



## PROJECT NOTIFICATION

Ref. No.:21-CP-08-GE-WSP-B-PN2100019-001

<b>Date of Issue</b>	25 March 2021
<b>Project Code</b>	21-CP-08-GE-WSP-B
<b>Title</b>	Workshop on Innovation for Climate-smart Livestock Production
<b>Timing and Duration</b>	19–21 May 2021 (three days)
<b>Hosting Country(ies)</b>	Mongolia
<b>Modality</b>	Digital Multicountry
<b>Implementing Organization(s)</b>	Mongolian Productivity Organization and APO Secretariat
<b>Participating Country(ies)</b>	All Member Countries
<b>Overseas Participants</b>	19
<b>Local Participants</b>	12
<b>Qualifications of Participants</b>	Government officers, consultants, researchers, and academics in charge of planning, developing, and managing livestock and agricultural production addressing climate change
<b>Nomination of Participants</b>	All nominations must be submitted through National Productivity Organizations of member countries
<b>Closing Date for Nominations</b>	25 April 2021

## 1. Objectives

- a. Make livestock production sustainable and profitable for farmers of all scales, while supporting global initiatives against climate change.
- b. Share recent advances in smart technologies and innovations relating to the mitigation of climate change which contribute to productive, sustainable livestock farming.

## 2. Background

Livestock contribute significantly to food security because they supply calories, protein, and nutrients; feeds on a diet mostly not consumed by humans, and provides nutrient-rich fertilizer for crop production. The global demand for livestock products is anticipated to double by 2050, mainly due to improvement in the worldwide standard of living. Livestock are central to achieving many of the UN Sustainable Development Goals (SDGs) and are directly relevant to most of them. Livestock production is a major industry that includes cattle, buffalo, sheep, goats, horses, poultry (chickens, ducks, turkeys, etc.), milk, meat, and eggs. It accounts for 40% of agricultural GDP in developing countries, and that share is growing. In addition to meat and milk production, livestock remain useful in farm production and as a source of protein and natural fat. In the case of Mongolia, the host of this workshop, a 2019 report by the International Monetary Fund stated that the livestock industry in Mongolia accounts for about 90% of agricultural production and employs 25% of the population, which is higher than any other sector.

However, the intensifying effects of climate change on agricultural systems, primarily global warming, pose threats to livestock production and to the quality of feed crops and forage, water availability, animal and milk production, animal diseases and reproduction, and overall biodiversity. The likelihood of zoonotic pandemics or human-triggered climate change is real and growing. The livestock sector contributes 14.5% of global greenhouse gas (GHG) emissions, driving further climate change. Consequently, the livestock sector will be a key player in mitigating GHG emissions and improving global food security.

Several studies have shown that the primary cause of decreased production in the dairy and beef industry is heat stress, causing significant economic losses. Rising temperatures and lower annual rainfall reduce livestock productivity and inhibit the growth of fodder crops. Reproductive cycles are affected by thermal stress, and the conception rates of dairy cows may drop by 20–27% in summer (Feedipedia, 2016). Data show that milk production in India decreases by a total of 1.8 million tons due to global warming, translating to an enormous loss of around USD 366 million per year. The new climate change and food security adaptation measures recommended by experts for the livestock sector in ASEAN are precision smart livestock farming methods, along with applications of ICT, policies, and strategies for climate change adaptation, and the expanded role of institutions (ERIA, 2019). This workshop will discuss innovative management models for the livestock sector in APO member countries to help minimize the problems caused by climate change.

## 3. Scope, Methodology, and Certificate of Attendance

The duration of each day's sessions will be around three hours comprising presentations by experts, group discussions, and other relevant learning methods. The indicative topics of the presentations are:

Day 1:

- Implications of climate change for livestock production and food security.
- Effects of climate change on poultry and dairy production.
- Policies and institutional settings for promoting climate-smart livestock production.

Day 2:

- Value creation through smart, innovative livestock farming systems.
- Sharing best practices of climate-smart livestock models and technologies.

Day 3:

- ICT for adapting livestock farming technologies to climate change.
- Action plan formulation.

The detailed program and list of speakers will be provided two weeks prior to the sessions with announcement of the names of the selected participants.

The participants are required to attend all sessions. This full participation is a prerequisite for receiving the APO certificate of attendance.

#### **4. Financial Arrangements**

- a. The APO will meet the assignment costs of overseas resource persons and honorarium for up to two local resource persons.
- b. The host country will meet the costs for a virtual site visit(s), either broadcast live or recorded as applicable.

#### **5. Implementation Procedures**

Please refer to the implementation procedures for APO digital multicountry projects circulated with this document.



Dr. AKP Mochtan  
Secretary-General

## **IMPLEMENTATION PROCEDURES FOR APO DIGITAL MULTICOUNTRY PROJECTS (TRAINING COURSES/WORKSHOPS/CONFERENCES)**

### **1. Modality of Implementation**

- a. The sessions will be conducted virtually.
- b. The duration of each day's sessions will be around three hours for training courses and workshops.
- c. The duration of the sessions will be around four hours for conferences.
- d. The APO Secretariat will inform the resource persons and participants of the link to the virtual sessions.
- e. The link will be exclusive to resource persons and participants and should not be shared.

### **2. Requirements of Participants**

- a. Competent in connecting to virtual meetings, including independently undertaking troubleshooting in the event of poor or lost connections.
- b. Proficient in English, both written and spoken.
- c. Have necessary devices comprising a computer, web camera, microphone, and speaker or headphones.
- d. Access to internet connections suitable for videoconferencing. Stable, wired LAN connections are preferred.
- e. Follow the instructions of the moderators/presenters in asking questions, joining discussions, and answering questions.
- f. Wear appropriate business attire during the sessions.

### **3. Actions by Member Countries**

- a. Each participating country will nominate three or more candidates in order of preference for training courses and workshops, and five or more candidates for conferences.
- b. All nominations must be endorsed by an APO Director or Alternate Director and submitted by a Liaison Officer or designated officer. Self-nominations will not be accepted.
- c. Nominations should reach the Secretariat before the deadline.
- d. Each nomination must be accompanied by the APO biodata form and uploaded to the APO Document Management System/Fleekdrive by the NPO. The biodata form is available on the APO website.
- e. If a selected participant becomes unable to participate, the NPO concerned should inform the APO Secretariat and the host country promptly.

### **4. Actions by the APO Secretariat**

- a. Selection of candidates will be at the discretion of the Participant Selection Committee of the APO Secretariat.
- b. Selection of candidates will be completed and announced two weeks prior to the start of the sessions.
- c. Slots that become available due to withdrawal of a selected candidate(s) or lack of nominations by a member country may be filled by alternates to be selected on a merit basis.
- d. The APO Secretariat will inform NPOs of the final program and link of the virtual sessions one week prior to commencement.