

## 終了時評価調査結果要約表（英文） Summary of Terminal Evaluation

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| <b>I. Outline of the Project</b>   |   |   |
| <b>Country :</b> Kyrgyz Republic   |   | <b>Project title :</b> The Project for Promotion of Exportable Vegetable Seed Production  |
| <b>Issue/Sector :</b> Agriculture  |   | <b>Cooperation scheme :</b> Technical Cooperation Projects  |
| <b>Division in charge :</b> Rural Development Department   |   | <b>Total cost :</b> 489 million Yen   |
| <b>Period of Cooperation</b>   | From June 2, 2013 to June 1, 2018 (5 years) | <b>Partner Country's Implementing Organization :</b><br>(Implementation Agency):<br>Ministry of Agriculture, Food Industry and Melioration (MAFIM)<br>(Related Organizations):<br>Seed Association of Kyrgyzstan (SAK)<br>KOSS Agriculture Cooperative (KOSS) |
|  |   | <b>Supporting Organization in Japan :</b><br>Ministry of Agriculture, Forestry and Fisheries<br>National Center for Seeds and Seedlings<br>Japan Seed Trade Association   |
|  |   | <b>Related cooperation project:</b>   |
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| <b>1. Background of the Project</b>  |   |   |
| <p>Agriculture sector is one of the basic industries of the Kyrgyz Republic, which accounts for 22% of GDP (2011) and employs more than 30% of its population. Kyrgyzstan used to be one of the main seed producers during Soviet Union time thanks to favorable environment for seed production, owing to arid climate condition and affluence of snowmelt water resources in the mountainous region. However after the Soviet Union dissolution, seed export also have fallen almost to one hundredth at present, and now the domestic market of seed is relying on import.</p> <p>The government of the Kyrgyz Republic puts the first place on export promotion of agriculture goods and agriculture processing products under “New Strategy for Agriculture Development” during the period of 2011 -2015. However, it has not yet achieved sufficient level of volume for production and exports of vegetable seeds due to lack of human resources and underdevelopment of system and seed production technologies for the producers, lack of business know-hows in private companies responsible for exportation and lack of inspection technologies necessary with vegetable seed production.</p> <p>Under such circumstance, the government of the Kyrgyz Republic submitted the official request to the Government of Japan for the technical cooperation project in order to establish and strengthen the structure to train farmers and companies which will be able to produce vegetable seed with exportable quality. The Project for Promotion of Exportable Vegetable Seed Production in the Kyrgyz Republic has started since June 2013 as 5-year project, and the four (4) Japanese experts, namely Chief Advisor, Vegetable Seed Production (2 persons) and Coordinator/Training Planning, have been dispatched at the</p> |   |   |

time of the terminal evaluation and they have engaged in their respective activities.

## 2. Project Overview

### (1) Overall Goal

Export of vegetable seed in the target area starts.

### (2) Project Purpose

Vegetable seed with exportable quality is produced in the target oblasts.

### (3) Outputs

- 1) Implementation system for seed industrial development is strengthened.
- 2) Vegetable seed production skill is disseminated through training at the training farm and Farmer Field School (FFS).
- 3) Testing skills for vegetable seed are improved.
- 4) Establishment of vegetable seed production organization is promoted.

### (4) Inputs (at the terminal evaluation)

**Japanese side :** Expert: 16 persons in total (9 long-term and 7 short-term), Trainings in Japan and Thailand: 41 persons in total, Provision of equipment: about 1.1 million Yen, Local cost expenditure: about 0.7 million Yen.

**Kyrgyz side :** Counterpart 6 persons (at the terminal evaluation), Local Cost: expenses for electricity and water (amount of expenses is not obtained), Provision of land and facility: office spaces for Japanese experts, training hall and lands for experimental cultivation and other facilities

## II. Evaluation Team

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| <b>Members of Evaluation Team</b> | <p>(1) Japanese side</p> <ol style="list-style-type: none"> <li>1) Leader: Mr. Kazuya SUZUKI, Deputy Director General, Rural Development Department, Japan International Cooperation Agency (JICA)</li> <li>2) Seed Production and Export: Dr. Yuji UDAGAWA, Advisor, Tako Flower &amp; Nurseries Co., Ltd</li> <li>3) Cooperation Planning 1: Ms. Tomoko TANAKA, Deputy Director, Team 2, Agricultural and Rural Development Group 1, Rural Development Department, JICA</li> <li>4) Cooperation Planning 2: Mr. Keigo NAKAMURA, Staff, Team 2, Agricultural and Rural Development Group 1, Rural Development Department, JICA</li> <li>5) Evaluation Analysis: Mr. Isao DOJUN, Consultant, Chuo Kaihatsu Corporation</li> </ol> <p>(2) Kyrgyz side</p> <ol style="list-style-type: none"> <li>1) Leader: Mr. Nurbaev Adyl, Head of Division of Phytosanitary Control, Department of Plant Quarantine, Ministry of Agriculture, Food Industry and Melioration (MAFIM)</li> <li>2) Member: Ms. Taranova Elena, Specialist, Agrarian Policy Division, Ministry of Agriculture, Food Industry and Melioration (MAFIM)</li> </ol> |
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| <b>Period of Evaluation</b>   | From November 26, 2017 to December 14, 2017 | <b>Type of Evaluation</b> : Terminal |
| <b>III. Results of Evaluation</b>   |   |                                      |
| <b>1. Project Performance</b>   |   |                                      |
| <b>Output 1:</b> Implementation system for seed industrial development is strengthened.   |   |                                      |
| <b>Achievement:</b> Regarding the degree of achievement of Indicator 1): Policy recommendation related to vegetable seed production is submitted to MOAM, SAK under the Project submitted document on Concept of Development of the Seed Sector (draft) of the Kyrgyz Republic to MAFIM. Moreover, regarding the degree of achievement of Indicator 2): Necessary information related to the vegetable seed export is collected and provided to producers and potential buyers, a representative of SAK, a member of KVS Cooperative and a Japanese expert participated in the congress of APSA and there are good information delivering occasions because the general meeting and the meeting of management office are hold frequently. From the viewpoints above, objective of Output 1 are achieved mostly. |   |                                      |
| <b>Output 2:</b> Vegetable seed production skill is disseminated through training at the training farm and Farmer Field School (FFS).   |   |                                      |
| <b>Achievement:</b> Regarding the degree of achievement of Indicator 1): The number of trainers who are able to conduct and supervise FFS trainings: 16 persons, 16 persons who have conducted FFS training are regarded that they have capacity to implement and supervise FFS training as trainer at the time of terminal evaluation and objective of indicator about number of trainers for FFS training is achieved. However, Indicator 2): The number of seed producers who participated in FFS: 190 persons, Indicator 3): The number of seed producers who carry out training techniques: 40 persons, and Indicator 4): The average number of vegetable seed production per ha will be 350kg/ha, the degree of each indicator is not achieved yet. Therefore, objective of Output 2 is not achieved yet. |   |                                      |
| <b>Output 3:</b> Testing skills for vegetable seed are improved.  |   |                                      |
| <b>Achievement:</b> Regarding the degree of achievement of Indicator 1): Enable to inspect in accordance with ISTA standard, the Central Laboratory of DACE obtained ISTA certificate in January 2015 and has passed ISTA's skill tests which are carried out 3 times a year. The Central Laboratory of DACE in Bishkek has capacity that seed inspection can carry out appropriately in accordance with the standards of ISTA. Therefore, the objective of Output 3 is achieved in general.  |   |                                      |
| <b>Output 4:</b> Establishment of vegetable seed production organization is promoted.   |   |                                      |
| <b>Achievement:</b> Regarding the degree of achievement of Indicator 1): More than 1 organization that is capable of contracting with foreign seed company is established, KVS Cooperative which is possible to make contract for vegetable seed production contract was established under the project. Therefore, it can be said that objective of Output 4 is achieved. However, further capacity enhancement is necessary for becoming an organization that can produce and export vegetable seed. In summary, the objective of Output 4 is achieved. However, capacity building of the KVS Cooperative is necessary.  |   |                                      |

**Project Purpose:** Vegetable seed with exportable quality is produced in the target oblasts.

**Achievement:** One of the indicators for the Project Purpose will be achieved soon (about export of vegetable seed). However, the target about production volume of exportable vegetable seeds will not be achieved by the end of the project period (June 2018). Therefore, it can be said that the degree of achievement of the Project Purpose is not at satisfactory level.

## **2. Summary of Evaluation Results**

### **(1) Relevance**

The Project is considered to promote exportable vegetable seed production in the Kyrgyz Republic and is consistent with the development potential and needs of farmers of the project target areas. Moreover, this project is consistent with Japan's official development aid (ODA) policy for Kyrgyz Republic. Therefore, it seems that these approaches of the Project are appropriate for promoting vegetable seeds production and export.

### **(2) Effectiveness**

As mentioned above, one of the indicators for the Project Purpose will be achieved soon (about export of vegetable seed). However, it is difficult that degree of achievement of the Project Purpose will become at satisfactory level by the end of the project period, therefore, the overall effectiveness of the Project is considered to be moderate.

### **(3) Efficiency**

In general, inputs by Japanese side were appropriate. Whereas participation to the project activities by Kyrgyzstan counterparts was limited, The Kyrgyzstan side has facilitated the project office for Japanese experts and project staff and various facilities such as lands for seed cultivation and greenhouses. TOT participants continually have practiced vegetable seed cultivation and have conducted FFS training for other farmers. It seems that project management has been conducted appropriately and it promoted effective progress of project activities. These viewpoints indicate that the efficiency of the Project is considered to be moderate.

### **(4) Impact**

Whereas several positive impacts are observed, any negative impacts are not observed. In order to attain the Overall Goal sufficiently in future, organization that can conduct vegetable seed production and seed business stably and continuously is important. On the whole, impact of the Project is considered to be moderate.

1) Prospect of achieving the Overall Goal "Export of vegetable seed in the target area starts."

Vegetable seed export with trial contract production will be carried out soon, therefore, it can be said that objective of the Overall Goal will be achieved soon. However, requirements of foreign seed companies are availability of stable volume and high quality exportable vegetable seeds from Kyrgyz. For

realizing stable and continuous export of vegetable seeds, organization that can provide instructions on vegetable seed cultivation techniques to farmers appropriately and can conduct vegetable seed business with foreign seed companies properly is required.

## 2) Positive Impacts Observed

- a) TOT participants have utilized learned seed cultivation techniques for regular vegetable cultivation and they harvested better yield of vegetable.
- b) Utilization of training method, which is used under the Project, for the seminars organized by KOSS farm
- c) Provision of trainings to the World Food Programme (WFP) supported project
- d) Increase on vegetable seeds by general farmers as results of dissemination of project activities

## **(5) Sustainability**

Sustainability of the Project in term of policy aspect is high. In order to ensure organizational, financial and technical sustainability of the Project, adequate measures are needed to be taken as described below. On the whole, it can be said that sustainability of the Project is likely to be moderate.

### 1) Policy aspect

Increase of production and exports of the agricultural products is regarded as priority issue in Governmental strategy and plan. MAFIM is recognizing more about importance of seed sector and strengthening regulatory measures (through provision of loans and subsidy). Therefore, policy sustainability of the Project is secured.

### 2) Organizational aspect

MAFIM has prepared various policies and draft regulations related to agricultural development and seed sector development. Therefore, MAFIM has proper organizational structure for preparing policies and regulations that promote seed sector development. As for DACE of MAFIM, DACE has a central laboratory with staff in charge of seed inspection in Bishkek and also laboratories in regions. Therefore, organizational sustainability of MAFIM in term for promotion of seed sector is secured.

As for the KVS Cooperative which was established in December 2016, the organizational structure is regulated in the constitution of the Cooperative. There are several management bodies in the Cooperative and members of management bodies were elected by member of the Cooperative. General meeting and meeting of management board have been hold frequently. Therefore, the Cooperative has appropriate organizational structure and it has certain operational capacity. However, further enhancement of organizational capacity is required for practicing vegetable seed business.

### 3) Financial aspect

The budget of MAFIM is on a downward trend and the budget of the Central Laboratory of DACE is on a downward trend as well. It is said that the budget for consumables for seed inspection is not sufficient well. There is no major problem for maintenance of equipment provided by the Project, however, there is concern that the Central Laboratory of DACE can repair and purchase spare parts

when necessary. In addition, the renewal of ISTA certificate, which the Central Laboratory of DACE has, is necessary every 4 years and renewal should be done in 2018. Cost for the renewal of ISTA Certificate is not within the budget of MAFIM, therefore, there is also concern about renewal of the certificate.

In order that the KVS Cooperative conduct vegetable seed export business, various expenditures are required for seed production and processing, and operation and management of the Cooperative. In addition, the Cooperative should strengthen its ability on increase of vegetable seed production and seed business in order to obtain necessary income for carrying out seed business, because the Cooperative does not have income from vegetable seed export.

#### 4) Technical aspect

a) Seed inspection: It is judged that two laboratory staff of the Central Laboratory of DACE has necessary technical skills as results of participations in the training in Japan and the seminar which was conducted by a short-term expert in Kyrgyz.

b) FFS training for farmers: Among TOT participants, 16 persons have acquired capacity to conduct FFS training appropriately. As for FFS training participants, they have learned vegetable seed cultivation in one cropping season or two cropping seasons. In order to acquire sufficient knowledge and skills, they have to practice several seed growing cycles, because sufficient practical experiences are indispensable for vegetable seed cultivation.

c) The KVS Cooperative: General meeting and Management board meeting have been hold frequently and this is a good point on management of the Cooperative. Capacities of the Cooperative should be strengthen further in terms of seed production, seed processing after harvest, creating relationship with foreign seed companies, negotiation ability for obtaining contract seed cultivation, trade practice on seed, and operation and management of the Cooperative.

### **3. Factors that promoted realization of effects**

#### (1) Factors concerning to planning

None

#### (2) Factors concerning to the implementation process

None

### **4. Factors that impeded realization of effects**

#### (1) Factors concerning to planning

None

#### (2) Factors concerning to the implementation process

Delay of dispatch of first Japanese coordinator made certain negative effects on timely procurement of equipment and administrative works. There was not negative effect for capacity improvement for seed inspection staff members of MAFIM. However, restructuring of organization of MAFIM affected start of activity for capacity improvement of them.

## **5. Conclusion**

Through the Terminal Evaluation, it was confirmed that a part of Project Purpose and Outputs are almost achieved. However, in order to realize sustainable vegetable seed production and export, more seed producers who can carry out trainings to farmers, farmers who have sufficient knowledge, skills and experiences on vegetable seed cultivation, capable organization that can conduct vegetable seed business with foreign seed companies is necessary. The remaining project period is about half year, and it is not possible to attain these issues sufficiently. Therefore, it is assessed that extension of the project period is necessary for securing cultivation period for 2 cropping seasons.

In terms of five evaluation criteria, relevance is evaluated as high whereas efficiency, sustainability, effectiveness and impact are evaluated as fair. It is difficult that the degree of vegetable seed production become at satisfactory level by the end of the project period, therefore, the overall effectiveness of the Project is considered to be moderate. When it comes to the efficiency, participation to the project activities by Kyrgyzstan counterparts was limited, therefore, the efficiency of the Project is considered to be moderate. Regarding Impact of the Project, there are several extra positive impacts.

However, in order to attain the Overall Goal sufficiently in future, enhancement of organization that can conduct vegetable seed production and seed business stably and continuously should be important. On the whole, impact of the Project is considered to be moderate. Adequate measures are required to be taken to ensure the organizational, financial and technical sustainability of the Project, therefore, it can be said that sustainability of the Project is likely to be moderate.

## **6. Recommendations**

### **6-1. Recommendation to the project**

#### **(1) Project Cooperation Period**

It is difficult that degree of achievement of the Project Purpose will become at satisfactory level by the end of the project period, and it is assessed that another 2 cropping seasons is required to achieve the Project Purpose. Thus, it is recommended to extend the project cooperation period for 20 months.

#### **(2) Revision of the PDM**

Through the evaluation of the Project, the Team found that some objectively verifiable indicators need to be set and modified to monitor project activities, outputs, and outcomes in an appropriate manner.

### **6-2. Recommendations to MAFIM**

#### **(3) Assignment of the Counterpart Personnel**

Throughout the project, participations to the activities from Kyrgyzstan sides have been limited.

Accordingly, it is required that necessary counterpart personnel are assigned to the project to implement the project activities continuously.

#### **(4) Agreement for Elita farm**

“Agreement to the Memorandum of Understanding on installation, utilization and management of seed

processing equipment between Elita, JICA and KVS for Promotion of Exportable Vegetable Seed Production and Export in the Kyrgyz Republic” has not been agreed yet due to inspection under the MAFIM. Therefore, it is recommended to make necessary arrangements among the concerned departments to sign the agreement as soon as possible.

#### (5) Update of ISTA Certification

The update of ISTA certificate is necessary every 4 years and current certificate will be expired in June 15, 2018, however the budget for its update has not been secured by MAFIM at the timing of the evaluation. Therefore, it is recommended to MAFIM to make necessary arrangements and efforts to secure the budget before ISTA certificate has been expired.

### 6-3. Recommendation for to the Project Team

#### (6) Installation and Utilization of the Seed Processing Equipment

Due to the delay of renovation work of the facility in Elita farm, the seed processing equipment have not been installed yet. Hence, it is recommended to install the seed processing equipment and to utilize them effectively as soon as possible.

#### (7) Strategical Enhancement of FFS Training

Due to the insufficient amount of seed production, KVS Cooperative has not operated autonomous business management yet. Therefore, it is recommended to grow vegetable seed producing farmers in more effective manner through the strategical enhancement of FFS training to ensure the KVS Cooperative management and business.

## **7. Lessons Learned**

### Consideration of required period for building trust relationship with foreign seed companies and necessary cropping seasons at project formulation stage

Two (2) to 3 years are necessary for farmers in order to produce vegetable seeds which satisfy with quality requirements in general. In the case of Japanese seed companies, they start request of seed production with trial seed production, and it is repeated for 2 or 3 years. When quality of vegetable seeds produced by farmers satisfies with requirement of Japanese seed companies continuously, Japanese seed companies will shift to formal contract. Therefore, it is necessary to consider these processes for project planning.

Moreover, based on cultivation period, vegetable seed is categorized into one cropping seasonal seed or two cropping seasonal seed. These seeds require different growing cycles, respectively, and lead the importance of seed selection to implement the project effectively. Hence, for agriculture project, which include the improvement of cultivation skill, it is important to set the project period considering cropping seasons and timing in the planning stage of the project.