTAs (28.8 trillion won) and Major Projects



Note: Data collected as of April 2014.

□ The core of the FTA complementary measures for the agricultural industry is the mid- and long-term investment and loan project for improving the conditions and competitiveness of agriculture, while the short-term damage compensation policies (direct payment for damage compensation, support for the cessation of agricultural businesses) are operated as supplementary plans.

○ The project to strengthen the competitiveness of each item, a plan with the largest amount of investment and loans, is aimed to enhance the productivity by supporting the modernization of facilities for vulnerable points of each stage (production, processing and distribution) focusing on the livestock and fruit sectors, and to build consumer trust by improving product quality and safety.

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- The project to improve the conditions of agriculture is designed to reorganize the manpower structure from aging workforce to professional farmers; to expand the farm management stabilization methods in response to potential risks to expanded professional farms; and to expand technology development, produce high-quality products and nurture upstream and downstream industries, thereby switching over to a value-added industry.
 - The short-term damage compensation project will be supported with a total of 1.5 trillion won (1 trillion won to aid direct payment for damage compensation and 500 billion won to support business cessation), which is around 5 percent of the total investment and loans for the agricultural industry.²⁾
 - In addition to financial investment and loans for damage compensation and competitiveness enhancement, tax benefits and institutional support for management and income stabilization and farming condition improvement will be expanded.³⁾

2) During the scheduled support period, it is legally guaranteed that even if the number of beneficiary farmers increases, damage compensation will be continuously carried out regardless of the amount of the budget.

3) Tax benefits include the non-taxation of livestock farm income, the expansion of zero-duty benefits for imported feed, the increase of supply of tax-free oil and the maintaining of zero-rate VAT for farming equipment and materials such as assorted feed, fertilizers and pesticides (for the next ten years). Institutional support includes the expansion of credit guarantee limit for farming and fishing households, the extension of the number of target items and the range of disaster insurance coverage, and the revision of the Farmland Act to protect farmers who rent farmland.

1.2. Implementation of FTA Complementary Measures for Domestic Industry

☐ **From 2004 to 2007, a total of 723.9 billion won of budget was allocated to the Korea-Chile FTA funding project, and 628.2 billion won of the budget was used to support the investment and loan and the business cessation in the fruit sector.⁴⁾**

- Projects for the fruit sector, including the modernization and expansion of orchards and the construction of APCs (Agricultural Products Processing Center), were supported by 427.2 billion won of investment and loans, and 201 billion won was allocated to aid the cessation of orchards which used to grow peaches, greenhouse grapes and kiwis.⁵⁾

☐ **From 2008 to 2013, the total investment and loan budget allocated to FTA complementary measures for the agricultural sector was 13.3279 trillion won, and 12.9467 trillion won has been used.⁶⁾**

- Before the effectuation of the FTAs with the US and the EU, several urgent projects for the competitiveness improvement were reflected on the budget allocation from 2008 in advance.
- In the early stage, these projects brought poor performance due to the postponed effectuation of the FTAs. As the Korea-EU FTA and the

4) By 2007, the implementation rate of the Korea-Chile FTA funding project was 86.8 percent, and the project was incorporated as part of the Korea-US FTA complementary measures from 2008.

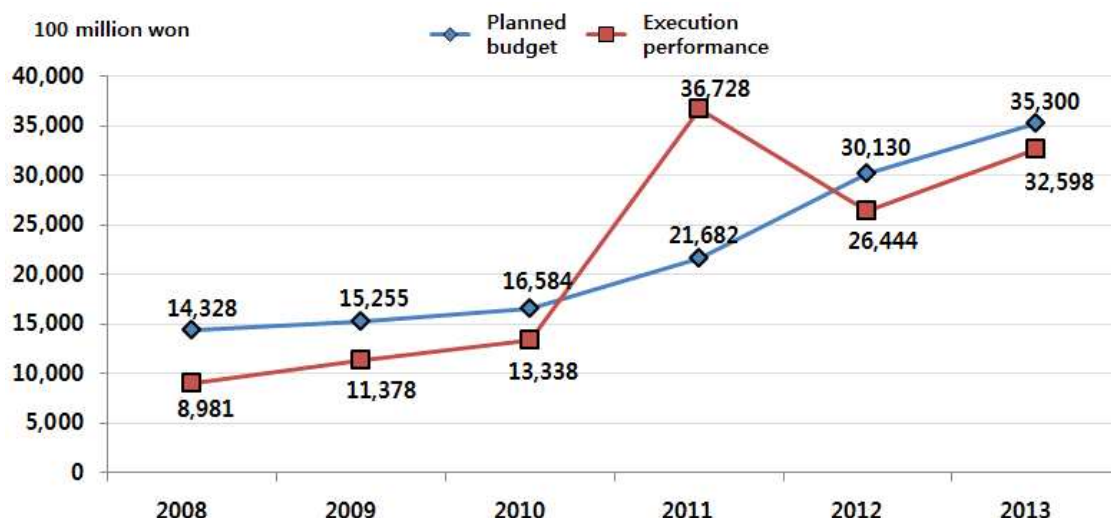
5) The business cessation support project ended after additional 36.7 billion won of financial support was used in 2008, the fifth year since the effectuation of the Korea-Chile FTA.

6) The detailed projects related to the FTA complementary measures are presented in Attached Figure 1 (data collected as of 2013), and the budget execution performance of each project between 2008 and 2013 is illustrated in Attached Table 1.

Korea-US FTA were effectuated, however, the implementation rate of these projects has improved.

- In 2013, the budget execution performance of the complementary measures amounted to 3.2598 trillion won, and the execution rate compared to the allocated budget was 92.3 percent.
- The excessive execution of the budget in 2011 was attributed to the compensation for stamping-out and disposal of FMD-affected livestock (1.6678 trillion won).

Figure 2. Budget Plan and Performance of FTA Complementary Measures for the Agricultural Sector



Note: The Korea-EU FTA budget includes data from 2011.

Source: Ministry of Agriculture, Food and Rural Affairs.

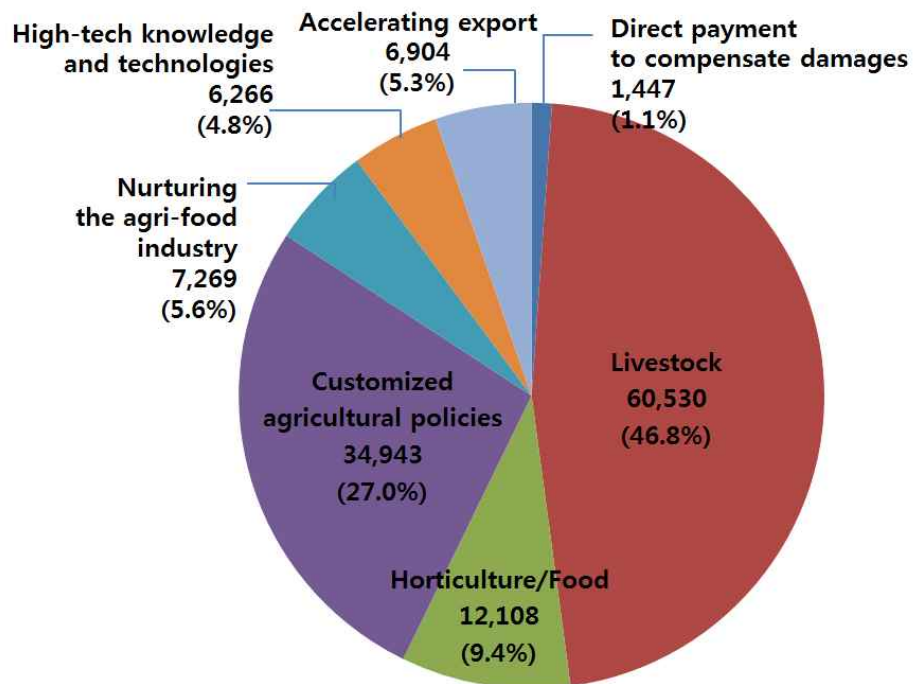
- Over the last six years, 46.8 percent (6.053 trillion won) and 27 percent (3.4943 trillion won) of the total financial support were allocated to improve the competitiveness of the livestock industry and to promote the customized agricultural policies, respectively.
- 1.2108 trillion won (9.4%) of investment and loans were allocated to strengthen the competitiveness of the horticultural and food industries. Moreover, in order to create a new growth engine in the agricultural sector, the agri-food industry and the high-tech knowledge and

technology industry were supported with 726.9 billion won and 626.6 billion won, respectively.

- In 2013, 26.1 billion won of direct payments to compensate damages and 81.9 billion won of subsidies to support business cessation were granted to farms with Korean native cattle and calves that satisfy the requirements of the FTA damage compensation measures.

Figure 3. Budget Execution Performance of the FTA Complementary Measures of Each Industry (Sum of Figures from 2008 to 2013)

Unit: 100 million won



Source: Ministry of Agriculture, Food and Rural Affairs.

□ **From 2008 to 2013, the proportion of the execution performance of the FTA complementary measures in the total fiscal expenditure in the agri-food sector is 16.7 percent.**

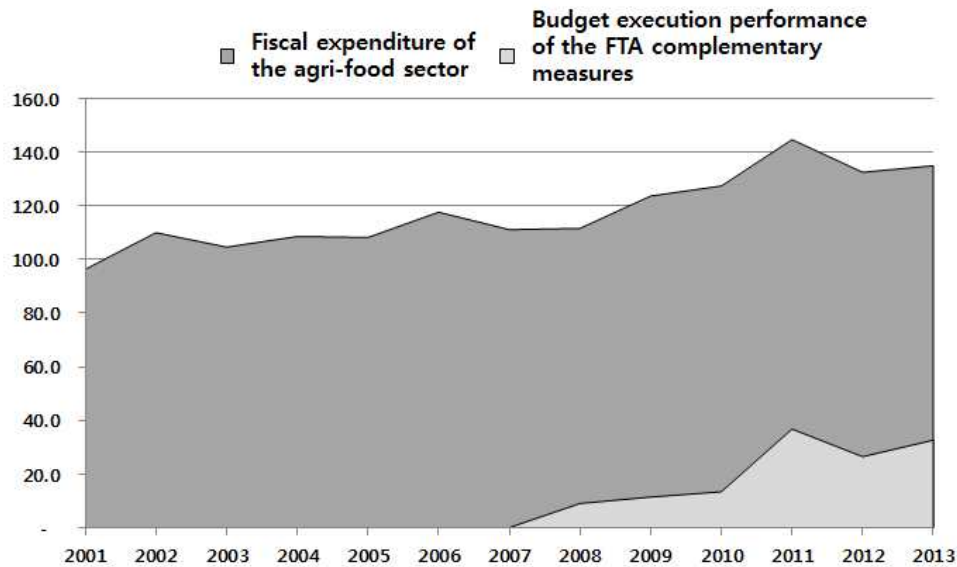
- Based on the settlement data, the fiscal expenditure of the agri-food sector including the FTA complementary measures increased by 1.4 times from 9.6 trillion won in 2001 to 13.2 trillion won in 2012. The average annual increase rate is 3.2 percent. (The budget for this sector in 2013 is 13.5 trillion won.)
- As the investment and loan budget for the FTA complementary measures started to be executed from 2008, the fiscal expenditure of the agri-food sector has been on the rise, while the fiscal expenditure of the existing agricultural projects has been reduced (Δ 0.4%).⁷⁾
 - From 2008, the average annual increase rate of the national budget was 5.6 percent, but that of the agri-food sector was only 4.2 percent.
- It is necessary to maintain continuous growth of the agricultural sector by allocating additional budget to redeem the income loss (the decrease in the agricultural output) caused by the effectuation of the FTAs.
 - When the fiscal expenditure of the agricultural sector increases by 1 percent, the output of the agricultural and forestry industries increases by 0.12 percent.⁸⁾

7) The average fiscal expenditure of the agri-food sector from 2001 to 2007 was 10.81 trillion won, and that of the existing agricultural policies (except for the FTA complementary measures) from 2008 to 2013 was 10.7650 trillion won.

8) Kim Mee-bok *et al.*, 2013, *A Study on the Performance Analysis of Fiscal Investment and Loan in the Agricultural Sector*, Korea Rural Economic Institute.

Figure 4. Proportions of Imports and Increased Amount of Imports of Agricultural and Livestock Products from the FTA Partner Countries

Unit: 100 billion won



Note: The fiscal expenditure of the agri-food sector in 2013 is based on 13.5 trillion won of budget in that year.

Source: Ministry of Agriculture, Food and Rural Affairs, *Annual Financial Implementation Report*, 2001-2012; “2013 Budget and Fund Operation Plan,” January 2013.

2. Outcome of Complementary Measures for Domestic Industry in Response to FTAs⁹⁾

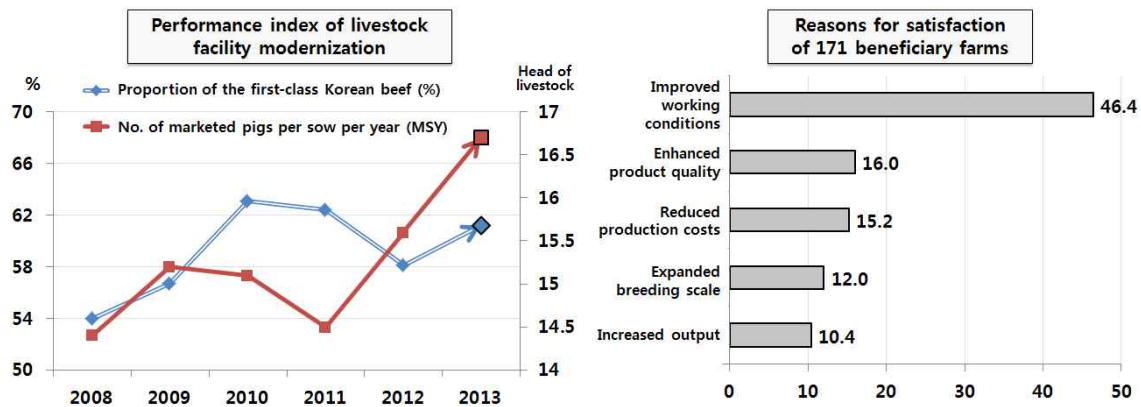
□ Thanks to the scale expansion and facility modernization, the livestock industry succeeded in reducing costs, enhancing productivity and improving quality of products.

- With the livestock facility modernization project supported with 900.7 billion won for six years, the overall livestock breeding conditions have improved, and the productivity of most species has increased.
 - The proportion of first-class Korean beef in the total production had increased from 54 percent in 2008 to 63.1 percent in 2010, but temporarily dropped later due to the outbreak of FMD. However, the rate rose again to 61.2 percent in 2013.¹⁰⁾
 - In the survey on beneficiary farmers in 2013, their satisfaction rate reached 73.1 percent (27.5 percent of the respondents were very satisfied), thanks to improved working conditions and quality of products and reduced production costs.

9) The authors extracted and summarized part of *2013 Performance Analysis Report of Support for Farmers in the FTA Complementary Measures* released by the FTA Implementation Support Center for Farmers.

10) Moreover, the average number of marketed pigs per sow per year increased from 14.4 heads in 2008 to 16.7 in 2013. The mortality rate of pigs decreased from 22.9 percent in 2012 to 16.9 percent in 2013. In case of poultry farming, the average daily gain remarkably grew from 41.6g in 2008 to 49.2g in 2013, and the mortality rate decreased from 4.9 percent to 3.6 percent in the same period.

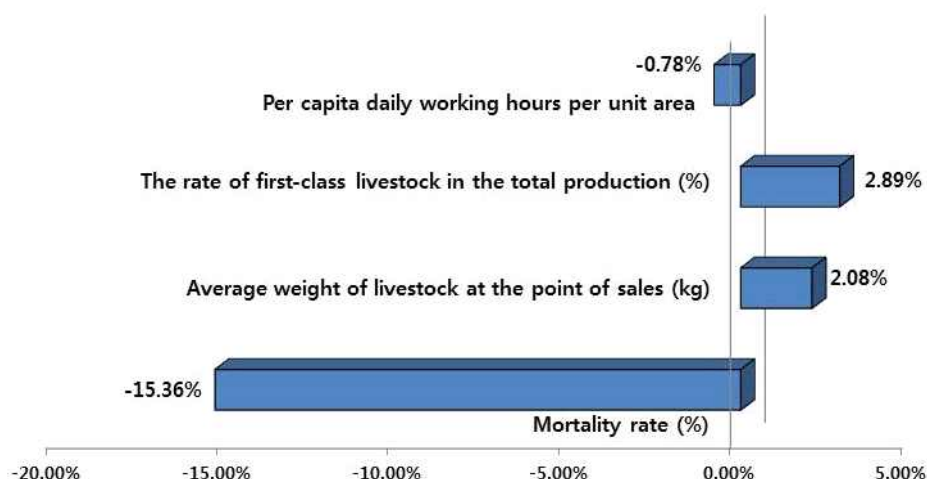
Figure 5. Performance Index and Satisfaction Level Survey of Livestock Facility Modernization Project



Source: FTA Implementation Support Center for Farmers, 2013, *2013 Performance Analysis Report of Support for Farmers in the FTA Complementary Measures*, Korea Rural Economic Institute.

- According to the comparative measurement result between farming performances of beneficiary farms (cattle on feed) supported by the facility modernization project and non-beneficiary farms in similar conditions (Propensity Score Matching), beneficiary farms produce 2.9 percent more first-class beef and 2.1 percent heavier cattle (at the point of sales) compared to non-beneficiary farms.
 - The livestock mortality rate of beneficiary farms is 15.4 percent lower, and the per capita daily working hours per unit area of these farms are 0.8 percent shorter, compared to non-beneficiary farms.
- However, the budget execution rate of the facility modernization project was only 75 percent in the case of specific projects with subsidies and loans and 38.6 percent in the case of interest make-up projects without subsidies, due to the excessive supply of Korean native cattle, burden of guarantee attributed to investment for facilities and civil complaints of residents in neighborhood.

Figure 6. The Rate of Changes in Productivity of Beneficiary Farms Supported by the Livestock Facility Modernization Project Compared to Non-Beneficiary Farms



Note: The survey was conducted on 447 Korean beef cattle farms as samples of the Agricultural Outlook Center at the Korea Rural Economic Institute.

Source: FTA Implementation Support Center for Farmers, 2013, *2013 Performance Analysis Report of Support for Farmers in the FTA Complementary Measures*, Korea Rural Economic Institute.

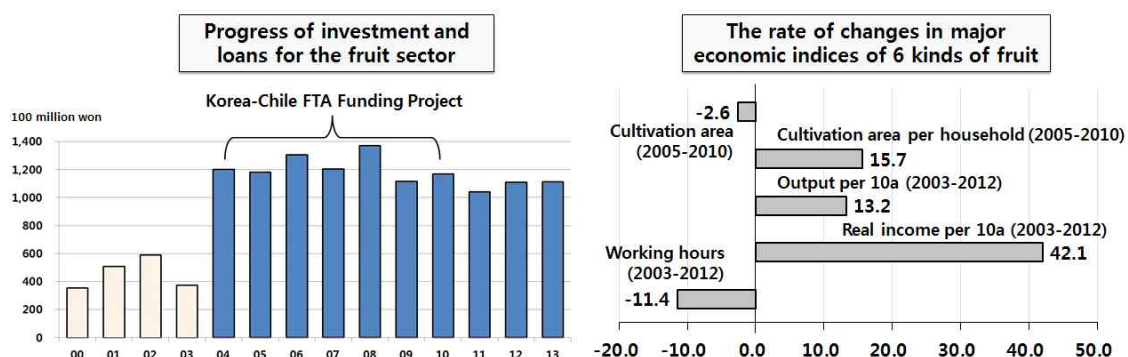
□ Over the past ten years, the fruit sector has obtained positive results by improving productivity, increasing added value and reducing distribution costs, thanks to 116.5 billion won of investment and loans on annual average in response to the FTAs.

○ From 2004 to 2013, along with the high-quality fruit and orchard facility modernization project supported with 540.3 billion won of budget, the orchard scale expansion project (290.5 billion won) and the APC construction project (130.4 billion won) contributed to reducing production costs and enhancing the quality of products.

- The number of professional fruit-growing farmers: 20,242 (2008) → 21,116 (2010) → 23,221 (2013)
- A total of 3,193 hectares of orchards of 4,066 farms were expanded through the orchard scale expansion project from 2004 to 2013.

- Compared to 2005, the total cultivation area of major six kinds of fruit (apple, pear, peach, citrus, grape and persimmon) decreased by 2.6 percent in 2010, but **the cultivation area per household increased by 15.7 percent** in the same period.
- In 2012, compared to 2003, **the fruit output per unit area increased by 13.2 percent**, and **the working hours decreased by 11.4 percent**. Accordingly, **the real income per 10 ares of orchard increased by 42.1 percent**.
- In 2013, the total sales of APCs reached 408.5 billion won, 28.4 percent up from the previous year.

Figure 7. Progress of Financial Support and the Rate of Changes in Major Economic Indices in the Fruit Sector

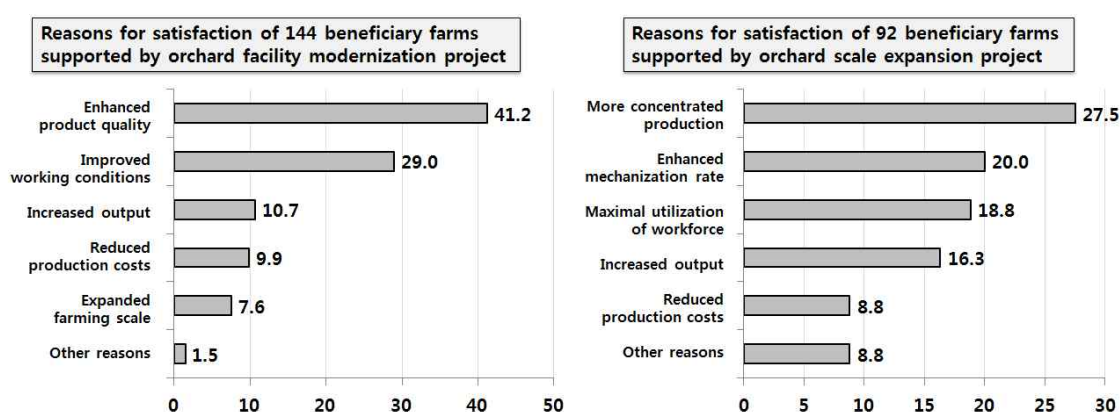


Source: Ministry of Agriculture, Food and Rural Affairs, *Revenue and Expenditure Report*, annual.
 Statistics Korea, *Agricultural Products Production Report*, annual; *Agricultural Census*, 2005 and 2010.
 Rural Development Administration, *Agricultural Product Standard Income Data*, annual.

- According to the project satisfaction level survey on 144 beneficiary farms supported by the high-quality fruit and orchard facility modernization project, the satisfaction level of these farms was 92.9 percent (49.5 percent of the respondents were very satisfied), thanks to enhanced quality of products and improved working conditions.

- The satisfaction level of the orchard scale expansion project also reached 87 percent (52.2 percent of the respondents were very satisfied), thanks to more concentrated production of fruit and the increased mechanization rate.

Figure 8. Reasons for Satisfaction from Major Horticultural Production Competitiveness Reinforcement Projects



Source: FTA Implementation Support Center for Farmers, 2013, *2013 Performance Analysis Report of Support for Farmers in the FTA Complementary Measures*, Korea Rural Economic Institute.

☐ **The differentiation of domestic agricultural and livestock products in the market has been accelerated, and food safety has been also enhanced over the entire process of production, processing, distribution and consumption.**

- Projects including restaurants' country-of-origin labeling system, **the livestock product traceability system¹¹⁾** and HACCP certification support **secured the transparency in the distribution process and enhanced consumer trust in domestic agricultural products.**

11) In 2013, the violation rate of the animal identification number system was 1.3 percent (645 out of 51,442 businesses), and the discordance rate of DNA coidentity test was 18.2 percent (576 out of 3,169 cases), which are quite low figures.

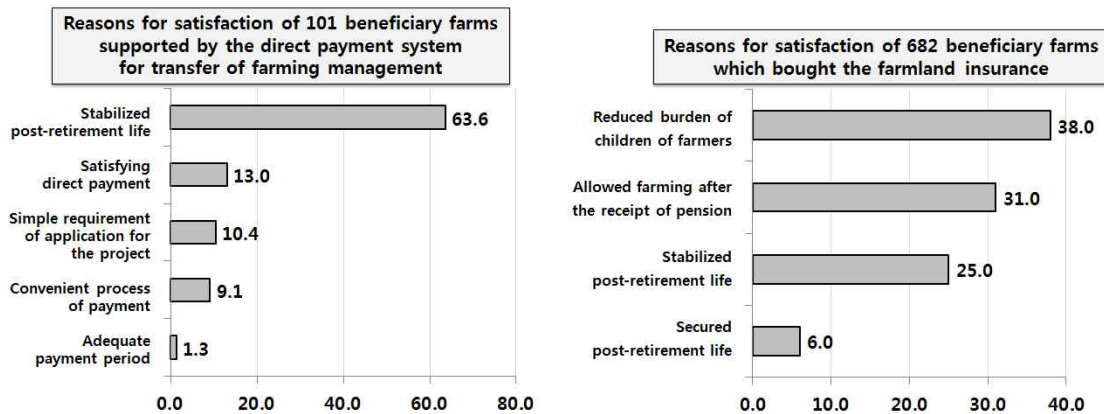
- The inquiry numbers of the beef traceability information: 1,679,000 (2009) → 7,205,000 (2010) → 13,917,000 (2013)
- The number of farms with HACCP certification: 273 (2008) → 1,682 (2010) → 2,172 (2013)
- The implementation of the eco-friendly agricultural base establishment project led to the increase of areas with eco-friendly certification within the eco-friendly agriculture complex.
 - Proportion of pesticide-free cultivation area: 6.7% (2011) → 7.3% (2012) → 7.0% (2013)
 - Proportion of pesticide-free distribution market: 6.7% (2011) → 9.5% (2012) → 12.4% (2013)
- The public awareness of agricultural food products with national certification has risen, encouraging and vitalizing the consumption of eco-friendly agri-food.
 - Consumers' awareness of agri-food with national certification: 46.6% (2011) → 50.3% (2012) → 56.3% (2013)
- **The overall conditions of domestic agriculture have been strengthened by stabilizing income of small-scale farms, securing post-retirement lives of elderly farmers, expanding the scale of professional farms and stabilizing farming management (risk management).**
 - Farmlands purchased through various projects, including the purchase and reserve of farmland, the direct payment system for transfer of management and the farmland pension, have been leased out and transferred to professional farmers or those in their 20s and 30s. These projects have contributed to stabilizing post-retirement lives of farmers, redistributing and expanding farmland resources and enhancing the food self-sufficiency rate.
 - Through the farmland purchase and reserve project starting from 2010, a total of 2,651 hectares of farmlands in the agricultural

development region have been purchased by 2013 from retired elderly farmers or those who wanted to quit farming and change their jobs.¹²⁾

- Through the project of the direct payment system for transfer of farming management, 2,186 elderly farmers transferred 1,952 hectares of farmland in 2013, and 1,876 hectares out of them (except for 76 reserved hectares) were transferred to 1,960 farmers including professional farmers, contributing 0.96 hectares of increase of per capita farming area.
- From 2011 to 2013, the farmland pension project supported 2,927 cases of insurance contracts with 45.2 billion won. The rate of policy-holders increased from 6.7 percent in 2011 to 17.4 percent in 2013.
- The satisfaction levels of participating farmers supported by the direct payment system for transfer of farming management and the farmland pension project were 76.2 percent (35.6 percent were very satisfied) and 77 percent (51 percent were very satisfied), respectively.

12) Through the farmland purchase and reserve project, about 10,000 tons of rice were produced. The average age of farmers who rented farmland was 46, 19 years younger than the national average age of farmers. Participating farmers of this project showed a high level of satisfaction thanks to alleviated burden of purchase and sales of farmland, reduced rent fees (reasons of leaseholders), stabilized income and reasonable purchase price (reasons of sellers). The satisfaction levels of leaseholders and sellers were 84.2 percent (42.9 percent was very satisfied) and 77.5 percent (9.9 percent was very satisfied), respectively.

Figure 9. Reasons for Satisfaction from the Direct Payment System for Transfer of Farming Management and the Farmland Pension Project

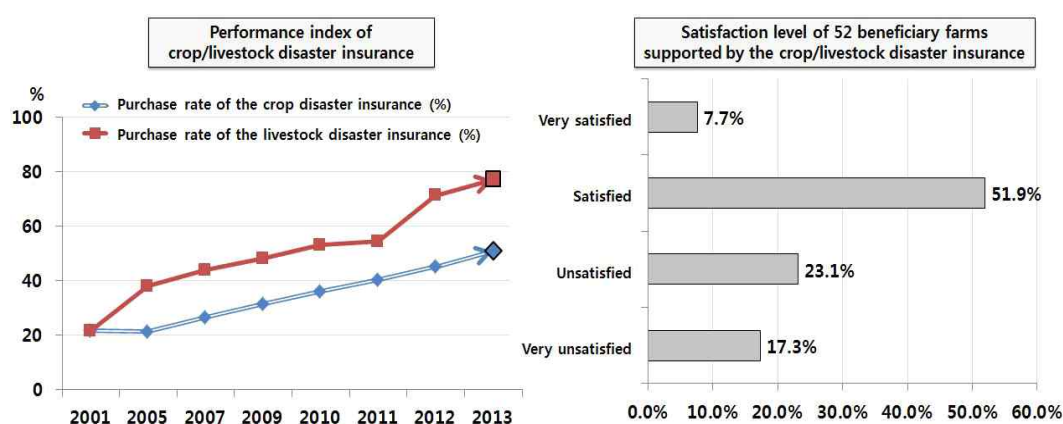


Source: FTA Implementation Support Center for Farmers, 2013, *2013 Performance Analysis Report of Support for Farmers in the FTA Complementary Measures*, Korea Rural Economic Institute.

- The number of policy-holding farmers of the agricultural disaster insurance is on the rise due to the expanded coverage and the increased number of target items. The disaster insurance has settled as a method for risk management and income stabilization of expanded farms.
 - As of 2013, a total of 56 items with additional 5 items were covered by the agricultural disaster insurance (crops and livestock), and its coverage range was also expanded to include diseases and harmful insects, damages by wild animals and fire incidents.
 - In addition, the purchase rate of the crop (livestock) disaster insurance increased from 40.2 (54.5) percent in 2011 to 51 (80.6) percent in 2013, along with the development of customized insurance plans including the connection with agricultural facilities and diversification of the proportion of self-payment.
 - Over the last five years, **farms which purchased the disaster insurance (more than once) were estimated to earn 9.1 percent more agricultural income (and 3.8 percent more farm income) compared to those without insurance.**

- According to the survey on beneficiary farms, their satisfaction level towards the disaster insurance was 59.6 percent (7.7 percent was very satisfied), which is quite a high level, thanks to reduced risk of farming management and alleviated economic burden.¹³⁾

Figure 10. Performance Evaluation and Satisfaction Level of the Crop/Livestock Disaster Insurance Project



Source: FTA Implementation Support Center for Farmers, 2013, *2013 Performance Analysis Report of Support for Farmers in the FTA Complementary Measures*, Korea Rural Economic Institute.

- In 2013, a total of 29.1 billion won was granted to 220,000 farms (73,000 hectares of farmland) with 26 kinds of items for the upland farming direct payment system which was introduced in 2012, but the implementation performance was low because of the strict requirements (over 0.1 hectares of cultivation area, requirements for urban residents, prohibited double payment with other direct payments) and non-application of small-scale farms due to small-sum receipt of direct payments.

13) Reasons of farmers who were not satisfied with the agricultural disaster insurance included “allowance smaller than expected” (28.6%) and “low accuracy and fairness of the appraisal method of damages” (28.6 percent).

□ **Agriculture has been vitalized by securing agricultural manpower, improving farming conditions, developing technologies and supporting front and back industries.**

○ The authorities have established the software infrastructure by nurturing farmers of future generation, conducting education and training programs for farmers, providing consulting for farming management and offering the rental service of agricultural machines.

- For the purpose of nurturing new agricultural manpower, the government selected 136,542 future generation farmers from 1981 to 2013 (9,612 after 2008), and additionally provided financial support for the improvement of management in the form of interest make-up to establish farming base (new farmers of future generation) and expand the scale of the industry (exemplary farmers of future generation).
- When the budget of agricultural education increases by 10 percent, agricultural labor productivity grows by 1.67 percent.¹⁴⁾
- **After the consultation for agricultural management, the average sales of farm businesses increased by 29.2 percent from 1.99 billion won to 2.57 billion won, and the net profit also grew by 17.6 percent from 69 million won to 81 million won.**
- The number of farms which rented agricultural machines increased from 36,000 in 2008 to 210,000 in 2013. The working days per machine also increased from 6.5 days in 2009 to 10.1 days in 2013.

14) Ma Sang-Jin *et al.*, 2013, *Road Maps for Promoting Advanced Agricultural Human Resource through Agricultural Education and Training System*, Korea Rural Economic Institute.

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- In case of the national food cluster establishment project in 2013, 26 companies/organizations showed intention to move into the cluster, which is twice the expected figure. The number of food companies and research institutes that have signed an MOU with the project is also on the rise.
 - The number of food companies and research institutes that have signed a MOU with the project: 32 (2010) → 62 (2012) → 88 (2013)
 - The national food cluster will be constructed in Iksan, North Jeolla Province from the first half of 2014, and its sale in lots will begin in the second half of the year.
 - The project of nurturing the seed industry has contributed to reproducing Korean varieties and establishing the foundation of dissemination.
 - The dissemination rate of Korean seeds (strawberry, rose, etc.): 40.0% (2010) → 49.2 (2012) → 51.9 (2013)
 - The golden seed project, which started in 2012, will be continuously carried out by 2021 for ten years, provided with 491.1 billion won of financial support (92.6 billion won from the private sector).

3. Drawbacks and Improvement Direction

3.1. Drawbacks

☐ Dispute over the support amount of investment and loans

- The agricultural sector raises complaints that the short-term damage compensation is insufficient and that the support amount is exaggerated as the mid- and long-term finances for investment and loans are overlapped with the existing support measures.
 - The appropriation of part (8 trillion won) of funds for the agricultural and rural development plan (119 trillion won); the incorporation of the Korea-Chile FTA complementary measures (after 2008); and overlapped measures of the livestock industry (the livestock industry development plan, the Korea-US FTA and the Korea-EU FTA complementary measures)
- In contrast, the non-agricultural sectors have critical perspective that the financial support for the agricultural sector is excessive.
 - The non-agricultural sectors point out that income loss due to the FTAs is overestimated (quarantine measure is assumed to be removed) and that the countermeasures are improperly designed (the Board of Audit and Inspection of Korea, July 2013). In addition, there was a dispute over the gap between predicted damage from the FTAs and real damage after the effectuation of the FTAs (the Special Committee on Trade Relations of the National Assembly, March 2014).
- Furthermore, the non-agricultural sectors point out that the government caused misunderstandings and controversies over the effectiveness of the FTA complementary measures by releasing the entire support amount at once, not making a distinction among subsidies, loans and

interest make-up plans, which are much different support methods from each other.

□ Insufficient distinctive features compared to existing agricultural policy projects

- The FTA complementary measures—the establishment of production base, farming management stabilization, the nurturing of industries and technology development—have already been included in existing agricultural policies.
 - The authorities reclassified existing agricultural policy projects not closely related to the FTA implementation into the FTA complementary measures, and extended the period and increased the support amount of these projects.
- Some criticize that the authorities exhausted a large amount of investment and loans by calculating the total amount of compensation—reserved fund for disposal of livestock due to the outbreak of animal diseases (FMD, AI)—as the execution performance of the FTA complementary measures.

□ Dispute over excessive expectation of farmers towards the short-term damage compensation plans and the effectiveness of the these measures

- The delay of the legalization of the import contribution ratio of the direct payment for damage compensation leads to unnecessary misunderstanding and conflicts.
 - As the establishment of the farm income safety net has been delayed, expectations on the direct payments for damage compensation (including request for compensation for falling price with no relation with the FTAs) are excessively growing.

- The agricultural sector is now faced with the need to improve overall institutions due to the low effect of damage compensation, irrational requirements, rate and period of compensation, and side-effects of support for business cessation.
 - Considering the application of the import contribution ratio, the direct payment system for damage compensation should be complemented.
 - Several projects, including the peach orchard cessation support (peaches were not imported after the effectuation of the Korea-Chile FTA, and the orchards recovered cultivation area within five years after a large-scale cessation of businesses), can expand the supply and demand and price volatility while having a low effect on restructuring.
 - In terms of the business cessation support system, leaseholders are restricted to apply for cessation (they need agreement of lessors) due to additional regulations on livestock facilities with consideration for the special characteristics of the item.¹⁵⁾

□ The customized agricultural policies are insufficiently operated, and farmers are increasingly exposed to management risks.

- The income stabilization programs for vulnerable farmers (small-scale farmers, elderly farmers) are inadequate, and the support project for restructuring also shows poor performance.
 - The establishment of the income safety net has been delayed as the plan of introducing a direct payment system to protect income by farm has been canceled; the incorporation and reorganization of the

15) Meanwhile, it is necessary to grant exception for leaseholders in hardships of livestock farm management due to the FTAs from the facility regulations of the current business cessation system.

direct payment system has been delayed; and the implementation of the income guarantee insurance is uncertain.

- The scaling up and restructuring support projects for the direct payment system for transfer of farming management and the farmland pension are insufficiently operated.

- Farmers are increasingly exposed to the management risk factors because those participating in the FTA investment and loan projects (loans, interest make-up plans and self-payment) have financial burdens caused by interest rate, guarantee and debt.

□ The satisfaction level towards the facility modernization project for individual farming businesses is high, but there are concerns on oversupply.

- The satisfaction level towards large-scale support for facilities of businesses by item or region (including producers' organizations) and projects related to education, training and consulting is relatively low.
- Given an increasing amount of imported agricultural and livestock products, the facility modernization support for individual businesses without adjustment duty of supply and demand can cause oversupply.

3.2. Improvement Direction

☐ Strengthening the distinctiveness with general agricultural policy projects by developing projects with a close relation with the FTAs

- Readjusting the current investment and loan plans by reviewing the feasibility of each project as an FTA complementary measure, reflecting the performance evaluation result and developing new projects based on the policy demand of farmers
 - Reducing a budget of projects with overinvestment or low performance, while increasing a budget of projects with potential damages from import or high policy demand, thereby enhancing the efficiency of financial investment¹⁶⁾
- Switching the renovation plan for the production base with a low connection with the FTAs to a general agricultural policy project, and pushing forward investment and loan plans for the expansion of demand and consumption base of domestic agri-food as FTA complementary measures
 - Introducing a voucher program to vitalize the consumption of domestic agri-food and improve dietary lives of low-income households;¹⁷⁾ operating public television home shopping programs

16) In accordance with the FTA Assistance Special Act, the government submits the *Performance Analysis Report of Support for Farmers in the FTA Complementary Measures* to the National Assembly by the end of every May from 2013. The report includes each project's budget execution performance, beneficiaries' satisfaction and farmers' policy suggestions.

17) In Korea, there is no voucher program related to the purchase of food products, but it is possible to consider introducing the in-kind agri-food support system for beneficiaries of the National Basic Livelihood, like the Food Stamp Program in the US. A food stamp is a coupon granted to low-income or no income classes. Beneficiaries can use the stamps as cash in large supermarkets through the identification process. However, those aged 16 to 60, who have a capability to work, should participate in the employment and training program

selling agri-food;¹⁸⁾ expanding public school meals; accelerating the export of agri-food, etc.

- The facility modernization project for individual farming businesses, which may cause oversupply, can be implemented by connecting with organizations of items which can control the amount of shipment.
- Excluding the existing measures' support amount when designing complementary measures for additional market opening (FTAs with China, Australia, Canada and New Zealand and TPP)
 - Establishing investment and loan plans to minimize expected damages and compensate real damages, focusing on the fields which were excluded in the existing FTA complementary measures (upland crops, rural development, farmers' welfare)
 - Expanding the proportion of support for software (human resources, system improvement, etc.) rather than hardware (facilities)
 - When developing investment and loan plans, revising relevant laws and regulations to enable supporting facilities of items that are emerging as profitable crops, in addition to existing items that have been designated as the target of support plans
 - Specifying the fiscal expenditure of each type of support (subsidies, loans and interest make-up plans), and excluding the expenditure as reserved funds for potential incidents (such as disposal of livestock) from the execution performance of the FTA complementary measures

and work after the program.

18) Given an increasing number of people using home shopping, online shopping and mobile shopping with smartphones, it is necessary to secure a public TV home shopping channel to sell agri-food as part of the FTA complementary measures. If a barrier of high commission is lowered, a TV home shopping can be a method for both sales and promotion, thus providing an efficient market for small-scale agri-food companies and farmers.

□ Improving the effectiveness of the FTA complementary measures and increasing the satisfaction level of farmers towards related policies

- When applying for the loan plan in the FTA complementary measures, farmers feel burdened the most by high interest rate and guarantee requirements. Therefore, it is necessary to reduce the interest rate of loans for each project, ease the requirements for guarantee, and expand the guarantee support.¹⁹⁾
 - Given that the benchmark interest rate of the government is 2.5 percent, the interest rate of the loan project is relatively high (3-4 percent). The interest make-up project also shows low performance due to the burden of guarantee. Given the high proportion of debt, many farmers fail to receive facility investment support as their guarantee cannot afford the scale of facility investment.
 - It is necessary to select exemplary farms and companies based on preliminary assessment and performance evaluation, and then review the provision of incentives including the graded interest rate of loans, the raised limit of guarantee and support, and the extended application period.
- In terms of the direct payment projects, the authorities should make the unit payment and requirements realistic to improve the satisfaction level and participation of farmers and the effectiveness of the projects.
 - It is necessary to make the unit payment realistic for the efficient operation of projects including the direct payment for transfer of

19) In terms of the livestock facility modernization project and the special vehicle support project for livestock and egg transportation, the interest rate is 3 percent, which is not low compared to the open market interest rate, and the support method is a combination of loans and self-payment. Therefore, farmers' demand for these projects is low due to insufficient benefits and the lack of guarantee.

farming management,²⁰⁾ the direct payment for upland farming,²¹⁾ the direct payment for less favored areas, the scale expansion of orchards, the purchase and reserve of farmland and the farmland pension. In particular, the appraisal and assessment, not the official land price, should be the standard of the evaluation of farmland value.

- It is also essential to rearrange relevant laws and regulations related to the implementation of the short-term FTA damage compensation measures, and find provisions of evidence for the implementation of relevant institutions on the import contribution ratio and the right of using livestock facilities after business closure.
 - In terms of the direct payment system for damage compensation, it is necessary to legalize the import contribution ration system and increase the proportion of damage compensation (90% → 100%), and also prevent moral hazard of farmers by specifying the restrictions (five years) on the right to use farming facilities (including economic activities such as cultivation, breeding, lease and consignment) after business cessation support.
 - The direct payment system for damage compensation is operated during ten years of temporary period under the FTA Assistance Special Act, so the authorities should consider incorporating this system into comprehensive farming management and the income safety net program in the long term, beyond a simple damage support in response to market opening and falling price.

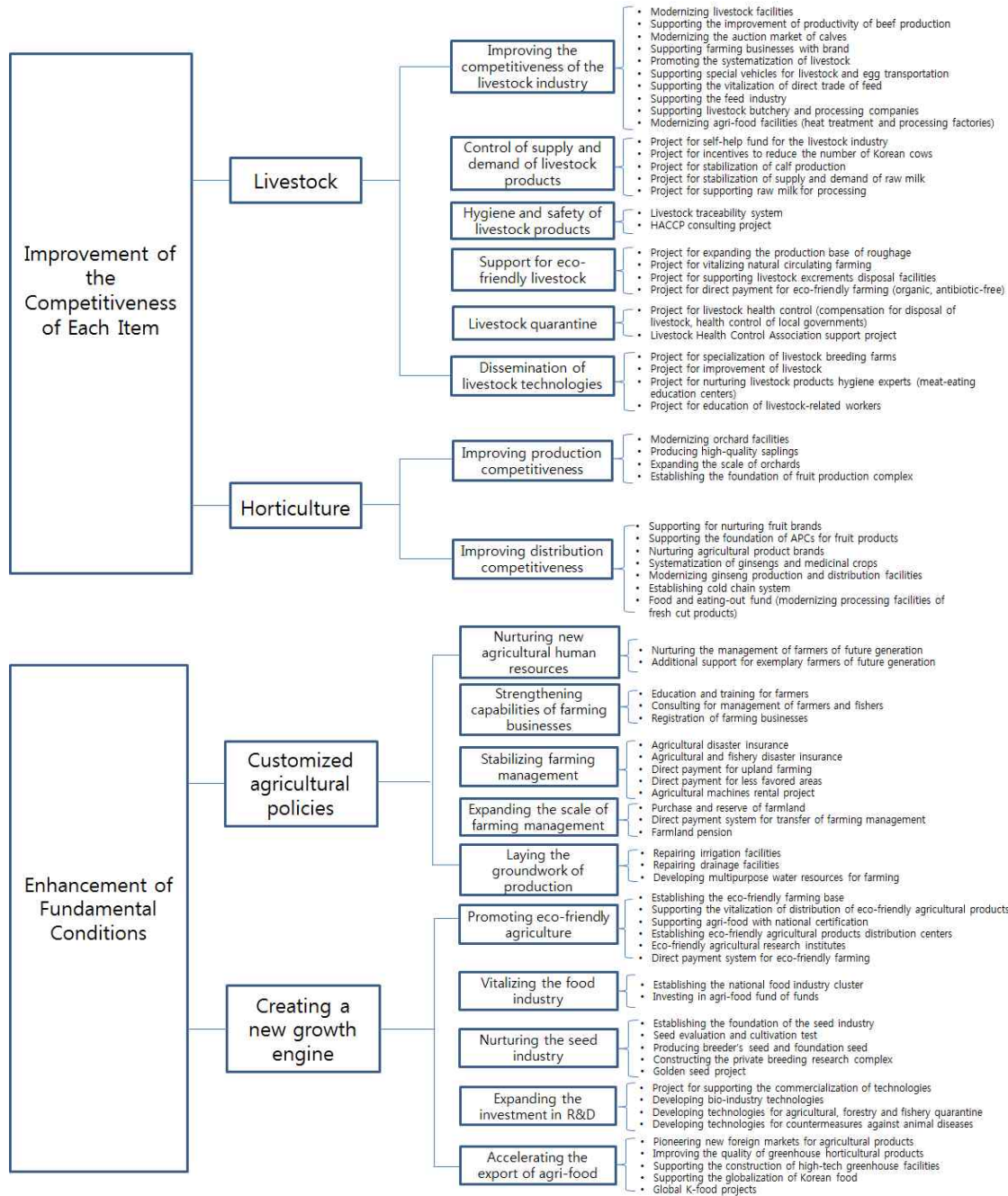
20) According to the survey on beneficiaries of the direct payment system for transfer of farming management in 2013, some (23.8%) were not satisfied with the system, and the biggest reason (83.3%) was small payment (250,000 won per hectare per month).

21) In 2013, the budget execution rate of the direct payment system for upland farming was 44 percent, which is low. It was because small-scale farmers gave up applying for the system due to the small payment and there were several restrictions (farmers cultivating less than 0.1 hectares are excluded; urban residents are excluded; and double payment with other support plans such as the eco-friendly agricultural direct payment is prohibited).

- The business cessation support system should be reformed not to make up for the cessation of farming business but to assist a smooth cessation process by supporting direct expenses for cessation and providing consulting.
- For customized agricultural policies, the government should clearly distinguish between different types of policies: those to improve the competitiveness of the agricultural industry in response to market opening and lead the growth of the industry; and those to compensate direct and indirect damages caused by the effectuation of the FTAs.
 - Encouraging expanded professional farms to participate in competitiveness-building programs, and providing damage compensation programs to help farmers manage their businesses before retirement with minimum income²²⁾
 - Due to the high proportion of loan project in the FTA complementary measures, farms participating in these investment and loan projects may be faced with bankruptcy caused by a failure in farming management or financial burdens. Therefore, the government should consider providing programs to support the revival of farming management as part of the FTA complementary measures.

22) For instance, in terms of the farmland purchase and reserve project, the age limit could be tightened for sellers, but the unit price of purchase should be increased to secure the minimum level of life for farmers. At the same time, the requirements for leaseholders could be strengthened to reinforce the competitiveness, but the rent fee for them should be reduced. Furthermore, it is necessary to encourage farmers who can improve competitiveness and compete with imported agricultural products to invest in facilities by providing low-interest loans, while providing increased subsidies to small-scale farmers who just want to manage farming business before retirement to help them continue managing their businesses.

Attached Figure 1. 18 Project Groups and Specific Projects in the Mid- and Long-term FTA Investment and Loan Sector



Attached Table 1. Budget Execution Performance of 18 Project Groups of the FTA Complementary Measures

Unit: 100 million won, %

Policy goals	Execution rate	2008	2009	2010	2011	2012	2013	2008-13 (SUM)
FTA complementary measures (1+2+3+4+5)	Budget	14,328	15,255	16,584	21,682	30,130	35,300	133,279
	Performance	8,981	11,378	13,338	36,728	26,444	32,598	129,467
	Execution rate	62.7	74.6	80.4	169.4	87.8	92.3	97.1
1. Improvement of the competitiveness of the livestock industry	Budget	3,555	4,666	4,588	10,008	14,046	15,745	52,608
	Performance	2,298	3,983	4,274	26,163	10,240	13,572	60,530
	Execution rate	64.6	85.4	93.2	261.4	72.9	86.2	115.1
Strengthening the competitiveness of the livestock industry	Performance	147	1,125	1,217	4,495	4,702	8,649	20,335
Controlling supply and demand of livestock products	Performance	330	551	344	546	1,249	614	3,634
Improving hygiene and safety of livestock products	Performance	139	207	247	219	262	207	1,281
Supporting eco-friendly livestock	Performance	1,370	1,760	1,951	1,887	2,093	2,465	11,526
Livestock health control	Performance	-	-	-	18,523	1,499	1,191	21,213
Disseminating of livestock technologies	Performance	312	340	515	493	435	446	2,541
2. Improvement of the competitiveness of the horticultural industry	Budget	2,566	2,318	2,458	1,849	1,930	2,042	13,163
	Performance	2,044	1,985	2,135	1,859	2,073	2,012	12,108
	Execution rate	79.7	85.6	86.9	100.5	107.4	98.5	92.0
Strengthening the competitiveness of production	Performance	1,166	1,071	1,081	945	1,016	1,071	6,350
Strengthening the competitiveness of distribution	Performance	878	914	1,054	914	1,057	941	5,758
3. Customized agricultural policies	Budget	3,760	4,664	5,357	6,016	9,234	10,235	39,266
	Performance	2,624	3,049	3,989	5,211	9,944	10,126	34,943
	Execution rate	69.8	65.4	74.5	86.6	107.7	98.9	89.0
Nurturing new agricultural human resources	Performance	1,308	1,120	815	853	1,343	1,409	6,848
Reinforcing capabilities of farming businesses	Performance	259	543	549	455	559	459	2,824
Stabilizing farming management	Performance	926	1,062	1,313	1,665	4,865	2,783	12,614
Expanding the scale of farming businesses	Performance	131	324	1,312	2,238	2,376	2,525	8,906
Establishing the production base	Performance	0	0	0	0	801	2,950	3,751
4. Creation of new growth engines	Budget	2,447	2,707	3,631	3,259	4,020	6,378	22,442
	Performance	1,648	2,361	2,940	3,495	4,187	5,808	20,439
	Execution rate	67.3	87.2	81.0	107.2	104.2	91.1	91.1
Promoting eco-friendly farming	Performance	623	631	456	1,116	1,025	1,147	4,998
Vitalizing the food industry	Performance	0	20	537	540	540	634	2,271
Nurturing the seed industry	Performance	104	129	145	163	183	431	1,155
Expanding the investment in R&D	Performance	735	885	1,022	813	881	775	5,111
Accelerating the export of agri-food	Performance	186	696	780	863	1,558	2,821	6,904
5. Direct damage compensation	Budget	2,000	900	550	550	900	900	5,800
	Performance	367	0	0	0	0	1,080	1,447
	Execution rate	18.4	0.0	0.0	0.0	0.0	120.0	24.9
Direct payment for damage compensation	Performance	0	0	0	0	0	261	261
Business cessation support system	Performance	367	0	0	0	0	819	1,186

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