



PROJECT NOTIFICATION

15 February 2018

1. **Project Code** 17-AG-36-GE/SPP-OSM-B
2. **Title** Multicountry Observational Study Mission on Smart Rice Farming
3. **Timing and Duration** 4–9 June 2018 (six days)
4. **Venue** Tokyo, Japan
5. **Implementing Organization** APO Secretariat
6. **Number of Overseas Participants** Up to 18 qualified participants from Bangladesh, Cambodia, Republic of China, Republic of Korea, India, Indonesia, Islamic Republic of Iran, Lao PDR, Malaysia, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, and Vietnam

Other member countries with special interest in this project may nominate candidates upon consultation with the APO Secretariat.
7. **Number of Local Participants** Up to six qualified participants
8. **Closing Date for Nominations** 27 April 2018
9. **Objectives**
 - a. To expose participants to innovations and technologies in the Japanese rice industry to increase its productivity and sustainability with particular emphasis on smart rice farming with automation and digital technology;
 - b. To study cost-effective, state-of-the-art postharvest rice operations and technologies that reduce losses, improve rice quality, and diversify rice products; and
 - c. To enhance the sustainable productivity and competitiveness of rice farming in member countries.

10. Background

Agriculture faces enormous challenges to feed more than nine billion people by 2050. This will require a 70% increase in food production in spite of the limited availability of arable land, unpredictable/shrinking water availability, aging farming communities, and shortage of farm labor. The development of smart agriculture can be the solution.

Smart agriculture is driven by innovative changes and advanced technologies such as remote sensing and digital automation of farming operations. In developed countries, farmers are already

using smart technologies and devices like automated moisture sensors, drones, smart irrigation systems, self-driving GPS-enabled tractors, and robots for monitoring crop health to enhance productivity and make farming more convenient and sustainable.

Smart farming equipment makes farming operations easier and more convenient, especially for the elderly and women. It can also make farming attractive to youth, allow efficient use of agricultural inputs, and conserve resources. Smart farming can minimize natural resource degradation and carbon footprints. The use of smart technology also gives rural farmers and SMEs access to the latest information on agrifood markets, enhancing their profitability. Precision agriculture can contribute to building resilience to climate change. Thus, digital technology-enabled smart farming is important for promoting sustainable productivity in agriculture and inclusive growth.

This study mission will focus on rice farming, the most common system in Asia. Rice is the staple food in most of the Asia-Pacific. Its production and postharvest handling provide employment to a major part of the rural labor force in many countries and are linked to various economic activities that provide livelihoods to many more people in rural areas.

11. Scope and Methodology

The tentative topics to be covered are:

- a. Smart rice farming: status, trends, and the way forward;
- b. Digital technology, infrastructure, and facilities for supporting smart rice farming operations such as planting, harvesting, monitoring of crop health and farm conditions, irrigation, application of fertilizers and plant protection materials;
- c. Applications of IT for efficient, effective extension services for rice farming;
- d. Cost-effective technologies for postharvest handling and processing of rice such as quality inspection, drying, husking/milling, storage, processing, etc.; and
- e. e-Marketing of rice in Japan: skills, strategies, tools, and techniques.

The study mission will consist of site visits and presentations by experts. The tentative program of the study mission is attached.

12. Qualifications of Candidates

The participants are expected to possess the following qualifications:

Present Position	Senior policymakers and planners, senior executives/CEOs of farm machinery institutes, and senior professionals and academics in charge of promoting the development and adoption of advanced machines/technologies for sustainable rice farming. Preference will be given to those in a position to develop plans based on learning from the study mission and implement them for promoting smart farming technologies for greater multiplier effects.
Experience	At least three years of experience in the position described above.
Education	University degree or equivalent qualification from a recognized university/institution.

Language	All proceedings of the project are conducted in English, and participants are frequently required to make oral and written presentations. They must therefore be proficient in spoken and written English. Those who are not proficient in English will not be accepted.
Health	Physically and mentally fit to attend an intensive project requiring participants to complete a number of individual and group activities and strenuous fieldwork. It is therefore recommended that member countries do not nominate candidates likely to suffer from physical and mental stress.
Age	Candidates who fit the above profile are typically between 30 and 58 years of age.
Attendance	Participants are required to attend the entire program.

13. Financial Arrangements

To be borne by the APO from the APO general fund

- a. All assignment costs of resource persons.
- b. Round-trip economy-class international airfare by the most direct route between the international airport nearest to the participants' place of work and Narita or Haneda Airport for participants from Bangladesh, Cambodia, Fiji, Lao PDR, Mongolia, and Nepal and for participants from SMEs and nonprofit organizations from other APO member countries. As far as practicable, all participants are encouraged to purchase discount tickets. Please note that the arrangements for the purchase of air tickets should follow the "Guide on Purchases of Air Tickets for APO Participants," which will be sent to the selected participants and is available on the APO website at <http://www.apo-tokyo.org> and from APO Liaison Officers in member countries. Neither the APO nor the implementing organization(s) will be responsible for paying any additional per diem allowances and hotel accommodation costs due to early arrival, delayed departure, rerouting of tickets, or any other reason.
- c. Hotel accommodations and per diem allowances for participants from the Republic of China, Republic of Korea, and Singapore and for any additional overseas participants for up to seven days at the rate to be specified later when more than 15 participants are selected.

To be borne by the APO from a special grant from the Japanese Ministry of Agriculture, Forestry and Fisheries

- a. Hotel accommodations and per diem allowances for up to 15 overseas participants for up to seven days at the rate to be specified later (except for those from the Republic of China, Republic of Korea, and Singapore).
- b. All local implementation costs.

To be borne by participants or participating countries:

For participants from profit-making organizations, except SMEs, from APO member countries other than Bangladesh, Cambodia, Fiji, Lao PDR, Mongolia, and Nepal:

- a. Round-trip international airfare between the member country and Narita or Haneda Airport, Japan.
- b. Participating country expenses of USD50 per participant, payable to the APO in convertible currency.

For all participants:

- a. Participants should be fully insured in Japan, regardless of any insurance coverage obtained in their own country, against accident and illness (including hospitalization) for:
 - accidental death and dismemberment for up to JPY4,000,000,
 - medical expenses for accident for up to JPY4,000,000, and
 - medical expenses for illness for up to JPY4,000,000

The APO will secure this insurance on behalf of participants in the host country from the day before project commencement until the day after project completion. Each participant must pay the premium himself/herself from the per diem allowances provided. The APO will not be responsible for any eventuality arising from accident, illness, acts of war, force majeure, or any unexpected events beyond human control such as those related to natural disasters.

- b. All expenses related to visa fees and airport taxes.
- c. Any expenses incurred by participants for stopovers on the way to and from the project venue as well as for extra stay at the project venue before and/or after the official project period on account of early arrival or late departure, for example, due to either limited available flights or any other reason.
- d. Any cancellation charges for airfare and hotel arising from withdrawals after letters of acceptance have been issued by the APO.

14. Actions by Member Countries

- a. Each participating country is requested to nominate three or more candidates in the order of preference. Please ensure that candidates nominated meet the qualifications specified under section 12 above.
- b. No form of self-nomination will be accepted. All nominations must be endorsed and submitted by an APO Director, Alternative Director, Liaison Officer, or their designated officer.
- c. Please note that nomination of a candidate does not necessarily guarantee that he/she will be selected. Selection is at the discretion of the APO Secretariat. A basic criterion for selection is the homogeneity of the participants in terms of qualifications and work experience. Nonselection therefore does not mean that the candidates concerned are not competent enough. Sometimes candidates are not selected because they are overqualified for a project.
- d. Each nomination should be accompanied by the necessary documents. A nomination lacking any of these documents may not be considered: two copies of the candidate's biodata on the APO biodata form together with a passport-sized photograph. The biodata form can be

downloaded from the APO website (www.apo-tokyo.org). We encourage submitting the biodata form to the APO Secretariat in electronic form as an attachment to a cover e-mail message from the APO Director, Alternate Director, or Liaison Officer. The nomination documents should be sent to the Agriculture Department, APO Secretariat (e-mail: agr@apo-tokyo.org, fax: 81-3-5840-5324).

- e. The APO Medical and Insurance Declaration/Certification Form. Every candidate must complete and submit a copy of the APO Medical and Insurance Declaration/Certification Form with his/her biodata at the time of nomination. Please note that self-declaration is sufficient for candidates without any of health conditions or illnesses listed on the reverse side of the medical form. However, for all others, medical certification by a licensed physician on the reverse side of the medical form is required.
- f. Necessary documents are to be submitted electronically. In that case, there is no need to send a hard copy by postal mail. However, if the documents are submitted by fax, member countries are requested to mail the originals of the documents to the APO Secretariat as well. If a digital photograph of a nominee is not attached to the electronic biodata form, a hard-copy photograph should be sent to the APO Secretariat by postal mail. Please give the candidate's name and the project code on the reverse side of the photograph.
- g. Member countries are requested to adhere to the nomination deadline given on page 1. The APO Secretariat may not consider late nominations as they have in the past resulted in considerable difficulties to the implementing organization in its preparatory work for the project.
- h. For member countries where nominations are required to be approved by higher government authorities and require a longer time, the APO Liaison Officers/NPOs are urged to send the names of nominees on or before the deadline, indicating that government approval will follow.
- i. If a selected participant becomes unable to attend, he/she should inform the APO Liaison Officer/NPO in his/her country immediately and give the reason for withdrawal. The NPO concerned is requested to transmit that information to the APO Secretariat and the host country promptly.
- j. NPOs are requested to inform the selected participants that they are not to bring family members or to engage in any private business activities during the entire duration of the project.
- k. Each selected participant should be instructed to arrive at the venue one day before the start of the official project. Also, he/she is expected to return home upon completion of the official project because he/she is visiting the host country for the specific purpose of attending this APO study mission.
- l. NPOs should inform participants that they must attend all six days of the project.

15. Actions by the APO Secretariat

- a. Under normal circumstances, candidates who are selected will be informed of their acceptance at least four weeks prior to the start of the project.

- b. If some candidates fail to qualify or be unable to participate after selection, or if some member countries fail to nominate any candidate, their slots may be filled by alternates from the same or another member country on a merit basis.

16. Project Preparation

The participants are required to prepare a paper prior to departure for the project venue. In preparing the paper, they are expected to follow the "Guidelines for the Preparation of Country Papers" to be provided later.

17. Postproject Actions

All participants are required to prepare action plans and share the plans with their NPOs. The APO will also request participants to submit progress reports six months after completion of the study mission

18. Evaluation of Participants

If the conduct/attendance/performance of a participant is not satisfactory, these will be reported to the APO director concerned.

19. Guide for Participants

Other conditions for participation are given in the *APO Guide for Participants*, which is available from APO Liaison Officers/NPOs in member countries and on the APO website (www.apo-tokyo.org).

20. Dress Code

Participants are required to wear business attire during the project. Other instructions will be provided in the circular for participants.



Santhi Kanoktanaporn
Secretary-General



17-AG-36-GE/SPP-OSM-B:
Multicountry Observational Study Mission on Smart Rice Farming
(4–9 June 2018, APO Secretariat, Tokyo, Japan)

Program of Activities

Date/Time	Activity
3 June (Sun.)	Arrival of participants in Tokyo
4 June (Mon.)	Day 1 (Opening Session, Presentations)
	Opening Session
	Orientation Session
	Presentation 1: “Japanese Rice Farming: Trends, Issues and Challenges, and Way Forward”
	Presentation 2: “Rice Production System in Japan”
	Presentation 3: “Precision Rice Farming Technologies”
	Presentation 4: “Applications of Digital Agricultural Extension”
	Presentation 5: “Inspection, Management and Analysis of Rice Grain Quality”
5 June (Tues.)	Day 2 (Field Visits)
	Visit 1: Agricultural Machinery Factory
	Visit 2: National Agriculture and Food Research Organization (NARO)
	Visit 3: Tsukuba University
	Presentation 6: “Recent Developments in Smart Agricultural Mechanization Technologies to Improve Agricultural Productivity and Sustainability”
6 June (Wed.)	Day 3 (Field Visits)
	Visit 4: Application of IT for Efficient and Effective Extension Services
	Visit 5: Rice Mill Plant
7 June (Thurs.)	Day 4 (Field Visits)
	Visit 6: Application of Smart Rice Farming
	Visit 7: Agricultural Machinery Museum
	Presentation 7: “Development in Agricultural Mechanization in Southeast Asia”
8 June (Fri.)	Day 5 (Field Visits)
	Visit 8: e-Marketing of Rice in Japan
	Visit 9: Rice Storage, Sorting and Processing Machinery Company
9 June (Sat.)	Day 6 (Group Presentations, Closing Ceremony)
	Group discussion
	▪ Key learning points from the mission
	▪ Proposed action plan
	Closing Ceremony
10 June (Sun.)	Return of participants to respective countries

Detailed schedule and the resource persons will be confirmed later.