## **WMO OMM**





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Our ref.: 01910/2018/CLW/CLPA/CAgM-17/Experts-and-TECO-2018 5 February 2018

Annexes: 3 (Annexes 2 and 3 in English only)

Subject: Seventeenth Session of CAgM and Technical Conference

- (a) Nomination of CAgM experts
- (b) Participation in Technical Conference (TECO)(c) Additional information concerning CAgM-17

Action required: (i) To nominate CAgM experts from your country before 31 March 2018

- (ii) To identify candidate TECO speakers by 28 February 2018
- (iii) To pre-register participants to the TECO before 23 March 2018

Dear Sir/Madam,

This is to invite you to nominate experts to undertake the work of the Commission for Agricultural Meteorology (CAgM) and to provide further information concerning the seventeenth session of CAgM, which will take place in Incheon, Republic of Korea, from 18 to 20 April 2018 and on the Technical Conference (TECO) on Future Challenges and Opportunities in Agricultural Meteorology on 16 and 17 April 2018.

Please note that these events will be preceded by a Women's AgroMeteorology Leadership Workshop on 14 and 15 April 2018. Further information on this event will be sent to you in a separate letter.

#### Nomination of CAgM experts

The CAgM session will consider, inter alia, proposals for the Commission to establish a new working structure for the seventeenth intersessional period (2018-2022) (Annex 1). Accordingly, the Commission is likely to adopt the following procedure, as proposed by the current CAgM Management Group (MG):

- 1. The Commission will decide on the focus areas under which it will carry out its work during the next intersessional period;
- 2. It is also likely to decide on re-establishing an MG to coordinate, guide and monitor the implementation of the various activities of the Commission during the next intersessional period;
- 3. During the session, Commission members may then propose nominated experts to serve as members of the MG;
- 4. The Commission will also establish a database of the experts nominated by Members, and draw upon this database to populate its working structure during the inter-sessional period to carry out specific tasks to be identified by the Commission in each of the focus areas.
- To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO
- cc: Hydrological Advisers to Permanent Representatives President and vice-president of CAgM Members of CAgM Members of Focus Areas

Nominated experts may come from any service or institute from your country, provided they have the relevant expertise. In considering your nominations, you may wish to recall the WMO Gender Equality Policy approved by the seventeenth World Meteorological Congress in 2015, which calls for technical commissions to make efforts "to ensure that a minimum of at least 30 per cent of the members of their working structures is female and that this percentage rises progressively within each financial period. The longer-term objective will be to reach parity between male and female members".

The attached nomination form (Annex 2 is in English only) should be submitted, preferably in Word format, by email to agm@wmo.int. If an electronic signature is not possible please also attach a scanned version of the signature page. In addition, to ensure that information on the background of the experts is available in a uniform manner, each nominated expert should complete a Professional Information Form (PIF) (available only in English). The PIF, as well as the attached nomination form, can be downloaded at <a href="http://meetings.wmo.int/CAgM-17">http://meetings.wmo.int/CAgM-17</a>.

Your nomination form and the experts' Professional Information Forms should be submitted preferably by **31 March 2018** in order to ensure that this information will be available for consideration during CAgM-17. In the event that you do not envisage at this time that your country will be represented at CAgM-17, it is particularly important that you consider favorably this invitation to nominate experts, which will ensure that experts from your country are considered when selections are made at the session or thereafter by the MG. Once again, please bear in mind that the ultimate decision regarding the establishment and composition of the MG rests with the Commission and will be decided during the session.

#### Technical Conference (TECO)

A Technical Conference on "Future Challenges and Opportunities in Agricultural Meteorology" will be organized at the same location before the seventeenth session of CAgM, from 16 to 17 April 2018 (Annex 3 is in English only). The conference will be conducted in English only. Participants in the CAgM-17 session are also invited to attend this Conference. Information concerning the TECO can be found at: <a href="http://meetings.wmo.int/CAgM-17">http://meetings.wmo.int/CAgM-17</a>. The TECO is intended to highlight the applications and utility of CAgM outputs from the current inter-sessional period, on-going needs, and proposed areas of future work, to inform the Commission's future directions.

TECO speakers will be selected largely from the list of TECO and CAgM-17 participants, taking into account the TECO subject matter as well as, gender and regional balance. Therefore, it would be highly appreciated if you could arrange to informally notify the organizing committee of your delegation's expected list of TECO participants via email to agm@wmo.int by 28 February, along with an indication of their interest in potentially making a presentation. TECO presentations will be an opportunity to highlight the use of CAgM-related tools, guidelines, products and practices, as well as to identify areas where further development of such is needed. Candidate speakers will be contacted directly by beginning of March 2018.

It is hoped that the costs of participation in the TECO will be borne by the Government of your country. If this is not possible, WMO is prepared, upon request, to consider providing some financial support for this purpose. Limited funding has been set aside to provide air tickets and a lump sum, in lieu of per diem support, for a limited number of participants. Priority will be given to developing countries and countries with economies in transition, and limited to those who will be attending the CAgM-17 session. The form for requesting financial assistance can be downloaded at <a href="http://meetings.wmo.int/CAgM-17">http://meetings.wmo.int/CAgM-17</a> and should be submitted via email to <a href="https://meetings.wmo.int/CAgM-17">agm@wmo.int</a> by 28 February 2018.

In view of your official status with WMO as Permanent Representatives, you are kindly invited to act as focal points for the online registration of participants to the Technical Conference. The link to the online Event Registration System (ERS), the username and password that were sent to Permanent Representatives by e-mail remain valid for all upcoming WMO meetings (https://eventregistration.wmo.int/register/).

Please note that the online registration will close on 23 March 2018. For further information concerning online pre-registration, please do not hesitate to contact the WMO Secretariat by e-mail at: registration@wmo.int.

## Additional information on CAgM-17

Please note my previous letter dated 15 January 2018, ref. 44612/2017/SG/LCP/CNF/CAgM-17, concerning the seventeenth session of CAgM. Documents and INFs for the session are in preparation and will be posted as they become available at http://meetings.wmo.int/CAgM-17. Commission members are encouraged to review these on a regular basis and send comments in advance of the session, preferably in track changes, to agm@wmo.int. In addition, based on your perspective and experience, we would also like to request you to provide input on the priorities on the future work of CAgM and these can also be provide to agm@wmo.int. Thank you for your continued support to WMO programmes and activities, including the Commission for Agricultural Meteorology.

Yours faithfully,

(E. Manaenkova) for the Secretary-General

#### WORLD METEOROLOGICAL ORGANIZATION

## Commission for Agricultural Meteorology (CAgM)

Proposed Structure for CAgM-17 (2018-2022) (as recommended by CAgM Management Group)

### Focus Area 1: Weather and Climate Services for Agriculture

## **Expert Team** on Agrometeorological Tools and Applications

• Topics: Agrometeorological tools and applications for Climate Service Toolkit (CST); agrometeorological decision support systems; Applications on Remote Sensing, GIS, Weather Forecasts for Agriculture (NWP).

### **Expert Team** on Feedback Mechanisms and Outreach of Agromet Information

• Topics: Weather and climate service user needs and requirements in agriculture; Economic assessments and weather index insurance products.

### **Expert Team** on Crop, Animal, and Pest/Disease Early Warning Systems

• Topics: Animal/Plant disease applications modeling; Crop Early Warning Systems, Crop Protection, and Crop Forecasting; Phenology; Crop Calendars; Inputs to agromet projects in various countries.

## Joint CAgM/JCOMM Task Team on Weather, Climate and Fisheries

• Topics: Impacts of climate change on fisheries and marine aquaculture; Climate services for fisheries; Liaise with fisheries organization on data issues

## Focus Area 2: Research and Technology Development in Agrometeorology

## **Expert Team** on Soil Moisture Monitoring and Applications

• Topics: Standards for soil moisture measurements; Applications on integrating ground-based and remotely sensed observations.

## Expert Team on Agricultural Flux Measurements (Atmosphere and Soils)

• Topics: Standards on agricultural flux measurements; Liaise with various UN organizations on soil flux measurements; Liaise with IG3IS activities.

#### Expert Team on Weather and Climate Modeling for Sustainable Agriculture

• Topics: Use of climate scenarios for plant breeding and agricultural planning; Integration of weather / climate models with crop models.

Task Team on Operational Data Issues in Agricultural Meteorology

Task Team on World Agrometeorological Information Service (WAMIS)

#### Focus Area 3: Agrometeorological Risk Management

## Expert Team on Drought

• Topics: Drought monitoring systems, outlooks, impacts and preparedness; Coordination with IDMP; Develop drought aspects for Global Meteo Alert System (GMAS)

#### Expert Team on AgroClimatic Data and Sub-seasonal to Seasonal Forecasts for Agriculture

• Topics: Agroclimatic data for agricultural applications and analyses; Applications of Subseasonal to Seasonal forecasts for agriculture.

**Expert Team** on Extreme Events / Natural Hazards Impacts on Agriculture (Dust Storms, Frosts, Cold, Heat, Floods)

• Topics: Impacts of dust storms, frosts, coldwaves, heatwave and floods on agriculture; Possible inputs to regional alerting systems and GMAS.

Task Team on Impacts of Climate Change on Agriculture

Task Team on Climate Smart Agriculture and Farming

## Focus Area 4: Communications, Education and Capacity Development / Enabling Environment

#### **Expert Team** on Capacity Development

• Keywords: Global Centers of Research and Excellence in AgroMeteorology (GCREAMs); Agromet Training Modules; Roving Seminars / Farmer Field Schools; Gender Issues / Women Empowerment.

#### **Expert Team** on Communication and User Interface for Agriculture

• Keywords: Liaise with GFCS; Communication strategies for agrometeorology; Socioeconomic assessments and policy; Interaction with Global Federation of Agricultural Meteorology Societies (GlobalFAMS).

## **Expert Team** on Information Communication Technology Applications

• Topics: Development of ICT applications for agriculture; Inputs to agromet projects in various countries.

Task Team on Guide to Agricultural Meteorological Practices

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## WORLD METEOROLOGICAL ORGANIZATION COMMISSION FOR AGRICULTURAL METEOROLOGY

#### **NOMINATION FORM**

## EXPERTS PROPOSED FOR CONSIDERATION TO UNDERTAKE THE WORK OF THE COMMISSION

Surname	First name	Gender	Telephone	E-mail

Please ensure that for each nominee, a full Professional Information Form in electronic form available at <a href="http://meetings.wmo.int/CAgM-17">http://meetings.wmo.int/CAgM-17</a> is submitted by **31 March 2018**. Nominations without Professional Information Forms may not be considered. (Additional sheets could be used, if required.)

I understand that the above nomination(s) implies a commitment that the nominee(s) will be fully supported by their employing agency(ies) in carrying out his/her duties. I also understand that it is estimated that an expert needs to be able to spend at least one month of work per year during the four-year period. Therefore, when making the above nomination(s), the following essential factors have been taken into consideration:

- (a) The candidate is an expert in the field to which he/she is nominated, and has recent international experience;
- (b) The candidate has a good knowledge of a WMO working language;
- (c) The candidate is ready, willing and able to carry out the duties of the position; and
- (d) The employer of the candidate has ensured his/her availability for the time needed to accomplish the work assigned.

I also understand that, by this advance nomination, the requirement for my prior concurrence (as prescribed under WMO General Regulation 36(a)), to his/her participation in the work of the Commission is met, and this with a view to enhance the possibility for an early activation of the work programme proposed during CAgM-17.

Date:	
Signature of the Permanent Representative	9:
This form is to be completed and sent to:	

The Secretary-General World Meteorological Organization 7 bis, avenue de la Paix Case postale No. 2300 CH-1211 Geneva 2 Switzerland

Email: agm@wmo.int Fax: (41 22) 730 80 43

Deadline for submission: 31 March 2018.

# Technical Conference on Future Challenges and Opportunities in Agricultural Meteorology – Applications and Services

#### **Concept Note**

## Incheon, Republic of Korea 16 to 17 April 2018

In the 21st Century, agriculture remains one of the most important human activities. Whether it is growing crops, raising livestock, sustainably maintaining forests for building supplies, or searching the ocean for fish, agriculture is vitally important to humankind and our economic well-being.

Agriculture is one of the human activities most connected to weather and climate, affecting primary production and essential support for human life, nutrition and health. Food security is still a major concern in developing countries. The balance of providing food to a growing global population with minimizing the impact of climate change to agriculture and reducing greenhouse emissions from agriculture is of major concern to every country on the planet.

The application of agricultural meteorological services to farmers and countries directly contributes to the United Nations (UN) Sustainable Development Goals (SDG), including: 1- No Poverty, 2- No Hunger, 5 – Gender Equality, 7 Clean Energy, 13 – Protect the Planet, 15 – Life on Land and 17 - Partnerships for the Goals. Countries need to change their focus from reactive to proactive drought policies and plans which include the promotion of the three pillars of drought management: Monitoring and Early Warning Systems, Vulnerability and Impact Assessments and Mitigation and Response. These issues are of great concern to the UN Framework Convention on Climate Change, the Intergovernmental Panel on Climate Change and UN Convention to Combat Desertification and the UN Convention on Biological Diversity.

The field of agricultural meteorology offers practical solutions to these issues and concerns by integrating the study of direct and indirect weather and climate impacts on agriculture production including crops, forests, livestock and fisheries. Some of the agrometeorological applications and services developed over the years include:

- Providing advice to farmers on the timing of field activities (planting, application of pesticides and fertilizers, harvesting);
- Advice on the design of farm infrastructure (shading, wind protection, mulching, drying, storage, frost protection);
- Specific weather forecasts for agriculture, including warnings of suitable conditions for pests and diseases and/or advice on mitigation measures, such as drought, fire weather monitoring, irrigation scheduling;
- Prediction of crop yields and animal production;
- Establishing measures to reduce the impacts and to mitigate the consequences of weather and climate to related natural disasters for agricultural production;
- Development of adaptation strategies to increasing climate variability and climate change; and
- Providing advice on measures to reduce the contributions of greenhouse gas emissions related to agricultural production.

For many countries, the National Meteorological and Hydrological Services (NMHSs) are of the focal point of agrometeorological services but agrometeorological stakeholders are not limited to these organizations. Many Ministries of Agriculture and universities also provide

agrometeorological advice to famers and their organizations. The agrometeorological experts from these organizations conduct research on many agricultural meteorological topics, offer farmer awareness programmes, and provide related publications. These experts are crucial in developing the future work plan of WMO's Commission for Agricultural Meteorology (CAgM) which will further assist NMHSs and other national institutions in providing better agrometeorological advisory services. In WMO, about 120 of its Members or 62 percent, provide agrometeorological services within their country.

Some countries have established National Agricultural Meteorological Societies to assist the development of agriculture meteorology within their countries. These national societies can join the Global Federation of Agricultural Meteorological Societies (GlobalFAMS) in order to increase international networking, share agrometeorological knowledge and provide input to CAgM.

However, there are still challenges facing the agrometeorological services including reduced financial support, inadequate training, and reduce support for agricultural extension services. It is with this background that WMO and the Korea Meteorological Administration (KMA) are organizing, with several co-sponsors, the Technical Conference on Future Challenges and Opportunities. The conference will be held from 16 to 17 April, 2018 in Incheon, Republic of Korea, in conjunction with the Seventeenth Session of the WMO Commission for Agricultural Meteorology (CAgM) from 18 to 20 April 2018.

## Specific Objectives of the Conference

- To review and assess the contributions of national agricultural meteorological services with respect to international agreements and protocols such as the Sustainable Development Goals (SDGs), Global Alliance on Climate Smart Agriculture (GACSA) and the United Nations Conventions and other bodies;
- To review and summarize the various operational agrometeorological services at a national level including monitoring, forecasting, risk management, coping strategies on climate extremes, variability and change, agro-climatic zoning, etc.;
- To review and summarize the national agricultural needs of countries to ensure that weather and climate services are best utilized to increase the resilience of their agricultural systems;
- To identify and summarize the challenges and opportunities of agricultural meteorological services at national and regional levels across the world.

#### **Expected Outcomes of the Conference**

Senior experts in several fields will be invited to prepare state-of-the-art discussion papers to address the above objectives, and these papers will be collected for guidance material to be published soon after the Conference. The programme will be designed in such a way as to engage all the participants in discussions on each of these papers and to develop appropriate strategies to address the future challenges and opportunities in agricultural meteorology.

Recommendations from the Conference will be considered at the ensuing session of the Commission for Agricultural Meteorology of WMO and to the Global Framework for Climate Services for promoting weather and climate information provided by the NMHSs and other partners to the agricultural community for increasing the resilience of their agricultural systems.