

PROJECT NOTIFICATION

| PN Issue Date | 5 July 2019 |
|---------------------------------|---|
| Project Code | 19-AG-29-GE-WSP-A |
| Title | Workshop on the Formulation and Study of Spatial Development, Climate Change, and the Environment for Agricultural Transformation |
| Timing and Duration | 18–22 November 2019 (five days) |
| Venue | Manila, Philippines |
| Implementing Organization(s) | Development Academy of the Philippines (DAP) |
| Number of Overseas Participants | Up to 18 qualified participants |
| Number of Local Participants | Up to six qualified participants |
| Closing Date for Nominations | 9 September 2019 |

1. Objectives

This workshop aims to introduce a framework for enhancing agricultural transformation and productivity in the light of climate change, increasing urbanization, and the Internet of Things. The framework is based on a combination of the topographic features that determine appropriate land use and the key elements of smart agriculture which integrate modern technology and connectivity into the sector. A feature of the workshop will be the sharing of learning support mechanisms and good practices in the Asia-Pacific region.

Specifically, the workshop aims to:

- a. Introduce a GIS-based land suitability framework that incorporates the environment, spatial considerations, and climate change as the first step in increasing agricultural productivity;
- Determine new approaches, technologies, and tools to transform agriculture and productivity in the Asian region taking into account the Internet of Things and environmental issues related to climate change and rapid urbanization;
- c. Identify good practices in smart agriculture in the Asia and Pacific region; and
- Recommend workable support mechanisms to improve agricultural productivity given projected trends and scenarios.

2. Background

The natural resources and physical endowments of a landscape determine its inherent potential for settlement and other equally important spatial development priorities including agriculture, forestry, mining, and urban development. The suitability and limitations of an area for specific purposes depend on its topography, soil properties, climate, diversity of flora and fauna, and unhampered flow of raw materials, water, nutrients, and other ecosystem goods and services. To be sustainable, any use of land should depend on existing natural resources and physical attributes of the area without causing significant degradation of the resource base and environment.

Through the years, however, the achievement of land use sustainability, particularly in relation to agriculture and food security, has become increasingly difficult. Climate change, increasing populations, growing urbanization and industrialization, and poor governance are among factors that have changed the spatial landscape and put stress on the natural environment. The need to expand settlements for increasing populations and related services and infrastructure as well as for industrialization is resulting in the conversion of prime agricultural lands into other uses; forested areas are also being converted to food production. The integrity of the environment, the sustainability of agriculture, and thus food security are therefore at stake.

The world population is projected to reach more than nine billion in the 2050s, and more than half will reside in Asia. The growing gap between food demand and the natural resources available to support agriculture, along with other challenges associated with climate change and related unpredictable extreme weather events, will require a paradigm shift from traditional agricultural productivity approaches. In this era of the Internet of Things, almost everything, including agricultural technologies, can be combined via Internet connectivity, e.g., online meteorological services and other big data analytics that can transform how core agricultural activities such as food crop production, livestock rearing, and forestry and fisheries operate.

This workshop will introduce an operational framework for the innovative transformation of agriculture to achieve sustained productivity, food security, and climate-smart economies, while at the same time protecting the environment for future generations.

3. Scope and Methodology

The workshop will introduce a framework for enhancing agricultural transformation and productivity that integrates the realities of climate change with the competing demand for food and housing of rapidly growing urban populations. The model reinforces the need to go back to basics by considering the natural physical endowments of land following an ecosystem-based approach that puts the environment at the heart of any discussion of agricultural productivity, while enhancing effectiveness through applications of modern technology and connectivity (the Internet of Things). Learning support

mechanisms and good practices in the Asia-Pacific region will be shared.

The workshop will consist of face-to-face lectures, an open forum and discussions, field/company visits, country paper presentations, case reviews, and development of action plans by participants.

The tentative program outline of the workshop is given below:

| | Activities/Topic | Person in Charge/ Resource Person |
|----------------------------|---|--|
| 17 Nov. 2019 | Arrival of participants Check-in at hotel | |
| Day 1, 18 Nov. | Registration 2019 | |
| 9:00–10:20 | Opening Program | |
| 9.00-10.20 | Welcome remarks Message from the APO Introduction of resource persons and participants Group photo Leveling of expectations Workshop overview | DAP project team |
| 10:20-10:30 | Coffee break | |
| 10:30–12:00 | Session 1: The Environmental Context of Agricultural Productivity: Issues, Challenges, and Impact of Climate Change, Population, and Urbanization on Spatial Development Interrelationships Trends Projections Presentation 1 | Dr. Rex Victor Cruz University of the Philippines-Los Baños |
| | Generally, the suitability of an area for specific land uses, e on its inherent biophysical features such as topograph However, each area based on its location has its share of change as well as its natural features. Furthermore, urbaniz need to be factored into the equation of agricultural productions. | ny, soil properties, etc hazards due to climat ation and other variable |
| 12:00-13:00 | | LIVILY. |
| | Lunch break | uvity. |
| 13:00–16:00 | Country Presentations Country papers on Agricultural Productivity Approaches in the Context of Climate Change, Rapid Urbanization, and Innovations in | DAP project team |
| 13:00–16:00 | Country Presentations Country papers on Agricultural Productivity Approaches in the Context of Climate Change, | DAP project team |
| 13:00–16:00 16:00–17:00 | Country Presentations Country papers on Agricultural Productivity Approaches in the Context of Climate Change, Rapid Urbanization, and Innovations in Technology Participants will share highlights of key principles in their a | DAP project team |
| | Country Presentations Country papers on Agricultural Productivity Approaches in the Context of Climate Change, Rapid Urbanization, and Innovations in Technology Participants will share highlights of key principles in their approductivity. Session 2: Framework for Agricultural Land Suitability and Sustainability Integrated Watershed Ecosystem Management: Interrelationships among Upland, Lowland, and Coastal Ecosystems as a Basis for Assigning | DAP project team pproaches to agricultura Dr. Federico Perez, Central Luzon State |
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| Date | Activities/Topic | Person in Charge/ Resource Person | |
|----------------|---|---|--|
| Day 2, 19 Nov. | 2019 | Nesource reison | |
| 8:30-8:45 | Brief recap | | |
| | Administrative announcements | | |
| 8:45-10:00 | Presentation 3 | Dr. Federico Perez | |
| | On Land Capability and Suitability: Assessing Land Performance for Agricultural Purposes | | |
| | These two sessions explore the various land use manage basic to agricultural productivity: land use suitability and cr The basis for agricultural land use suitability is land capable looks at factors or criteria and how each affects the capability. | op suitability. oility classification, which | |
| | the agricultural ecosystem or land use. | illy of the land to sustain | |
| 10:0011:00 | Presentation 4 | Dr. Federico Perez | |
| 10.00 | On Crop Suitability: Tools and Processes | Di. i caciloo i cicz | |
| | Another basic consideration for productivity is crop suitability, which is based on the premise that all crops should follow specific requirements to be suitable and productive. | | |
| 11:00–12:00 | Session 3: Introduction to Smart Agriculture: Framework for Promoting Transformation for Sustainable Productivity and Food Security | APO international resource person | |
| | Presentation 5 | | |
| | This session considers support technologies and processes that build on the foundation of land use. This includes the use of smart technologies and their applications that should be factored into the equation of agricultural productivity. | | |
| | The APO Smart Agricultural Transformation (SAT) Framework examined for application and integration in participants' loc | | |
| 12:00-13:00 | Lunch break | | |
| 13:00–15:00 | Presentation 6 Smart Technologies in Agriculture Transformation: Basic Principles | APO international resource person | |
| 15:00-16:30 | Presentation 7 | Ria Persad, | |
| | Maximizing Opportunities for Smart Agriculture | StatWeather | |
| 16:3-17:00 | Preview of Field/Site Visit | DAP training team | |
| Day 3, 20 Nov | . 2019 | | |
| 6:30–17:00 | Application of the Framework in the Field o Field/site visit | Dr. Federico Perez | |
| 17:00–20:00 | Cultural tour/sightseeing | | |
| Day 4, 21 Nov | | T-2 | |
| 9:00-10:00 | Summary of Site Visit | DAP project team in coordination with APO resource person | |
| 10:00–12:00 | Presentation 8 Best Practices in Smart Agriculture: Case Studies Synthesis | APO international resource person | |
| | Best practices in smart agriculture in various countri- participants through case studies. | es will be shared with | |
| 12:00-13:00 | Lunch break | | |
| 13:00–17:00 | Session 4. Preparation for Drafting Participants' Follow-up Action Plans | DAP project team | |
| | | | |
| | Participants will draft follow-up action plans for the Framework in their countries. | application of the SAT | |

| Date | Activities/Topic | Person in Charge/ Resource Person |
|---------------|--|--------------------------------------|
| | | Philippines |
| Day 5, 22 Nov | . 2019 | |
| 9:00-11:00 | Presentation of Participants' Follow-up Action Plans | DAP project team |
| 11:00–12:30 | Closing Program Course Evaluation and Other Administrative Matters | |
| 12:00-13:00 | Lunch break | |
| 13:00- | Free time | |
| 23 Nov. 2019 | Departure of participants | |

4. Qualifications of Candidates

The participants are expected to possess the following qualifications.

| Present Position | Officials of national and local governments or private-sector enterprises involved in agricultural management, and professional consultants and academics specializing in agriculture, climate change, spatial development and smart farming. |
|------------------|---|
| 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 25 and 45 years of age. |
| Attendance | Participants are required to attend the entire program. |

5. Requirements

The participants are required to undertake preparatory work such as writing country papers prior to departure for the project venue.

All participants are required to prepare and submit action plans to the APO and to share them with their NPOs within 10 working days after attending the project. The participants are also required to submit postproject follow-up reports six months after project completion to document the achievement of outcome(s) of the project. The NPOs will monitor the follow-up actions and report submission by participants.

The guidelines for project preparatory work will be provided in the project circular, and the postproject activity guidelines are given in Attachment 1.

5-1. Repeat Participants (who attended previous APO projects and are applying for another)

 a. In the Candidate's Biodata form (application form), candidates are required to provide details of follow-up actions taken after attending a previous APO project(s) and outcomes (benefits) of those activities. Candidates are also required to state in the Candidate's Biodata form whether they submitted a report on their follow-up actions.

5-2. All Participants

- a. In the Candidate's Biodata form, candidates are required to list their expectations from the project and planned postproject actions/activities. This is a tentative list which participants are free to revise or replace after attending the project (as in item b below).
- b. All participants are required to develop and submit final follow-up action plans within 10 working days of project completion, in the format to be provided by the APO Secretariat later.
- All participants are required to submit reports on the follow-up actions taken within six months (or a period specified for a particular project) of project completion.
- d. The reports on follow-up actions are separate from the trip reports participants usually submit to their organizations/NPOs immediately after returning from project venues. The report format will be provided before project completion.

6. Financial Arrangements

6-1. Airfare

The APO will meet the cost of round-trip economy-class international airfare between the international airport nearest to the participants' place of work and Manila, the Philippines.

Participants should 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 also available on the APO website and from APO Liaison Officers in member countries.

6-2. Insurance Coverage

Participants' insurance premiums: All participants should be fully insured against accident and illness (including hospitalization and death) for a principal sum equivalent to USD10,000.00 for the entire duration of the project and travel and must submit to the APO Secretariat a copy of the comprehensive travel insurance certificate before participation. Such insurance should be valid in the host country. This insurance requirement is in addition to existing government insurance coverage in some member countries. Neither the APO nor the implementing organization will 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.

6-3. Cost Sharing

Subject to the conditions stated in the Financial Arrangements section, the following table shows the cost-sharing arrangements between the APO, host country, and participants or participating countries.

| | Cost to be met by | | |
|--|---|-----------------|-----|
| Cost item | Participants or participating countries | Host country | APO |
| Round-trip economy-class international airfare (refer to paragraph Airfare for conditions) | No | No | Yes |
| Participating Country Expenses (PCEs) | NA | NA | NA |
| Hotel accommodation in Manila | No | Yes | No |
| Per diem allowance in Manila | No | Yes | No |
| Transportation costs to and from hotel and airport in Manila | No | Yes | No |
| Insurance coverage in the Philippines (refer to paragraph Insurance Coverage) | Yes | No | No |
| Any expenses related to visa fees and airport taxes | Yes | No | No |

| | Cost to be met by | | |
|--|---|-----------------|-----|
| Cost item | Participants or participating countries | Host country | APO |
| All expenses incurred by participants for any reason including but not limited to: a. Stopovers b. Extension of stay c. Early arrival or late departure d. Flight cancellation | Yes | No | No |
| Any cancellation charges for expenses such as airfare and accommodations incurred by the APO or host country after issuance of Letters of Acceptance | Yes | No | No |
| Assignment costs of international resource persons | NA | No | Yes |
| Assignment costs of local resource persons | NA | Yes | No |
| All local implementation costs including but not limited to: a. Meeting rooms b. Documentation c. Preparatory costs | NA | Yes | No |

7. 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 the section Qualifications of Candidates 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 selection committee of the APO Secretariat. A basic criterion for selection is the homogeneity of the participants in terms of qualifications and work experience. Non-selection 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 Department in charge of this project.
- 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 the 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, 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 workshop.
- NPOs should inform participants that they must attend the entire program of the project.
- m. NPOs should assist the APO and/or host country in collecting amounts corresponding to cancellation charges arising from withdrawal or no-show of a participant.

8. 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.

9. Project Preparation

The participants are required to prepare a short 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.

10. Postproject Actions

All participants are required to prepare action plans and share the plans with their NPOs. The APO also requests participants to submit progress reports six months after completion of the project. In addition, participants taking part in training-of-trainers courses must also submit a report summarizing a training project that they conducted following the action plans to the APO and NPOs within six months after project completion.

11. Evaluation of Participants

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

12. 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).

13. Dress Code

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

Dr. Santhi Kanoktanaporn

Secretary-General

POSTPROJECT ACTIVITY GUIDELINES

The follow-up actions by participants after project attendance determine the extent of multiplier effects (outcomes) of APO projects in member countries. The APO has therefore established an interdepartmental Participant Selection Committee to ensure selection of the most appropriate candidates. A key consideration is whether individuals are in a position, have the ability, and are willing to undertake follow-up actions after project attendance.

Each participant is required to undertake follow-up actions after attending an APO project based on his/her learning from it and report on those activities to the NPO of his/her country and the APO Secretariat, following the guidelines below:

Examples of Follow-up Activities

The examples below are suggestions and are not meant to limit participants' choices of follow-up actions:

- a. An official report on project attendance to participants' organizations, or NPOs, or both;
- b. Newspaper/magazine articles based on learning from the project;
- Application of knowledge, skills, techniques, or technologies for improving job performance and/or organizational capacity;
- d. Delivering a presentation or lecture on the project topic;
- e. Conducting a workshop/seminar/conference/forum on the project topic;
- f. Improving training/teaching/extension materials related to the project topic; and
- g. Sharing project findings with colleagues, professional groups, or others.