



REQUEST FOR PRE-PROPOSALS

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The USDA-NIFA Southern Regional Aquaculture Center solicits response from qualified multi-state teams interested in participating in the regional project:

ECONOMIC IMPACT ASSESSMENT AND MONITORING PROGRESS OF TECHNOLOGY ADOPTION IN THE U.S. CATFISH INDUSTRY

SRAC's Board of Directors has authorized up to \$125,000 for a two-year project analyzing the economic impact of the U.S. catfish industry. This project will be developed using the "comprehensive proposal method" where proposals are submitted from multi-state teams of scientists. Each team submits one proposal addressing all project objectives. One proposal will be selected for funding based on review by a committee of scientists not involved in any of the proposals that are submitted.

Background

Catfish (*Ictaluridae*) industry continues as the leading U.S. aquaculture sector with farm gate sales of \$363 million, constituting 35% of the total U.S. sales in 2016. Although the farmed area has contracted more than 60% in the last decade, the industry is evolving by embracing productive alternate technologies such as split-ponds and intensive aeration. Previous economic impact assessments have shown that contribution of the catfish industry to the overall U.S. economy is estimated much higher than the direct farm gate sales due to supply-side contribution of other value-chain members. The industry continues to act as a vital contributor to the development of new aquaculture production and management technologies, while contributing heavily to the local employment, rural economy, poverty alleviation, and food production. Documenting the current economic impact of the catfish industry along with monitoring the adoption of various production enhancing technologies validates and ensures continued support from policy makers. Estimating the economic and technological contribution of the U.S. catfish industry on the rural economies will provide insights about the potential impacts associated with economic shocks that might affect this major segment of aquaculture.

Objectives

- 1) *Determine the economic impact of the U.S. catfish industry:* Quantify the direct, indirect, and induced economic impact by specifically calculating the economic multipliers generated by the U.S. catfish industry at regional and national levels.
- 2) *Monitor the adoption of alternate technologies in the U.S. catfish industry:* Monitor the extent and intensity of adoption of new catfish production technologies (split-ponds, intensive aeration, and in-pond raceways) and complementary production inputs (fingerlings, fixed paddlewheel aerators, and automated oxygen monitoring systems) in the U.S. catfish industry.

Experimental Approach

1) *Determine the economic impact of the U.S. catfish industry:* SRAC is inviting proposals that intend to estimate the cumulative economic effects of farm-level spending on catfish farms on the regional and national economies. Comprehensive evaluation using social accounting matrix platforms like IMPLAN[®] database that quantifies interactions among industries and firms in an economy are encouraged. The study should specifically investigate the impact of the key supply chain players and quantify the value of their goods and services. The rippling multiplier effects in terms of output, income, and employment need to be measured to assess how changes in farm-level spending affects the overall economy. This project envisions to estimate the current (2018) economic impact of catfish industry at state level from major catfish producing states like Alabama, Arkansas, and Mississippi. Inclusion of other catfish producing states are discretionary based on availability of funds.

2) *Monitor the adoption of alternate technologies in the U.S. catfish industry:*

The second objective of this project is intended to monitor the information on the extent and intensity of adoption of new catfish production technologies such as split-ponds, intensive aeration, and in-pond raceways along with the adoption of complementary technologies like hybrid catfish fingerlings, fixed-paddlewheel aerators, and oxygen-monitoring systems in major catfish producing states. Preliminary data on adoption of these technologies are available for 2010-2013 period. Specific information such as types of technologies adopted, the devoted farm area, number of ponds and, number of farms adopting these technologies need to be collected through an industrywide survey to get annual adoption data for the period post 2013. This information will be used to estimate the rate of adoption of these production and complementary technologies in the catfish industry.

How to Respond

Pre-proposals must address both objectives. Preference will be given to pre-proposals that show a high degree of collaboration and coordination among participants. To meet the criterion for a regional project, the pre-proposal must include collaboration from scientists in two or more states or territories in the Southern Region (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, U.S. Virgin Islands, and Virginia).

The pre-proposal must include a one-page vita for each participant and a proposed budget for each participating institution or organization. Pre-proposals, vitae, and budgets that are not in the proper format will not be considered. (See "Format for Pre-Proposals" file attached or contact Kristen Thompson with the SRAC office at 662-686-3269.)

Send an electronic copy of the pre-proposal in Word format to Jimmy Avery, SRAC Director as an email attachment (jimmy.avery@msstate.edu) by **October 31, 2017**. Proposals received after that date will not be considered.