

Mekong River Commission

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JOB DESCRIPTION

Updated: April 2010

Title: Specialist

Functional Title: River Forecasting Expert

Division: Regional Flood Management and Mitigation Centre (RFMMC),

Forecasting, Warning and Dissemination Unit

Location: M-11 (Riparian professional staff) RFMMC, Phnom Penh, Cambodia Operations Manager, RFMMC

1. THE MEKONG RIVER COMMISSION

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, Laos, Thailand and Viet Nam. In accordance with this Agreement, the Mission of MRC is: "To promote and coordinate sustainable management and development of water and related resources for the countries' mutual benefit and the people's well being by implementing strategic programmes and activities and providing scientific information and policy advice."

2. THE FLOOD MANAGEMENT AND MITIGATION PROGRAMME

The Flood Management and Mitigation Programme (FMMP) is one of the MRC programmes. The overall development objective of the FMMP is 'people's suffering and economic losses due to floods are prevented, minimised, or mitigated, while preserving the environmental benefits of floods'. It consists of five components: 1. Regional FMM Centre, 2. Structural measures and flood proofing, 3. Enhancing cooperation for addressing trans-boundary flood-related issues, 4. Flood emergency management strengthening, and 5. Land management. The FMMP is based on priorities agreed upon by the four MRC member countries and on the strategic roles of the MRC. The components of the programme are related to each other and most components link to the MRC's existing programmes, and will contribute to the MRC's overall role in knowledge base development, capacity building and regional cooperation.

The Flood Forecasting, Warning and Dissemination Unit (FWDU) is one of the most important units of the RFMMC. It performs the core technical tasks of the Centre requiring highly qualified technical and managerial staff to perform the mandate of the Centre as a "Centre of Excellence". The unit closely collaborates with other units in a coordinated and effective manner. The unit consists of various subject experts who are working to improve operational forecasting, warning and risk assessment tools and others.

3. JOB SUMMARY

The River Forecasting Expert will refer to the Operations Manager of the Regional Flood Management and Mitigation Centre (RFMMC).

The incumbent will work in close collaboration with other specialized staff of flood forecasting team and other managerial and professional staff, CTA, external consultants and other members of the RFMMC. He/she will be part of the flood forecasting team who is jointly responsible for day-to-day river flood forecasting and monitoring, and flash flood guidance activities, which is a core task of the RFMMC. In carrying out this important task he/she should work closely together and on the basis of equality with the relevant staff members.

As the RFMMC is at this moment in the process of testing a new state of the art flood forecasting system and flash flood guidance system the incumbent is expected to take part in the operations of the systems, systems testing, fine-tuning as well as future development of the systems.

4. KEY TASKS

The incumbent performs the following tasks:

- Be responsible for the daily flood forecast during the flood season and for the river monitoring during the dry season in close collaboration with the Hydrologist, Operational Meteorologist/Flood Forecaster and other team members, supervising the Assistant Hydrologist during his regular flood forecasting duties;
- Reviews and report data coverage and data flow as used as input in the daily operations for flood forecasting; recommend in close cooperation with the Hydrologist and Operational Meteorologist/Flood Forecaster on continued improvement and availability of hydro-meteorological monitoring data on (near) real-time basis;
- Cooperates with other experts in establishing and maintaining an operational database for flood forecasting, warning and dissemination services,
- Cooperates with other experts in establishing and maintaining the new state of the art flood forecasting model; this involves participation in building the necessary hydrological/flood routing and hydrodynamic models;
- Together with the FMMP management and other concerned staff, be responsible for the further development and operations of the MRC Flash Flood Guidance System (MRCFFGS) in the LMB;
- Undertakes annual evaluation of the performance of the new Meknog flood forecatsing systems and flash flood guidance system;
- Jointly determines the way and approcach for further improvement of the new flood forecasting system (URBS-FEWS) and flash flood guidance system (MRCFFGS);
- Continuously improves operational forecasting by actively looking for practical ways to reduce uncertainties, increase lead time and accuracy, and improve operational cooperation with national flood forecasting centres/institutions,
- Collaborates with other involved staff, to improve the operational standard of flood forecasting, warning and dissemination across the riparian countries,
- Establishes, improves and maintains links with the National Flood Forecasting Centres (NFFC) as well as improving mechanisms for obtaining feedback from the NFFCs, product users and affected communities in order to seek continuous improvement in flood forecasting; and where relevant, improvement in warning information/products and its dissemination mechanisms and system in close cooperation with the Early Warning Expert,
- Identifies and proposes new technologies and emerging trends in flood forecasting which can be successfully applied in the Mekong River Basin. This can be done through professional networking and the development of global links with relevant organisations and technological resource centres worldwide,
- Takes the lead in the organisation and preparation of the MRC's Annual Mekong Flood Report production and takes the lead or contribute as team member in other projects to be assigned by the supervisor,
- Assist in preparation of quarterly progress reports based on assigned responsibilities in accordance with the overall work plan,
- Participate in the selection, installation and operation of new tools and associated equipment/facilities for forecasting, risk assessment, warning, dissemination, feedback communications from the users, etc., and
- Undertake other related duties as may be assigned by the management.

5. SCOPE OF AUTHORITY

- (a) **Supervision requirements:** The incumbent does not have any supervisory responsibilities but work in collaboration with the flood forecasting team and other staff of the RFMMC.
- (b) Level of autonomy: Decisions are generally recommendatory in line with MRC policy.
- **(c)** Level of problem solving required: Problem solving is complex and the incumbent must display initiative and creativity.
- (d) Level and type of communications required: Communications are wide, both within and outside of the organisation, and a variety of written documentation is required of the position.

6. COMPETENCE REQUIREMENTS

- (e) Core Values: Integrity, professionalism and respect for diversity.
- **(f) Core Competencies:** Communication, teamwork, planning and organising, accountability, creativity, client orientation, commitment to continuous learning, and technological awareness.

7. POST-SPECIFIC QUALIFICATIONS

An advanced university degree (preferably PhD.) in hydrology, hydraulic engineering or similar,

Proven experience of at least 7 years in related activities of which at least 3 years in hydrological modelling and/or operational flood forecasting,

Substantial knowledge and experience in developing and implementing river forecasting and modelling in large rivers; computer programming languages, and warning dissemination to communities and a wide range of users is a prerequisite,

Experience in developing and using forecasting tools / hydrological models in large river basins,

Proven experience with working in an international and multi-cultural environment,

Knowledge about MRC and its activities and working experience in the MRC member countries is an advantage.

Language: Fluency in English both written and spoken and one riparian language is a must.

Signed:	Incumbent	Date:
Signed:	FMMP Coordinator	Date:
Signed:	Division Director, TSD	Date:

The remuneration package, *subject to change*, includes (i) annual net base salary exempt from tax by Laos authorities, starting at US\$ 26,059.00 (M-11, step 1) to US\$ 42,986.00 (M-11, step 14); (ii) Monthly fluctuation and removable Devaluation Allowance (8.21% of basic salary for the month of April 2010); (iii) MRC's contribution to staff member's Provident Fund of 14% of basic salary upon

¹ Brief information on remuneration

completion of 3 years in service; (iv) Contribution of MRC to Health and Accident insurances (on shared basis with employee); (v) other entitlements and benefits such as dependency allowance, 6 weeks' annual vacation; sick leave, maternity leave etc.

Non-resident staff members receive an additional (i) 7% of basic salary for Post Adjustment allowance; (ii) 7% of basic salary for Hardship allowance; (iii) Rental subsidy of 40% of the rent rate up to maximum of US\$ 6,000 annually; (iv) Education Grant of 75% of max. Expense of US\$ 13,000; (v) Travel cost and Shipment expenses on assignment and upon separation; (vi) other entitlements and benefits such as Relocation Grant allowance, Home Leave Travel, Education Grant Travel, etc.

The duration of the assignment of MRC Riparian Professional Staff is up to maximum 6 years according to 1995 Mekong Agreement and Procedural Rules.

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