# PROJECT IMPLEMENTATION PLAN

Ref. No. 19-AG-32-SP-DON-C-TW01-PP2000005-005

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| **PIP Issue Date** | 25 March 2020 |
| **PIP Revision 1 Issue Date** | 11 August 2020 |
| **Project Code** | 19-AG-32-SP-DON-C-TW01 |
| **Title** | 2020 International Conference on Smart Agriculture |
| **Reference** | Project Notification on 19-AG-32-SP-DON-C dated 27 January 2020 |
| **Timing and Duration** | 15-16 September 2020 (two days) |
| **Venue** | NCHU International Conference Hall, Taichung, Republic of China |
| **Implementing Organization(s)** | China Productivity Center |
| **Maximum Number of Participants**<br><br>**If necessary, please insert "overseas" before participants.** | N/A |
| **Number of Local Participants** | 300 |
| **Closing Date for Nominations**<br><br>**Self-registration in case of self-learning e-Course** | N/A |

**Change History of PIP: 19-AG-32-SP-DON-C-TW01**

| Revision | Date of Issue | Clause | Modifications |
|---|---|---|---|
| Revision 1 | 11 August 2020 | Timing and Duration | Timing is changed from 9-11 September 2020 to 15-16 September 2020. Duration is changed from three days to two days. |
| | | Scope and Methodology | Program Schedule and Activities are revised in accordance with the revised project timing. |

## 1. Objectives

During the International Conference on Smart Agriculture, domestic and international experts will be invited to share development trends related to smart agriculture, providing an opportunity for participants to learn more about state-of-the-art technologies and resources in the sector worldwide. It is expected that the introduction of smart production management systems will improve the overall efficiency and quantity of agricultural production, thus enhancing the competitiveness and viability of all agroindustries. At the same time, raising the international brand visibility of the ROC's unique smart agriculture technologies and services could open up more possibilities for future international cooperation.

## 2. Background

The agriculture sector around the globe faces similar challenges of an aging workforce, labor shortages, climate change, etc. However, the rapid development of innovative technologies is gradually changing many traditional industries including agriculture. With improved materials and operation methods (such as capital communication and automation), agriculture has evolved from the traditional labor-dependent, experience-based industry to science-based farming models depending on data and automation. Some advanced countries are using engineering technologies to achieve cross-domain integration. Technologies such as the Internet of Things (IoT), cloud computing, and big data can be built into smart network integration systems through information platforms, which may enhance smart agriculture alliances, traceability of data, precision farming, consumer-oriented production, etc. In other words, smart agriculture technologies offer integrated approaches to the challenges of increasing population, labor shortages, food security, and climate change adaptation, enabling countries to identify options with maximum benefits and minimize the risks that need to be managed. This will optimize the quantity and quality while increasing the value of agricultural products.

In recent years, the Taiwan Agricultural Committee has been constructing a new value chain for agriculture from three different aspects: manufacturing; sales; and service. Manufacturing includes the development of high-efficiency, energy-saving, water-saving, and disaster-preventing innovative facilities with green energy to create an environment-friendly model. The sales aspect involves the establishment of cloud-based product tracing systems with QR codes and verification platforms to ensure food safety. Service includes the provision of agricultural product marketing information through cloud computing, the creation of agricultural grain databases, and the integration of information services to farmers covering land, crops, and administrative measures.

The future of agricultural production will rely on smart technologies such as sensors, intelligent robotics, the IoT, and big data analytics to construct smart digital management and marketing service systems. In this conference, participants will learn about strategies to promote smart agriculture and production management in different subsectors. By optimizing supply chains, producers can stabilize output, reduce resource waste, and stimulate consumption, resulting in more sustainable, environment-friendly food systems.

## 3. Scope and Methodology

The tentative program of activities of this international conference is given below:

| Day 1: Tuesday, 15 September 2020, International Conference on Smart Agriculture | | |
|---|---|---|
| Time | Topic/Activity | Speaker/Facilitator |
| 10:00–10:15 | Opening remarks and group photo | |
| 10:15–10:40 | Smart agriculture alliance development in rice industries | - Local expert |
| 10:40–11:05 | Key transformation opportunities for the poultry industry-Experiences and strategies on smart agriculture application | - Local expert |
| 11:05–11:30 | Smart technologies application in edamame industry and development strategies of edamame alliance | - Kaohsiung District Agricultural Research and Extension Station, COA |
| 11:30–12:00 | Panel Discussion | - Council of Agriculture, Executive Yuan |

| Time | Topic/Activity | Speaker/Facilitator |
|---|---|---|
| 12:00–13:00 | Lunch break | |
| 13:00–13:30 | Intellectualization in aquaculture-water quality monitoring, disease detection, and automatic fry sorting system for fish fry production | - Local expert |
| 13:30–14:20 | How the Internet of Things is changing Japanese aquaculture | - International expert |
| 14:20–14:50 | Panel Discussion | - Council of Agriculture, Executive Yuan |
| 14:50–15:10 | Tea break | |
| 15:10–15:40 | Transformation of agricultural finance and the future of agricultural ecosystem in ROC | - National Development Council, Executive Yuan |
| 15:40–16:30 | Innovation in agricultural finance | - International expert |
| 16:30–16:50 | Panel discussion | - Council of Agriculture, Executive Yuan |
| Day 2: Wednesday, 16 September 2020, International Conference on Smart Agriculture | | |
| Time | Topic/Activity | Speaker/Facilitator |
| 10:00–10:30 | IoT and sensing technology for agricultural facility | - Local expert |
| 10:30–11:00 | The prospect of cross-field intellectualization in the mushroom industry | - Local expert |
| 11:00–11:50 | Application of smart agricultural ICT and automation equipment | - International expert |
| 11:50–12:20 | Panel Discussion | - Council of Agriculture, Executive Yuan |
| 12:20–13:30 | Lunch Break | |
| 13:30–14:00 | Application of AI in poultry farming - smart poultry house and supply chain system | - Local expert |
| 14:00–14:50 | Technology integration on a poultry farm - How to get started and where it can lead to | - International expert |
| 14:50–15:20 | Panel Discussion | - Council of Agriculture, Executive Yuan |

### 4. Resource Persons

The APO will assign four international resource persons. Local resource persons from relevant agencies will be assigned by the implementing organization.

### 5. Requirements of Participants

Relevant government officers involved in promoting smart agricultural production, researchers on technological developments in smart agriculture in government R&D agencies, academic experts, researchers from legal entities, smart agricultural technology service providers, and agribusiness representatives, especially agricultural product distributors and logistics operators.

### 6. Financial Arrangements

**To be met by the APO**

a. All assignment costs of APO resource persons, covering honoraria, airfare, and daily subsistence allowances.

b. Local implementation costs such as for conference rooms, meeting package, conference facilities, interpretation fees, translation costs, material costs, local transportation costs, etc.

c. The total amount of financial assistance from the APO for this national project should not exceed USD41,950.00. Please see Attachment 1 for a detailed breakdown of the approved project cost.

**To be met by the implementing organization**

a. If the actual project cost exceeds USD41,950.00, the overrun should be met by the

implementing organization.

  b. Other expenses not met by the APO.

## 7. Roles and Responsibilities

The roles and responsibilities of the implementing organization and APO are:

### Implementing organization

  a. Organizing the two-day conference;

  b. Assigning local coordinators(s) to organize the conference (e.g., conference facilities, accommodation, meeting materials and/or kits, logistics);

  c. Inviting local participants and arranging mass media coverage;

  d. Inviting and assigning local resource speakers;

  e. Making arrangements for the venue and logistics;

  f. Making copies of the meeting materials;

  g. Providing budget not provided by the APO;

  h. Meeting the balance of project implementation costs if the total amount exceeds USD41,950.00; and

  i. Submitting a project completion report to the APO, including the financial report and expenditure receipts for the project.

### APO

  a. Providing financial support for organizing the project as detailed in section 6;

  b. Assigning four international resource persons for the project; and

  c. Coordinating with the international resource persons and implementing organization

## 8. Procedures for Project Implementation

This project is to be implemented in close collaboration with the APO Secretariat, referred to as the APO in this document.

  a. A temporary advance of up to 50% of the total APO share will be remitted to the implementing organizations, if necessary, according to the detailed breakdown of the approved project cost given in the Attachment.

  b. The project will be carried out by the implementing organization.

  c. The implementing organization will make the agreed expenditures and settle the entire account by providing all necessary proof of payment to the APO after completion of the project. The proof of payment, e.g., bills, payment records, and receipts issued by third parties, must be submitted together at one time, written in clear English, with English translations of all documents not originally written in English. The final payment will be made based on the actual expenditure after the implementing organization submits the comprehensive report. In general, internal evidence is not accepted as proof of payment and will not be reimbursed.

  d. The implementing organization will submit a project completion report and a statement of expenses supported by receipts, etc. related to the project to the APO within one month of project completion. The report will provide details on how the project was carried out in the country; program of activities; benefits and advantages to the local agriculture and food industry sector, implementing organization, and host country; and follow-up action plans, among others.

## 9. Final Project Output and Outcomes

Upon completion of the project, the CPC will undertake the following:

a. Submit a project completion report on the international conference to the APO and disseminate the report on the proceedings of the conference including recommendations to relevant government bodies such as the Council of Agriculture within one month after project completion.

b. Submit a statement of expenses supported by third-party receipts/bills within one month after project completion.

c. Submit documents and e-links relating to promotional material on the national program, e.g., newsletters, news articles, brochures, bulletins, and news clippings, written in English or the local language with an English translation of the main points.

d. Disseminate the knowledge and experience gained to the public and private sectors through publications, consultancy services, training courses, etc.; and

e. Monitor the follow-up actions undertaken by participants or participants' organizations and report them to the APO.

Expected outcomes:

At the time of the assessment workshop conducted by the CPC at the end of 2020:

a. A deeper understanding of smart agriculture for improvement of overall efficiency and production will have been created;

b. At least six extension programs will have been carried out to develop smart agriculture in relevant enterprises; and

c. At least an 80% satisfaction rating will have been given for the implementation of participants' action plans.

## 10. Follow-up Action Plans

After completion of the international conference, the participants or their organizations will undertake the following:

Government agencies such as the Council of Agriculture and universities

a. Include innovative techniques and technologies in extension programs; and

b. Coordinate among various agencies in support of awareness, extension, and promotion of smart agribusiness.

Participants

a. Submit action plans to the CPC for the implementation of concepts, techniques, technologies, and best practices in their own farms, enterprises, or companies;

b. Inform the CPC of the expected outcomes of successful action plan implementation; and

c. Submit requirements for government agency assistance for their own action plans.

Dr. AKP Mochtan
Secretary-General

## Cost Estimate

| Item | Cost(USD) |
|---|---|
| Meeting package | 13,750.00 |
| Conference facilities cost | 5,500.00 |
| Honoraria for local resource persons | 1,360.00 |
| Local transportation costs for local resource persons | 680.00 |
| Local transportation costs for participants | 3,450.00 |
| Interpretation fee | 12,610.00 |
| Convention materials | 4,600.00 |

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| Total | 41,950.00 |