

The Development of Organic Farming in the DPR Korea

1. Background

The Development of Organic Farming in the DPR Korea is closely related to the policy of the government encouraging the sustainability of agriculture.

It comes from the specific features of the socialist regime.

In the DPRK, the agriculture is considered as the important economical area for solving the food question.

The question regarding the sustainable development of agriculture has its background for a long time in DPRK which was presented as an urgent task in the 1990's.

The world's trends towards the development of organic agriculture and the negative impact of chemical fertilizers promote the government of DPRK to formulate new policy of sustainable development of agriculture to suit to the new century.

Putting forward the agriculture as the main front of economic construction, the DPRK government is devoting a great effort for the development of agriculture.

Especially, the government has taken several active measures for settling problems in line with soil, water, seeds and fertilizers, the main basis of agriculture, to suit our specific conditions and the requirement of new century.

Mobilizing all the economic and technological potentialities and possibilities of the country the government is laying the solid basis for the sustainable development through the successful undertaking of re-zoning of all the fields of the country to the standard plots

From this point of view, the Government of the DPR of Korea presented a new strategy to do farming using little or no chemical fertilizer, and put great emphasis in this field.

Thanks to the popular policies of the Government, the DPR of Korea has clean natural ecological environment and rich resources of organic trade.

During the past period, emphasis was put on the development of agricultural science and technology to provide technical basis and experiences to a certain degree in the field of agriculture.

In October 2003, therefore, the Organic Agriculture Development Association of DPR of Korea (OADA) was organized.

The OADA, based on the Government policies of agriculture development and practical realities of the country, defined the organic agriculture as “the economic sector that produces the agricultural and marine products, wooden ware, foodstuff, medicament, cosmetics, daily necessities, craft work products,



spinning and weaving and so on without chemical, physical, biological pollution, as results of concerning materials and methods in the viewpoint of thinking the whole structure of production & management, including space-time elements, the same as life organism.

Organic agriculture development in the DPR of Korea is considerably different from that of other countries that aims at gaining economic benefits from producing organic products with high value-added tax. The DPR of Korea's aim is to limit to the maximum the use of chemical complex including chemical fertilizer and agrochemicals to protect and improve the agricultural ecology and sustainably develop the agricultural production. On this basis, an ecological high-yielding production system will be established.

The OADA has selected a farm of 800 ha as a pilot farm of organic agriculture to do experiments of applying organic agriculture materials such as bioorganic fertilizer to the crop cultivation.

The OADA plans to strengthen its capacity and the basis of production and technology, and to create the circumstance of policy of producing organic products in order to develop the production and trade of organic products in the DPR of Korea.

As "The law of the Organic Industry of the DPR of Korea", in the 23rd of November 2005, was adopted, the OA has become to be positively supported and promoted.

At present, the DPR of Korea is not increasing necessary state assistance and investment because of temporary economical difficulties. However, she is rich in resources, experiences and potentiality to develop techniques, and will make an active contribution with the future development of economy to increasing organic agricultural entities that fit in with the actual conditions of the country and to achieving sustainable development.

The conclusion is that the organic agricultural development in the DPR of Korea is nothing but the beginning from its stage of recognition to the performance, thus requiring more international cooperation and technical interchange in this field.

The international cooperation and investment to the organic agricultural field will certainly make a positive contribution to developing the sustainable economy and improving people's livelihood of the DPR of Korea, especially to reducing the risk of fail in farming, stabilizing and improving peasants' living and ensuring the country's secure food requirements.

2. The Project of the OADA, From 2006 To 2008 (summary)

2.1 R&D of Green Manure

2.1.1 Variety selection

- To evaluate varieties in different locations

2.1.2 Biomass incorporation



- To test different methods and farm machinery, to make local design prototype
- To solve H₂S problem from anaerobic decomposition

2.1.3 Seed production

- To evaluate seed production methods, to implement on large scale

2.1.4 Practical use on Ssang-un farm

- To implement green manure system in rice and upland fields
- To monitor changes in soil conditions, crop yields, and to monitor labor and other input requirements, and to compare with conventional production

2.1.5 Research decay of organic matter

- To monitor decomposition rate of different green manure and different animal manure under different soil conditions
- To test methods of incorporation or cultivation for effects on decomposition rate and nutrient release

2.2 Crop Rotation Systems

2.2.1 Test different crop rotation

- Extensive test plots

2.2.2 Identify appropriate cultivars of rotation crops

- To test plots; yield & maturity monitoring

2.3 Integration of Livestock in Crop Farms

2.3.1 Develop appropriate forage production systems

- To identify appropriate forage crops for different environments, different livestock, and to select best cultivars
- To identify appropriate forage collection methods and winter storage methods

2.3.2 Develop appropriate manure handling systems

- To build test modules and to analyze nutrient content of manure, compost
- To compare confinement vs. range feeding of livestock
- To integrate manure into composting systems

2.4 Compost production

2.4.1 Identify appropriate composting systems

2.4.2 Implement compost production in research farm

- Field application of tested compost system
- Comparison of yields, soil quality between composted, green manure, and conventional farming

2.4.3 Clarify benefit of microbial fertilizers

- To test different microbial fertilizers and microbial mixes on biomass decomposition, nutrient availability in different crops and growing conditions; cost analysis of production/use of microbial fertilizers vs. crop yield effect

2.5 Crop Protection

2.5.1 Develop low-chemical insect pest control methods

- To liaise with existing IPM programs in DPR of Korea to review knowledge developed
- To test different insect control methods for major crops

2.5.2 Implement IPM on Ssang-un farm

- To apply methods and materials identified on production scales
- To evaluate economic and yield cost/benefit

2.6 Organic Certification

2.6.1 Develop Organic Products certification standards for DPR of Korea

- Research international organic standards
- To write draft organic standard for DPR of Korea

2.6.2 Implement Certification in DPR of Korea

- To develop certification laboratory

2.7 Technical Training

2.7.1 International study tours

- Delegations visit international research institutions, farms, etc
- Delegations report to colleagues on return to DPR of Korea

2.7.2 International research & study

- DPR of Korea scientists posted at international research or training institute
- Scientists report to colleagues on return to DPR of Korea

2.7.3 Access to scientific information

- Subscription to appropriate scientific journals
- Purchase of appropriate books and other publications

2.7.4 Local training of specialists

- International experts lead workshops or seminars in DPR of Korea
- DPR of Korea experts lead workshops or seminars in DPR of Korea
- Delegations abroad report and lead seminars

2.8 Farm Level Training and Propaganda

2.8.1 Preparation of training materials

- To select relevant subject matter and to communicate research results to training department
- To identify important information and content, to prepare posters, PowerPoint, other materials

2.8.2 Farmer field days

- To prepare teaching materials and site-specific information
- To invite farm managers and engineers to visit research farm and/or cooperating test farms

2.8.3 Farmer training programs

- To prepare teaching materials, and to identify and train specialists (extension agents, scientists)
- To organize appropriate physical facility (training room, dormitory, etc)
- To carry out farmer training programs

2.8.4 Publications

- To write and publish handbooks, field guides

