### Summary of Evaluation Results

#### I. Outline of the Project

<table>
<thead>
<tr>
<th>Country:</th>
<th>Thailand</th>
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<tr>
<td><strong>Project Title:</strong></td>
<td>The Agricultural Statistics and Economic Analysis Development Project</td>
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<td><strong>Issue/Sector:</strong></td>
<td>Agricultural statistics, economic analysis</td>
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<td><strong>Cooperation Scheme:</strong></td>
<td>Technical cooperation</td>
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<td><strong>Division in Charge:</strong></td>
<td>JICA Thailand Office</td>
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<td><strong>Total Cost:</strong></td>
<td>Approximately 163.61 million yen (at the time of evaluation study)</td>
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<td><strong>Period of Cooperation</strong></td>
<td>(R/D): July 16, 2003 – July 15, 2008 (5 years)</td>
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<td><strong>Partner Country’s Implementing Organization:</strong></td>
<td>Ministry of Agriculture and Cooperatives (MOAC), Office of Agricultural Economics (OAE)</td>
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<td><strong>Supporting Organization in Japan:</strong></td>
<td>Ministry of Agriculture, Forestry and Fisheries</td>
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<tr>
<td><strong>Related Cooperation:</strong></td>
<td>ASEAN Food Security Information System (AFSIS) Project</td>
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#### I-1 Background of the Project

The Thai economy has developed along a rapid growth path. This has brought considerable changes in the agriculture and food sector. To respond to such changes, the concerned departments of the Ministry of Agriculture and Cooperatives (MOAC) are responsible for formulating and implementing proper policies and programs based on the agricultural statistics and information, and economic analyses provided by the Office of Agricultural Economics (OAE). However, these agricultural statistics and economic analyses were not sufficient in terms of their accuracy and reliability since the OAE collected the necessary data and information mainly through interview surveys targeting farmers. Furthermore, the summarized data and results of analyses were often released more than one year after the end of the interview surveys. Thus, it is necessary for the OAE to release its public statistics and results of analyses in a timely manner. On the other hand, it was agreed at the Ministerial Meeting of Agriculture and Forestry from ASEAN plus Three Countries (AMAF+3) in 2002 that the ASEAN Food Security Information and Training (AFSIT) Center was to be established in the OAE, and the OAE was to be assigned to the project manager of the ASEAN Food Security Information System (AFSIS) Project. Since then, the OAE has been expected to contribute to human resource development for agricultural statistics and economic analysis, and improvement of the information network system regarding food security among the ASEAN member countries. It was urgent to improve the overall capacities of the OAE in terms of technical skills, knowledge and practical experiences in the field of agricultural statistics and economic analysis in order to transfer these technologies and know-how to other ASEAN member countries. Against such background, the Government of Thailand requested the Government of Japan for a technical assistance project to improve capacities for agricultural statistics and economic analysis.

#### I-2 Project Overview

The Project has been carried out in cooperation with the OAE and the nine Regional Offices of Agricultural Economics (ROAEs) to improve capacities of the OAE and ROAEs, and support human resource development for the AFSIS Project. More specifically, the Project has provided technical assistance in the following five areas: i) human resource development of the OAE for ASEAN country assistance; ii) improvement of data collection methodology; iii) development of an information network system; iv) economic analysis; and v) training.

1. **Super Goal:** Food security in ASEAN + 3 regions is strengthened.
2. **Overall Goal 1:** Statistical information and methodology of economic analysis developed by the AFSIT Center are...
utilized in ASEAN Member countries.

Overall Goal 2: Policies and programs for the agricultural sector are formulated and implemented by the MOAC in a more effective and efficient manner through accurate statistical information and economic analysis provided by the OAE.

(3) Project Purpose: The OAE is strengthened as a central institution for statistical information and economic analysis for agricultural policy in Thailand and for supporting human resource development in the AFSIS.

(4) Outputs

Output 1: Human resources of the OAE are developed for data collection methodology, an information network system, and agricultural economic analysis including demand-supply forecasting for ASEAN member countries.

Output 2: Data collection methodology (mainly for major food crops*) in the OAE and the 9 ROAEs is improved.
*Major food crops: rice, cassava, sugarcane, maize, soybean

Output 3: An information network system between the OAE and the 9 ROAEs is established and developed further.

Output 4: Methodology of agricultural economic analysis is developed.

Output 5: Training capacity of OAE staff members is developed.

(5) Inputs

Japanese Side:
- Long-term Experts: 9 people
- Equipment: 67.06 million yen (17.495 million baht)
- Short-term Experts: 10 people
- Operational Cost: 163.61 million yen (42.68 million baht)
- Trainees Received: 60 people
- Technical Exchange Programs: 19 people

Thai Side:
- Counterparts: 73 people
- Operational Cost: 292.34 million yen (76.269 million baht) including costs for surveys, OAE training, and cost sharing for training in Japan for 27 trainees
- Land and Facilities: Office space provided
- Budget Allocated by the Thailand International Development Cooperation Agency: 10.35 million yen (2.7 million baht) including costs for the secretary, drivers, gasoline, and vehicle maintenance

II. Evaluation Team

<table>
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<tr>
<th>Members of Evaluation Team</th>
<th>Mr. Masazumi Ogawa</th>
<th>Leader</th>
<th>Deputy Resident Representative, JICA Thailand Office</th>
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<tbody>
<tr>
<td>Mr. Shoji Kimura</td>
<td>Agricultural Statistics and Data Collection</td>
<td>Senior Statistician, Statistics Planning Division, Statistics Department, Minister’s Secretariat, Ministry of Agriculture, Forestry and Fisheries</td>
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<tr>
<td>Ms. Akemi Inoue</td>
<td>Planning Management</td>
<td>Assistant Resident Representative, JICA Thailand Office</td>
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<tr>
<td>Ms. Toshiko Shimada</td>
<td>Evaluation Analysis</td>
<td>Consultant, IC Net Limited</td>
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Type of Evaluation: Terminal Evaluation

III. Results of Evaluation

III-1 Confirmation of Results

There are some variations in the level of achievement among the five Outputs. But most of the Outputs have been achieved or almost achieved. In other words, capacity development of the OAE in each technical field has made considerable
As for Output 1, 10 counterparts in total have met the criteria for qualified instructors of AFSIS training courses. However, the Project has not yet achieved the target of 13 qualified instructors set in the PDM. This also influences the degree of achievement of the Project Purpose. It is fair to say that the Project Purpose, i.e., capacity development of the OAE, has been almost achieved. However, there is room for improvement in support for the AFSIS Project. OAE counterparts need to gain experiences to give lectures in AFSIS training, other international seminars and workshops.

III-2 Summary of Evaluation Results

(1) Relevance
Accurate and reliable data and results of analysis are indispensable for policymaking in the MOAC. Human resource development of the OAE is also given high priority by the MOAC in response to the needs of other ASEAN countries for improving capacities of statistical personnel in the agriculture and food sector. Since the Project has provided technical assistance to the OAE and ROAEs under the MOAC focusing on these areas, the Project certainly meets the needs and priorities of the MOAC. The Project is also consistent with the Ninth National Economic and Social Development Plan (2000-2006) and the Strategic Plan of the MOAC (2004-2008) in terms of improvement of the agricultural information network system and improvement of release of accurate agricultural data and information. Enhancement of competitiveness for sustainable growth in several sectors is one of the priority areas for Japan's technical cooperation in Thailand. Implementation of effective agricultural policy based on the accurate and reliable statistics and results of data analysis is one of the keys to enhancement of competitiveness for sustainable growth. In this regard, the objectives of the Project are also in line with Japan's development assistance in Thailand. Furthermore, Japan has already conducted several technical cooperation projects in Indonesia, Syria and Paraguay in the field of agricultural statistics and Information Technologies (IT). Thus, the Project has taken full advantage of these previous experiences and lessons learned. Overall, the Project has a high degree of relevance for technical cooperation in the OAE.

(2) Effectiveness
Evidence shows that most of the Outputs have been achieved, or almost achieved, and thereby the Project Purpose has been almost achieved. The targets set in the PDM have not been completely achieved in Output 1 and the Project Purpose. However, the capacities of the OAE and ROAEs in each technical field have significantly improved so that the OAE has been able to transfer knowledge, technologies and know-how in agricultural statistics to ASEAN member countries through AFSIS training, workshops and technical exchange programs. Therefore, the Project can be assessed as effective.
(3) Efficiency
The adequate inputs from the Thai side and the Japanese side have been provided as planned, and thereby the majority of activities have been carried out smoothly. Thus, the Project has a high degree of efficiency as a whole. Below are factors that might enhance efficiency of the Project: i) both training in Japan and technical exchange program have contributed to the smooth implementation since these training highly motivated counterparts to be actively involved in project activities; ii) the existing institutional framework in which ROAEs were established across the country and had enumerators for surveys on site made it possible for the Project to conduct yield surveys and area surveys nationwide, and data input and processing in all 9 ROAEs; and iii) the adequate budget for operational costs allocated by the OAE made it possible for the Project to conduct these activities efficiently. However, ROAE sometimes faced difficulties in responding to continuous requirements from different divisions of the OAE at all once. It was found that, in some cases, this resulted in the delay of data input and processing at the regional level.

(4) Impact
The OAE has already applied yield surveys by crop cutting methods to other commodities such as pineapple, onion and longan by themselves. Judging from such an initiative, the effects of the Project are likely to be expanded, and the Overall Goals also stand a chance of being achieved. Another positive and unexpected impact was also observed. According to ROAE counterparts, they used to just collect data and information from farmers under the conventional interview surveys. However, the yield surveys introduced by the Project made it possible for ROAEs to provide the scientific-based data and information, and the useful results of surveys directly to the sample farmers. These data and information have benefited farmers so that they came to cooperate more on surveys conducted by ROAEs and enumerators. In this way, positive impacts have been already observed at the time of terminal evaluation.

(5) Sustainability
The OAE is responsible for providing accurate and reliable statistical data and results of analysis in a timely manner. Since this mandate for the OAE will stay the same, the OAE needs to continue to take the lead in improving agricultural statistics and economic analysis after the completion of the Project. In other words, the policy aspect of the OAE is likely to be sustained. The technologies and skills in the field of agricultural statistics, information technologies and economic analysis will be sustained after the completion of the Project. This is because the counterparts are expected to continue to be involved in the same activities carried out by the Project. However, further assistance from the OAE to ROAEs is needed to ensure the accurate and reliable data collection and analysis. More specifically, training on survey methods covering statistical theory should be given to ROAEs so that ROAEs would be able to provide enumerators with training more effectively. From the institutional and organizational perspectives, it was found that the project activities have been already undertaken as routine work by the OAE staff members who gained knowledge, skills and technologies from the Project. Since personnel reshuffle does not happen so frequently in the OAE and ROAEs, trained human resources will continue to be utilized. However, further development of human resources, particularly core staff members, needs to be strengthened in each technical field to sustain the effects of the Project. The financial aspect will be sustained since the OAE has increasingly allocated the budget for surveys, information technologies, economic analysis and training during the implementation of the Project, and will continue to allocate the sufficient amount of budget after the phase-out of the Project. Judging from these aspects, it is fair to say that the prospects of the sustainability of the Project are good.

III-3  Factors promoting sustainability and impact
(1) Factors concerning planning
The Project was well designed in accordance with the urgent and important focus areas of the OAE, i.e., improvement of accuracy and reliability of its statistical data. As the Project’s effective measures, the necessary activities such as
improvement of data collection methodology, development of an information network system, economic analysis and training were incorporated into the PDM. In this way, the Project has completely met the needs and priorities of the OAE. As a result, the strong leadership of the high-ranking officials of the OAE was observed, which also encouraged the counterparts of the OAE and ROAEs to be actively involved in project activities as their routine work. Both training sessions in Japan and technical exchange programs were very effective to encourage the counterparts to improve their capacities and broaden their perspectives. These factors might bring about some positive effects of the Project.

(2) Factors concerning the implementation process
The strong leadership of the high-ranking officials of the OAE from the beginning of the Project and the strong motivation to improve their capacities and work among counterparts might contribute to effective implementation of the Project. Other factors including good communication between the Japanese experts and the counterparts, and regular monitoring activities could help generate the intended effects of the Project.

III-4 Factors inhibiting sustainability and impact
(1) Factors concerning planning
There have been no inhibiting factors so far.

(2) Factors concerning the implementation process
Several divisions of the OAE sometimes gave separate instructions on surveys to ROAEs at once without adequate coordination at the OAE headquarters. This triggered the delay in data collection and processing to some extent in ROAEs. Some AFSIS training in which the OAE had limited or no opportunities to give lectures were unexpected and external factors that might have an adverse effect on the achievement of Output 1 and the Project Purpose.

III-5 Conclusion
Most project activities have been smoothly carried out under the good cooperation between the counterparts and the Japanese experts. The capacities of the OAE and ROAEs have remarkably improved. Thus most of Outputs and the Project Purpose have been already achieved or almost achieved. In this regard, it is fair to say the Project has been successful.

III-6 Recommendations
The Evaluation Team made the following recommendations based on the evaluation results.

- **Improvement of the whole crop production survey system in the OAE**
  It is suggested that the OAE improve coordination within the concerned divisions, review the whole crop production survey system including the yield survey, the area survey and the interview survey, and reduce duplication of survey items among the concerned surveys.

- **Strengthening of the activities on crop forecasting**
  For crop forecasting, it is necessary to accumulate the data of yield surveys using the crop cutting method for more than several years to conduct regression analysis. Therefore, the OAE needs to work on the future plan by accumulating the data for the time being. Furthermore, it is recommended to consider the normal yield which is the long-term trend of the yield to be used as the standard of production situation, and the crop index which can be calculated using normal and actual yield to show the production situation.

- **Adjustment and release of the data obtained by yield surveys and area surveys**
  It is commendable that the OAE has strived to revise the previously released data, and adjust them with the results of yield
surveys. However, the yield survey results have been only partially made public. The OAE needs to get relevant departments of the MOAC and concerned organizations to understand the yield survey results so that the data obtained by the Project can be utilized. Moreover, it is recommended that the OAE consider utilizing the results of area survey, which might be summarized regularly in the near future.

- Development of the estimation function for yield survey and the area survey program
Based on the recommendations of the Mid-term Evaluation, the data processing program for yield surveys has been developed together with the graph function for monitoring and checking data, which makes it possible to input multiple-year data of each crop. However, the estimation function for yield survey and the area survey program have not been completed. Thus, it is recommended that these activities be completed by the end of March 2008.

- Improvement of the IT operation and maintenance system
The OAE has promoted IT by installing hardware and software so that OAE staff members can use computers in their office. However, some serious problems regarding the system operation of IT have emerged. The data from the server was lost due to power failure, and it took time to restore the system. This results from the insufficient system operation and maintenance within the OAE. It is recommended that the OAE improve the IT operation and maintenance system and make guidelines on security policy and regulations, and strengthening institutional arrangement in case of emergency.

- Promotion of the information sharing system
The OAE has already had the information sharing system in its intranet, but most of the staff members are not very familiar with the system. It is suggested that the OAE clarify the objectives of the information sharing system, make a users’ manual and encourage its staff members to use the system.

- Strengthening of the human resource development
1) To strengthen support for human resource development in the AFSIS, OAE staff members should keep trying to gain more knowledge, experiences and know-how in teaching at regional and international seminars and workshops. Furthermore, it is strongly recommended that OAE staff members improve their English proficiency in order to give a lecture more effectively.
2) Many capable staff members are required to construct the I/O table since there are a number of complicated tasks such as data evaluation, modification, and conversion from basic statistics for the I/O framework. Given that only a few staff members have acquired the knowledge necessary for construction of the I/O table at this moment, it is recommended that the OAE focus on further human resource development of core staff members.
3) It is suggested that human resource development for INS also be strengthened by the OAE since the limited number of staff members are working in this field.
4) Capacity development of ROAEs and enumerators is essential for collecting and analyzing accurate and reliable data on sites. It is recommended that the OAE continue to conduct training on survey methods to ROAEs so that the staff members of ROAEs can impart their knowledge to enumerators and give proper instruction son surveys.

III-7 Lessons Learned
The Evaluation Team identified the following lessons learned from the Project:
- Strong leadership of the high-ranking officials contributes to smooth implementation of the Project.
- Adequate budget allocation including cost sharing from the counterpart organization facilitates efficient implementation, and enhances the sustainability of the Project.
- A number of training in Japan, technical exchange programs with neighboring countries, and international seminars
significantly boost the morale of the counterparts to be actively involved in the project activities and enhance their capacities.

- The coordination mechanism should have been in place to facilitate intra-division work more effectively and efficiently.
- The adoption of survey methods nationwide is indispensable for improvement of statistics.
- Close coordination with other projects of similar nature generates synergy effects.