

Speech
50 years achievement of Hydro-meteorological services
in Lao PDR

Your Excellencies

Honorable Guests, Friends, Ladies and Gentlemen, very good morning.

It's a great honor to be invited to join the 50th Typhoon Committee Session, especially to celebrate the 50th Anniversary of Typhoon Committee, on behalf of Lao's delegates I would like to express our gratitude and sincere thanks to Government of Viet Nam and WMO for providing a chance for us to participate this importance event.

As you may have known that floods, droughts, and extreme weather are the dominant hazards in Lao PDR and cause loss of life, damage agricultural production, and threaten livelihoods. The number of significant flood events has been increasing over the years. Furthermore, climatic variability is expected to exacerbate food insecurity and result in an increase in food prices.

Lao PDR's population is predominantly rural based and most of the population is subsistence farmers or fishers. As a result natural hazards have drastic affects on the poor and vulnerable and pose a serious challenge for water resources management and poverty alleviation in the country. Consequently, flood and drought proofing to reduce risk is a priority for sustainable development and for protecting the population.

Due to the serious impacts of recent weather and climate events in the region which affected economic and business operations, the various sectors in the country area beginning to demand for improving of increasing hydro-meteorological products and services. The frequent occurrence and increasing severity of extreme weather and climate events in the country are seen as indications of changing climate.

For generations, the people of Lao PDR especially those living in remote areas with no access to information and warnings have used traditional knowledge and beliefs to anticipate and cope with environmental hazards.

Scientific weather forecasting was formalized in the country in 1955 with the establishment of the National Meteorological Service (NMS) under Ministry of Transport and Public Work and NMS has been registered as a member of the World Meteorological Organization (WMO) in 1st June 1955. The NMS was mandated to provide weather and climate-related services for the country, from 1955 to 1975 there were only 5 SYNOPTIC Stations whereas located in big cities and all of them were manual type.

In 1976, the NMS received an additional mandate of providing operational hydrological work and it was accordingly renamed as the Department of Meteorology and Hydrology (DMH) under Ministry of Agriculture and Forestry (MAP) and some number of hydrology station have been established as well as some more new SYNOPTIC and CLIMATE stations in some provinces.

Later in 1997 the DMH also took charge of earthquake monitoring activities, it also provides weather services to aviation and land transportation, there were 2 earthquake stations established and one earthquake data center.

Due to the government strategy to reform agencies dealing with environment, water resources, climate change and weather, in July 2007 the DMH was transferred from MAF to the Water Resources and Environment Administration (WREA) under Prime Minister's Office. Due to date 2007, DMH has expanded hydro-meteorological networks over the country in totally: 17 synoptic stations, 49 climate stations, 110 hydrological stations, 2 agro-meteorological stations, 119 standalone rain gauge posts, 12 of 17 synoptic stations have been served as aeronautical station for domestic and international airports.

In 2011, Water Resources and Environment Administration renamed as the Ministry of Natural Resources and Environment (MONRE) whereas DMH belongs to.

Since DMH has been registered to WMO's member in 1955, WMO provided great supports for strengthening the capacity building such as short-medium and long term training in the country and overseas, and also provided some facilities for improvement hydro-meteorological services in Lao PDR, especially the improvement of data sharing among the WMO's members by establishing the Global Telecommunication System (GTS) in 2002 and also the improvement of weather analysis tools, sharing the hydrological data with sub-Mekong River countries through the Mekong River Commission (MRC) project.

During the last two decades, Lao PDR has been facing with the severe natural disasters such as the severe flooding and devastation in 2008, Typhoon Ketsana in 2009, and Typhoons Haima and NokTeng in 2011, the Government of Lao PDR has increased its effort to improve natural disaster preparedness.

The World Bank, with funding from the Global Facility for Disaster Reduction and Recovery (GFDRR), and from different donors such as Asian Development Bank, JICA, KOICA, CMA, IMA, FAO, China, Japan, Republic of Korea, Viet Nam have been supporting Lao PDR in these efforts. With these support the Government of Lao PDR has strengthened early warning by developing a National Early Warning Strategy. To complement the strategy Standard Operating Procedures (SOP) were developed, which clearly define roles and responsibilities of departments and organizations at all levels of government involved in the warning dissemination process. To implement the Early Warning Strategy and the SOPs, a National Implementation Plan was developed. The plan makes recommendations on network design, field instrumentation, data management, reporting, training requirements, modeling, and forecasting approaches. Due to date, hydro-meteorological services have been improving such as: upgrading hydro-met stations and new installation from manual type to automatic stations, and improving the facilities which meet to WMO's standard. So we have 22 manual stations, 50 climate stations, 110 hydrology stations, 119 standalone rain gauges, 43 Automatic weather Stations, 38 Automatic Water Level Stations, 3 Earthquake stations, 3 Ground Receiving Satellites, 1 Doppler Radar, 1 National Early

Warning Center, 1 National Water Resources Data Information Center. Specially, the hydro-meteorological has endorsed and will be published during this year, and by cooperation with Lao's national University to develop the curriculum of hydro-meteorological degree. Under big supports from WMO, UNESCAP and Typhoon Committee, to strengthening of the capability of our staff, which are improving the knowledge, experiences and confidents for hydro-met services.

Distinguish, Ladies and Gentlemen,

Since last 50 years, Department of Meteorology and Hydrology of Lao PDR has a big changing and big improvement, especially the improvement of hydro-met networks, the improvement of the exchange among the WMO's country member, the improvement of equipment and facilities on meteorological and hydrological services, the improvement of the accuracy of weather forecast and warning system, the improvement the dissemination system and the strengthening the capacity building, these all improvement can be reduce the loss of life and properties of the people of Lao PDR. Without supporting from WMO, UNESCAP, Typhoon Committee, all WMO's member countries and donors we cannot success and achieve.

In the occasion of celebrating 50th Anniversary of Typhoon Committee, on behalf of Lao's delegates, I would like to express my sincere thanks to WMO/Typhoon Committee for all supports for strengthening our capabilities to be stronger and stronger, and also thanks for all donors to provide funding for the improvement of hydro-meteorological services. I do hope that you will continue to support us

Thank you!