

## REQUEST FOR PROPOSAL

### SUBMISSION DEADLINE

1:00 PM CST, 1/30/2023

**RFP TITLE:** Targeted soy-optimized feeds for In-Pond Raceway Systems (IPRS) including a focus on resulting fecal materials

#### RFP CONTACT:

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**PROPOSAL DEADLINE: JANUARY 30, 2023 – 5:00PM CST**

#### INTRODUCTION:

Through a global network of international offices and strong support in the U.S., USSEC helps build a preference for U.S. soybeans and soybean products, advocates for the use of soy in livestock and aquaculture feed and human consumption, promotes the benefits of soy use through education and connects industry leaders through a robust membership program.

USSEC has been a leader on the development and promotion of the In-Pond Raceway System technology, a technology that allows traditional pond farmers to increase yields up to three times, improve profitability, and to benefit from better operational/management control. More information on the IPRS technology can be found at <https://ussec.org/resources/ussec-in-pond-raceway-systems-manual/>.

There has long been a discussion within USSEC whether feeds used in In-Pond Raceway Systems (IPRS) should be formulated specifically to the system, as opposed to just using “off the shelf” high-quality commercial feeds. IPRS generally replaces static water pond systems with a raceway approach that forces fish to constantly swim against a current. This may have important implications for the protein/energy balance of the feeds used. Additionally, as IPRS is a much more closely managed system, use of better-quality formulations may make economic sense. Linked to this possible need for specific formulation approaches for IPRS is the aspect of the fecal matter that is created by the farmed fish in the IPRS raceways. For the IPRS technology to be most effective, there is a desire for any fecal material to be cohesive (to stick together) and to sink rapidly so it can be extracted from the end of the IPRS in the Quiescent Zone (QZ, an important aspect of the IPRS technology is that it seeks to remove as much of the fish fecal matter from the pond as possible).

#### PURPOSE OF RFP:

USSEC seeks a contractor to develop research to find formulations and targeted soy-optimized feeds for In-Pond Raceway Systems (IPRS) including a focus on resulting fecal materials, its

composition, and its possible industrial uses. Contractors can be physically located in any region and may liaise with USSEC Aquaculture regional teams to help determine potential research locations. This RFP is for a maximum term of seven months in the first phase. Contract extension or second phase is subject to performance results, other research opportunities, and conditions resultants from the findings. The purpose of this RFP is to seek proposals to solve questions about the best diet approach for use in IPRS with fish species, how to optimize the removal of fecal matter from the system (linked to diet formulation), and the best disposition and industrial use of the fecal products removed from the IPRS to encourage more sustainable fish production.

#### **BACKGROUND & PURPOSE OF PROJECT:**

USSEC has long been supporting IPRS as a technology that can help move traditional pond farmers to an approach that can greatly improve yields (up to three times) with greater management control and water savings. In fact, this can also drive increases of volume to move the final aquaculture product to export markets. What is less clear is whether the concept of using a higher quality, targeted feed for IPRS has been fully realized by industry. This is important as high-quality feeds should favor US soy products, particularly if the end aquaculture product is going to export markets, and therefore needs to be certified. This will then mean that the feeds will need to have certified sustainable soy ingredients, which can use SSAP certified US soy.

This work could help update the standards for IPRS and be incorporated into future updates of the IPRS Manual and information could potentially also be included in the International Aquaculture Feed Formulation Database (IAFFD).

#### **TARGET AUDIENCE:**

The target audience that will benefit from the results of this research corresponds to aquafeed producers as well as fish producers that have already implemented the IPRS and those that will soon do so.

#### **SCOPE (SERVICES) OF WORK:**

As in-pond raceway systems (IPRS) evolve around the world as a new fish production technology, USSEC´ regions recognize this production system as a great potential for a more productive, sustainable, and environmentally friendly culture unit compared to traditional pond culture systems for fish. The main idea will be to expedite the generation of data that can improve production protocols of the IPRS technology. There has long been a discussion within USSEC whether feeds used in IPRS should be formulated to the system, as opposed to just using “off the shelf” commercial feeds. IPRS generally replaces static water pond systems with a raceway approach that forces fish to constantly swim against a current. This may have important implications for the protein/energy balance of the feeds used. Additionally, as IPRS is a much more closely managed system, use of better-quality formulations may make economic sense. Linked to this possible need for specific formulation approaches for IPRS is the aspect of the fecal matter that is created by the farmed fish in the IPRS raceways. For the IPRS technology

to be most effective, there is a desire for any fecal material to be cohesive (to stick together) and to sink rapidly so it can be extracted from the end of the IPRS in the Quiescent Zone (QZ).

The purpose of this research should be to:

1. Determine whether a specific formulation approach would yield better results for IPRS (growth, survival, quality, economically, etc.) specifically (compared to an open pond approach using commercial feeds) and what that formulation approach might be.
2. Determine what specific formulation approach would help to create fecal matter that is cohesive and has a density that makes it sink rapidly enough to be better collected in the QZ.
3. Determine what differences in formulation might be needed to achieve the above for key different species, i.e., carps, tilapia, *Pangasius*, and other commercial fish species.
4. If possible, an indication of how changes in formulation will impact the ability to collect solid fecal material in the QZ and the nutrient quality of that material (NPK) for use in other economically valuable ways, such as aquaponics or agriculture.
5. Quantify the fish metabolic waste collection efficiency from the IPRS operation with proper feed formulation.
6. Determination of the quantity and composition of feces to determine its impact on the system, and research about the industrial uses and verify the complete functionality of the feces extractor.
7. Suggest and propose possible proven industrial uses of the products extracted from the IPRS and that contribute to a circular economy that makes the fish farming operation more sustainable.

#### **ADDITIONAL CONSIDERATION (if applicable)**

The initial project must be completed in the first year of execution ending on September 30. If a second phase (year) is needed, the possible approach should be outlined in the initial proposal, though any future phase(s) may need to undergo a new RFP.

#### **DELIVERABLES:**

The deliverable schedule listed below is illustrative, and applicants may propose an alternative schedule in their proposals. However, all work for **Phase I** must be completed before September 30, 2023. Preference will be given to applicants that demonstrate the ability to deliver quality work in a shorter timeframe.

<b>Completion Date</b>	<b>Description of Deliverables</b>
<b><i>Within five business days of contract start date</i></b>	<i>Hold a kick-off call with USSEC Aquaculture experts that work with fixed IPRS raceways. Establish a relationship and regular communication schedule. Primary linkages to USSEC will be through the USSEC Americas Aquaculture Lead, Mr. Jairo Amezcuita (<a href="mailto:jamezcuita@ct.ussec.org">jamezcuita@ct.ussec.org</a>), USSEC IPRS Taskforce Lead, Mr. Zhou En Hua (<a href="mailto:ehzhou@ussec.org">ehzhou@ussec.org</a>) and the USSEC Aquaculture Program Technical Contractor, Mr. Lukas Manomaitis (<a href="mailto:LManomaitis@ct.ussec.org">LManomaitis@ct.ussec.org</a>) for this effort.</i>
<b><i>Within ten business days of contract start date</i></b>	<i>Submit format outline of narrative report including proposed data table format to finalize report structure.</i>
<b><i>August 31, 2023</i></b>	<i>Submit a draft narrative report in Microsoft Word, a PowerPoint presentation, and Excel tables to USSEC for review and comment (all in native Microsoft Office formats [version 2010 or later] and in English).</i>
<b><i>September 27, 2022</i></b>	<i>Submit final narrative report in Microsoft Word, a PowerPoint presentation, and Excel tables with USSEC comments addressed. (All in native Microsoft Office formats [version 2010 or later] and in English).</i>

#### **PROJECT TIMELINE:**

Our expectation is for the initial proposal to last from contract signing to September 30, 2023 (or be completed by a certain date). We are asking that the Project Proposal include details about what the proposed timeline would look like from the potential contractor's viewpoint, including any future phase(s).

#### **RFP TIMELINE:**

- **RFP Distribution:** January 15, 2023
- **Last Day to Submit Questions:** January 26, 2023
- **Project Proposals Due:** January 30, 2023
- **Selections Made By:** February 10, 2023
- **Prospective Contractors Notified By:** February 13, 2023

#### **INSTRUCTIONS:**

Proposals must contain at a minimum the specific criteria listed below:

1. Please email the proposal to [RFP@USSEC.ORG](mailto:RFP@USSEC.ORG) by **5:00PM Central Time** January 30, 2023.
2. A description of Prospective Contractor's capabilities, resources, and experience. Emphasis should be placed on experience related to this RFP.

3. A thorough proposal outlining Prospective Contractors' planned work, deliverables, and timeline to complete the work.
3. Resumes for each of the Prospective Contractor's personnel assigned to work directly on the implementation of the contract.
4. Provide a minimum of two names and contact information for other similarly sized clients for reference purposes.
5. Detailed Budget
  - All bids for services must provide a breakout of how the fee was derived including but not limited to a breakdown of hourly rate and the amount of effort they anticipate doing the work.
6. Proposals should be no longer than **10 pages** (8 ½" x 11").

**NOTES:**

- Prospective Contractors are hereby notified that proposals will be duplicated for internal review only. Every effort will be made to maintain confidentiality of all information presented. The appropriate representatives from staff and legal counsel will review proposals. Proposals will not be returned.
- USSEC reserves the right to retain all proposals submitted. Submission of a proposal indicates acceptance by the submitter of the conditions contained in the request for proposal, unless clearly and specifically noted in the proposal submitted and confirmed in the contract between USSEC and the contractor selected.
- Confidentiality - Without USSEC's prior written consent, Prospective Contractors and its officers, employees, agents, representatives, affiliates, and subcontractors shall not disclose to any third party any documents, materials, or information that the Prospective Contractors learns from or is provided in relation to the RFP request.
- During the evaluation process, USSEC reserves the right to request additional information or clarifications from proposers, or to allow corrections of errors and omissions.
- USSEC reserves the right to reject any proposal that is in any way inconsistent or irregular. USSEC also reserves the right to waive proposal defects or deficiencies, to request additional information, and/or to negotiate with the Prospective Contractor regarding the proposal.
- Prospective Contractor agrees that Fees are in lieu of all other benefits, including, but not limited to, repayment of all taxes related to contractor service fees, health and life insurance, administrative costs and vacation.

- Prospective Contractor agrees that any income taxes, value added taxes or any other form of direct or indirect taxes on compensation paid under the contract shall be paid by Contractor and not by USSEC or Funding Sources.
  - Prior to any payment to a Contractor, a contractor must provide a W-9, W-8, or W-8BEN upon agreement signature
- Non-Competition. Contractor shall not act as agent or representative for any product or service directly or indirectly competitive with U.S. soybeans or soybean products for the length of the contract.
- USSEC and Prospective Contractor agree to comply with the provisions of Equal Employment Opportunity (EEO). USSEC provides EEO to all employees and applicants for employment without regard to race, color, religion, gender, sexual orientation, gender identity or expression, national origin, age, disability, genetic information, marital status, amnesty, or status as a covered veteran in accordance with applicable federal, state, and local laws.

## SUPPLEMENTAL INFORMATION AND BACKGROUND

### *BUILDING A PREFERENCE FOR U.S. SOY*

**USSEC's strategy** can be found here: <http://ussec.org/about-ussec/vision-mission/>

**USB's Long Range Strategic Plan** can be found here: <http://unitedsoybean.org/about-usb/strategic-planning/>

We are a dynamic partnership of key stakeholders representing soybean producers, commodity shippers, merchandisers, allied agribusiness and agricultural organizations.

Through a global network of international offices and strong support in the U.S., we help build a preference for U.S. soybeans and soybean products, advocate for the use of soy in feed, aquaculture and human consumption, promote the benefits of soy use through education and connect industry leaders through a robust membership program.

Our 15-member board of directors is comprised of four members from the American Soybean Association (ASA), four members from the United Soybean Board (USB), and seven members representing trade, allied industry, and state organizations.

New board members are seated annually. We are receiving funding from a variety of sources including soy producer checkoff dollars invested by the USB and various state soybean councils; cooperating industry; and the American Soybean Association's investment of cost-share funding provided by the United States Department of Agriculture's (USDA) Foreign Agriculture Service.

The United Soybean Board, created by the 1990 Farm Bill to manage and direct the National Soybean Checkoff, is dedicated to marketing and research for the soybean industry. USB is comprised of 73 volunteer soybean farmers representing the interests of fellow growers nationwide. Each board member is nominated by Qualified State Soybean Boards (QSSBs) and appointed by the U.S. Secretary of Agriculture.

Because of the limitations on administrative and salary costs established in the Act, USB outsources most of its program management responsibilities to USB's three primary contractors:

- SmithBucklin-St. Louis for domestic marketing, new uses, production research and Board initiative activities;
- Osborn & Barr Communications for communications/public relations activities and;
- U.S. Soybean Export Council (USSEC), Inc. for international marketing and global opportunities activities.

As one of these three primary contractors USSEC may also undertake initiative activities on behalf of USB. USB considers primary contractor staff (approximately 60 people) as core USB staff. These three primary contractors use several subcontractors and, together, these entities carry out approximately 450 projects each year for USB. USB also manages approximately 10 subcontractors.

## **Non-Discrimination Statement**

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: [program.intake@usda.gov](mailto:program.intake@usda.gov).

USDA is an equal opportunity provider, employer, and lender.

**Civil Rights Clause**

Contractor agrees that during the performance of this Agreement it will not discriminate against any employee or applicant for employment because of race, color, religion, gender, national origin, age, disability, political beliefs, sexual orientation, marital or family status, parental status or protected genetic information. Contractor further agrees that it will fully comply with all applicable Federal, State and local equal employment opportunity statutes, ordinances and regulations, including, without limitation, Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990, the Age Discrimination in Employment Act of 1967, and the Equal Pay Act of 1963. Nothing in this section shall require Contractor to comply with or become liable under any law, ordinance, regulation or rule that does not otherwise apply to Contractor.