



Putting Gender on the Programme of NACA

At its March meeting in Cambodia, the 23rd NACA Governing Council endorsed a proposal to add Gender Issues in Aquaculture as a cross-cutting theme for the NACA Work Plan. This means that gender issues will now be incorporated as a regular component of all the thematic work programmes. The proposal prepared by Dr Williams follows below.

Purpose

The purpose of this briefing note is to recommend that the work program of the Network of Aquaculture Centers in Asia (NACA) commits to incorporating gender dimensions. It argues that considering women and men within a gender framework fits well with the Vision of NACA, that many NACA member states and key agencies in the Network are beginning to pay greater attention to women and gender and thus NACA has the requirement to address gender in its work programme and operations, and the opportunity to lead and work with member governments to address gender in the burgeoning aquaculture sector.

Background

Aquaculture developed from a base in fisheries and agriculture and both these sectors have been erroneously identified as arenas mainly for men. In them, women's roles and contributions have been downplayed and overlooked and are not accounted for in statistics, development programs and even inside the organisations that serve them. Researchers and activists have tried to overcome these oversights but to little avail, and despite the international policy leadership in the broader society from instruments such as the 1979 Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). Despite waxing and waning interest in women and gender in aquaculture, including 5 Asian Fisheries Society symposia on women/gender and aquaculture/fisheries over the last 15 years and an active website (<http://genderaquafish.org/>), aquaculture and

fisheries institutes and national and international policies have remained at best disinterested, and at worst resistant to taking action. Conversely, major women's agencies such as UN Women pay little attention to women in sectors such as aquaculture, agriculture and fisheries as they focus on cross-cutting social issues such as reproductive rights and domestic violence. Therefore, sectors such as aquaculture will need to forge their own gender programs, tailored to their own needs. And this means that international agencies such as NACA must take a lead.

In 2011, FAO, which had previously paid little attention to the gender dimensions of its technical areas, made the gender gap in agricultural production the theme of its whole 2010-2011 State of Food and Agriculture (SOFA) report. This report also addressed aquaculture and fisheries, although not in depth. The SOFA 'gender gap' report has been galvanising, and its main conclusions are already highly cited. Briefly, FAO concluded that:

- "the yield gap between men and women averages around 20–30 percent and most research finds that the gap is due to differences in resource use.
- "Closing the gender gap in agricultural yields could bring (the number of undernourished people) down by as much as 100–150 million people."

We could expect a similar yield gap to be occurring in aquaculture, though we do not have data to support this conclusion. In addition, social equity principles



The Gender Issues theme will be developed under the mentorship of Dr Meryl Williams, former Director General of the WorldFish Center and Chair of the Organising Committee of the Asian Fisheries Society 3rd Global Symposium on Gender in Aquaculture and Fisheries, held in April 2011, Shanghai. NACA would like to thank Dr Williams for developing the proposal and for agreeing to provide mentorship to the organisation in this regard – Ed.

should mandate that women deserve attention in any sector and should have equal opportunity.

Women or gender?

Activists and feminists will often argue that taking a 'gender approach' is inappropriate when the most severe gender problems are experienced by women who therefore should be the sole focus of empowerment and assistance efforts. However, gender experts point out that gender equity as an objective is founded on the concept that women and men's roles, including gender hierarchies and power relations, are formed by society. To change the power structures to create gender equity requires working within society. To take a women-only approach does not address the power structures and institutional constraints. In a gendered approach, women would be the focus for practical development interventions. "Gender" is more a conceptual lens. Thus, women and gender are part of the same systematic approach.

Why gender is required in the NACA program

The NACA Vision is:

NACA is an intergovernmental organisation that promotes rural development through sustainable aquaculture. NACA seeks to improve rural income, increase food production and foreign exchange earnings and to diversify farm production. The ultimate beneficiaries of NACA activities are farmers and rural communities. The core activities of NACA are:

- Capacity building through education and training;
- Collaborative research and development through networking among centers and people;
- Development of information and communication networks;
- Policy guidelines and support to policies and institutional capacities;
- Aquatic animal health and disease management; and
- Genetics and biodiversity.

Given this Vision, several reasons immediately indicate the imperatives for NACA to include gender in its program, as follows.

1. Intergovernmental nature of NACA: NACA has an imperative as an intergovernmental organisation to consider gender in aquaculture. Most if not all the member governments would be signatories to CEDAW and many would also have national legislation and policies on women/gender. Positive actions to ensure that women are included in NACA programs would help the member governments meet their obligations through helping make aquaculture a more equal sector. Few member governments, Cambodia being the main exception, have gender policies in the fish sectors.

2. Sustainable rural aquaculture: Women are vital in generating rural income directly through their productive activities on farm or in the supply chain, or indirectly through their so-called reproductive activities. Reproductive activities mean not just producing and bringing up children but also the support services to the family and community.

Women with better skills, knowledge and training make better contributions to food production and foreign exchange earnings and are often the backbone of diversified farm production activities. Thus, women, whose roles and contributions can be similar to those of men, but may also be different, need to be fully included in order for the main tenets of NACA's vision to be achieved.

3. Core activities: Gender is a critical dimension to be understood and taken into consideration in capacity building through education and training; collaborative research and development through networking among centers and people; development of information and communication networks and policy guidelines and support to policies and institutional capacities. Even in aquatic animal health and disease management and genetics and biodiversity, women may play important roles and need training in disease recognition and management on the farm and in helping maintain and improve breed.

In short, gender is a dimension in nearly every part of the NACA Vision.

In addition, as a Network, NACA has the opportunity to show leadership to its members and help them share and coordinate their own work on women/gender in aquaculture. This opportunity for leadership could stand NACA in good stead regionally and in global and intra-regional initiatives because women/gender needs this leadership after receiving scant attention compared to fisheries, which is also only lightly served.

Finally, in its work program, NACA should be taking a lead in implementing Recommendation 5 from the 2010 Phuket Consensus of the Global Conference on Aquaculture:

“Support gender sensitive policies and implement programmes that facilitate economic, social and political empowerment of women through their active participation in aquaculture development, in line with the globally accepted principles of gender equality and women’s empowerment.”

What has NACA already done on gender in aquaculture?

NACA has already made a start by including materials on women in aquaculture in some of its publications, especially in stories in “Aquaculture” magazine, in some of the chapters in “Success Stories in Asian Aquaculture” and in Expert Panel Review 6.3 of Farming the Waters for People and Food, the Proceedings of the Global Conference on Aquaculture 2010 (“Sustaining aquaculture by developing human capacity and enhancing opportunities for women”). Annex 1 summarises the gender issues and opportunities from that chapter which contains many useful ideas.

How could NACA develop a gender element in its program?

NACA could embark on a development pathway for including gender in its programs by addressing four elements as steps, all done in collaboration with member government and with the help of experts as necessary. However, the short term aim would be to achieve good ownership among the membership, agencies and staff of the NACA Secretariat.

First, develop a set of specific objectives for its gender work. Second, develop a rationale that describes to its member governments and Network agencies why gender is important to incorporate. They all need a narrative to support their own moves toward greater gender awareness and inclusion in their programs. Third, consider the four following elements:

- Systematically integrate gender into NACA and partnership projects, programs and activities.
- Engage partners in gender and aquaculture research and development.
- Generate and disseminate new evidence on gender and aquaculture to inform policy and practice in the member countries and with industry partners.

- Mainstream gender into NACA's work and organisational culture.

These elements involve changes in the way NACA does its own work, in the types and substance of projects NACA does, in how it engages with partners and how it influences others. As women are already quite active in many fields of aquaculture, and more women are joining the ranks of technical experts, then the sort of shift envisaged will not be as radical and dramatic as it may appear.

However, gender and social science experts will be needed to help on the technical side of the transformation. NACA will likely need to consider its own long term staff complement to incorporate more women staffers, and to include good social scientists. Many agencies presently are making the mistake of using 'rebadged' but untrained biologists and economists to do gender work. These people rarely have the deep knowledge of social science and grasp of gender concepts needed to bring the sectoral

gender work forward. To add a further constraint, such gender and social science experts are in great demand. Many agencies are tending to pick up newly graduated experts and give them strong internal support to help them succeed in working with much more senior colleagues. This could also be an option for NACA, who could also take advantage of the nearby presence in Bangkok of a strong gender department at AIT, including faculty who have worked on aquaculture in the region.

Proceedings of the Global Conference on Aquaculture 2010 available for download

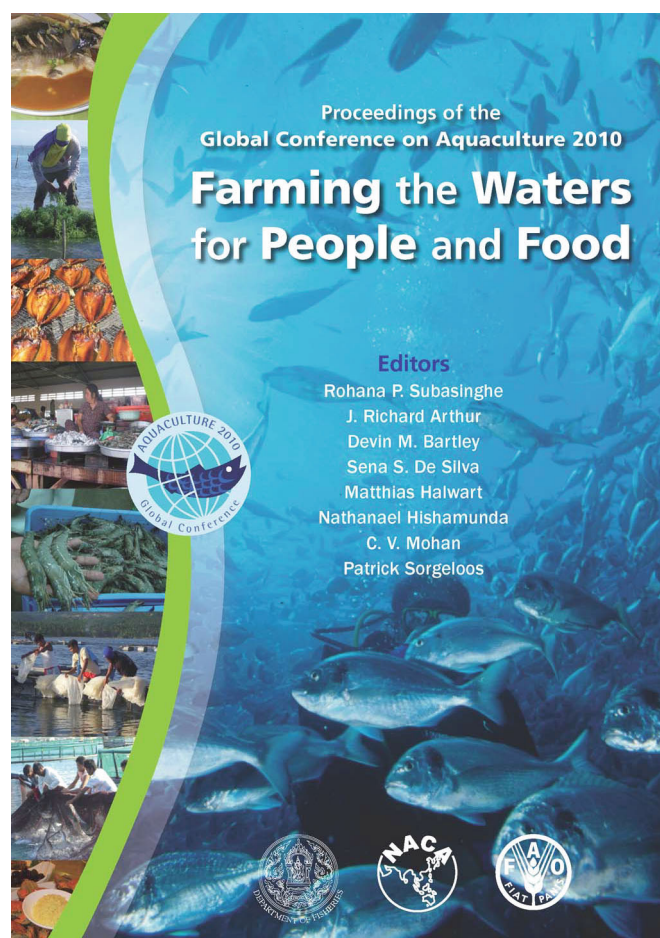
The Food and Agriculture Organization of the United Nations (FAO) and NACA are pleased to present "Farming the Waters for People and Food: Proceedings of the Global Conference on Aquaculture 2010". The Global Conference on Aquaculture 2010, organised jointly by FAO, the Network of Aquaculture Centres in Asia-Pacific (NACA) and the Royal Thai Department of Fisheries (DoF), was held from 22 to 25 September 2010. It sought to bring together a wide-ranging group of experts and important stakeholders to review aquaculture progress and the further potential of this sector, as a basis for improving the positioning of the sector and its mandate within the global community.

The objectives of the Conference were to: (a) review the present status and trends in aquaculture development; (b) evaluate the progress made in the implementation of the 2000 Bangkok Declaration and Strategy; (c) address emerging issues relevant to aquaculture development; (d) assess opportunities and challenges for future aquaculture development; and (e) build consensus on advancing aquaculture as a global, sustainable and competitive food production sector.

In order to achieve these objectives, the Global Conference was conducted in four separate sessions over a period of four days. The Conference's technical programme included: (1) two keynote addresses; (2) three invited guest lectures; (3) six regional aquaculture development trends reviews and one global synthesis; and (4) 41 thematic presentations covering six broad thematic areas which included: (i) resources and technologies for future aquaculture; (ii) sector management and governance; (iii) aquaculture and the environment; (iv) responding to market demands and challenges; (v) improving knowledge, information, research, extension and communication in aquaculture; and (vi) enhancing aquaculture's contribution to food security, poverty alleviation and rural development.

The Global Conference triggered great interest among a wide range of stakeholders (including government, academia, education, research, industry and many others) and was very well attended. Over 650 delegates representing 69 countries from the aforementioned sectors participated. In fact, registra-

tion was closed two weeks prior to the commencement date, once the full holding capacity of the meeting rooms had been attained.



The regional aquaculture trends reviews and the global synthesis have already been published and are also available online.

This publication comprises all other presentations and reviews of the Conference, which have been subject to peer review by a panel of experts. The Report of the Global Conference on Aquaculture 2010, which is available at the same site, provides a detailed account of the conduct of the Conference along with its technical recommendations.

As a modest step towards reassuring the support to sustainable aquaculture development, the Global Conference adopted the Phuket Consensus, a document which reaffirms commitment to implementing the Bangkok Declaration and Strategy which had been adopted during the Conference on Aquaculture in the Third Millennium held in 2000. The Phuket Consensus confirmed that the progress towards sustainable aquaculture development at the global level has been made possible largely by efforts made in line with the Bangkok Declaration and Strategy. The latter Strategy thus continues to be highly relevant to the aquaculture development needs and aspirations of FAO member countries; however, there are elements of the Bangkok Strategy that require further strengthening in order to enhance its effectiveness, achieve development goals and address persistent and emerging threats. The participants of the 2010 Global Conference therefore reaffirmed their commitment to the Bangkok Declaration and Strategy for Aquaculture Development and made several recommendations that since the early 1980s are outlined in the Phuket Consensus, as elicited at the end of this volume.

FAO and NACA have been collaborating on sustainable aquaculture development at the global level since the early 1980s, and significant contributions have been made jointly

by FAO and NACA towards aquaculture development. With increasing poverty at the global level and the increasing demand for fish to feed a growing global population, much needs to be done to augment the contribution of aquaculture to global food and nutrition security. This volume, yet another joint effort of FAO and NACA, presents the much needed clear and comprehensive technical information that will assist in the mobilisation of global efforts to alleviate poverty and improve food and nutrition security through sustainable and responsible aquaculture.

Árni Mathiesen
Assistant Director-General
Fisheries and Aquaculture Department
FAO, Rome

Ambekar Eknath
Director General
Network of Aquaculture Centres in Asia-Pacific (NACA)
Bangkok

Download the proceedings from:

<http://www.enaca.org/modules/wfdownloads/singlefile.php?cid=220&lid=1055>

Download the regional aquaculture trends reviews and the global synthesis from:

<http://www.fao.org/fishery/regional-aquaculture-reviews/aquaculture-reviews-home/en>

Peter Edwards to mentor the new Sustainable Farming Systems Programme



At its recent meeting in Cambodia, the 23rd Governing Council endorsed some significant changes to the NACA Work Plan. One of the key changes is the formation of the Sustainable Farming Systems Programme, which will incorporate the former Inland Aquaculture and Coastal Aquaculture Programmes. One of the key issues the new programme will address is sustainable intensification, seeking to increase the productivity of farming systems through gains in efficiency, rather than only through additional resource inputs. As the global population continues to grow, feeding the world without further degrading the environment is a key challenge that must be met.

We are pleased to announce that the Sustainable Farming Systems Programme will be mentored by Prof. Peter Edwards, who will already be well known to many people in the network. Prof. Edwards is an Emeritus Professor at the Asian Institute of Technology, where he founded the aquaculture programme and he has 36 years of experience in aquaculture education, research and development in the Asian region. He will also be familiar to readers of Aquaculture Asia Magazine, for which he has written a regular column on rural aquaculture for many years.

NACA wishes to welcome Prof. Edwards and looks forward to his assistance with the development of the Sustainable Farming Systems Programme.

International Fisheries Symposium (IFS 2012), 6-8 December, Can Tho, Vietnam

Aquaculture and Fisheries industry are increasingly playing important roles in the world. Reportedly, the total world aquaculture and fisheries production is continuously increased which is approaching 150 million tons. The South-East Asia has been showing as a very dynamic and important region for aquaculture and fisheries which is significantly contributing to sustainable development of global aquaculture and fisheries.

Aquaculture and fisheries sciences and technology are rapidly developed in the South-East Asian countries to meet its missions and to deal with newly emerged issues for sustainable development. Sharing knowledge in aquaculture and fisheries sciences and technology is thus really important and necessary for the region.

This is the second time, six universities, Universitas Airlangga (Indonesia), Can Tho University (Vietnam), Kasetsart

University (Thailand), Nong Lam University (Viet Nam), Universiti Malaysia Terengganu (Malaysia), Prince of Songkla University (Thailand), are jointly organising the International Fisheries Symposium. As its objectives, the subject of this annual symposium is "Sharing knowledge for sustainable aquaculture and fisheries in the South – East Asia".

This will be a wonderful opportunity for scientists, technicians, businessmen, farmers and managers from the South- East Asian countries and from the worldwide countries to gather and to share knowledge and information on Aquaculture and Fisheries Science and Technology. Students are highly welcomed to attend the symposium.

This annual symposium will be organised at Can Tho University, Viet Nam, the third largest producer of the world aquaculture production. This will give

you a great chance to explore deeper aquaculture and fisheries industry in this country.

We strongly believe that this symposium is not only an opportunity to share knowledge, but also a great chance to promote further international collaboration in research, education, technical transfer and other business activities.

On behalf of the organisers, we warmly welcome you to Can Tho University, Viet Nam, and do hope that you will have wonderful time of staying here during the symposium.

For more information please visit the symposium website for the scientific programme, abstract submission procedure and registration forms:

http://www.ctu.edu.vn/colleges/aquaculture/ifs2012/index.php?option=com_content&view=article&id=89&Itemid=102

Broodstock management training course launched by NACA and UNU-FTP

Although the aquaculture sector in Asia has grown considerably over the last three decades, currently accounting for over 90 percent of the global production of approximately 62 million tonnes, there is reason to believe that the rate of growth is declining. One possible reason for this decline is a decrease in the quality of seed stocks of many of the major species cultured. Few hatcheries have personnel trained in broodstock management or effective broodstock management plans in place. The situation has been further exacerbated in countries that are dependent on alien species where the sector is witnessing the deteriorating quality of broodstock, which in most instances are based on small imported founder populations that have been maintained in captivity for many generations without genetic management. Establishing capacity in broodstock management is a prerequisite for the development and maintenance of improved, more productive strains desired by many countries. These problems and related issues have been acknowledged in

many fora, including the Asia Regional Ministerial Meeting on Aquaculture for Food Security, Nutrition and Economic Development (2011), the FAO/NACA/DOF Global Conference on Aquaculture (2010) and the FAO/NACA Expert Consultation on the Use and Exchange of Aquatic Genetic Resources (2009). Capacity building in broodstock management has been requested at every annual meeting of the NACA Governing Council since 2006.

A long term solution in this regard has not been explicitly thought out nor put in place; the most common approach to the problem has been to replace existing broodstock sourced from the wild, where possible, and in the case of alien species request the original donor countries for fresh replenishments. The latter is becoming more and more difficult with most countries becoming increasingly conscious of biodiversity concerns, trans-boundary pathogens and the up-coming access and benefit sharing protocols, all leading to a relative reluctance on

sharing germplasm. As the science of broodstock management comes to light more explicitly, with increasing application of molecular genetic tools, such knowledge has to be applied as a long term or sustainable solution to the problem.

In the region one of the major weaknesses of the sector lies in the fact that science of broodstock management is not well understood and rarely applied in practice. Neither is it a component of the curriculum in courses on aquaculture in tertiary institutions. In most countries in the region there is a dearth of capacity in broodstock management principles and practices, hatchery personnel almost always concentrating on paying more attention to the immediate needs of producing seed stocks required, but less so on its quality and or on aspects of preserving the genetic diversity of the parental stocks and the manner in which the best results could be obtained, in respect of quality of seed stock in each production cycle.

In addition, stock enhancement of inland waters is conducted as a routine practice in many countries for cultural purposes (e.g. water festival activity) and increased food fish production. In these practices little or no attention has been paid to interactions of the hatchery produced (hence the origin of the broodstock) stock and wild stocks, and potential impacts on genetic diversity of the latter. This again is an area where capacity building, which could be coupled with broodstock management in aquaculture, in relation to such impacts could bring about long term benefits of such wild stocks.

As such capacity building, among broodstock and hatchery managers, as well teachers in leading tertiary institutions providing aquaculture training, on the science of broodstock management warrants urgent attention.

NACA and the Fisheries Training Programme of the United Nations University (UNU-FTP) have jointly launched a project in collaboration with Nha Trang University Vietnam and Holar University Iceland to develop and test a short training course on principles of finfish broodstock management, to hatchery managers and key in-service personnel associated with hatchery operations drawn from six to eight countries in the Asian region. The course development started with communications coordinated by NACA

among a group of experts and collection of technical inputs of a number of relevant expertise. The experts are from Iceland, NACA, Australia and Vietnam with their specialties covering fish nutrition, genetics, health management, breeding, and other husbandry aspects. Through the initial communication the group had successfully generated a draft design and outline of the training course, and a set of PowerPoint presentations. A preparatory workshop for the training course was then organised from 30 May to 5 June 2012 at Nha Trang University, Vietnam, during which the course outline was revised, PPTs reviewed and modifications for improvement suggested. The group agreed to develop full sets of training materials, including session plans, visual aids, reading handouts, broodstock management planning exercises, and structured cases studies.

It is expected that the test-run of the training course should be implemented early next year for a group of selected participants from 6 to 8 Asian countries. Hopefully dissemination of the training materials and continuation of the training course in the future by NACA, UNU-FTP and their partners will contribute to capacity building in broodstock management and ultimately contribute to aquaculture development in the region. For expressions of interest or more information, please contact yuan@enaca.org.



**Network of
Aquaculture
Centres in
Asia-Pacific**

Mailing address:
P.O. Box 1040,
Kasetsart University
Post Office,
Ladyao, Jatujak,
Bangkok 10903,
Thailand

Phone +66 (2) 561 1728
Fax +66 (2) 561 1727
Email: info@enaca.org
Website: www.enaca.org

NACA is a network composed of
18 member governments in the
Asia-Pacific Region.



Copyright NACA 2012.

Published under a Creative
Commons Attribution license.
You may copy and distribute this
publication with attribution
of NACA as the original source.

www.enaca.org

Thousands of free aquaculture publications, news stories and audio recordings.