



**REQUEST FOR CONSULTANT PROPOSAL**

**RFP #: MAT 2024 – CONSULTANT 04**

**International Aquaculture Nutritionist Expert**

**ISSUANCE DATE: Feb 12, 2024**

**LAST APPLICATION RECEIPT DATE: March 1, 2024, 5:00 PM EST USA**

**Components of this solicitation are as follows:**

**Appendix A:** Terms of Reference and Requirements

**Appendix B:** Instructions for Application and Review Process

**APPENDIX A:**

**Terms of Reference / Consultancy**

**Timeline and Reporting:**

Title or proposed position/work: **International Aquaculture Nutritionist Expert**

Location: Simara, Bara District, Nepal (remote and field work to be decided at contracting stage)

Reporting to: DCoP

Anticipated Start Date: March 2024

Anticipated End Date: June 2024

Consultancy Type: Individual or Firm

Contract type – initial contract of 30 days LOE with the possibility to extend.

**Background**

Nepal is a landlocked country ripe for investment in its growing aquaculture sector, with 5% of its total area occupied by different freshwater aquatic habitats, including rivers, lakes, reservoirs, swamps, ponds and irrigated paddy fields.<sup>1</sup> Only 2% of the available water resources are utilized for aquaculture production, but the environment is suitable for producing warm, temperate, and cold-water fish species across the country, offering many opportunities to increase both aquaculture production across the value chain and economic benefits for Nepalis.<sup>2</sup> Aquaculture appeared in Nepal in the 1950s, while capture fishing has existed for much longer. Nepal has 236 indigenous fish species and 16 exotic fish species, but aquaculture activities focus on seven types of carp, tilapia, pangasius catfish (pangas), and rainbow trout.<sup>3</sup> Aquaculture and fisheries production continues to grow at a rate of 17.1% and contributes to 2.47% of the

---

<sup>1</sup> Jha, D.K. 2022. "Status of Fisheries and Aquaculture in Nepal." In: T. S. Pathan; A.R. Chourpagar; S.V. Rankhamb; R.S. Shaikh (eds.), *Fisheries, Ecology and Environment*, pp. 45- 68.

<sup>2</sup> Alok Dhakal et al. 2022. Hindawi, *Advances in Agriculture*, Volume 2022. Article ID 4206401

<sup>3</sup> Jha, D.K. 2022. "Status of Fisheries and Aquaculture in Nepal."

<sup>4</sup> Alok Dhakal et al. 2022. Hindawi, *Advances in Agriculture*.

<sup>5</sup> OECD-FAO Agricultural Outlook 2020-2029 & FAO. 2022. *The State of World Fisheries and Aquaculture 2022*.



nation's agricultural gross domestic product.<sup>4</sup> Average fish consumption per person in Nepal is approximately 2 kg per person (2020), much lower than the global average of 20.2 kg per person<sup>5</sup>. While fish consumption provides a nutritious protein source, the low average purchasing power of low contributing to low fish sales and production. Many farmers participate in the aquaculture sector, offering employment and business opportunities across genders, age segments, and social groups.

The anticipated United States Department of Agriculture (USDA) Food for Progress (FFPr) project in Nepal will leverage local, regional, and international technical expertise in aquaculture and extensive stakeholder engagement to make lasting change in Nepal aquaculture productivity, food safety, aquaculture marketability, nutritional awareness, enabling environment, and ultimately, trade.

Under Lutheran World Relief (LWR)'s leadership, the project will support direct and indirect individuals by working with aquaculture farmers, farmer groups, cooperatives, associations, hatcheries, nurseries, transporters, buyers/traders, institutions, equipment providers, and government bodies across sixteen districts in five provinces of Koshi, Madhesh, Bagmati, Gandaki, and Lumbini.

The project focuses on two USDA FFPr's strategic objectives:

- To increase agricultural productivity of fish farmers through improving producer access to improved inputs, services, financing, and end-market linkages.
- To expand trade of aquaculture products locally including aquaculture inputs, services, live fingerlings, and processed fish through improving access to finance, quality inputs, and end markets.

The project will carry out five activities, in capacity building, training, inputs, financial services and market access.

### **Consultant Opportunity:**

Nepalese aquaculture mainly grows carp as one of the major aquaculture species. As a part of warm water aquaculture Pangas and Tilapia have been added up in southern Terai recently besides Rainbow trout being cultivated in hills and mountains in cold water regions. The number of fish feed manufacturer is increasing in Nepal. The major fish feeds in the market are rice bran, mustard oil cake, soybean cake supplementary feed on one side, in other side fish pellet industries are also coming up. Soon demand for floating types of pellet feed is also increasing up. However, the feed produced from pellet mills and those farmed base feeds are required to be formulated according to the nutrition, micronutrition and mouth size of the targeted age and fish species. Similarly, knowledge of high standard, healthy, hygienic, and long self-life packaging practices and with traceability information has been the requirement to enhance the profitability and productivity of fish feed. This consultancy will work with various fish feed industries, researchers and government officers and private sector farms in Nepal and will draw on expertise regionally and/or internationally.

LWR is seeking a highly qualified and experienced Aquaculture Nutritionist Expert. The main objective of this consultancy is to prescribe nutritional formula for different fish species of carp, tilapia, pangas, and trout belonging to various life cycle stages such as brood, hatchling, fry, fingerling, and grow out according to socio-economic context of Nepal, in general. The expert will work with feed mills to introduce alternative feed bags, such as use of at least three layers of packaging bags to keep the feed inside airtight avoiding moisture to enter as much as possible with relatively longer shelf life for feed storage after manufacture. The feed package should contain information about ingredients used to produce the feed inside with appropriate labelling for traceability needs. The aquaculture nutritionist will

---



work on pre-feasibility of community-based feed mill establishment after a short briefing and situation analysis. The expert will work closely with fisheries scientists of Nepal Agricultural Research Council, governments officials and in academic institutions such as Agriculture and Forestry University, private feed mills and project Deputy Chief of Party.

### **Detailed Tasks**

The Aquaculture Nutritionist Expert will be responsible for the following tasks:

- a) Review current feeding practices for target fish in Nepal and propose suitable feed formulations and feeding regimes.
- b) Conduct literature reviews and research on the nutritional needs of the cultured species.
- c) Develop feed formulation for specific fish species, including carp (specifically rohu, catla and mrigal, common carp, grass carp, silver carp, big head,), pangas, tilapia, and trout, according to each species life cycle stages.
- d) Develop the protocols and outline of information that will be included in a brochure or booklet on the formulated feed and feeding regimes, that is easy to interpret for smallholder and large-scale commercial fish farmers in Nepal.
- e) Design at a minimum a three-layer bags for fish feed packaging that will avoid moisture and provide longer shelf life for storage.
- f) Organize short-term training to trainers on advances of aquaculture feed nutrition, importance of micronutrients for fish growth, composition of feed ingredients, calculation of protein and other ingredients.
- g) Collaborate with scientists, private farms, and government extension officers.
- h) Provide training to fish feed producers group and feed milling companies on the feed formulation.

### **Deliverables**

The following deliverables are expected from Aquaculture Nutritionist Expert:

- a) Training materials, presentations, and resources for educating aquaculture personnel and farmers.
- b) Booklets, leaflets, pamphlets and other materials on carp, pangas, tilapia and trout nutrition and with recommendation to Nepalese socio-economic context focusing on different life cycle stages as explained above.
- c) A pre-feasibility report on community-based fish feed mill establishment in suitable areas.
- d) Design at least three-layer moisture proof well labelled feed bags for ingredients used and traceability purposes and participate in a group discussion with feed millers and concerned officials.
- e) Organize a “Training for Trainers’ course on aquaculture nutrition.
- f) A booklet on the use of floating feeding sacks for carp aquaculture ponds.
- g) Floating feed manufacturing practices for Pangas and Tilapia
- h) A booklet or leaflet preparation on feed and nutrition for hatchling rearing of Pangas.
- i) Propose eco-friendly and sustainable feed ingredient alternatives.

### **Level of Effort and Timeline**

The ToR is expected to be completed by both remote and field work. Field visits will be required to Simara and the implementation regions through the course of the consultancy. The perspective timeline for the selected consultant to start March 2024 and submit deliverables by end of June 2024 for a total of 30 days level of effort. All terms will be agreed upon in the consultant contract.

### **Qualification and Experience**

The Expert should possess the following qualifications:



- a) Advanced degree in aquaculture or animal nutrition with special reference to carp, pangas, tilapia and trout.
- b) Proven experience in fish nutrition production, manufacturer and packaging.
- c) Experience working with international development organizations and knowledge of donor-funded projects is advantageous.
- d) Strong verbal and written communication and writing and technical skills.
- e) Ability to communicate technical matters effectively to a wide audience.
- f) Microsoft package: Word, Excel; PowerPoint, preferred.
- g) English language, fluency in Nepali/Hindi/local languages is a plus.
- h) Willing to travel to Nepal, including to remote districts.

**APPENDIX B:  
APPLICATION INSTRUCTIONS AND REVIEW PROCESS**

**LANGUAGE REQUIREMENTS** – All documents submitted in response to this solicitation, as well as all correspondence in connection with the solicitation, shall be in the English language.

**EVALUATION** – Evaluation of responsive and technically acceptable applications submitted pursuant to this solicitation will be carried out by LWR in accordance with the evaluation factors in, “Instructions for Application and Review Process.”

**QUESTIONS** – Questions should be addressed to the below email address 5 business days prior to the submission deadline.

**APPLICATIONS** – Applications are to be submitted electronically via email no later than the Last Application Receipt Date, which is defined as **March 1, 2024, 5:00 PM EST USA**. Electronic applications must be addressed and delivered to:

Attention: MATSYA Procurement – **International Aquaculture Nutritionist Expert**

Email: [Matsyaprocurement@lwr.org](mailto:Matsyaprocurement@lwr.org) CC: [rbhandari@lwr.org](mailto:rbhandari@lwr.org)

Last Proposal Receipt Date: **March 1, 2024, 5:00 PM EST USA**

**EVALUATION CRITERIA**

The selection process will be based on the following criteria:

- a) Advanced knowledge in the nutrition of various aquaculture species.
- b) Understanding of feed formulation, dietary requirements, and supplementation strategies for different stages of aquatic life
- c) Expertise on agriculture enterprises, regulations with certification system in aquaculture, agriculture, or livestock
- d) Track record of publications or contributions to the field of aquaculture nutrition
- e) Demonstrated ability to apply theoretical knowledge to practical aquaculture challenges
- f) Continuous professional development in the field of aquaculture nutrition
- g) Daily rate

**Note:** LWR will not accept responsibility for delays with transmission or receipt of applications/ proposals. Applicants are solely responsible for ensuring the timely receipt of their applications/ proposals. Applications/ proposals received after the date and time required will generally not be considered unless no other proposals are received.



Submissions shall be in accordance with the instructions provided in this solicitation, at the place and time specified. If submitting a proposal as a firm, please share the CVs of the proposed consultants and include a breakdown of tasks outlined in the ToR in the cover letter. Interested applicants are requested to submit:

1. **A recent CV or resume.** The CV/resume must include sufficient relevant information to evaluate the application in accordance with the stated evaluation criteria and must contain the following information:
  - Personal Information: Full name, mailing address, email address, phone number.
  - Education: School/ university name, type of any degrees received.
  - Work and Consultancy Experience: Job/consultancy title, duties, and accomplishments, starting and ending dates (month and year).
  - Other Qualifications: Other pertinent information related to the qualifications required for the position, as noted above, including job-related training courses (title and year), job-related skills, and notable accomplishments.
2. **A Cover Letter.** The cover letter must outline how you expect to use previous experience and expertise to complete the ToR. Include a proposed daily rate for services in the cover letter. Only include daily rate for services and not any other expenses.

Applicants that best fit the criteria may be invited for interview.