



# International Association of Aquaculture Economics and Management (IAAEM)

February 2006

IAAEM Newsletter

2006 / Number 1

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## Carole Engle, Ph.D.

*President IAAEM,  
Director/Chair  
Aquaculture/Fisheries Ctr.  
Mail Stop 4912  
University of Arkansas at  
Pine Bluff  
1200 N. University Drive  
Pine Bluff, AR 71601  
Tel: 870-575-8523  
Fax: 870-575-4637  
E-mail: [IAAEM@uaex.edu](mailto:IAAEM@uaex.edu)  
or [cengle@uaex.edu](mailto:cengle@uaex.edu)*

## Greetings from the New IAAEM President

It is an honor to serve as President of the International Association of Aquaculture Economics and Management and to follow in the footsteps of Professors Shang, Tisdell, and Leung. Economic analysis and its application to aquaculture is of greater importance than ever, and yet economists who specialize in analysis of aquaculture seem to be fewer in numbers. IAAEM can provide the framework for global professional collaboration and interaction on the critical economics issues facing aquaculture worldwide.

Over the last decade alone, the volumes of farm-raised salmon and shrimp have joined the carps and trout in surpassing global supply from capture fisheries. As aquaculture continues to grow, farmed production of other species will likely develop to levels at which farmed supplies exert greater influence in local and worldwide markets than capture fisheries. Economic analysis can provide vital guidance to industry and policy-makers as seafood supplies become increasingly affected by production from aquaculture.

The exciting new developments in offshore marine production systems and culture technologies have and will continue to benefit from results of economic analysis. Economics can identify the most effective research directions, identify appropriate scales for investment and efficient production levels. The growth of aquaculture has attracted a great deal of attention from non-governmental organization, environmental groups, social activist groups, and policy makers. Economics can contribute a rational framework for quantifying trade-offs among various alternative policy options, whether local, national or international, that could serve to move these debates in a more rational direction.

The growing role of aquaculture in international trade and the associated trade conflicts related to aquaculture also call for economic analysis. With increased globalization, the need for economics guidance to address the complex issues associated with international trade will only grow.

IAAEM has a vital role to play in promoting socio-economic research and information exchange on aquaculture. We are planning to enhance the content of our web site. Dr. Francisco Martinez-Cordero has graciously agreed to head this up. Dr. Terry Hanson is serving as our newsletter editor and Dr. Donna Lee is developing a student awards program for IAAEM. I look forward to working with you and to hearing your suggestions on activities and programs that IAAEM should be undertaking.

Carole Engle, President IAAEM

## IAAEM Links

<http://www.uaex.edu/ceng/le/IAAEM>  
The IAAEM home web page

<http://www.uaex.edu/ceng/le/IAAEM/Management/>

**Aquaculture Economics and Management - Official Journal of the International Association of Aquaculture Economics and Management (IAAEM)**

Contact IAAEM directly at: [IAAEM@uaex.edu](mailto:IAAEM@uaex.edu)

Contact Dr. Terry Hanson for IAAEM newsletter items at: [hanson@agecon.msstate.edu](mailto:hanson@agecon.msstate.edu)

Contact Dr. Francisco Martinez-Cordero for IAAEM website items at: [cordero@victoria.ciad.mx](mailto:cordero@victoria.ciad.mx)

Contact Dr. Donna Lee for IAAEM Student Award Information at: [donna@ufl.edu](mailto:donna@ufl.edu)

Contact IAAEM directly for membership, renewal and application form at: <http://www.uq.edu.au/aem/membership.htm>

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## Ph.D. Dissertation Award in Aquaculture Economics

1. Amount of the award: \$1000 + travel to the conference
2. Location of the meeting/awards ceremony: Adelaide, Australia
3. Recipient of the nomination packages: Dr. Donna Lee
4. Deadline for entries: April 1, 2006

The Ph.D. Dissertation Award will recognize research excellence and contribution to the profession by a doctoral candidate in the area of aquaculture economics. The recipient of the award will receive an honorarium of \$1,000 and be reimbursed for travel to attend the WAS Australasia Aquaculture Conference in Adelaide South Australia August 27-30, 2006 to accept the award.

Nomination requirements:

- Eligible for nomination are final dissertations with a completion date during calendar 2005.
- A letter of nomination from the department head (or chair) where the dissertation was completed. The letter should state the nominee's name, title of the dissertation, adviser's name, name of the institution, and a brief outline of the merits of the research.
- Three (3) copies of the dissertation. Copies should be double-sided and spiral bound. Upon request, copies will be returned. If return is desired, a return mailing address should be provided.
- Deadline for receipt of entries is April 1, 2006.

Entries should be sent to: Prof. Donna J. Lee, Award Subcommittee Chair, PO Box 110240, University of Florida, Gainesville Florida, 32611-0240

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## IAAEM holds two sessions at the 2005 WAS meeting in Bali, Indonesia

The choice of Bali, Indonesia for the conference enabled attendance by many people involved in aquaculture in developing countries. When WAS meetings are held in developed nations in North America and Europe, many potential attendees from developing countries are unable to secure visas to attend because of quite stringent visa requirements by the host countries. In Bali, however, there was a visible presence of participants from developing countries, and especially for South East Asia. The conference provided opportunities for developing countries to display aquaculture in their respective countries.

The IAAEM had a display that offered information about the association and invited passers-by interested in economics of aquaculture to join.

## Upcoming Events:

**AQUA AMERICA 2006**  
Las Vegas, Nevada, USA  
Feb.13-16, 2006

**AQUA 2006**  
Firenze (Florence), Italy  
May 9-13, 2006

**AUSTRALIAN  
AQUACULTURE 2006**  
Adelaide, Australia  
August 27-30, 2006

**LATIN AMERICAN  
CHAPTER MEETING/ISTA**  
Veracruz, Mexico  
September 6-8, 2006

**AQUACULTURE 2007 -**  
San Antonio, Texas, USA  
Feb. 26 - March 2, 2007

**WORLD AQUACULTURE  
2008**  
Busan, Korea  
May 19-23, 2008

**AQUACULTURE AMERICA  
2009**  
Seattle, Washington  
February 16-19, 2009

Overall, it was a successful recruitment opportunity for the IAAEM as we were able to get people from developing countries to join the association.

- Submitted by Dr. Kwamena Quagraine, Purdue University

## IAAEM Sessions

IAAEM has sponsored two sessions at the World Aquaculture 2005 annual conference during May 9-13, 2005 in Bali, Indonesia. Kwamena Quagraine moderated the morning session on May 12, 2005 on "Economics and Marketing of Aquaculture" with seven papers presented. The session was well attended with about 30 in attendance including the presenters. We had presentations on various forms of aquaculture from different countries. The first was a presentation on Iran by Hassan Salehi that provided an overview of trout production and the economics of current production in Iran. Hassan is an agricultural economist and was among the new members recruited at the meeting (Hassan Salehi, AN ECONOMICS ANALYSIS OF TROUT *Oncharynchus mykiss* FARMING PRODUCTION IN IRAN).

This was followed by a presentation on effluent discharges from aquaculture operations. Jeff Hinshaw from North Carolina State University provided results from different scenarios of imposing effluent treatment options on net returns to farms raising trout in raceways in Idaho and North Carolina. Effluent discharges and the effects on the environment has been a major issue confronting aquaculture production (Jeffrey M. Hinshaw, Carole Engle, Steeve Pomerleau, Gary Fornshell, Debra Sloan, Skip Thompson THE ECONOMIC IMPACT OF PROPOSED EFFLUENT TREATMENT OPTIONS FOR PRODUCTION OF TROUT *OnchArynchus mykiss* IN FLOW-THROUGH SYSTEMS).

There were presentations on shrimp production in Hawaii and Mexico. Both presentations focused on the economics of production using different modeling approaches (PingSun Leung, Run Yu OPTIMAL HARVESTING STRATEGIES FOR A MULTI-POND AND MULTI-CYCLE SHRIMP OPERATION: A PRACTICAL NETWORK MODEL; and Francisco J. Martínez-Cordero, Martin Mariscal Lagarda A PRODUCTION FUNCTION ANALYSIS OF SEMI-INTENSIVE CULTURE OF WHITE SHRIMP *Litopenaeus vannamei* IN SONORA STATE, MEXICO).

Papers presented at this session were not all about production. Marketing issues were also featured. Polo Gerardo provided an overview of the prospects of introducing and commercializing aquaculture products in the EU market, particularly the Spanish market. He focused the presentation on identification of the main distribution channels, logistic chains and the evolution of the seafood market in Europe (Gerardo Polo, José De Lara KEY ASPECTS OF MARKETING OF AQUACULTURE PRODUCTS IN SPAIN AND THE EU; and José M. Fernández, Ladisla Luna, Fernando G. Laxe THE MARKET FOR SEABREAM IN THE MEDITERRANEAN COUNTRIES OF THE EUROPEAN UNION AND TURKEY: A PREDICTION MODEL FOR 2003-2006).

Dr. Quagraine presented preliminary results from a survey of U.S supermarkets and consumers about their attitudes towards catfish. For consumers, the focus was on their willingness to pay for retail packages (Kwamena Quagraine, Sanatan Shreay A STUDY OF CATFISH DEMAND BY U.S. SUPERMARKETS; and Kwamena Quagraine, Carole Engle IQF CATFISH RETAIL PACK: A STUDY OF CONSUMERS' WILLINGS TO PAY).

On May 13, 2005 Denis Bailly moderated a morning session on "Public

Policies for Aquaculture Sustainability” with nine papers presented. The sessions were all well-attended.

1. Denis Bailly, Pascal Raux PUBLIC POLICY ISSUES ON SHRIMP FARMING SUSTAINABILITY
2. Premachandra Wattage THE RELATIONSHIP OF SHRIMP EXPORT AND PRICES IN ASIA: AN ECONOMETRIC ANALYSIS OF INDIAN SHRIMPS
3. C. Vasudevappa, D. Seenappa, Y Basavaraju, Y.S. Arun Kumar, Denis Bailly, Pascal Raux, Fabienne Kervarec, G.Y. Keshavappa POLICY ISSUES FOR PROMTION OF PRODUCT COMPETITIVENESS IN ASIAN SHRIMP FARMING
4. Y. S. Arun Kumar, Y. Basavaraju, C. Vasudevappa, D. Seenappa, Denis Bailly, Pascal Raux, Fabienne Kervarec, G. Y. Keshavappa POLICY ISSUES FOR MARKETING ASIAN SHRIMP
5. Omer Chouinard, Jean-Paul Vanderlinden NEW STAKES OVER MARINE AND COASTAL AREAS MANAGEMENT: CHANGING FROM FISHERS TO SHELLFISH FARMERS IN THE SOUTHERN GULF OF SAINT LAWRENCE, CANADA
6. Ayut Nissapa, Sornsak Boromthanarat COLLECTIVE ACTION FOR SUSTAINABLE ECOSYSTMES AND SHRIMP FARMING MANAGEMENT
7. Tran Van Nhung STAKEHOLDERS INVOLVEMENT IN NATURAL RESOURCES MANAGEMENT IN SHRIMP FARMING SECTOR: A CASE STUDY OF VIETNAM
8. Pascal Raux, Dwijen Mallick, Atiq Rahman SOCIAL TRANSFORMATION INDUCED BY SHRIMP FARMING: COPING STRATEGIES FOR PROMOTION OF LIVELIHOODS AND GENDER RELATION
9. Dwijen Mallick, Atiq Rahman IMPROVING INSTITUTIONAL LINKAGES AND INDUSTRY GOVERNANCE FOR PROMOTION OF SUSTAINABLE SHRIMP AQUACULTURE IN ASIA

Overall, the sessions were very informative and the questions asked by participants were an indication of how much interest there is in economics and management issues relating to fish farming.

- Submitted by Kwamena Quagrainie, Purdue University and PingSun Leung, University of Hawaii

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## New IAAEM editorial board members

**Madan Mohan Dey** is the newest addition to the IAAEM board. Dr. Dey is a Senior Research Scientist and Regional Director (East and Southeast Asia) at the WorldFish Center. He has a Ph.D. in agricultural economics and 20 years of experience in agricultural research and development in tropical countries. His areas of expertise include aquaculture economics, impact assessment, community based natural resource management, economics of development and diffusion of agricultural technologies, food sector modeling, agricultural and trade policy analysis, and poverty analysis. He can be contacted at: [m.dey@cgiar.org](mailto:m.dey@cgiar.org).





**Chin-Hwa (Jenny) Sun** is another new IAAEM board member. She is a Professor and Director at the Institute of Applied Economics, National Taiwan Ocean University. She received her Ph.D. from Cornell University in 1994 and joined the Institute of Applied Economics, NTOU. She served as an executive committee member of the International Institute of Fisheries Economics and Trade from 2000 to 2004. Her principal expertise includes productivity evaluation, fishery resources economics, price analysis, and trade policy evaluation. She can be contacted at: [jsun@mail.ntou.edu.tw](mailto:jsun@mail.ntou.edu.tw).

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## Mexico to Assess GMPs in Shrimp Farming

Diseases are one of the main-if not the most relevant- problems that the shrimp farming industry in Mexico has faced in latest years. As an approach to diminish both the negative externalities and the probability of occurrence of diseases in commercial shrimp farming, different groups of technical experts and managers have identified and recommended the implementation of Good Management Practices (GMPs), which rely on the paradigm that practices which reduce risks of all kinds are conducive to long-term sustainable production that provides maximum benefits to society.

The implementation of GMPs in the shrimp farming industry is not new in Mexico, but demands a continuous effort of promotion to make its use more extensive. For their promotion, it is very important to know their economic effects. Two independent research projects, to assess in three different regions of the country the cost-benefit results of GMPs implementation at specific locations and production systems, are in progress. They will provide very useful information for both farmers and policy-makers at State and Federal Government in the country.

- Submitted by Dr. Francisco J. Martinez Cordero, Aquaculture Economics Laboratory, CIAD, A.C. Mazatlan Unit in Aquaculture and Environmental Management, Mazatlán, Sinaloa. Mexico;  
[cordero@victoria.ciad.mx](mailto:cordero@victoria.ciad.mx)

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## U.S. Farm-raised Catfish Industry

In 2005, there were 601 million pounds of round weight catfish processed, 95% of the quantity of catfish processed in 2004. The 2005 U.S. farm-raised catfish production water acreage decreased 13% from the record high of 197,000 acres in 2002 and -2.4% from 2004 acreage of 173,590. Mississippi's water acreage constitutes 58.2% of all production area, followed by Arkansas with 18.1%, Alabama with 14.5%, Louisiana with 4.4% and all other states combined with 4.8%.

In 2005, catfish producers and processors began to recover from the

difficulties posed by low prices during 2001 - 2003. In 2004 catfish producers received an average \$0.696/lb of live fish (up 11.5 cents per lb from 2003). Prices received in 2005 ranged from \$0.69 - \$0.74/lb, with an average price received of \$0.726/lb. Notable in the 2005 price data is the stability of prices since May/June when catfish prices "normally" experience a seasonal drop.

Catfish feed prices have remained in a manageable range in 2005, with a low of \$222/ton and a high of \$247/ton in 2005. Feed prices in 2005 were \$40 to \$80 per ton lower than the January to July 2004 when feed prices ranged from the \$270 to \$310 per ton range. Large holdings of corn and soybeans and large harvests of both crops in 2005 will make corn and soybean prices low into next spring, and will translate into lower catfish feed prices this fall and into spring 2006.

- Submitted by Terry Hanson, Mississippi State University,  
[hanson@agecon.msstate.edu](mailto:hanson@agecon.msstate.edu)

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## Research - News Area for Students

An opportunity exists for a student interested in an aquaculture economics project in Mexico

For more information, contact: Francisco Javier Martínez Cordero (Ph.D), Laboratorio de Economía Acuícola, CIAD, A.C. Unidad Mazatlán en Acuicultura y Manejo Ambiental, Av. Sabalo Cerritos s/n, A.P. 711, Mazatlán, Sinaloa. MEXICO C.P. 82100, Tel (669)9898700 (10 líneas) ext 212, Fax (669)9898701, <http://www.ciad.mx>.

In future IAAEM newsletters we would like to include student opportunities in this area of the newsletter. Example listing possibilities would include graduate student research opportunities in aquaculture economic research. If you have opportunities available please email them to the IAAEM address, [IAAEM@uaex.edu](mailto:IAAEM@uaex.edu) or Dr. Carole Engle, [cengle@uaex.edu](mailto:cengle@uaex.edu) or Dr. Terry Hanson, [hanson@agecon.msstate.edu](mailto:hanson@agecon.msstate.edu).

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## Professional Jobs in Aquaculture Economics

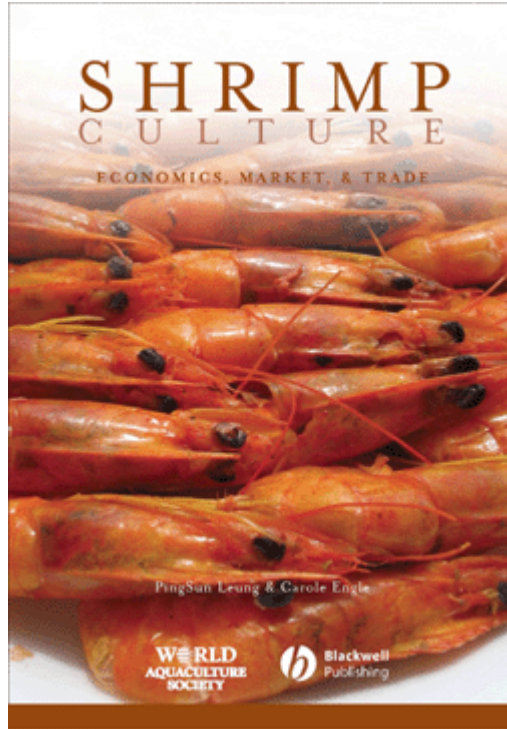
In future IAAEM newsletters we would like to include professional job openings in this area of the newsletter. If you would like to submit job positions, please email them to the IAAEM address, [IAAEM@uaex.edu](mailto:IAAEM@uaex.edu) or Dr. Carole Engle, [cengle@uaex.edu](mailto:cengle@uaex.edu) or Dr. Terry Hanson, [hanson@agecon.msstate.edu](mailto:hanson@agecon.msstate.edu).

## New Book by Dr. PingSun Leung and Dr. Carole Engle

### **Shrimp Culture: Economics, Market, and Trade**

The growth in the demand for and culture of shrimp has exceeded most expectations and this growth is expected to continue until at least 2025.

A proper knowledge of the economics, market and trade for shrimp is now as important to shrimp farmers and aquaculture scientists in the future of shrimp, as is disease management or husbandry.



This important book covers all major aspects of the economics, trade and markets for shrimp worldwide, with chapters written by experts from major consuming and farming countries such as the U.S.A. and major providers such as Thailand and Brazil. The book has been carefully edited by PingSun Leung and Carole Engle, both well known and respected internationally for their work in this area.

Shrimp Culture is an essential purchase for everyone involved in this massive industry across the globe.

#### **About the Editors:**

PingSun Leung, Department of Agriculture and Resource Economics, University of Hawaii, U.S.A.

Carole Engle, Director of the Aquaculture and Fisheries Center, University of Arkansas at Pine Bluff, Arkansas, U.S.A.

Hardcover, 416 pages

WAS Member Price - \$122.40; Non-WAS Member Price - \$179.99.

Item # 0813826551

You can visit their bookstore site at:

<http://store.blackwell-professional.com/0813826551.html>

It has also been advertised by the World Aquaculture Society at their bookstore website at: <http://www.was.org/shopping/shopexd.asp?ID=388>

The book is expected to be available in the summer of 2006.