

# REQUEST FOR PRE-PROPOSALS

## Center for Tropical and Subtropical Aquaculture

### Due Friday, June 29, 2012

The Center for Tropical and Subtropical Aquaculture (CTSA) requests pre-proposals for applied research that addresses problems and opportunities in the regional aquaculture industry. In a recent region-wide survey, CTSA stakeholders identified the below strategic areas and species as the top aquaculture development priorities. Pre-proposals that target these strategic areas and priority species will receive highest preference. However, pre-proposals that do not fall under specific priority areas but address CTSA's mission will be considered in our development process. **CTSA strongly encourages collaboration between institutions and agencies in the region**, as well as shared funding of large priority projects.

CTSA's mission is to support aquaculture research, development, demonstration, and extension education in order to enhance viable and profitable aquaculture in the United States. CTSA is funded by an annual grant from the U.S. Department of Agriculture's National Institute of Food and Agriculture (NIFA). The CTSA region includes the following areas: American Samoa, Guam, Hawaii, the Commonwealth of the Northern Mariana Islands, the Republic of the Marshall Islands, the Federated States of Micronesia, and Palau.

**Please note:** Desired outcomes and/or deliverables are included where applicable. They represent industry-identified requests and it is strongly recommended that they be addressed in your pre-proposal.

## FY 2012 Strategic Areas & Priority Species

### **Cost Effective Locally-Made Aquatic Feed**

Nearly all survey participants identified availability of affordable feed as one of the major constraints in the regional development of aquaculture. CTSA would like to solicit a proposal that will develop a cost-effective aquaculture feed using locally available ingredients. The major goal should be to create a local feed that costs less than imported feed for species currently being farmed and/or species identified in the CTSA survey as desired species for regional farming. These include but are not limited to tilapia, marine shrimp, moi, Kahala, rabbitfish, freshwater prawn and groupers.

### **Tilapia Farming Development**

In our recent survey, tilapia was identified as the most desired species for aquaculture farming throughout the CTSA region. Although most farming technology is available elsewhere, the development and expansion of tilapia farming still faces regional challenges, including but not limited to sources of fingerlings and farming and importation restrictions of some desired species. CTSA encourages studies to develop desired strains from those that are already locally available, and cannot provide funding to introduce non-native species. We also encourage proposals to develop locally made feed for tilapia.

### **Rabbitfish farming development**

Rabbitfish is a highly desired species for farming on almost all Pacific Islands. Currently, the rabbitfish supply for local markets is dependent on wild harvest. Although farming technology is established in several Asian countries, it is still not widely available in the Pacific Islands. CTSA is seeking a project to adapt, demonstrate and transfer rabbitfish farming technology to different Pacific Islands.

### **Sea Cucumber farming technology**

With an increased demand for sea cucumber in Asian markets, natural stocks of the species have been over harvested in some Pacific Islands. To mitigate this problem, CTSA recently funded projects to transfer sea cucumber hatchery technology to Pohnpei and Yap. It is important to ensure that any technology transferred throughout the Pacific region is adapted to local conditions, and is being operated wholly by local technicians. Currently, the major issues facing the development of the sea cucumber industry are the lack of farming technology and sources of seedstock within different communities. CTSA is calling for a proposal to continually transfer and demonstrate sea cucumber farming technology in waters around the islands, using locally desired species.

### **Marine Shrimp farming**

The CTSA region is known as the main source of SPF white shrimp broodstock for many shrimp farming countries around the world. However, the local shrimp farming industry is still struggling to achieve profitable and sustainable operations, mainly due to the high costs of feed, energy, labor, and transportation on most islands. CTSA is therefore soliciting a proposal for a collaborative effort between researchers and industry members to improve production efficiency and sustainability of marine shrimp technology.

### **Marine Finfish Farming Technology**

Farming of marine finfish such as moi, Kahala and groupers has been identified as a commercial aquaculture practice with potential for growth in the region. CTSA has previously supported the development of farming technology for moi and Kahala. However, stakeholders have indicated that existing operations are still struggling with impeding issues, including the lack of a reliable source of fingerlings, expensive feed, and the high cost of energy. Stakeholders have also indicated that groupers are another desirable marine finfish for farming in the region. Grouper farming technology that is currently available in several Asian countries can likely be adapted to regional conditions. CTSA will accept proposals to adapt and/or develop technology that improves the practices, profitability, and sustainability of marine finfish farming in the region.

### **Freshwater Prawn industry**

CTSA stakeholders also identified freshwater prawns as a desirable species for regional farming. Freshwater prawn culture was developed in Hawaii over three decades ago. Although the number of prawn farms has decreased in recent years, data from the CTSA survey indicated that freshwater prawns remain a species with potential for profitable farming in the region. However, revitalizing the prawn industry will require solutions for key issues, including seedstock source and cost of feed, energy, and labor, etc. The Center will consider proposals that will improve freshwater prawn farming industry in the region.

## **Process and Instructions**

When submitting pre-proposals, researchers must identify the strategic area and priority targeted. All pre-proposals received by the deadline, **Friday, June 29, 2012**, will be reviewed by CTSA's Industry Advisory Council (IAC) and Technical Committee (TC). Only some pre-proposals will move forward with requests for a full proposal. Full proposals will receive both internal and external review for technical quality and industry impact. Not all full proposals may be awarded. Full proposals approved by the CTSA Board of Directors and the USDA as part of the CTSA FY12 Plan of Work are expected to have funding available for implementation by July 2013.

CTSA typically does not fund projects for more than \$100,000 per year. CTSA gives preference to projects that will deliver the most benefits at the lowest cost. Due to its limited project budget (< \$600,000), CTSA will distribute funding to the highest ranked proposals until it has exhausted all available funds.

### **Eligible Applicants**

Universities, community colleges, or nonprofit research institutions and organizations must lead project execution. Private individuals or commercial companies are welcome to participate in research work but cannot act as the prime contractor for any project.

### **Pre-Proposal Guidelines**

Although an individual may submit a maximum of three pre-proposals, a researcher can act as principal investigator to only two projects in a single funding cycle. Pre-proposals must be no more than two pages (single-spaced, 12-pt. font, 1-inch margins), and the required format is Microsoft Word. Each pre-proposal must state which strategic area and priority it is targeting. Pre-proposals must include the following sections:

#### **Proposed title or main idea**

#### **Problem statement**

Clearly explain the significance of the targeted problem and its relation to current and future industry development.

#### **Proposed objectives**

Define and number objectives that are achievable and measurable. Please visit the CTSA Web site ([www.ctsa.org](http://www.ctsa.org)) to view previously funded projects so that your pre-proposal does not duplicate the work of completed or current projects.

#### **Expected Impacts**

Define how your proposed project will realistically impact the regional aquaculture industry. Please be specific in your description.

#### **Approach**

Describe the principal approach that the project work group will use to accomplish the objectives outlined in your pre-proposal.

#### **Duration**

If a project's duration is to be more than one year, then your pre-proposal must include objectives and approach for each year. Objectives listed should be accomplished within a three-year time frame.

#### **Estimated budget**

Estimate the amount of funding needed to accomplish objectives. A breakdown need only include total estimates for major categories, such as salary, supplies, and equipment.

#### **Project work group members**

List members, by name and affiliation, who will participate in the execution of the proposed project.

**How to Submit**

Please e-mail pre-proposals to [mbrooks@oceanicinstitute.org](mailto:mbrooks@oceanicinstitute.org) by Friday, June 29, 2012. If you have any questions, please contact Meredith Brooks via e-mail or by telephone at (808) 259-3176. If necessary, pre-proposals may be faxed to (808) 259-8395 or mailed to the following address:

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