Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Sri Lanka Office: August, 2022

Country Name	**The Project for Enhancement of Production System of Certified Vegetable Seed in Sri Lanka**
Democratic Socialist Republic of Sri Lanka	

I. Project Outline

Background	The mid- and long-term national development plan of Sri Lanka ("Mahinda Chintana, Vision for a New Sri Lanka" (2010)) emphasized importance of improvement of self-sufficient rate of vegetables and other field crops and pointed out that shortage of quality seeds and planting materials remained a major issue in increasing production and productivity. However, only 4-35% of the total vegetable seed requirement was supplied as quality certified seeds certified by Department of Agriculture (DOA)/Ministry of Agriculture due to limitation of seed growers' capacity, poor processing and certifications system, under-developed seed distribution. (Figures at the time of ex-ante evaluation.)		
Objectives of the Project	The project aimed to improve production system for certified vegetable seed in the target areas in Sri Lanka through (i) improving planning capacity of Seed and Planting Materials Development Center (SPMDC) for seed production and distribution, (ii) improving vegetable seed production techniques in both public and private sectors, and (iii) improving vegetable seed quality control techniques in both public and private sectors, thereby increasing quantity of vegetable seeds* in the market up to minimum standards stipulated by DOA.** *DOA certified seeds (produced by DOA and the private sector) and self-certified seeds of the private sector. **Recommended seed certification standards for seed and planting materials issued by Seed Certification Service (SCS) in 2009. 1. Overall Goal: Quantity of vegetable seeds in the market up to minimum standards stipulated by DOA is increased. 2. Project Purpose: Production system for certified vegetable seed is improved in the target areas.		
Activities of the Project	1. Project site: Kundasale Government Seed Farm (GSF), Aluttarama GSF, Mahailuppallarna GSF and Nikaweratiya SPMDC Regional Office, and their surrounding areas. 2. Main activities: Regular meetings and joint workshops between the government and private sectors, a market survey in the project site, a nation-wide seed-related database establishment, training on quality seed production for the government and private sectors, development of a technical manual on quality seed production, development of a technical manual and teaching materials on seed testing, training on seed quality control for the government and private sectors, training for seed producers to prepare quality seed lots, a survey on seed quality available in the market, etc. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: (long-term) 4 persons, (short-term) 7 persons 2) Trainees received: 51 persons (37 in Japan and 14 in Thailand) 3) Equipment: Equipment for seed production, seed testing and research, seed processing, etc. 4) Local cost Sri Lanka Side 1) Staff allocated: 45 persons 2) Building and facilities: Provision of project office and classrooms for training, construction of building of Seed Health Testing Unit (SHTU), provision of necessary equipment and facility for operation of the database system, renovation of the building for installation of seed processing machines, etc. 3) Local cost		
Project Period	(ex-ante) March 2012-February 2017 (actual) May 2012-May 2017	Project Cost	(ex-ante) 365 million yen (actual) 356 million yen
Implementing Agency	Department of Agriculture (DOA)* *The core organizations consisted of (i) SPMDC together with its regional offices, GSFs, and Seed Sales Centers (SSCs), and (ii) Seed Certification Service (SCS) under Seed Certification and Plant Protection Centre (SCPPC) together with its regional offices, Seed Testing Laboratories (STLs), and SHTU established under the project[1].		
Cooperation Agency in Japan	Ministry of Agriculture, Forestry, and Fishery		

II. Result of the Evaluation< Special Perspectives Considered in the Ex-Post Evaluation >

- The quantitative data for the Project Purpose Indicators 1, 2, and 3 were collected through beneficiary surveys during the project implementation. As it was difficult to conduct similar surveys to confirm their continuation status due to time and human resource constraints in the internal ex-post evaluation, which was a simplified evaluation, qualitative data was collected by asking opinion of the key informants.
- "More than X" appeared in the Project Purpose Indicators 2 and 3 was interpreted to be "at least X" based on the expression of the corresponding parts in the existing Japanese documents related to the project, including Terminal Evaluation Summary.
- Target area for the Overall Goal was the same as the Project Purpose as "the Overall Goal…aims at improvement of entire market in the project area" according to the Terminal Evaluation Summary of the project.
- Achievement status of Overall Goal Indicator 1was confirmed through comparison of the results in 2015 Yala[2] period and 2018 Yala period (around

[1] Some of the project activities were carried out in collaboration with Horticultural Crop Research and Development Institute (HORDI), Extension &Training Centre (ETC), and Socio Economics & Planning Centre (SEPC).

[2] In Sri Lanka, there are 2 farming seasons a year, called Yala and Maha.

April-August 2018), which fell in about 1 year and a few months after the project completion, based on the recommendation of the terminal evaluation of the project. Regarding achievement status of the Overall Goal Indicator 2, the supply rate of the vegetable basic seeds was confirmed in terms of weight and number of varieties, following the perspective of the terminal evaluation. Target year for Indicator 2 was set to be 2020 (more specifically, 2020/21 Maha period) as the ex-post evaluation was planned 3 years after the completion of the project according to the Ex-ante Evaluation Sheet.

1 Relevance

<Consistency with the Development Policy of Sri Lanka at the Time of Ex-Ante Evaluation >

At the time of ex-ante evaluation, the project was consistent with the national development plan of Sri Lanka ("Mahinda Chintana, Vision for a New Sri Lanka" (2010)) as described in the "Background".

<Consistency with the Development Needs of Sri Lanka at the Time of Ex-Ante Evaluation >

At the time of ex-ante evaluation, the project was consistent with the development needs of Sri Lanka for enhancement of the production system of the certified vegetable seed as described in the "Background".

<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation>

At the time of ex-ante evaluation, the project was consistent with Japan's Country Assistance Program for Sri Lanka (April 2004), prioritizing assistance to development of agriculture and fisheries as measures for poverty alleviation through improvement of social and economic Infrastructure.

<Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

<Status of Achievement of the Project Purpose at the Time of Project Completion>

The Project Purpose was partially achieved at the time of project completion (judged based on the achievement status of the 5 indicators: "achieved", "not verifiable", partially achieved", "partially achieved" and "partially achieved"). The number of the participants of the Joint Public Private (JPP) Seminars initiated by the project, who expressed that information sharing between public and private sectors, was increased from 17 persons (85% of the participants) in 2015 to 27 persons (96% of the participants) in 2017 (Indicator 1). The seed-related database was developed in March 2016, but the rate of the DOA officials who expressed that the database made their data processing work efficient could not be confirmed as the response rate of the questionnaire survey in April 2017 was extremely low[3] (Indicator 2). More than 60% of the contract farmers who had attended the seed production training applied at least one technique introduced in the training (the nursery tray and pot technique) according to the interview survey to the trained farmers in 2015, but quantitative information was not available after 2015. For reference, the SPMDC regional offices responsible for the 4 project sites made positive reports on application status of the introduced techniques by the trained contract farmers at the final Joint Coordination Committee (JCC) of the project in 2017, indicating a similar trend as in 2015, although there were no reports showing the concrete data (Indicator 3). SCS/SCPPC conducted in-service and induction training on seed certification by using the seedling evaluation manual and the teaching materials introduced by the project in 2014 and 2015, but not in 2016 and 2017 (Indicator 4). Actions were taken for 5 out of the 8 items in the short-term plan of the Seed Quality Action Plan developed under the project[4](Indicator 5).

<Continuation Status of Project Effects at the Time of Ex-post Evaluation>

The project effects partially continued at the time of ex-post evaluation. At SCS, the seed testing process improved by the project was continuously implemented at STLs and the seed health testing of bacteria, virus and fungi continued at SHTU established under the project[5]. The action plan for improvement of quality control developed under the project was also utilized[6]. The JPP Seminars and the meetings of the Seed Industry Development and Coordinating Committee (SIDCC), established as an outcome of the JPP seminars during the project implementation, were not regularly conducted as expected mainly due to some external reasons (i.e., the Easter attack in 2019 and the COVID-19 pandemic in 2020 and 2021). The level of information sharing between the public and private sectors enhanced through the project was maintained, however, because communication continued as needed owing to a very good linkage created through the project, which was sustained after the project completion. According to the Agricultural Instructors of the GSFs in the 2 project sites visited by the ex-post evaluators, all the introduced techniques except for re-potting, were useful for the trained contract farmers in all the 4 project sites and they were using them in their respective farms. This was also confirmed by informal discussions with 3 trained contract farmers in one of the project sites. The seed-related database did not contribute to improvement of efficiency of data-processing work of the DOA officials because the database was not functioning as expected. It was mainly because the access to the database became very slow when many users were in the system, especially in the rural areas where internet connection was very poor; rural users could not feed the data easily due to less signal strength in the internet facilities in their offices or lack of internet facilities in some offices[7]; the database was not user-friendly and appropriate enough for the rural users; and it was very difficult to transfer the work pattern of staff from fully manually adopted practices to the internet based system within a short period of time. The seed-related database was not used to formulate seed production plans for basic seeds as planned for the same reasons. Regarding in-service and induction training on the seed certification, SCPCC conducted in-service training in 2018, using the seedling evaluation manual and teaching materials of the project. SCPCC planned

[3] Questionnaires were distributed to 350 users through email, but only 5 responded. It is noted that, as of April 2017, not all the user organizations were entering the data. The data entry rate was 55%, 52%, and 55% respectively at SPMDC-regional offices, GSFs and SCS-regional offices and it was only 12% at SSCs. In addition, only 18 out of 27 GSFs and 8 out of 23 SCCs had personal computers and internet facilities, which were necessary to use the database, while most of SPMDC-regional offices and SCS-regional offices had them.

[4] As per the Seed Quality Action Plan, actions of the short-term plan were to start by December 2016, actions of the mid-term plan were to be taken by December 2017, and actions of the long-term plan were to be taken after January 2018. For reference, plans were being developed for the other 3 items of the short-term plan by the project completion.

[5] According to SCS, annual vegetable sample testing increased to above 2,000 samples.

[6] For example, some technologies for hybrid seed quality improvement for capsicum, Chilli was developed. A quality control system for poly tunnels was also developed.

[7] The terminal evaluation team had recommended DOA to ensure installment of necessary IT equipment and facilities for the database. The necessary equipment/facilities were installed at most of the database user organizations but DOA prioritized seed production and introduction of techniques for seed production systems with available allocations than focusing on installation of expensive equipment/facilities to all the database users.

to conduct in-service and induction training on the same topic after 2018, but those plans were not materialized due to the external reasons (the Easter attack in 2019 and the COVID-19 pandemic in 2020 and 2021). As for the Seed Quality Action Plan, actions for 8 items of the short-term plan and 4 out of 6 items of the mid -term plan were either completed or being implemented. For reference, plans were being formulated for the remaining 2 items of the mid-term plan and both 2 items of the long-term plan.

<Status of Achievement for Overall Goal at the Time of Ex-post Evaluation>

The Overall Goal was partially achieved (judged based on the achievement status of the 2 indicators: "partially achieved" and "partially achieved").

SCS confirmed that, compared to 2015 Yala (the base year), the percentage of the vegetable seeds available in the market which was up to the minimum standards stipulated by the DOA (i.e., certified vegetable seeds) was increased in 2018 Yala (the target year) and the similar trend continued after that. According to SCS, the percentage of the certified vegetable seeds, produced by GSFs, contract farmers and a very few private companies, had been very small before the project but it was increased drastically after the project completion. Although the exactly calculate data was not available, SCS estimated the percentage was increased from less than 30% in 2015 Yala to more than 50% in 2018 Yala and continued to be more than 50% after that. SCS considered that the estimate was reasonable because, compared to 2015, the total production of the certified vegetable seeds in the country[8] more than doubled in 2018 and more than tripled in 2020 (contribution of the GSFs and the contracted farmers especially increased).[9] The significant increase was promoted by utilization of the outputs of the project such as the seed production manual, enhanced capacity of SPMDC to train seed producers, technologies and laboratory equipment introduced for identification of seed born pathogen and diseases at SCS/SCPPC, etc. Implementation of the Seed Act, which was enforced after the project completion, also encouraged informal seed producers to become the certified seed producers. SCS considered the estimated degree of increase in the target year was appropriate as the one in 3 years after the completion (Indicator 1).

The ratio of the requested basic seeds by the private sector seed producers which was supplied (i.e., the supply rate) by Nikawaratya SPMDC Regional Office was 54%[10] in 2020/21 Maha (target: over 90%[11]). The supply rate was over 90% in 2017 Yala and 2017/18 Maha, but it went down below 90% after that due to several external factors. Nikawaratya SPMDC Regional Office explained that amount of the seed production depended on rainfall, climatic conditions, pest and disease attacks as well as the farmers' choices of the varieties. Even though SPMDC had plans/estimates for the production, the actual amount varied mainly with the above parameters. Less mobility, input and input distribution as well as the farmers' negative perceptions on the selling risks during the COVID-19 pandemic were some other reasons for less production. The basic seed requested by the private sector producers were continuously supplied in the other 3 project sites as well. The credible data on the supply rate was not available, but there was no information that the situation was significantly different in the other 3 project sites (Indicator 2).

<Other Impacts at the time of Ex-post Evaluation>

According to the AI of the GSF in Aluttarama, contract farmers who had undergone training program conducted by the GSF, using the seed production manual developed under the project, increased their income significantly because of the higher price received to the seed they produced. Based on the observations of these farmers' success, there was a trend of other farmers also to go for seed production. These statements were confirmed by the informal discussion with the 3 trained farmers and field observations in Aluttarama. Negative impacts were not observed.

<Evaluation Result>

Therefore, the effectiveness/impact of the project is fair.

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results	Source
(Project Purpose) Production system for certified vegetable seed is improved in the target areas.	Indicator 1: Number of respondents of both public and private sectors who expressed that information sharing between both sectors is increased.	Status of the Achievement (Status of the Continuation): achieved (continued) (Project Completion) -The number of the participants of the JPP seminars who expressed that information sharing between public and private sectors was increased from 17 persons (85% of the participants) in 2015 to 27 persons (96% of the participants) in 2017. (Ex-post Evaluation) - Although the JPP seminars and the meetings of the SIDCC, established as an outcome of the JPP seminars, were not regularly conducted due to the Easter attack in 2018 and the COVID-19 pandemic in 2020 and 2021, level of information sharing between the public and private sectors enhanced through the project was maintained because communication continued as needed owning to a very good linkage created through the project.	Terminal Evaluation Report (TER), Project Completion Report (PCR), interview survey to Aluttarama and Kundasale SPMDC regional offices and SCS.
	Indicator 2: More than 80% of DOA officials express that Seed related database make their data processing work efficient. (For interpretation of "more than X", see <Special	Status of the Achievement (Status of the Continuation): not verifiable (not continued) (Project Completion) -The sufficient information to verify the achievement status was not obtained. The questionnaire was distributed to 350 DOA officials using the database, but only 5 replied. (Ex-post Evaluation) -The seed-related database did not make the data processing work of the DOA officials efficient because it was not used by them. The database system was not functioning as	TER, PCR, interview survey to SPMDC, SCPPC and SCS.

[8] The project sites are the major vegetable seed producing areas in Sri Lanka. Therefore, even the data is for the whole country, it is considered to significantly represent the production from the project sites.

[9] The total amount of the certified vegetable seeds produced by GSFs, contract farmers, and private companies increased from 40 metric ton (MT) in 2015 to 81 MT in 2018 and 195 MT in 2020. For reference, the total production by GSFs and contract farmers increased from 24 MT in 2015 to 74 MT in 2018 and 142 MT in 2020.

[10] Average of 48% in terms of weight and 60% in terms of number of varieties.

[11] The target figure of the Overall Goal Indicator 2 (for details, see description of the Overall Goal Indicator 2 in the table "Achievement of Project Purpose and Overall Goal" below.

<table>
<tr><td></td><td>Perspectives Considered in the Ex-Post Evaluation>.)</td><td>expected mainly because the access became very slow when many users were in the system; rural users could not feed the data easily due to less signal strength in the internet facilities in their offices or lack of internet facilities in some offices; the database was not user-friendly and appropriate enough for the rural users; and it was very difficult to transfer the work pattern of staff from fully manually adopted practices to the internet based system within a short period of time.</td><td></td></tr>
<tr><td></td><td>Indicator 3: More than 60% of contract farmers who attended seed production trainings apply techniques introduced by the project*
*Use more than one of the techniques introduced by the project.
(For interpretation of “more than X”, see <Special Perspectives Considered in the Ex-post Evaluation>.)</td><td>Status of the Achievement (Status of the Continuation): partially achieved (continued)
(Project Completion)
-More than 60% of the contract farmers who had attended the seed production training applied at least one technique in 2015, but quantitative information was not available after 2015. At the final JCC in 2017, the relevant SPMDC regional offices made positive reports on application status of the introduced techniques by the trained farmers, but there were no reports showing the concrete data.
(Ex-post Evaluation)
-All the introduced techniques except for re-potting were useful for the trained contract farmers in all of the project sites and the trained farmers were using them in their respective farms.</td><td>TER, PCR, informal discussions with AIs of Aluttarama and Kundasale GSFs,
field observation and informal discussions with 3 trained contract farmers in Aluttarama.</td></tr>
<tr><td></td><td>Indicator 4: SCPPC continuously conduct in-service and induction trainings on seed certification using seedling evaluation manual and teaching materials introduced by the project.</td><td>Status of the Achievement (Status of the Continuation): partially achieved (continued)
(Project Completion)
-SCPPC conducted in-service and induction training on seed certification in 2014 and 2015, using the seedling evaluation manual and teaching materials introduced by the project, but not in 2016 and 2017.
(Ex-post Evaluation)
-SCPPC conducted in-service training on seed-certification in 2018. It planned to conduct in-service and induction training on the same topic after 2018, but those plans were not materialized due to the Easter attack in 2019 and the COVID-19 pandemic in 2020 and 2021. They would have been conducted without the Easter Attack and the COVID-19 pandemic.</td><td>TER, interview survey to SCPPC and SCS.</td></tr>
<tr><td></td><td>Indicator 5: Actions are taken in accordance with the action plan developed based on the results of the survey on seed quality available in the market (Seed Quality Survey).</td><td>Status of the Achievement (Status of the Continuation): partially achieved (continued)
(Project Completion)
-Actions were taken for 5 out of the 8 items in the short-term plan in the Seed Quality Action Plan developed under the project.
(Ex-post Evaluation)
-Eight items of the short-term plan and 4 out of 6 items of the mid-term plan were either completed or being implemented. For reference, plans were being formulated for the remaining 2 items of the mid-term plan and both 2 items of the long-term plan.</td><td>TER, interview survey to SPMDC and SCS.</td></tr>
<tr><td>(Overall Goal)

Quantity of vegetable seeds in the market, up to minimum standards stipulated by DOA, is increased.</td><td>Indicator 1: The percentage of vegetable seeds available in the market, which is up to the minimum standards stipulated by DOA, is increased*.
*See <Special Perspectives Considered in the Ex-post Evaluation >.</td><td>(Ex-post Evaluation) partially achieved.
-According to SCS, the percentage of the certified vegetable seeds in the market was drastically increased after the project completion mainly due to significant increase of production of the certified vegetable seeds, especially by GSFs and contract farmers; and to implementation of the Seed Act, which encouraged informal seed producers to become the certified seed producers. Although the exactly calculate data was not available, SCS estimated the percentage of the certified vegetable seeds in the market was increased from less than 30% in 2015 (base year) to more than 50% in the target year (2018) and continued to be more than 50% after that. SCS considered the degree of increase in the target year was appropriate as the one in 3 years after the completion.</td><td>Questionnaire and interview survey to SCS.</td></tr>
<tr><td></td><td>Indicator 2: Over 90% of the requested basic seeds by the private sector seed producers is supplied by SPMDC*.
*See <Special Perspectives Considered in the Ex-post Evaluation >.</td><td>(Ex-post Evaluation) partially achieved
< The ratio of the requested basic seeds by the private sector seed producers which was supplied by Nikawaratya SPMDC Regional Office>
<table><tr><th>Season</th><th>In terms of weight</th><th>In terms of number of varieties</th><th>Average</th></tr><tr><td>(ref) 2016 Yala in 4 project sites</td><td>83%</td><td>73%</td><td>78%</td></tr><tr><td>(ref) 2016/17 Maha in 4 project sites</td><td>66%</td><td>74%</td><td>70%</td></tr><tr><td>2017 Yala</td><td>91%</td><td>186%</td><td>138%</td></tr><tr><td>2017/18 Maha</td><td>98%</td><td>92%</td><td>95%</td></tr><tr><td>2018 Yala</td><td>66%</td><td>86%</td><td>76%</td></tr><tr><td>2018/19 Maha</td><td>41 %</td><td>75%</td><td>58%</td></tr><tr><td>2019 Yala</td><td>43 %</td><td>70%</td><td>57%</td></tr><tr><td>2019/20 Maha</td><td>32%</td><td>64%</td><td>48%</td></tr><tr><td>2020 Yala</td><td>43%</td><td>64%</td><td>53%</td></tr><tr><td>2020/21 Maha</td><td>48%</td><td>60%</td><td>54%</td></tr></table>- The basic seed requested by the private sector were continuously supplied in the other 3 project sites as well. Credible data on the supply rate was not available, but there was no information that the situation was significantly different in the other 3 project sites.</td><td>TER, questionnaire and interview survey to Nikawatya SPMDC Regional Office.</td></tr>
</table>

3 Efficiency

Both the project period and the project cost were within the plan (ratio against the plan: 100% and 98%). The outputs were produced as planned. Therefore, the efficiency of the project is high.

4 Sustainability

<Policy Aspect>

The National Policy Framework Vistas of Prosperity and Splendour up to 2030 set forth "expansion of agriculture production by providing good seed and planting materials" as a strategy for agriculture. In addition, the draft of National Agriculture Policy (2021), which focused on 2020-2023, includes "allocation of adequate budget to carry out operations of seed certification process" and "timely supply of imports and /or production of quality inputs including seeds and planting material, at affordable prices" as policy actions.

<Institutional/Organizational Aspect>

Organizational structure of the implementing agencies to promote certified seed production remained unchanged and functioning. The management posts for the regional offices of SPMDC and SCS were not fully filled because, after 2013, there was no recruitment of the management officers through the Sri Lanka Agriculture Service due to internal legal issues of DOA. In addition, there were certain vacancies for extension officers under the regional offices of SPMDC and SCS mainly because some of them preferred working in the headquarters or urban areas. However, the existing minimum management and extension officers under both SPMDC and SCS in the target areas were contributing significantly to cover the duties of other vacant officers and keeping up with all the relevant demands from the seed producers. Good coordination with other relevant organizations such as HORDI, ETC, and SPEC also continued.

<Technical Aspect>

Both SPMDC and SCPPC, including SCS, still had the staff trained in country, Japan and Thailand under this project on different aspects of the techniques or procedures introduced by the project. From time to time, these organizations conducted experience sharing sessions and formal training sessions for the existing staff and on-the-job training for the new staff to sustain the knowledge and skills acquired through the project. Manuals and guidelines developed under the project were utilized in their operations and training[12].

<Financial Aspect>

SPMDC and SCPPC, including SCS, secured enough budget allocations to continue their functions in the certified vegetable seed production from Ministry of Agriculture except for the budget for installing the IT infrastructure facilities for the seed-related database at all the users. In addition, SCS was able to utilize the budget allocated under the Seed Act for the market survey and other related activities.

<Evaluation Result>

In light of the above, slight problems have been observed in terms of the institutional/organizational aspect of the implementing agency. Therefore, the sustainability of the project effects is fair.

5 Summary of the Evaluation

The project partially achieved the Project Purpose of improving production system for certified vegetable seed in the target areas in Sri Lanka due to lack of sufficient data to verify the rate of the DOA officials who expressed that the seed-related database made their data processing work efficient, partial delay of actions according to the Seed Quality Action Plan etc... The effects of the project partially continued mainly due to discontinuation of the regular JPP seminars initiated under the project and non-utilization of the seed-related database by the DOA officials. The Overall Goal of increasing quantity of vegetable seeds in the market, up to minimum standards stipulated by DOA was partially achieved because the percentage of the certified vegetable seeds in the market was estimated to be increased in the project sites but the calculated data was not available; and the supply rate of the basic seeds was 60% of the target at one of the project sites while there was no information to show that the situation was significantly different at the other 3 project sites. As for the sustainability, slight problems have been observed in terms of the institutional/organizational aspect (i.e., existence of vacant posts for the extension staff) but no major problems have been observed in terms of the policy, technical, and financial aspects. Considering all of the above points, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

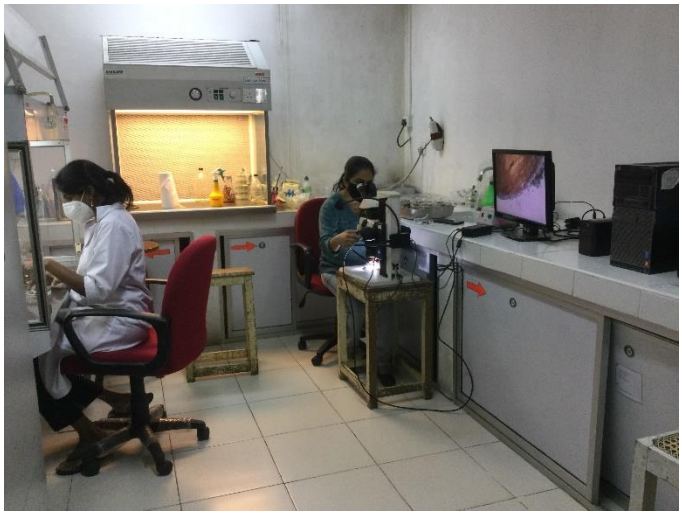
Recommendations for Implementing Agency:

- It is recommended that DOA take required measures immediately to modify the seed-related database (i) to match with the current level of internet connectivity to enable the database to function for multiple users at any time and (ii) to make it easier to add data and generate report which can be used for seed production and distribution planning.

Lessons Learned for JICA:

-For a project related to seed production, it would be useful to conduct proper analysis of the existing situation, obtain enough level of inputs from the implementing agencies, and understand the ground realities in the seed farmers and seedling evaluators, then developing manuals/guidelines as in the case of this project in order to secure continuous utilization after the project completion.

[12] These manuals and guidelines were prepared after appropriate study and analysis of the situation of techniques, process and procedures in the implementing agencies.



Seed Health Testing Unit: SCS staff work on identification of seed born pathogens.

Farmer field: Contract Farmer in Aluththarama area prepared his land for seed farming using the learnt techniques from the project.