



## JOB DESCRIPTION

|                                       |   |
|---------------------------------------|---|
| <b>Job Title:</b>                     | <b>Assistant Hydrologist and Forecaster</b>                                       |
| <b>Division:</b>                      | <b>Technical Support Division</b>   |
| <b>Office:</b>                        | <b>Regional Flood and Drought Management Centre (RFDMC), Phnom Penh, Cambodia</b> |
| <b>Salary Level:</b>                  | <b>M-09</b>   |
| <b>Date of Verification (If any):</b> | <b>January 2025</b>   |

### 1. THE MEKONG RIVER COMMISSION AND MRC SECRETARIAT

The Mekong River Commission (MRC) was established by the 1995 Agreement on Co-operation for the Sustainable Development of the Mekong River Basin, between the governments of Cambodia, Lao PDR, Thailand and Viet Nam. The role of the MRC is to coordinate and promote cooperation in all fields of sustainable development, utilization, management and conservation of the water and related resources of the Mekong River Basin.

The MRC Secretariat is the operational arm of the MRC. It provides technical and administrative services to the Joint Committee and the Council to achieve the MRC's mission.

#### **VISION for the Mekong River Basin:**

An economically prosperous, socially just and environmentally sound Mekong River Basin.

#### **VISION for the Mekong River Commission:**

A world class, financially secure, International River Basin Organization serving the Mekong countries to achieve the basin Vision.

#### **MISSION of the Mekong River Commission**

To promote and coordinate sustainable management and development of water and related resources for the countries' mutual benefit and the people's well-being.

#### **MRC values**

- Integrity
- Transparency
- Mutual respect
- Professionalism
- Accountability
- Results orientation.

### 2. JOB SUMMARY/JOB STATEMENT

The jobholder is responsible for collecting and analyzing Hydromet data from line agencies and assisting them in data collection. He or she supports the Head of RFDMC, the Chief Hydrologist, the Forecasting Specialist and the Water Climate Monitoring Specialist with hydrological, flood, and drought-related tasks, as well as river monitoring services. Additionally, the jobholder

assists in preparing input data on precipitation and runoff, running drought indices for various timesteps, and compiling reports. The assistant also contributes to improving the accuracy of both drought and flood forecasting systems and routinely operates and maintains the Regional Hydrological Extreme Assessment System (RHEAS) and related drought indices tools.

### 3. MAIN TASKS AND RESPONSIBILITIES

Under the overall supervision of the Technical Support Division (TD) Director, technical guidance of the Head of RFDMC and Chief Hydrologist, the incumbent performs the following duties:

- Assist the Head of RFDMC, Chief Hydrologist, Forecasting Specialist, Water Climate Monitoring Specialist, and other relevant specialists in hydrological and monitoring tasks, including day-to-day forecasting and monitoring services;
- Establish and maintain operational contact with focal persons in riparian countries for continuous data supply for flood and drought forecasting, river monitoring, and statistical archiving;
- Receive, manage, and support the analysis of hydromet data, including water level, discharge, rainfall, river and floodplain hydraulic data, soil moisture and other related data for timely flood and drought forecasting and analysis;
- Perform daily database management for hydromet data, downloaded data, forecasted data and maps, ensuring proper collection, processing, and archiving of relevant data;
- Receive and archive rainfall data from various sources such as NOAA, NASA and CHIRPS for meteorological and climatological analysis;
- Prepare data for flood and drought forecasting model runs and support operational database maintenance;
- Collect additional hydrological and hydraulic data, including river cross-sections, water slopes, floodplain characteristics, and backwater effects;
- Support the maintenance and improvement of flood forecasting and drought monitoring and forecasting platforms and tools;
- Participate in the selection, installation, and operation of new forecasting tools, risk assessment methods, and communication systems;
- Assist in rating curve analysis to improve the accuracy of discharge estimates;
- Perform routine hydrological data processing and drought monitoring and forecasting works including hydromet data, the calculation of key drought indexes such as Standardized Precipitation Index (SPI), Standardized Runoff Index (SRI), Index of Soil Water Fraction (ISWF), Combined Drought Index (CDI), and other relevant indexes, etc;
- Perform routine forecasts of rainfall, runoff, and soil moisture under RHEAS for the LMB;
- Contribute to and support on the development project of a state-of-the-art flood and drought forecasting platforms and tools;
- Support the forecasting team on the weekly, seasonal and annual flood and drought situation report;
- Support specialists with additional information on flood and drought characteristics, including distribution, magnitude, and impacts on infrastructure;
- Perform other relevant tasks as required.

### 4. SCOPE OF AUTHORITY

- a. **Supervision requirements:** The position does not require any formal supervisory responsibilities.
- b. **Level of autonomy:** Decision making follows defined procedures. The position does not administer a budget.

- c. **Level of problem solving required:** Problem solving skill is expected and the incumbent must display sensitivity, initiative and creativity
- d. **Level and type of communications required:** Communications are wide, within and outside the organisation, and require considerable oral and written skills.

## 5. QUALIFICATION REQUIREMENTS

|                                 |  |
|---------------------------------|--|
| <b>Certificate:</b>             | <input type="checkbox"/> Bachelor degree or higher degree in water resources engineering, hydrology, statistics, mathematics, economics, or relevant discipline;   |
| <b>Additional Certificates:</b> | <input type="checkbox"/> TOEIC certificate with 400 points and over is required. An equivalent internationally recognized certificate may also be considered.  |
| <b>Experience:</b>              | <input type="checkbox"/> Minimum 5 years of experience in hydrology (flood/drought);<br><input type="checkbox"/> Extensive experience in using excel spreadsheet and statistical analysis is an advantage;<br><input type="checkbox"/> Experience in working with drought indices is required;<br><input type="checkbox"/> Experience in water resources management or drought management is an advantage;<br><input type="checkbox"/> Experience in database management;<br><input type="checkbox"/> Experience in modelling applications and hydro-meteorological data processing;<br><input type="checkbox"/> Experience in operational flood and drought forecasting is highly desirable;<br><input type="checkbox"/> Knowledge and experience with GIS are an asset;<br><input type="checkbox"/> Previous experience in the Mekong basin, preferably working with or for the MRC. |

MRC is an equal opportunity organization, therefore, we welcome applications from all qualified candidates. Women are especially encouraged to apply.

## 6. COMPETENCIES

| <b>Knowledge</b>  | <b>Level (1-3)</b><br>1 = Required<br>2 = Desirable<br>3 = Optional |
|---|---|
| Hydrological forecasting model                                  | 1   |
| Drought forecasting model                                       | 1   |
| Database management   | 1   |
| Modelling applications and hydro-meteorological data processing | 1   |
| Operational flood and drought forecasting                       | 2   |

| <b>Skills</b>                                      | Level (1-3)<br>1 = Required<br>2 = Desirable<br>3 = Optional |
|--|--|
| Fast system operating                              | 1  |
| Time management                                    | 1  |
| Problem solving (e.g. imperfect data)              | 1  |
| Cross-cultural and interdisciplinary communication | 1  |
| IT   | 2  |

| <b>Attitudes</b>  | Level (1-3)<br>1 = Required 2 = Desirable 3 = Optional |
|---|--|
| Attention to details  | 1  |
| Willingness to undertake field trips to identify and solve problems with stations as required   | 2  |
| Work outside of normal office working hours in flood and dry seasons, taking shift work in order to guarantee 24/7 forecasting availability | 2  |
| Autonomous working  | 1  |

## 7. REMUNERATION

The remuneration package, subject to change, includes:

**Remuneration:**

- Annual net base salary exempts from tax by Lao authorities, starting at M-09 Step 1 with **US\$ 13,349** with a living cost of 10% of the base salary;
- Rental subsidy for resident staff: Maximum support is US\$250 per month. Conditions apply.

**Benefits:**

- The MRC's contribution to staff member's Provident Fund (pension fund) of 14% of base salary per annum;
- Coverage of health insurance for staff and eligible dependents, and accident insurance (on a shared basis with the employee) for staff;
- Other entitlements and benefits such as dependency allowance (USD40/dependent), annual leave (30 days per year), sick leave (30 days per year), special leave with pay, maternity and paternity leaves, education grant (7% of the base salary for resident staff), annual health check (subject to budget availability), annual vaccination, and more;

All MRC Secretariat staff members are subject to a six-month probationary period.

THE MRCS RESERVES THE RIGHT TO APPOINT A CANDIDATE AT A LEVEL LOWER THAN THE ADVERTIZED LEVEL OF THE POST.

**8. REMARKS**

The Job Description is subject to revisions by the MRC.

**9. INCUMBENT'S SIGNATURE:** \_\_\_\_\_ (date)