An Introduction to NACA

Network of Aquaculture Centres in Asia-Pacific
Bangkok, Thailand

Promoting responsibility and sustainability in Asian aquaculture
1. What is NACA?
We are an Intergovernmental Organization

- Established through international agreement in 1990
- 18 member Governments in Asia Pacific
  
  Together produce >90% Global Aquaculture Production  
  About 50% of global food fish supplies
- Focus on sustainable regional Aquaculture Development through networking, sharing and communication
- Completing 25 years on 31\textsuperscript{st} Dec 2014
18 NACA Member Countries
- Australia
- Bangladesh
- Cambodia
- China
- Hong Kong SAR
- India
- Indonesia
- IR Iran
- Lao PDR
- DPR Korea
- Malaysia
- Myanmar
- Nepal
- Pakistan
- Philippines
- Thailand
- Sri Lanka
- Vietnam
NACA Governance

- Governing Council (GC)
  - Meets annually and sets NACA policy
  - Representatives of the 18 member governments
- Technical Advisory Committee (TAC)
  - Develops the work programme and identifies priorities
  - Technical experts nominated by each member state
- Thematic Task Force
  - More than 90 experts
- Network of centres
  - Implements the work programme
  - 5 Regional Lead Centres and >30 participating centres in 18 states
Our Work Programs

Thematic Programs:
- Sustainable Farming Systems
- Genetics and Biodiversity
- Aquatic Animal Health
- Food Safety, Quality and Certification
- Response to Climate Change

Cross-Cutting Programs
- Education and Training
- Information and Communications
- Gender
2. Responsible and sustainable aquaculture

What has been NACA’s role and involvement?
Promoting sustainability thinking

- Responsible development of Aquaculture
- Quality and food safety
- Animal health and welfare
- Integrity of the Environment
- Social responsibility
- Supporting livelihoods of small farmers
International principles for responsible farming

Translating principles to practice
A group of inter-dependent ponds situated in a specified geographical locality

- Cluster in Valsad, Gujarat
- Cluster in Tanjavur, TN
- Cluster in Kundapur, KA
Promoting Concept of Cluster Farming

Collective planning, decision making and implementation of crop activities
Common BMPs promoted across commodities

1. Good pond preparation
2. Good quality seed selection
3. Water quality management
4. Feed management
5. Health monitoring/Biosecurity
6. Pond bottom monitoring
7. Disease management
8. Better Harvest and post–harvest Practices
9. Record maintenance/Traceability
10. Environmental awareness
India Case Study

- 2001: Survey, 365 ponds, Risk factors, BMPs
- 2002: 5 farmers, 10 ponds, 7 Ha, 4 tonnes
- 2003: Village level extension, 1 Village, 1 Aquaclub, 58 farmers, 108 ponds, 58 Ha, 22 tonnes
- 2004: Creek level extension, 6 Villages, 7 Aquaclubs, 130 farmers, 254 ponds, 173 Ha, 40 tonnes
- 2005: State level expansion, 3 States, 19 Aquaclubs, 736 farmers, 663 Ha, 672 tonnes
- 2006: 5 States, 28 Aquaclubs, 730 farmers, 1370 ponds, 813 Ha, 870 t
- 2007-08: 4 Coastal states, 153 Societies, 3326 farmers, 4219 ha, 2180 t
- 2008-09: 4 Coastal states, 250 Societies, 6443 farmers, 7324 ha, 4081 t
- 2009-10: 5 Coastal states, 438 Societies, 10175 farmers, 10728 ha

- Market Linkage established
- Establishment of NaCSA
- Expansion to other states
- Expansion to 5 states
- Expansion to other states
- Expansion of NaCSA
- 2002: Survey
- 2003: Village level extension
- 2004: Creek level extension
- 2005: State level expansion
- 2006: 5 States
- 2007-08: 4 Coastal states
- 2008-09: 4 Coastal states
- 2009-10: 5 Coastal states
Shrimp and Milk Fish–BMPs and business models in Aceh, Indonesia
Change is Possible

- BMPs and cluster model clearly demonstrated that it is possible to bring change in the behavior, attitude and practice of small farmers contributing to sustainability thinking.
3. Certification and Market Access

Who is driving and who is benefiting?
What is our role?
Issues and Concerns

- Emergence of a wide range of certification schemes
- Cost/benefit value for producer still not clear
- Confusion in the minds of producers and consumers
- Need for improved harmonization of standards
- Need for benchmarking, mutual recognition and equivalence
FAO Technical Guidelines on Aquaculture Certification

TECHNICAL GUIDELINES ON AQUACULTURE CERTIFICATION

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Cluster/group certification

- Achieve economy of scale
- Reduce cost & efforts of certification
- Enable small scale farmer to participate
5. Improving Biosecurity in Asia Pacific

How to minimize the impact of trans-boundary aquatic animal diseases?
Regional Aquatic Animal Health Program

Works closely with international, regional and national organizations:

- www.enaca.org
- Improve regional cooperation to reduce risks of aquatic animal disease impacting on livelihoods of aquaculture farmers, national economies, trade and human health.
21 Participating Countries
Supporting regional and national strategies

  - Consistent with FAO code of conduct for responsible fisheries
  - OIE Aquatic Code and Aquatic Manual
  - ICES protocols
  - Adopted by 21 countries in Asia-Pacific
  - Adopted by ASWGFi of the ASEAN
  - Promoting implementation of TG is the main focus of NACA’s health program
Asia Regional Advisory Group on Aquatic Animal Health (AG)

Addressing Asian Concerns

Composed of invited aquatic animal disease experts and representatives from World Organisation for Animal Health (OIE), Food and Agriculture Organization of the United Nations (FAO), collaborating regional organizations, and the private sector.
Quarterly Aquatic Animal Disease (QAAD) Reporting System: Asia-Pacific

- First published in the 3rd quarter of 1998;
- Includes all OIE-listed diseases plus diseases of regional importance;
- Serves as early warning system for emerging diseases in the region;
- Useful mechanism for recognizing emerging disease problems in the region, and guide to participating countries in revising their national list of reportable diseases.

www.enaca.org
Supporting outbreak investigations in case of emerging diseases
Improving biosecurity to support sustainability

Regional Expert Group Workshop on Transboundary Aquatic Animal Health Issues in the Bay of Bengal

Workshop on Regional Proficiency Testing Program for Aquatic Animal Disease Diagnostic Laboratories in Asia-Pacific

Asia Pacific Emergency Regional Consultation on Shrimp EMS/AHPNS
5. Addressing Climate Change issues in Asia Pacific

Scenario mapping
Mitigation measures
Case Studies
Policy briefs
FINAL REPORT

Aqua + Climate

Strengthening Adaptive Capacities to the Impacts of Climate Change in Resource-poor Small-scale Aquaculture and Aquatic Resources-dependent Sector in the South and South-east Asian Region (AQUA CLIMATE Project)

Norwegian Agency for Development Cooperation (NORAD)
Project NO. RAS – 2760 RAS – 08/012

October 2012
6. Supporting aquaculture through better brood stock management and quality seed
Part 1:
Conceptual basis of population genetic approaches

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7. Supporting food security and rural livelihoods through CBF

Promoting the concept of culture based capture fisheries

Utilization of seasonal water bodies

Community based approaches for managing inland water bodies
better-practice approaches for culture-based fisheries development in Asia
8. Building capacity through education and training
A regional shared learning platform for individuals and institutions in fisheries and aquaculture

**Objectives:**

- To assist in capacity building in fisheries and aquaculture development through education and training.
- To promote networking and collaboration through information exchange, experience sharing, and knowledge and skills transfer.
10. Information and communication key to sustainable aquaculture
• Website: www.enaca.org
• + Open access policy
• = 13,000 unique visitors per month
• = 114,000 page views per month
• > 1,000,000 publications downloaded since 2004
• Podcasting
  – Recordings of technical presentations from workshops and expert consultations
  – 100,000 audio recordings downloaded in 2012
Lessons learned

- The keys to NACA’s success:
  - A truly participatory organisational structure that engages all stakeholders in the work programme
  - A large network of collaborating research centres distributed widely throughout the region
  - A genuine commitment from member governments to reach consensus and collaborate in addressing issues of common interest
  - An open philosophy to collaboration with external partners
Our Strengths

- We are a network of individuals, institutions and governments
- We have access to vast resources in the network
- Network has extensive expertise on a range of issues in aquaculture research & development including governance & policy, management, production technology, rural development, Certification, global and regional standards and BMPs
- Good Track Record in promotion of International Codes of practice for responsible Fisheries and Aquaculture
Towards mainstreaming Gender in NACA:

- Opportunities for integrating gender issues in Present and future programs/
  Regional Partnerships

- Strategies?

- Idea is to develop a major Gender Program /provide a regional platform for development of new ideas/approaches in the emerging science of Gender (in Aquaculture) Research
Initial ideas for Gender mainstreaming:

- **Aquatic Animal Health Program:**

  Perform an analysis of Women’s role in diagnosing diseases in hatcheries and in markets; and in ensuring biosecurity

- **Sustainable Farming Systems:**

  BMPs should include attention to gender equity in present and new farming practices

  Gender equity in sharing of household and farm responsibilities
Food Safety, Quality and Certification

Although the FAO certification guidelines does not mention gender, NACA can take a gendered supply chain approach to get a better understanding of the roles and responsibilities in fish supply and certification chains.

How can Gender sensitive training of workers improve the overall value and quality?

Climate Change

There is now good resource materials available for putting gender firmly in the framework of CC projects
Genetics and Biodiversity

Gender differences in breeding goals?
Perception and valuation of Genetic Resources?
Access to training of women hatchery workers?

Information, Education & Training

Reporting and highlighting stories with a gender dimension
Recording and reporting of gender differences in views on training programs, trainers.

Patterns of gender variations by country and topics of training?
Thank you

Open to your views, collaboration and partnership to progress the GENDER agenda in NACA for responsible and Sustainable Aquaculture