

Government of Nepal (GON)  
Ministry of Energy, Water Resources and Irrigation  
Department of Water Resources and Irrigation  
Rani JamaraKulariya Irrigation Project (RJKIP)  
Tikapur, Kailali

## **Terms of Reference (ToR) For the Hiring of Biodiversity Expert**

### **I. BACKGROUND**

The Rani, Jamara, and Kulariya Irrigation Scheme (RJKIS) is one of the largest farmer-managed irrigation systems located in Kailali District of SudurPaschim Province in Nepal. At present the system covers a net cultivable area of approximately 14,300 ha of which about 11,000 ha is currently being irrigated. The system is a cluster of three independent canal systems each with its separate water intake from a natural channel of the Karnali River. The system has been suffering from problems such as frequent wash-out of temporary diversion works, large fluctuations in the river course at the head of the main diversion channel, erosion of canal banks, and sediment deposition in the canals after every flood. Additionally, a major shift of in the course of the Karnali River towards the eastern bank and away from the western intake site in the recent past has triggered more difficulties in diverting water to the irrigation system during low river flow periods.

To address these issues, the Government of Nepal (GoN), as per the request of the irrigation users of the Rani, Jamara and Kulariya system, has planned for modernization and improvement of the scheme with financial assistance from the IDA/World Bank. Accordingly, the financial agreement was signed in year 2011 and schemes improvement work initiated at the end of same year. The scope of scheme modernization works included: (a) modernization of the RJK system; (b) strengthening community-based water management; (c) providing support to agricultural development in the irrigated area; (d) encouraging crop diversification; and (f) facilitating market access. The phase -I of the system modernization was completed on December 2017

In the meantime, GON requested the World Bank to provide financial support for the remaining works of modernization of RJKIS. The World Bank agreed to provide financial assistance for the Phase-II which is now focusing on modernization of the lower-order irrigation system so that irrigation water can reach farmers' fields with the optimal flows, continuation of the WUA institutional support program including implementation of a comprehensive agricultural improvement/development program. As a part of system improvement, the scope of the work includes the rehabilitation and modernization of 13 sub-branch (secondary) canals (66.7 km) and 32.3 km of tertiary canals in Kulariya; 12 sub-branch canals (86 km) and 20 km of tertiary canals in Jamara; and 13 sub-branch canals (60 km) and 36 km of tertiary canals in Rani canal.

In addition to physical system modernization, the project strongly emphasizes on environmental, social and core biodiversity issues through Environment Assessment (EA); Biodiversity Impact Assessment (BIA) and Integrated Pest Management Plan (IPMP). Through these strategic documents, the project intends to ensure that the environmental impacts are minimized and all the adverse impacts are addressed in a sensitive manner.

At present Social and Environmental safeguard works are in progress under RJKIP Social, Environmental and Institutional Development Unit (RJKIP-SEIDU) of the project. Biodiversity Expert/Consultant (BE) will be hired in order to implement the provisions of Biodiversity Management Plan (BMP) during execution of the Project. The BE will ensure the implementation of and compliance with the environmental safeguard instruments/ documents prepared (EA, BIA, IPMetc) as well as actions agreed during Implementation Support Review. The objectives, activities, and outputs for the Biodiversity Expert are presented below.

## **II. OBJECTIVES**

The overall objective of the procurement of the consulting service is to support project to ensure the implementation of and compliance with the environmental safeguard instruments. The specific objective is to implement the provisions of BMP consistent with EA, BIA, IPMP and related safeguard requirements of the Project.

## **III. SCOPE OF WORK**

- a) Review the EA, BIA and IPMP and suggest detailing, customization, and any improvement in the biodiversity mitigation measures based on the actual site condition.
- b) Support project in preparing annual implementation plan to implement BIA and BMP recommendations and requirements. Oversee the implementation of the BMP in general by supervising the execution and adaptation of recommended mitigation measures in day-to-day basis keeping records of those and preparing required reports.
- c) Work in close collaboration with the Project engineering and safeguard team (Environmental and Social) for mainstreaming/ incorporating biodiversity mitigation measures into the plans, designs, estimates, and bidding documents (tender and contract documents).
- d) Support project in detailing, customizing and implementing the Biodiversity Monitoring Plan consistent with EA, BIA and IPMP to ensure that all of the actions required and related mitigations measures are addressed as set out in the BMP; the actions mitigate the impacts and protect the environment as intended; and the residual impacts due to unexpected activities or any other reasons occurring during project execution are recorded and addressed by applying additional mitigation measures.

- e) Review and ensure the adequacy of implementation of the biodiversity provisions in EMP, BMP, Contract Documents, Site Specific Plans, World Banks policies relevant with this work, and other related project documents during construction and implementation of the project.
- f) Support project in designing, planning and conducting trainings and awareness program as prescribed in the BIA and BMP.

#### **IV. QUALIFICATION AND EXPERIENCE**

- a) Master's Degree in Zoology/ Environment Science or equivalent (specialization in wildlife/aquatic life will be preferred).
- b) Minimum 10 years professional experience in the areas relevant to the assignment.
- c) Experience of biodiversity conservation in linear infrastructure project will be an advantage.
- d) The Acquaintance with World Bank's safeguard policies will be an additional advantage
- e) Knowledge of Tharu language will be an added advantage.
- f) The expert should be a Nepalese national having sound health and command in computer skills.
- g) The language of communication will be English
- h) Must registered as Individual tax payer in VAT according to rule of GoN.

#### **V. LOCATION AND DURATION**

- a) The Expert shall be hired for- 10 months (4 months per year for 3 years in construction period). This required time can be revised as per need of RJKIP. The Expert shall be stationed at RJKIP office in Tikapur Kailali, with frequent travel to the project sites.

#### **VI. REPORTING**

- b) A brief documentation of the monthly activities carried out in each month shall be submitted within the first week of each month.
- c) A completion report summarizing all activities carried out during the Contract period after completion of Contract.
- d) The reports shall be in English Language

## **VII. PAYMENT**

The BE will be contracted by RJKIP and all costs and expenses shall be paid by and the responsibility of RJKIP. Payment shall be made according to the procurement guidelines of the project. The final payment shall be made after the submission and acceptance of the final reports.

## **VIII. SUPERVISION ARRANGEMENTS**

The activities foreseen under the TOR shall be supervised by the project Director or a professional assigned by him.

## **IX. OFFICE SPACE, EQUIPMENT AND OTHER LOGISTIC SUPPORT**

The office space, equipment and other relevant facilities shall be provided by RJKIP as per the contract agreement. The RJKIP office will assist in obtaining all available reports, materials and data necessary and facilitate the Consultant for access to stakeholders/offices for the efficient execution of the assignment.

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**Rani Jamara Kulariya Irrigation Project, Tikapur, Kailali**

**Bill of Quantity (BoQ)**

**Title: Hiring of Bio-Diversity Expert**

**Venue: RJKIP, Tikapur**

Duration: 10 Months (Two & Half years)

S.N.	Description	No.	Unit	Total (nos)	Monthly Rate (NRs)	Monthly Rate in Words (NRs)	Remarks
<b>1</b>	<b>Remuneration and Allowances</b>						
1.1	Remuneration of Bio-Diversity expert (2.5 years- 4 times a year)	1	Month	10			
2	Stationary and Reporting Cost	PS	As per actual bill		37,500	Thirty Seven thousand and Five Hundred only	
3	Air fare (two way)	PS	As per actual bill		240,000	Two Lakh Forty Thousand Only	