

**Flood Management Improvement Support Centre (FMISC),  
2<sup>nd</sup> Flood, Jal Sansadhan Bhawan, Anisabad, Patna-800002,  
Water Resources Department, Govt. of Bihar**

Expression of Interest (EOI)

For

***Engagement of Individual Consultant (Environmental Safeguard Expert)***

under

**Bihar Water Security and Irrigation Modernization Project (BWSIMP)**

**Ref No.: ESE/BWSIMP/EOI/07/2024-25**

**Patna, Dated:31/07 /2024**

1. The proposed Bihar Water Security and Irrigation Modernization Project (BWSIMP) will cover the state of Bihar, focusing more on districts impacted by flood, water-logging and drought. As the project title suggests, the GoB has embarked upon a new path of water resources management. This is a comprehensive initiative covers efficient irrigation and flood risk management and drought proofing through multi-stakeholder participation in planning and management, after needed institutional strengthening and capacity building exercise. The project will ensure positive economic and environmental outcomes for the state. It would enable completion of the Kosi Canal Project, restore age-old dams and protect river embankments. Additionally, it includes crucial projects of intra-linking of rivers, not only to control of excess water flow from major rivers to mitigate floods but also to provide irrigation source for drought districts. The project would employ new techniques for long-term protection of river embankments. Furthermore, advanced measures will be implemented in vulnerable areas along rivers to safeguard them for long-term erosion.
2. Joint Director, Flood Management Improvement Support Centre (FMISC), Water Resources Department, Govt. of Bihar now invites eligible 'Individual Consultant' to advice, support and assistance to Project Management Unit (PMU) and Project Implementation Units (PIU) in carrying out their duties and responsibilities to ensure that BWSIMP activities are planned and properly implemented to achieve BWSIMP project objectives with respect to environmental risk management and monitoring, including inclusive stakeholder engagement and grievance mechanism (GM), environmental accountability, environmental inclusion, conflict reduction, measures to address loss and vulnerability and strengthen environmental inclusion.
3. The Terms of Reference (ToR) consisting of eligibility criteria, functions and responsibilities etc. for **Environmental Safeguard Expert** can be viewed on websites <https://wrd.bihar.gov.in/> and <https://fmiscwrdbihar.gov.in/>
4. FMISC, Patna invites interested candidates to submit Curriculum Vitae (CV) from individuals to indicate their interest for the above specialist position. Interested Individuals must submit their CV in **Format-1** that contains information indicating qualification to perform the services as **Environmental Safeguard Expert**. The CV format can be downloaded from the websites <https://wrd.bihar.gov.in/> or <https://fmiscwrdbihar.gov.in/>
5. The individual will be selected in accordance with the procedures set out in the World Bank's Procurement Regulations for IPF Borrowers, Fifth Edition, September 2023.
6. Interested individual may obtain further information at the address given below from 10:00-17:00 hours (IST) on all working days. This notice for engagement of Individual Consultant has also been posted on websites <https://wrd.bihar.gov.in/> and <https://fmiscwrdbihar.gov.in/>
7. The CV along with all relevant documents must be submitted in a closed envelope superscribed "**Expression of Interest for Environmental Safeguard Expert under BWSIMP**" and be delivered to the address below by **not later than 15:00 hours (IST) on 19-08-2024**. In case this last date being declared as holiday by the State Government, due last date for submission of above CV will be the next working day up till the same appointment time. The Expression of Interests received till the appointed time and date shall be opened same day at 15:30 hours Server time.

Joint Director,  
Flood Management Improvement Support Centre (FMISC),  
2nd Flood, Jal Sansadhan Bhawan, Anisabad, Patna-800002,  
Water Resources Department, Govt. of Bihar,  
Tele fax: +(91)612-225699, Telephone: +(91)612-2254802  
E-mail: [fmiscbihar@gmail.com](mailto:fmiscbihar@gmail.com)

  
Joint Director  
FMISC, WRD, Patna

**Draft Terms of Reference (ToR)**  
**for**  
**Engagement of Environmental Safeguard Expert**  
**under**  
**Bihar Water Security and Irrigation Modernization Project (BWSIMP)**

|                       |   |
|-----------------------|---|
| <b>Job Title</b>      | : Environmental Safeguard Expert          |
| <b>Location</b>       | : PMU, BWSIMP, Bihar                      |
| <b>Number of Post</b> | : 1                                       |
| <b>Contract term</b>  | : One year with possibility for extension |

## **I. Background**

The proposed Bihar Water Security and Irrigation Modernization Project (BWSIMP) will cover the state of Bihar, focusing more on districts impacted by flood, water-logging and drought. As the project title suggests, the GoB has embarked upon a new path of water resources management. This is a comprehensive initiative covers efficient irrigation and flood risk management and drought proofing through multi-stakeholder participation in planning and management, after needed institutional strengthening and capacity building exercise. The project will ensure positive economic and environmental outcomes for the state. It would enable completion of the Kosi Canal Project, restore age-old dams and protect river embankments. Additionally, it includes crucial projects of intra-linking of rivers, not only to control of excess water flow from major rivers to mitigate floods but also to provide irrigation source for drought districts. The project would employ new techniques for long-term protection of river embankments. Furthermore, advanced measures will be implemented in vulnerable areas along rivers to safeguard them for long-term erosion.

## **II. Project Development Objective (PDO)**

The Project Development Objective (PDO) of the proposed Bihar Water Security and Irrigation Modernization Project (BWSIMP) is to **“To improve irrigation service delivery and flood resilience in selected project areas of Bihar”**.

The proposed BWSIMP has 4 project components: i) Climate Resilient Irrigation Management (CRIM); ii) Flood and Drought Risk Reduction (FDRR); iii) Stakeholder Partnership and Capacity Building (SPCB) and iv) Project Management (PM).

## **III. Project Components**

- 1. Component 1: Climate Resilient Irrigation Management (CRIM):** This component focuses on adopting a balanced approach between ‘last mile’ and ‘first mile’ service delivery to improve the overall viability of irrigation, especially the canal irrigation. Service delivery encompasses the entire life cycle of investments in the irrigation sector, including planning, design, operation, maintenance, and monitoring. Canal irrigation modernization will develop strategies to deliver appropriate service levels to water users from head to tail, considering their needs and demands. Asset management will include life-cycle costing for accountability and timely service delivery. Activities will include procuring equipment for topographic, bathymetric, and Light Detection and Ranging (LiDAR) surveys, allied software and hardware, establishing Supervisory Control and Data Acquisition (SCADA) systems, promoting conjunctive water use, micro-irrigation, and climate-resilient agriculture, and facilitating Participatory Irrigation Management (PIM) by Water User Associations (WUAs).
- 2. Component 2: Flood and Drought Risk Reduction (FDRR):** This component aims to enhance the efficiency and responsiveness of flood and drought management, crucial for the well-being of people, land, and infrastructures in vulnerable areas. The project will focus on making the State flood and drought resilient, and equipping institutions to minimize loss of life and property during extreme events. Drought-proofing will involve efficient water use, contingency planning, and possible risk transfer mechanisms. Land reclamation for productive use in waterlogged areas, community-based solar pumping systems for micro-irrigation will also be considered in suitable areas. Activities will inter-alia include procuring sensors and allied systems, Real-Time Data Acquisition Systems (RTDAS), blue-green infrastructure solutions, use of Jute Geo Textile

(JGT) for erosion control, bund strengthening, and modernizing flood forecasting systems. The component will draw from the experiences of the Bihar Kosi Basin Development Project (BKBDP).

3. **Component 3: Stakeholder Partnership and Capacity Building (SPCB):** This component reflects bold action and a significant shift from “business as usual,” requiring strong, coordinated institutions, a sound knowledge base, and integrated, long-term planning. The project will develop strong functional linkages between state government departments working in the water sector and create a platform for all water sector stakeholders, from the community to the national government, to plan and implement Joint Action Plans (JAPs). The project will focus on training and capacity building of water users, operators, line departments, and other stakeholders. Activities will include: strengthening WRD wings, upgrading/procuring software/hardware and allied infrastructure, modernizing training infrastructure, developing training modules, conducting thematic trainings/workshops, hiring consultancy services for specialist areas, and implementing inter-departmental JAPs.
4. **Component 4: Project Management (PM):** This component will ensure effective implementation and monitoring of project activities. Establishing a Project Management Unit (PMU) will be supported under the project, to oversee/coordinate project activities, monitor operations, finance consultancies, procure equipment, and handle operating costs. A comprehensive Management Information System (MIS) will be developed for data collection and reporting on key performance outputs and impact indicators, based on benchmarking surveys, participatory assessments, reviews and evaluations.

#### IV. Purpose of the Job:

The Environmental Safeguard Expert, designated as an integral part of BWSIMP, will play a pivotal role in managing environmental concerns associated with the World Bank (WB) assisted project. The primary responsibilities will revolve around overseeing environmental matters and maintaining accurate documentation in alignment with WB guidelines and Environmental plans. The role necessitates frequent travel to project sites to conduct environmental screenings and various related tasks.

#### V. Person Specifications and remuneration:

| Name of Post                   | Consolidated remuneration per month  | Qualification/Experience  | Engagement Type |
|--------------------------------|--|---|-----------------|
| Environmental Safeguard Expert | Rs. 1,60,000/- + Reimbursement on actual basis (Rs. 40,000/- per month expected) | <ul style="list-style-type: none"> <li>➤ Minimum qualification should be Master’s degree in Environmental Science or Equivalent.</li> <li>➤ Experience- At least 10 (Ten) years of working experience in Environment Protection and Conservation with Central Government/ State Government/ Public Sector Organizations/Externally aided Project (EAP)/ Multilateral Organizations/ International Organizations/International NGOs/ Reputed Corporate Organizations.</li> <li>➤ At least 3 (Three) years of working experience in environmental safeguard policies and guidelines for externally aided engineering project.</li> <li>➤ Willingness to work in remote in difficult conditions.</li> <li>➤ Can demonstrate IT skills including experience of MS Office.</li> <li>➤ Proficiency in English and Hindi languages and able to write reports in both the languages.</li> <li>➤ The consultant should not be more than 55 years of age as on last date of submission of application for this post.</li> </ul> | Contractual     |

## VI. Scope of Work:

The main tasks will include but not limited to the following:

- (a) Integrate Environmental considerations into DPR including the Bill of Quantities. Include measures that would help in resource efficiency, climate resilience etc. into the technical specifications and engineering designs. Emphasize the use of nature based solutions and sustainable engineering practices in the sub-project design
- (b) Ensure that the Bid Document include the EMP, and other provisions to ensure that the contract carry out the operations in a sustainable manner.
- (c) Document and prepare the Environmental Assessments for the project including data collection and support to the Engineering team to ensure that the negative impacts are minimized/ mitigated through sustainable design and construction practices. Finalize the EIA in close coordination with the World Bank and ensure that World Bank processes are adhered to.
- (d) Carry out a risk assessment against the World Bank ESF and lead the preparation of Ensure that the Project activities follow Project Environmental and Social Management Framework (ESMF) including the Bio-diversity Action and Management Plan, Cultural Heritage Plan, etc. as per the World Bank Requirement.
- (e) Report against all Social risk management actions in the Environmental and Social Commitment Plan (ESCP) of the project.
- (f) Develop a system for managing reporting, auditing of the implementation of environmental management measures in the sub-projects.
- (g) Review and approve the contractor's implementation plan with the Supervision Consultant for the environmental measures as per the environment plan.
- (h) Liaise with the various central and state government agencies on environmental and other regulatory matters.
- (i) Continuously interact with the NGOs and community groups to be involved in the project (for the maintenance of additional plantations, if any, suggested for the project).
- (j) Assist the Supervision Consultants in establishing dialogue with the affected communities and ensure that the environmental concerns and suggestions from such interactions are incorporated and implemented in the project.
- (k) Provide support and assistance to the Government Agencies and the WB to supervise the implementation of the Environment plans during the construction as well as operation stage of the project.
- (l) Report to the Project Director on the Environmental aspects pertaining to the project.
- (m) Prepare Social Impact assessment in accordance with World Banks safeguards.
- (n) Liaise with World Banks quality representative, to ensure that all potential and actual environmental and settlement issues are resolved.
- (o) Prepare periodic (monthly, quarterly, and annual) reports and document good practices and lessons learnt for dissemination within the PIU for the WB etc.
- (p) Participate in periodic training of the PIU staff on related topics.
- (q) Ensure compliance with the WB safeguards/guidelines.
- (r) Provide guidance and support in establishing efficient grievances redressal mechanism.
- (s) Any other relevant work as and when required.

## VII. Criteria for shortlisting of the individual consultant

| Sl. No. | Mandatory Criteria                     | Supporting Compliance document       |
|---------|--|--------------------------------------|
| 1       | Identity card of Individual Consultant | Aadhaar Card/ PAN Card/ Voter ID/ DL |

| Sl. No.   | Evaluation Criteria                                 |   | Supporting Compliance document  |            |  |              |   |           |  |  |   |
|---|---|---|---|------------|--|--------------|---|-----------|--|--|---|
| 1.  | Qualification                                       | <table border="1"> <thead> <tr> <th data-bbox="470 212 1038 315">Qualification</th> <th data-bbox="1038 212 1192 315">(25 Marks)</th> </tr> </thead> <tbody> <tr> <td data-bbox="470 315 1038 418">Master's degree in Environmental Science or Equivalent from any recognised university.</td> <td data-bbox="1038 315 1192 418">20 Marks</td> </tr> <tr> <td data-bbox="470 418 1038 521">Ph. D on the topic related to Environmental Science or Equivalent from any recognised university.</td> <td data-bbox="1038 418 1192 521">+ 5 Marks</td> </tr> </tbody> </table>  | Qualification   | (25 Marks) | Master's degree in Environmental Science or Equivalent from any recognised university. | 20 Marks     | Ph. D on the topic related to Environmental Science or Equivalent from any recognised university. | + 5 Marks | Certificate of Master's degree or Ph. D or both.   |  |   |
| Qualification   | (25 Marks)  |   |   |            |  |              |   |           |  |  |   |
| Master's degree in Environmental Science or Equivalent from any recognised university.  | 20 Marks  |   |   |            |  |              |   |           |  |  |   |
| Ph. D on the topic related to Environmental Science or Equivalent from any recognised university.   | + 5 Marks   |   |   |            |  |              |   |           |  |  |   |
| 2.  | Experience  | <table border="1"> <thead> <tr> <th data-bbox="470 562 1038 835">Year of working experience in Environment Protection and Conservation with Central Government/ State Government/ Public Sector Organizations/Externally aided Project (EAP)/ Multilateral Organizations/ International Organizations/International NGOs/ Reputed Corporate Organizations.</th> <th data-bbox="1038 562 1192 835">(25 Marks)</th> </tr> </thead> <tbody> <tr> <td data-bbox="470 835 1038 913">Less than 10</td> <td data-bbox="1038 835 1192 913">Disqualified</td> </tr> <tr> <td data-bbox="470 913 1038 954">10</td> <td data-bbox="1038 913 1192 954">20</td> </tr> <tr> <td colspan="2" data-bbox="470 954 1192 1070">Additional 5 marks will be allocated proportionately to the individual consultant having experience greater than 10 years.</td> </tr> </tbody> </table> | Year of working experience in Environment Protection and Conservation with Central Government/ State Government/ Public Sector Organizations/Externally aided Project (EAP)/ Multilateral Organizations/ International Organizations/International NGOs/ Reputed Corporate Organizations. | (25 Marks) | Less than 10   | Disqualified | 10  | 20        | Additional 5 marks will be allocated proportionately to the individual consultant having experience greater than 10 years.   |  | Copy of experience certificate/salary slip issued by the employer and supporting documents clearly indicating the period of employment.   |
| Year of working experience in Environment Protection and Conservation with Central Government/ State Government/ Public Sector Organizations/Externally aided Project (EAP)/ Multilateral Organizations/ International Organizations/International NGOs/ Reputed Corporate Organizations. | (25 Marks)  |   |   |            |  |              |   |           |  |  |   |
| Less than 10  | Disqualified  |   |   |            |  |              |   |           |  |  |   |
| 10  | 20  |   |   |            |  |              |   |           |  |  |   |
| Additional 5 marks will be allocated proportionately to the individual consultant having experience greater than 10 years.  |   |   |   |            |  |              |   |           |  |  |   |
| 3.  | Experience in externally aided engineering projects | <table border="1"> <thead> <tr> <th data-bbox="470 1093 1038 1218">Year of working experience in environmental safeguard policies and guidelines for externally aided engineering project</th> <th data-bbox="1038 1093 1192 1218">(25 Marks)</th> </tr> </thead> <tbody> <tr> <td data-bbox="470 1218 1038 1296">Less than 3</td> <td data-bbox="1038 1218 1192 1296">Disqualified</td> </tr> <tr> <td data-bbox="470 1296 1038 1337">3</td> <td data-bbox="1038 1296 1192 1337">20</td> </tr> <tr> <td colspan="2" data-bbox="470 1337 1192 1491">Additional 5 marks will be allocated proportionately to the individual consultant having working experience in management policies and guidelines for externally aided engineering project greater than 3 years.</td> </tr> </tbody> </table>   | Year of working experience in environmental safeguard policies and guidelines for externally aided engineering project  | (25 Marks) | Less than 3  | Disqualified | 3   | 20        | Additional 5 marks will be allocated proportionately to the individual consultant having working experience in management policies and guidelines for externally aided engineering project greater than 3 years. |  | Copy of experience certificate/salary slip issued by the employer and supporting documents clearly indicating the period of employment under externally aided engineering projects. |
| Year of working experience in environmental safeguard policies and guidelines for externally aided engineering project  | (25 Marks)  |   |   |            |  |              |   |           |  |  |   |
| Less than 3   | Disqualified  |   |   |            |  |              |   |           |  |  |   |
| 3   | 20  |   |   |            |  |              |   |           |  |  |   |
| Additional 5 marks will be allocated proportionately to the individual consultant having working experience in management policies and guidelines for externally aided engineering project greater than 3 years.  |   |   |   |            |  |              |   |           |  |  |   |
| <p><b>Note: Interview of 25 Marks will be conducted for the candidates shortlisted on the basis of above mandatory and evaluation criteria. Final selection of the individual consultant shall be made on the basis of aggregate marks of evaluation criteria and interview.</b></p>      |   |   |   |            |  |              |   |           |  |  |   |

Format-1

**CURRICULUM VITAE (CV) FORMAT**

**(Individual Consultant for Environmental Safeguard Expert for Bihar Water Security and Irrigation Modernization Project)**

**1. Project Data**

|                     |  |
|---------------------|--|
| <b>Project Name</b> | Bihar Water Security and Irrigation Modernization Project (Project ID No.: P505190)  |
| <b>Assignment</b>   | Management & Implementation of Environmental Safeguard issues of Bihar Water Security and Irrigation Modernization Project (BWSIMP) till end of project i.e. .... (present project closing date) |

**2. Contact Details**

|  |  |
|--|--|
| <b>Name</b>                                      |  |
| <b>Current Residential Address of consultant</b> |  |
| <b>E-mail of consultant</b>                      |  |
| <b>Mobile No.</b>                                |  |

**3. Date of Birth:** \_\_\_\_\_ **Citizenship:** \_\_\_\_\_

**4. Education** [*Indicate college/university and other specialized education of expert, giving names of institutions, degrees obtained, and dates of obtainment*]: \_\_\_\_\_

**5. Employment Record** [*Starting with present position, list in reverse order every employment held by expert since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.*] (For last 10 Years):

From [Year]: \_\_\_\_ To [Year]: \_\_\_\_\_

Employer: \_\_\_\_\_

Positions held: \_\_\_\_\_

|  |   |
|--|---|
| <b>6. Detailed Tasks Assigned</b><br>[ <i>List all tasks to be performed under this assignment</i> ] | <b>7. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned</b><br>[ <i>Among the assignments in which the expert has been involved, indicate the following information for those assignments that best illustrate the expert's capability to handle the tasks listed in ToR</i> ]<br><br>Name of assignment or project: _____<br>Year: _____<br>Location: _____<br>Client: _____<br>Main project features: _____<br>Positions held: _____<br>Activities performed: _____ |
|--|---|

**8. Assignment Specific Qualifications and Experience**

Assignment Specific Experience (Provide information demonstrating your ability, skills and experience to undertake advertised assignment and deliver inputs/ outputs required under the TOR)

- A. **Experience in Management & Implementation of Environmental Safeguard issues associated with World Bank/Multilateral funded projects**  
*(including experience in preparing and implementing Environmental Impact Assessment, Social risk management action plans in the Environmental and Social Commitment Plan (ESCP) of the project issues, etc.)*

|                                |
|--------------------------------|
| Name of assignment or project: |
| Year: _____                    |
| Location: _____                |
| Client: _____                  |
| Main project features: _____   |
| Positions held: _____          |
| Activities performed: _____    |

- B. **Overall Experience in handling the assignments related to Management & Implementation of Social Safeguard issues (not limited to World Bank/Multilateral funded projects)**  
*(including experience in preparation of Project Environmental and Social Management Framework (ESMF) documents related to Environmental safeguard issues; design developing of Grievance Redressal Mechanism, Monitoring & Documentation and impart Training /Capacity building etc.)*

|                                |
|--------------------------------|
| Name of assignment or project: |
| Year: _____                    |
| Location: _____                |
| Client: _____                  |
| Main project features: _____   |
| Positions held: _____          |
| Activities performed: _____    |

9. **Certification:**

I, the undersigned, certify to the best of my knowledge and belief that, this CV correctly describes my qualifications and my experience. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

**Signature of expert**

Date: (Day/Month/Year)

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