

**Government of Karnataka,
Advanced Centre for Integrated Water Resources Management (AC-IWRM)
1/1, First Floor, KSFC Bhavan, Thimmaiah Road, Near Cantonment Railway
Station, Bangalore-560052, Karnataka**

No.SE/AC-IWRM/EOIs/11/2015-16

Dated: 11/ 01/2016

EXPRESSION OF INTEREST (2nd call)

Government of Karnataka, Advanced Centre for Integrated Water Resources Management (Water Resources Department) re-invites Expression of Interests from reputed national consultants for the following posts to work in AC-IWRM

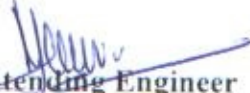
1. Deputy Director (Water Resources Specialist)
2. Land and Water Management Specialist
3. Hydrology and Irrigation System Expert
4. River Basin Management Specialist

For Details & Terms of Reference, please visit e-procurement platform www.eproc.karnataka.gov.in. EOI shall be submitted electronically at www.eproc.karnataka.gov.in. Interested consultants will need to register on the e-procurement platform to participate.

The details are also available on www.waterresources.kar.nic.in & www.knnlindia.com

Any clarification can be sought at aciwrm2012@gmail.com

The closing date for submission of proposal is 1st February 2016.


Superintending Engineer
AC-IWRM, Bangalore

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Advanced Centre for Integrated Water Resources Management
(AC-IWRM)
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Cantonment Railway Station,
Bangalore-560052. Karnataka

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Date: 11/01/2016

EXPRESSION OF INTEREST

Government of Karnataka, Advanced Centre for Integrated Water Resources Management (Water Resources Department) with Asian Development Bank assistance invites Expression of Interest (2ndcall) from reputed national consultants for the following posts with deep understanding in the field they are interested to apply for the post for implementing IWRM activities in Karnataka. Duration of the position is 38 Months.

- 1) Deputy Director (Water Resources Specialist), AC-IWRM
- 2) Land and Water Management Specialist, AC-IWRM
- 3) Hydrology and Irrigation Systems Expert, AC-IWRM
- 4) River Basin Management Specialist, AC-IWRM

The Terms of Reference, Job description & Minimum Qualification requirements for

1. Deputy Director (Water Resources Specialist)

Job Description

This position is responsible for the development of the State Water Resource Information Strategy which will include all aspects of the water resource and usage and demand including climate, surface water, groundwater, water quality, the environment, and relevant demographic information. It will also identify and fill data and information gaps, the development of relevant spatial decision support systems including GIS for river basin and sub-basin management, and preparation of the State water resources inventory. The position is to ensure that these systems provide excellent support to the AC-IWRM in undertaking its wider responsibilities of river basin planning and management, irrigation modernization and raising of water use efficiency and water productivity. It will contribute to training

programs for various stakeholders and network with academic and research institutes to promote, research and adopt international best practice. The position will support the Director and management for compliance with organization norms and policies and development of the AC-IWRM organization.

Terms of Reference

Under the supervision of the Director AC-IWRM, The Deputy Director (Water Resources Specialist) will:

- Compile, as an initial priority, water resource data, using geographic information systems (GIS), remote sensing data and global position systems (GPS) software into initial data sets to support river basin planning and other studies by AC-IWRM.
- Plan and coordinate with other agencies the building and operation of the integrated State Water Resources Information System, comprising all information relevant to the supply, condition, demands, pressures and conservation of the water resource (surface and groundwater). The system will include the various data management aspects associated with such systems.
- Perform hydrologic, hydraulic, or water quality modeling
- Recommend new or revised policies, procedures, or regulations to support water resource or conservation goals
- Provide technical expertise to assist communities in the development or implementation of water monitoring, data collection or other water programs
- Support monitoring, storing and supplying climatic, water use, demand, or quality in a particular sub-basin or irrigation command or geographic area for project activities.
- Support, and where relevant conduct with the assistance of contract staff and consultants, technical studies for water resources on topics such as remote sensing of land and water use, water quality and pollutant management, catchment processes and the interaction of vegetation with runoff and groundwater recharge, conjunctive use of surface water and groundwater, groundwater conservation
- Supporting the management for compliance with organization norms and policies and development of the AC-IWRM organization.
- Ensure that the relevant aspects of the ADB-GOK agreements are delivered on time and with good quality
- Promote and facilitate the involvement of other research and educational institutions to conduct research, undertake studies, pursue international best practice and provide training to stakeholders, so as to support the efforts of AC-IWRM
- Supervise staff and short term experts and collaborate with international specialists
- Participate in a multi-disciplinary, innovative and enthusiastic team.

Minimum Qualification Requirements

- Post Graduate degree in Water Resources or Hydrology or allied fields preferably to PhD level.
- Qualifications or experience with GIS and data management
- Proven working experience is minimum 15 yrs in the field of water resources management preferably with several years related to water resources data and data management
- Experience, preferably strong, in the use of GIS and data management systems and techniques in the water resources/environment/natural resources sector
- Experience with Water Resource information Systems and the application of such systems to water resources management
- Experience, aptitude or strong interest in developing expertise in water resources modeling
- Good knowledge of water resources (quantity, quality, surface and groundwater)
- Appreciation and knowledge, ideally with some experience of river basin inventories, groundwater and water quality issues
- Strong communication, presentation, interpersonal and counseling skills, and MS Office proficiency.
- Strong analytical and report writing skills are required.
- Ability and willingness to participate in a multi-disciplinary, innovative and enthusiastic team.
- Knowledge of Kannada language will be an asset.
- Good English language skills
- Computer skills etc

2 Land and Water Management Specialist

Job Description

This position is responsible essentially for the management of land and water by farmers and Water User Community Societies (WUCS). It will lead studies and programs for land and water management plans and their implementation, water use efficiency (WUE) and water use productivity (WUP), conjunctive use, on-farm water management and watershed studies with an overall IWRM approach. The position will provide inputs for other AC-IWRM activities including for river basin planning and management, and water resources modeling. The position will contribute to training programs for various stakeholders and network with academic and research institutes to promote, research and adopt international best practice. The position will assist the Director and the management for compliance with organization norms and policies and development of the AC-IWRM organization.

Terms of Reference

Under the supervision of the Director AC-IWRM, Land and Water Management Specialist at AC-IWRM the incumbent will;

- Work at the field level to improve water management and irrigation practices and productivity
- Prepare Land and Water Management Plans (LWMPs) and conduct and supervise the studies associated with such plans
- Supervise/conduct studies of WUE and WUP pilots including water saving irrigation approaches including for the support of LWMPs
- Supervise/conduct studies of conjunctive use as part of developing and implementing LWMP
- Supervise/conduct MASSCOTE studies for LWMP's and WUE studies
- Advise on irrigation water saving approaches, agricultural water management practices
- Advise on modernization of irrigation systems and benchmarking of irrigation projects
- Provide expert inputs into the river basin planning and management program, especially in K-8 sub-basin;
- Provide inputs into other and other AC-IWRM activities including the design of the information system and in modeling process.
- Assisting the management for compliance with organization norms and policies and development of the AC-IWRM organization.
- Ensure that the relevant aspects of the ADB-GOK agreements are delivered on time and with good quality
- Promote and facilitate the involvement of other research and educational institutions to conduct research, undertake studies, pursue international best practice and provide training to stakeholders, so as to support the efforts of AC-IWRM
- Supervise staff and short term contractors and collaborate with international specialists
- Participate in a multi-disciplinary, innovative and enthusiastic team.

Minimum Qualification Requirements:

- Post Graduate degree in Agricultural Engineering, Water Resources Engineering, Agricultural Science, Natural Resource Management Science or allied fields with specialization in land and water management.
- Proven working experience of minimum ten years' in land, water and irrigation management programs at the farmers/water user and WUCS level.
- Experience and capacity for project management
- Extensive knowledge and preferably experience of WUE and WUP studies.
- Capacity and knowledge sufficient to conduct MASSCOTE studies
- Strong communication, presentation, interpersonal and counseling skills, and MS Office proficiency.

- Strong analytical and report writing skills are required.
- Ability and willingness to participate in a multi-disciplinary, innovative and enthusiastic team.
- Knowledge of Kannada language will be an asset.
- Good English language skills
- Computer skills.

3 Hydrology and Irrigation Systems Expert

Job Description

This position is responsible for providing hydrology inputs for the KISWRMIP. It will undertake assessment and upgrading of hydrological monitoring in project river basins, modeling and assessment of water balances at river basin and irrigation system scales, monitoring and reporting water use by sectors. It will support development of the strategy for IWRM and the water resource information system design, river basin planning and management, irrigation system modernization and telemetry, and the capacity building program of engineers etc. It will contribute to training programs for various stakeholders and network with academic and research institutes to promote, research and adopt international best practice. The position will support the Director and the management for compliance with organization norms and policies and development of the AC-IWRM organization.

Terms of Reference

Under the supervision of the Director AC-IWRM, Hydrology and Irrigation Systems Expert at AC-IWRM, the incumbent will:

- Contribute to identification of surface water priority issues in Karnataka state
- Provide strategic direction for hydrology and hydrological assessment and monitoring, review the existing surface water data collection network in WRDO and advise on rationalization
- Assess the hydrological monitoring network in priority river basins and its upgrading and linkage to the State water resource information system to support river basin management and IWRM
- Assist with river basin and other hydrological modeling to support river basin planning and management; as well as irrigation system planning, management and modernization
- Provide advice, and to keep address of national and international developments to support the modernization of irrigation systems, particularly regarding the monitoring, Regulation and telemetry of canal flows and measurement of deliveries to water users.

- Support the benchmarking of irrigation projects from a hydrological perspective
- Compute water balances for irrigation commands and sub-basins; analyze sectoral water demand data for various scenarios in commands/sub-basin and forecast future demand
- Provide leadership to high level technical assessment and analysis programs; conceptualize, design and implement hydrological sub-projects in the state
- Contribute to the formulation of hydrological policies and support their implementation
- Provide inputs into the design of the state water resources information system and in water resource modeling process
- Assisting the management for compliance with organization norms and policies and development of the AC-IWRM organization.
- Promote and facilitate the involvement of other research and educational institutions to conduct research, undertake studies, pursue international best practice and provide training to stakeholders, so as to support the efforts of AC-IWRM
- Ensure that the relevant aspects of the ADB-GOK agreements are delivered on time and with good quality
- Supervise staff and short term contractors and collaborate with international specialists
- Participate in a multi-disciplinary, innovative and enthusiastic team.

Minimum Qualification Requirements:

- Post Graduate qualifications in Water Resources Engineering/Science and preferably a Ph.D. in Hydrology or allied field with specialization in surface water hydrology, hydrological monitoring systems and surface water hydrology.
- Proven working experience of minimum fifteen years' in hydrology programs eg., National Hydrology Project. Experience in the water resources management sector and hydrological monitoring is essential.
- Extensive knowledge and preferably experience in:
 - a) hydrological techniques, analysis, investigation and applications
 - b) hydrological databases and water resources modeling and analysis or strong aptitude for this.
 - c) irrigation systems modernization and the automation of canal regulation and flow measurement and telemetry,
- Adequate knowledge of catchment or river processes.
- Strong communication, interpersonal skills, MS Office proficiency, presentation techniques with experience and aptitude for project management
- Strong analytical and report writing skills are required.

- Ability and willingness to participate in a multi-disciplinary, innovative and enthusiastic team.
- Knowledge of Kannada language will be an asset.
- Good English language skills
- Computer skills.

4. River Basin Management Specialist

Job Description:

This position is responsible for the introduction of IWRM river basin planning, facilitating implementation of the plans and to assist with the establishment and introduction of river basin management institutional arrangements. The position will assist with preparation of river basin planning guidelines, assessments relevant to river basin plans such as preparation of river basin profiles and inventories for priority basins, water resource assessments, assessment of current and future water demands, risk assessments, etc. The position will contribute to training programs for various stakeholders and network with academic and research institutes to promote, research and adopt international best practice. It will support the Director and management for compliance with organization norms and policies and development of the AC-IWRM organization

Terms of Reference

Under the supervision of the Director AC-IWRM, River Basin Management Specialist at AC-IWRM, the incumbent will carry out:

- Develop and prepare planning procedures and guidelines consistent with IWRM and international best practice
- Plan and initiate implementation of river basin plans in selected river basins commencing with the Tungabhadra (K-8) sub-basin, including drafting and presentation of the river basin profile and river basin plan.
- Assist in the development and implementation of institutional arrangements for river basin management.
- Involve and participate with relevant staff and systems of AC-IWRM and other institutions in developing river basin plans
- Work with and where relevant supervise short term national and international consultants contracted to assist development of the river basin plans.
- Provide training to staff on river basin planning as required.
- Assisting the management for compliance with organization norms and policies and development of the AC-IWRM organisation.
- Ensure that the relevant aspects of the ADB-GOK agreements are delivered on time and with good quality

- Promote and facilitate the involvement of other research and educational institutions to conduct research, undertake studies, pursue international best practice and provide training to stakeholders, so as to support the efforts of AC-IWRM
- Supervise staff and short term contractors and collaborate with international specialists
- Participate in a multi-disciplinary, innovative and enthusiastic team.

Minimum Qualification Requirements:

- Post graduate degree in Water Resources Engineering or Agricultural Engineering or equivalent, preferably to PhD level With Undergraduate in engineering (eg. agricultural or water resources) or science with a relevant water related specialization
- Proven working experience of minimum 10 years' in water resources management programs, preferably with some exposure to river basin management and IWRM.
- Strong experience and capacity for project management
- Experience, with water resources management and ideally of preparation of IWRM river basin plans
- Good knowledge of water resources (quantity, quality, surface and groundwater)
- Knowledge and awareness of IWRM and river basin modeling
- Strong communication, presentation, interpersonal and counseling skills, and MS Office proficiency.
- Strong analytical and report writing skills are required.
- Ability and willingness to participate in a multi-disciplinary, innovative and enthusiastic team.
- Knowledge of Kannada language will be an asset.
- Good English language skills
- Computer skills

Interested consultants will need to register on the e-procurement platform (Government of Karnataka) to apply. The Expression of Interest (Proposal) with all relevant documents shall be submitted electronically at www.eproc.karnataka.gov.in. The closing date for uploading EOI/proposal is 1st February 2016.

Any clarification can be sought at AC-IWRM2012@gmail.com.

Sd/-
Superintending Engineer
AC-IWRM