Global Conference on Aquaculture 2010

Farming the waters for People and Food

22-25 September 2010, Phuket, Thailand

Disclaimer

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1. Author.
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3. Presented at the Global Conference on Aquaculture 22-25 September 2010, Phuket, Thailand.

Expert Panels
Afternoon

- V.1 Investing in research, communication, training/extension for responsible aquaculture, Brian Davy
- V.2 Servicing the aquaculture sector: role of state and private sectors, Michael Phillips

Expert Panels
Tomorrow

- V.3 Progressing aquaculture in this knowledge economy through virtual technology and decision-making tools for novel management, Joao Gomes Ferreira
- V.4 Information and data needs: a strategy for improving aquaculture statistics, Xiaowei Zhou

Knowledge Systems for Sustainable, Responsible Aquaculture

- Integrate interdependent themes
- Knowledge-intensive and –driven development
- Operational across local to global scales
- Collective contributions define and solve problems for social, economic and environmental goals

Talking Points

Knowledge Systems Elements

- Human resources
- Generation and innovation
- Translation and synthesis
- Extension and transfer
- Information and communication

Aquaculture Production Systems

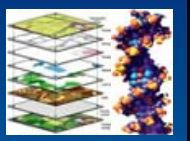
everything to everyone – not one defined "industry"

- Alternative
- Sustainable
- Industrial
- Corporate
- Multinational
- Subsistence
- Multi-level intensification
- Urban-rural
- Integrated
- Traditional
- Contemporary
- Natural
- Niche (organic)
- Family (household)

Capacities and Competencies

- Human resources development
- Determine public value from knowledge systems
- Resources required drive knowledge programs
- Basis for problem-solving across scales

The Research Enterprise (Knowledge Generation)



- Basic or fundamental – study of living processes universal in application to scientific knowledge
- Applied – problem-solving, evidence-based improved practices and technologies

- Directed – requests for specific scientific area or question
- Investigator-initiated – researcher question or hypothesis

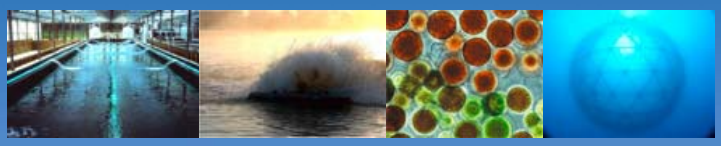
Contributors – academia, government, industry, farmers, NGOs

Research Related

- Scale work to match problem
- Think and act science to practice
- Converge-integrate science disciplines
- Integrate cross-cutting issues

Research Related

- Link with market-trade intelligence
- Evaluate cost-benefit in application
- Use case study research on complex issues
- Shorten time from discovery to application



Research Related

- Show me - field testing and yield verification
- International partners-collaborators
- Proof-of-concept or innovation centers
- Entrepreneurism to commercialize technologies

Research Related

- Co-develop solutions with farmers
- Seek solutions to overcome adoption barriers
- Re-examine assumptions
- Integrate research for evidence-based policies

Research Related

- Know regulatory approval factors
- Avoid duplication – state of knowledge
- Communicate outcomes and outputs
- Conduct external third-party reviews

Research "Stakeholders"

- Indigenous knowledge-experience factors
- Local economic, market and social relevancy
- Cost-effective opportunity
- Span boundary science and management

Integrated Solutions Research-Extension

- Complementary functions for success
- Bidirectional relationship
- Multi's – institutional, functional and disciplinary
- Effective best practice models

Translation and Synthesis

- Enhance value scientific literature
- Translate for application potential
- Access, language, readability and science literacy
- Local plain language

The Extension Enterprise (Outreach)

- Most important resource is capable people
- Connect knowledge system where people live and work
- Preferred source unbiased knowledge – "brand excellence"
- "Informal education" as a profession

Scholarship in Extension

- Peer-reviewed publications
- Increasing literature on effective practices
- Practical use of new tools and technologies
- Career-long learning and professional development

Journal of Extension
www.joe.org

Journal of Extension Systems

eXtension

The Extension Toolkit

Limited tools impact effectiveness like research

- Subject matter competency
- Research support and sources credible knowledge
- Scope and quality of networks
- Program and delivery resources

Extension Education Delivery Models

Delivery options may affect:

- who gets information
- how programs are delivered
- de-emphasize public goods
- cooperation
- quality
- incentive for public support
- private sector opportunities

No single model for effective program delivery

(personal creativity and innovation to achieve learning objectives)

Extension Related

- Public education
- Apply specialized and advanced research
- Range clientele needs
- Rapid response to emerging problems

Revolutionary Information and Communication Technologies

- Daily access to global developments
- Patterns of productivity and collaboration
- Link farmer networks to timely information
- Enabling tools to level knowledge
- Innovate to optimize benefits of new tools

Knowledge Sharing

- Connect local issues to national and global news
- Integrate, manage and use knowledge effectively
- Online courses and training
- Online direct marketing connect suppliers and buyers

New Decision-making Tools Virtual Technology Applications

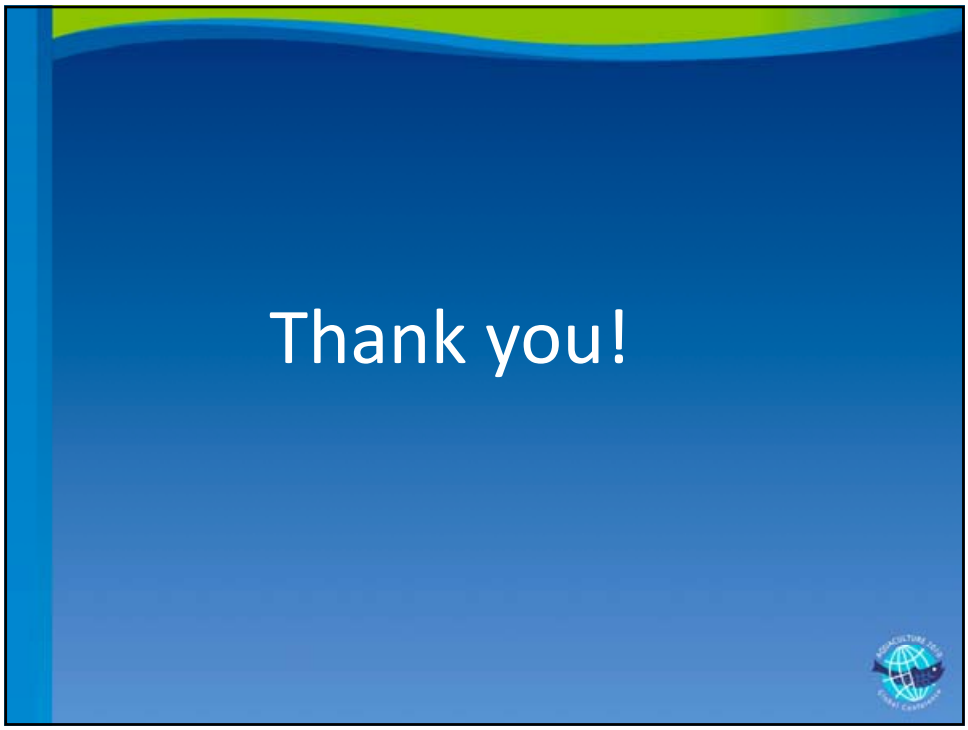
- New tools for novel ecosystem-wide assessments
- Simulations with decision-support functions
- Spatial planning and temporal ocean-land use changes
- Integrate expert systems into virtual environments

Reporting Public Value
Political Capital Drives Resources

- Identify standard impact indicators
- Aggregate measurable outcomes at desired scale
- Align with national goals and priorities
- Estimate economic and social contributions

Closing Remarks
Knowledge Systems (Local-Global)

- Dynamic and adaptive
- Solution-focused
- Demand-driven
- Pond to plate
- Continuous innovations
- Multifunctional
- Multidisciplinary
- Good science-sound policy
- Accountable


Thank you!