

## AIDE MEMOIRE Prof. Dwikorita Karnawati Indonesia's Candidate for the President of the World Meteorological Organization 2023-2027

- The Government of the Republic of Indonesia presents the candidature of its Head of the Agency for Meteorology, Climatology, and Geophysics (BMKG), Prof. Dwikorita Karnawati, as the President of the World Meteorological Organization (WMO) for the period of 2023-2027, at elections to be held during the Nineteenth World Meteorological Congress (Cg-19) in Geneva, May-June 2023.
- 2. Through this candidature, the Government of the Republic of Indonesia attaches great importance to the work of the President of the WMO in performing functions of the Organization, to guide and coordinate the activities of the Organization in achieving the high-level vision, mission, core values and overarching priorities of the Organization.

## **VISION AND MISSION**

3. Indonesia vision as the President of WMO is to empower the capacity of the memberstates as well as to strengthen the leadership of WMO to be a leading-strategic UN Specialized Organization in developing the Science-based Policy, for ensuring the global prosperity with respect to the resiliency of global society to the climate and multi geo-hydro-meteorological hazards.

Through the Missions for:

- a. Supporting the development of human capacity for ensuring the analytical skills of the Members in providing qualified data and information for climate and weather multi-services
- b. Supporting the development of Infrastructure for improving the quality of observation, data quality, processing, analysis, prediction, and early warning
- c. Facilitating the partnership and collaboration for resources mobilization to support infrastructure and capacity development of the Members
- d. Encouraging the development of appropriate technology by addressing the local/indigenous knowledges, technology, and wisdom to accelerate the

sustainable development in Developing countries and Small Island Developing States (SIDS),

towards the global prosperity with respect to the resiliency of global society to climate and multi geo-hydro-meteorological Hazards.

## **INDONESIA AND THE WMO**

- 4. Indonesia values the role of the WMO and its Member country.
- 5. Indonesia values progress to be made in WMO to be inclusive for all Members, developed-developing-least developed countries.
- 6. All countries have the same opportunity to contribute and benefit from WMO.
- 7. Having the advantage of its strategic geographical location, Indonesia plays significant role in coping with atmospheric-ocean circulation and is willing to share the experiences and knowledge of its natural privileges background to other members.
- 8. Indonesia has demonstrated its strong commitment to the WMO by actively engaged in the implementation of numerous ongoing WMO programmes and activities, such as the Coastal Inundation Forecast Demonstration Project (CIFDP-I), Global Ocean Observing System (GOOS), Systematic Observations Financing Facilities (SOFF), Southeast Asia Oceania Flash Flood Guidance System (SAOFFGS), Southeast Asia Climate Outlook Forum (SEACOF), Southeast Asia Climate Assessment and Dataset (SACA&D), Space-based Weather & Climate Extremes Monitoring Demonstration Project in East Asia & Western Pacific (SEMDP), Cataloguing Extreme Weather Water and Climate Events (CWWCE), Global Atmosphere Watch in Bukit Kototabang, and hosting a number of important WMO Constituent Body Sessions (Commission for Basic System/CBS, Joint WMO-IOC Commission for Oceanography and Marine/JCOMM, and Commission for Atmospheric Sciences/CAS, and two times Regional Association – V Sessions), as well as by hosting various WMO technical meetings important events in Indonesia, such as the 3<sup>rd</sup> Multi-Hazards Early Warning Conference (MHEWC-III) of the 7<sup>th</sup> Session of Global Platform for Disaster Risk Reduction, International (GPDRR2022), the 10<sup>th</sup> International Workshop on Tropical Cyclone (ITWC-10). In addition, Indonesia's commitment to the WMO has been reflected through its contribution in the development of Global Framework for Climate Services (GFCS) through the membership in the IBCS Management Committee and its role as President of the Regional Association V for the period of 2010-2014 and 2014-2018 and serve as an Executive Council Member for the period of 2019-2023.
- 9. Indonesia is also actively contributed to WMO in its role as the WMO Centers, among others as one of the WMO Regional Training Center in Indonesia (Ina-RTC), Tropical Cyclone Warning Center (TCWC), the Southeastern Asia-Oceania Flash Flood Guidance (SAOFFG) System Center, Global Atmosphere Watch Kototabang, Data Collection or Production Centre for Haze, Ina-TEWS, NWP, dan TCWC, Southeast

Asian Climate Assessment & Dataset (SACA&D), WMO Global Multi-hazard Alert System (GMAS) yang mencakup wilayah ASEAN including as the candidate of one nodes of South East Asia Regional Climate Center, Regional WIGOS Center in Regional Association V. It is hoped that the active engagement of Indonesia in running of such Centers would contribute significantly to support the operational activities of Members.

10. Indonesia has been actively promoting the Capacity Development programme in Regional Association V through its Indonesia-Regional Training Center (Ina-RTC) of WMO. Among others, Indonesia carried out the project of "Strengthening multihazard risk assessment and early warning system in the Pacific with applications of space and geographic information system in Pacific Island Countries" together with UNESCAP, with the support from the WMO and the Government of Japan in 2017. Officials from six WMO Member States (Fiji, Papua New Guinea, Samoa, Solomon Island, Tonga, and Vanuatu) participated in the training where three of them received assistances to implement pilot projects on early warning system. Ina-RTC also held Group Fellowship Training Course on Numerical Weather Prediction (NWP) since 2019, Impact Based Forecasting, climate field school, and Climate Sectoral Information for RA V WMO Member. Indonesia expert has also contributed to the development of NWP in Pacific Region and will continue these efforts in the future.

## PROF. Dr. DWIKORITA KARNAWATI AS A PROFICIENT CANDIDATE

- 11. Prof. Dr. Dwikorita Karnawati, popularly known as Prof. Rita, has been appointed as the Head of Agency for Meteorology, Climatology and Geophysics (BMKG) since November 2017. She is also appointed as the Chair of the Intergovernmental Coordination Group of Indian Ocean Tsunami Warning and Mitigation System (ICG-IOTWMS) since 2019. Prof. Rita has an extensive professional and academic backgrounds. She was the President of Gadjah Mada University, a prominent university in South East Asia, which serve 50 000 students. She received a professorship in Engineering and Environmental Geology in 2008.
- 12. Since 2015-2018, Prof. Rita has been appointed as Vice President of the International Consortium on Landslides. She developed an innovative approach for the Capacity Development in the Inter-disciplinary fields of geo-hydro-meteorological disaster mitigation. where she played notable role in developing the Hybrid Socio-Technical Approach for a Community-based Disaster Risk Reduction. Recently, she is actively promoting the Concept of Hybrid Socio-Technical Approach through the integration of the technical aspect and human aspect for the Geo-hydro-meteorological Multi Hazard Early Warning System, in which couple of her innovative products have become an International Reference (ISO 22327: Guidelines for Community-based Landslide Early Warning System), which is now in place. Furthermore, she also played a significant role in developing the ISO 22328-3: Guidelines for the implementation of a community-based early warning system.

- 13. In October 2011, her action-research in community-based landslide early warning system was selected as the best research in the Landslide Disaster Risk Reduction awarded by the International Consortium on Landslides, which led to the appointment of her University, Gadjah Mada University, as the Center of Excellence for Landslide Disaster Risk Reduction.
- 14. By having 4 Intellectual Property Rights Prof. Rita's research works have been widely used by the industry sector. In 2010, her research team successfully produced and implemented the digital and real time Landslide Early Warning System to support human and asset protection in various mining and geothermal companies in Indonesia and Myanmar, including Pertamina Geothermal, Arutmin, INCO, and the United Mercury Group in Myanmar. Prof. Rita and her team also partnered with San Diego State University and Pacific Disaster Center in the USA in 2011 to develop the Smart Grid as the crowd-sourcing technology for facilitating community-based landslide hazard monitoring and warning system.
- 15. Prof. Rita has been consistently working on Engineering Geology for natural disaster prediction, mitigation and early warning, with respect to life survivability and environmental protection. She has received extensive recognition from national and local counterparts as well as from various international organizations for her work. Between 2004 and 2014, she served as a Coordinator for Education Development Program under the ASEAN University Network/ South East Asian Engineering Education Development (AUN/Seed Net), in the field of Engineering Geology in 2004-2013, as well as the Field of Disaster Mitigation (especially the geohydrometeorological multi disaster) in 2008-2013.
- 16. Prof. Rita was a Fulbright Senior Fellow which served as an Adjunct Professor in San Diego University, USA in 2011-2012 and was also awarded a Leverhulme Professorship by the Institute of Advanced Study, Bristol University, UK in 2003. She was involved in various post-doctoral and joint-research programs to develop technology for landslide prediction and early warning with Tokyo University of Agriculture and Technology, supported by Hitachi Foundation in 1997 after obtaining her Philosophy of Doctor from the Department of Earth Sciences at Leeds University, UK in 1996.
- 17. Prof. Rita has delivered keynote speeches and lectures in conferences, meetings, and events in universities in India, Japan, China, Australia, New Zealand, USA, Europe and Africa, with the aim to promote the innovative concept and share best practices of her experiences in Community-based Disaster Risk Reduction.
- 18. During her tenure as the Executive Member of the WMO for the period 2019-2023, Prof. Rita has been very active in the EC Capacity Development Panel as the Member of Expert Team on Policy Development and Institutional Matters (CDP-ET-PDIM), Expert Team on Capacity Development through WMO Technical Departments (CDP-ET-TDs), Expert Team on Resource Mobilization, Partnerships and Development

Assistance (CDP-ET-RMPDA), and Task Team on Revision of WMO Capacity Development Strategy (CDP-TT-WCDS).

- 19. Prof. Rita also plays an active role as the Member of IOC/WMO/UNEP/ICSU Steering Committee of the Global Ocean Observing System (GOOS) representing WMO Members in the Committee. She actively encourages GOOS to actively contribute to the United Nations Decade of Ocean Science for Sustainable Development (2021-2030) through various Programs, i.e., the Observing Together Programme, the Ocean Observing Co-Design Programme, and the CoastPredict Programme, to which 5 GOOS programmes have been endorsed included the Fisherman Field School which aims to support understanding of the information delivered by weather and ocean climate services in local fishing communities and improve safety at sea. The Government of Indonesia believes that Prof. Rita has the required capacity to become the President of the WMO considering her distinguished academic research, experiences on human capacity development in disaster risk reduction, strong leadership in the Indonesia NHMSs as well as in Indian Ocean Tsunami Early Warning and Mitigation and other international organizations. The role of President will also enable her to continue her strong support and commitment to drive the capacity development of WMO Members as well as to strengthen the leadership of WMO as a leading strategic UN Specialized Agency in developing Science-based Policy for ensuring the global prosperity with respect to the resiliency of global society to the climate and multi geo-hydrometeorological hazards.
- 20. If elected, Prof. Rita will focus her activities on, but not limited to, the following:
  - e. the development of human capacity for ensuring the analytical skills of the Members in providing qualified data and information for climate and weather multi-services
  - f. the support to the development of Infrastructure for improving the quality of observation, data quality, processing, analysis, prediction, and early warning
  - g. the facilitation to the partnership and collaboration for resources mobilization to support infrastructure and capacity development of the Members
  - h. the encouragement to the development of appropriate technology by addressing the local/indigenous knowledges, technology, and wisdom to accelerate the sustainable development in Developing countries and Small Island Developing States (SIDS),

towards the global prosperity with respect to the resiliency of global society to climate and multi geo-hydro-meteorological Hazards.

21. The Government of Indonesia is aware of the major challenges faced by the WMO in the coming fiscal period, especially in addressing the needs of the WMO Members in the development of capacity, implementation of the Global Framework for Climate Services (GFCS), further implementation of the WMO Integrated Global Observing System (WIGOS) and the WMO Information System, as well as the action plan of the Early Warning for all to achieve the zero victims and enhance the welfare of the community.

- 22. With those abovementioned credentials, the Government of Indonesia believes that Prof. Rita will ensure the continuity of Indonesia's constructive and active role in the WMO and to address the aforementioned challenges. The Government is of the view that Prof. Rita will deliver valuable contribution in achieving WMO's missions.
- 23. In this regard, the Government of the Republic of Indonesia will highly appreciate the valuable support of the Member States of the WMO for the candidature of Prof. Dr. Dwikorita Karnawati as the member of the President of WMO for the period of 2023–2027.

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