

# Michael Cremer



## **U.S. Soybean Export Council United States**

Dr. Michael Cremer has 40 years of experience in fisheries and aquaculture in the United States, Asia, Latin America, Middle East, Europe and Africa.

He currently is senior program advisor for the International Aquaculture Program of the United States Soybean Export Council.

Through a global network of offices, USSEC helps create demand for U.S. soybean products, advocates soy use in feeds and promotes the benefits of soy-fed fish to the foodservice industry.





# **Soy Applications To Feed Sustainability**

**Michael Cremer, Ph.D.**

IM Aquaculture Senior Program  
Advisor/ USSEC



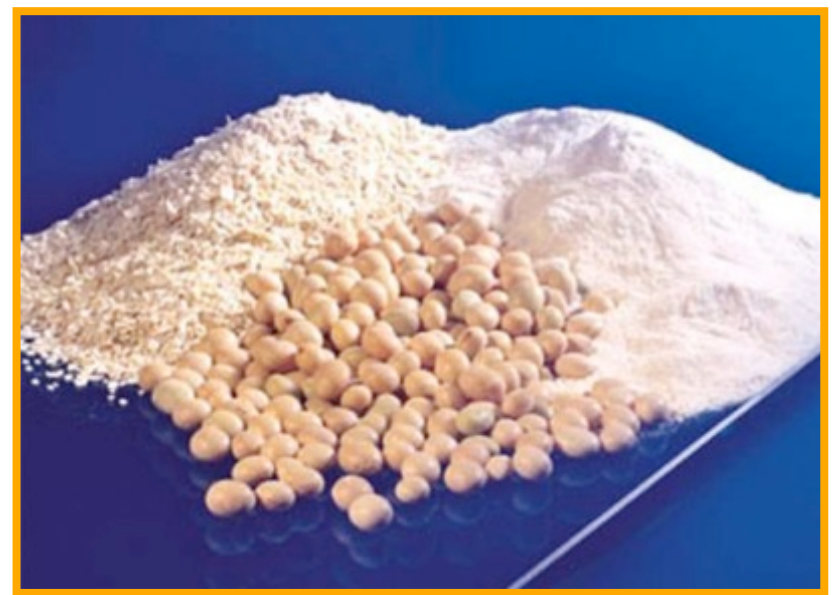
# SOY APPLICATIONS TO FEED SUSTAINABILITY

Michael Cremer, Ph.D.  
IM Aquaculture Senior Program Advisor/ USSEC

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# SOY AS PRIMARY PROTEIN SOURCE

- Soy products can substitute for fishmeal
- SBM >50% in all-plant protein feeds for carp, tilapia, catfish and other freshwater omnivores
- SBM + SPC for carnivorous fish diets





# AQUACULTURE DEMAND FOR SOY

- 🍌 >10 mmt of SBM demand globally for aquafeeds (464 million bushels of soybeans) - will increase >4 mmt by 2020



# KEY TRENDS FOR SOY

- Soy protein use is forecast to supply one-half of global aquafeed requirements by 2020
- The market value of soy proteins for aquaculture is projected to reach US\$4.7 billion by 2020
- Increasing demand for multiple soy products as key components in aquafeeds globally: SBM, SPC, SBO, lecithin



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# USSEC GLOBAL SOY IN AQUACULTURE

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# GLOBAL SOY IN AQUACULTURE

- Global program with linked marketing and research efforts





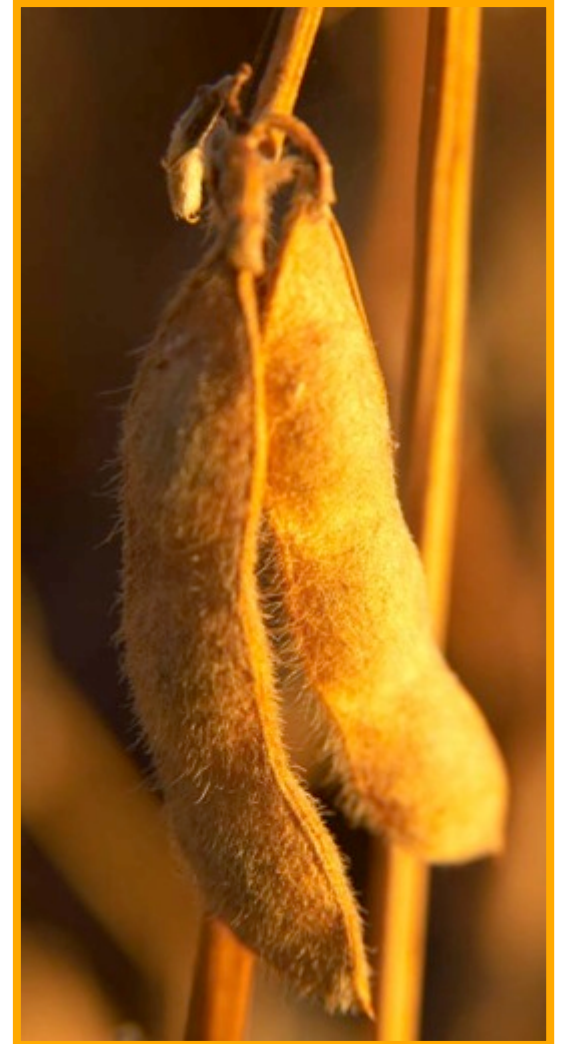
# PRIORITY COUNTRIES/REGIONS

## First Priority

1. China
2. Southeast Asia
3. Americas

## Second Priority

1. India
2. Egypt
3. Europe
4. Turkey
5. Other Asia



# GLOBAL STRATEGIC APPROACH

- Global strategic approach, with country specific activities and tactics, focused on:
  - Sustainable Feeds - development & demonstration of soy-optimized feeds for all key fed aquaculture species – freshwater and saltwater
  - Best Aquaculture Practices – development and demonstration of best aquaculture practices focused on sustainability, environmental protection, and food safety

# GLOBAL STRATEGIC APPROACH

- **Industry Servicing** – farmer, feed mill and other industry and consumer servicing to increase knowledge of aquaculture production, feed manufacturing, post harvest technologies, and value and use of soy products
- **Investment Promotion** – promote investment in aquaculture sector infrastructure as a means to expand the industry to meet global demand





# MARKETING-RESEARCH LINK

**The USSEC International Aquaculture Program is linked to the United Soybean Board research program to address critical industry research needs identified by field staff**





# FY13 SOY HIGHLIGHTS

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# IPA TECHNOLOGY

**IPA Introduction China** – Intensive Pond Aquaculture (IPA) technology introduced in China to combat critical constraints. IPA technology, developed in the U.S. with U.S. soybean industry funding, uses raceways inside existing ponds and waste removal to sustainably triple fish production and recycle water.





# KEY FY13 ACTIVITIES

- **SEA Aqua Industry Survey** – In-depth survey of SEA aquaculture industry conducted in 2013, to identify the challenges and opportunities for investment in aquaculture in Southeast Asia and to provide guidance for USSEC and industry strategic planning.

Survey conducted by Stanton Emms, completed in September 2013 – results available for discussion with USSEC at the Paris GOAL Conference.

# U.S. SOY COMMITTMENT

**The U.S. soybean industry has funded more than \$50 million to help ensure that safe and healthy aquaculture products are produced with high quality, sustainable soy feeds.**







# SOY FED FISH FOR THE WORLD



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**USSEC**  
U.S. SOYBEAN EXPORT COUNCIL

**ASA**  
International  
Marketing  
**USB**