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An intergovernmental organization 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.

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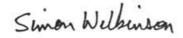
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The issue of chemical residues in aquaculture products, and the use of chemicals in aquaculture in general, has had a high profile in the media recently, notably because of the detection of antibiotic residues in some aquaculture products. This issue is not new and it has dogged the aquaculture industry (and other livestock sectors) for some time. Pressure against chemical usage in food production is likely to increase as consumer awareness of such issues grows.

The issue of chemical residues is only one part of the broader issue of food safety and public health in general. Events in recent years, such as the BSE or "mad cow" disease in the beef industry, have demonstrated that consumers are increasingly intolerant of threats to food safety, whether real or perceived. A clear lesson from the BSE crisis is that food safety is an industry-wide issue involving not only the producer but also suppliers of inputs, processors and distributors. BSE has also shown that a food safety issue affecting even a small part of an industry can affect the confidence of national or even the global market. All parts of the supply chain therefore need to cooperate to produce safe products. This raises issues such as health and environmental standards, certification and auditing, labeling and ability to trace product origin, canvassed in an article on page 38 by Dr Rola.

In this issue, our Thai-language column (and English translation) takes a close look at the antibiotic chloramphenicol, its medical uses and its potential health risks. The issue of appropriate chemical usage in aquaculture and food safety will be explored in future issues of Aquaculture Asia.

In other developments, the recent NACA Governing Council meeting passed two resolutions on the Grouper Network. The first was to change the status of the network from a project to a core (ongoing) NACA activity, thereby extending the life of the network indefinitely. The second resolution was to expand the focus of the network to "Marine Finfish". This is largely in recognition of the fact that most people working on grouper are also working on a range of other non-grouper marine finfish species. I hope that you will find the new expanded network useful and enjoyable. Please continue to share your experiences with others (visit http://www.enaca.org/Grouper/index.htm for full details of how to participate).





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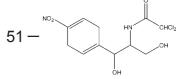
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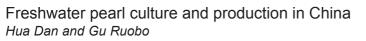


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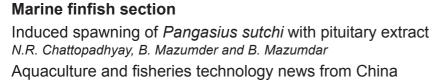
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Notes from the Publisher

Building up NACA's institutional capital with partnerships

Work agenda drafted for the WB-NACA-WWF-FAO Consortium Program on Shrimp Farming and the Environment

A stakeholders consultation held at the World Bank headquarters in Washington DC on 27-28 March 2002, has provided guidelines to the Consortium's next work program. It includes distilling and disseminating the lessons learned from the study and assisting governments and farmers to implement better management practices in shrimp aquaculture in coastal areas. The immediate work agenda includes improving, finalizing and developing ways to implement the study on shrimp farming and the environment.

The Program conducted a study that comprised 35 complementary case studies on different aspects of shrimp aquaculture. The study, which includes case studies and thematic reviews on best management practices in shrimp aquaculture, was conducted between 1999-2001 in Asia-Pacific, Latin America and Africa with the participation of over a hundred researchers and development workers from government agencies, NGOs, academic institutions, corporate managers, and individual farmers.

The consultation in Washington identified follow-up actions and outlined collaborative arrangements to assist farmers and governments implement BMPs. It was attended by more than 30 representatives coming from the private sector in Asia and Latin America, governments in Asia and Latin America, donor organizations including US AID, Foundations, civil society, IUCN and NACA, FAO, WB, WWF, which constitute the Consortium Program.

The cases and reviews, and the synthesis report of the Programme, are available at NACA's website: www.enaca.org/shrimp. Send an email to shrimp@enaca.org for particular inquiries.





Pedro B, Bueno, Director-General of NACA, conceived of and was Editor of Aquaculture Asia for six years. He now writes from the vantage view of the Publisher.

Pacific Island Nations set aquaculture development priorities

An action plan for developing the aquaculture of the Pacific Island Nations based on, initially, eight commodities identified as having the most potential for aquaculture development in the Pacific region, has been formulated. The eight selected from a list of 17 species, are: seaweed, corals, giant clams, pearl oysters, tilapia, *Macrobrachium* shrimp, milkfish and sea cucumber.

A five-day workshop held on 11-15 March 2002 on the neat and green campus of the University of South Pacific in Suva attended by more than 70 stakeholders representing the government, academic institutions, private sector, civil society, students, donor agencies, and regional and international organizations, established the strategic plan for developing the region's aquaculture based on eight of 17 commodities that were studied by the workshop. Largely on a profile previously developed for each commodity by experts from Oceania, the Pacific and Asia, coordinated by the Secretariat of the Pacific Community (SPC), ICLARM and ACIAR, the workshop systematically went through the list and set the priorities based on two criteria – the potential benefits of farming the commodity to the region and the feasibility of farming it. Benefits were broadly defined as the commodity's contribution to social and economic development, and feasibility was based on the availability of information on the commodity, the capability of the Secretariat to deliver the information and technology, and the ability of the region to absorb and implement the technology.

NACA and the FAO RAP took part in the workshop. NACA also provided some experts that contributed to the development of the commodity profiles (carps, shrimp and tropical abalone). An assessment of NACA as a collaborating organization and an outline of a possible framework of cooperation between NACA and the Pacific Island nations - collectively represented by the SPC - were presented at the workshop.

ICLARM, SPC and ACIAR are finalizing the action plan and refining the commodity profiles, in light of suggestions and further expert inputs from the workshop participants. What to do with the species that fell below the priority line? The exercise provided useful leads on key technological and management efforts that can be done to increase their importance. Participants came from all the Pacific Island Nations from the Palau and Marshall Islands to French Polynesia, as well as Papua New Guinea, Australia, New Zealand and the Philippines.

Dr Kristalina I. Georgieva, Director of the Bank's Environment Department (shown here with Pedro Bueno of NACA (left) and Ron Zweig, Senior Aquaculturist of the World Bank) in her welcome and keynote speech underlined the Bank's strategy on and support to activities in environment and poverty alleviation. She said the Bank welcomes and strongly supports a mode of cooperation exemplified by the Consortium program. The WB environment strategy emphasizes three objectives: Improving the quality of life; Improving the quality of growth by supporting policy, regulatory and institutional frameworks for sustainable environmental management and by promoting sustainable private development; and Protecting the quality of the regional and global commons such as climate change, forests, water resources and biodiversity. "We have to consider environment as a part of development rather than a self-standing agenda," she said.

NACA Alumni in the South Pacific

NACA Alumni from the South Pacific are doing very well. The three in this photo, from Fiji, were participants in various NACA training courses including the Senior Aquaculturist Training Course that led to a Master's degree in Aquaculture (professional) and the Integrated Fish Farming course in Wuxi, China which has been continuously offered since 1981. From left are Ms Tavenisa Vereivalu (Integrated Fish Farming Course, Wuxi), who is now project leader for seaweed and milkfish in the Fiji fisheries department; Esaroma Ledua (seaweed course in China, economics for aquaculture course, and various others), who is now a Macrobrachium farmer but previously with the Secretariat of the Pacific Community and the Department of Fisheries of Fiji; and Jone Vasuca (Senior Aquaculturist Programme, Philippines and Integrated Fish Farming), head of the Nadurouloulou Freshwater Aquaculture Research Station where this photo was taken.



We also learned that Mr Tukabu Teroroko of Kiribati (Senior Aquaculture Programme), is his country's Permanent Secretary of Marine Resource Development. A third alumnus, Petrus Sagom of Papua New Guinea, after about three decades of service to PNGs agriculture, having been head of the Highlands Aquaculture Station for a long time, resigned from the civil service to try to serve the country as an elected official.

Alumni network

To all NACA alumni, a move is afoot to formally establish the NACA alumni network. Beato Pudadera, Jr of Brunei's Fishery Department, Ministry of Primary Industries, and Ramon Agbayani, General Manager of an aquaventure of a quasi-government agency of Brunei's Ministry of Primary Industry have volunteered to be the focal point of the alumni network. An alumni page is being constructed to be placed at the NACA website. We urge NACA alumni (all training courses) to send their brief CVs and latest mailing and electronic addresses (phone, fax and email) to Ramon Agbayani (rracva@brunet.bn) and Beato (beatojr@brunet.bn). Support to the initiative is provided by the NACA Secretariat; send messages to Zhou Xiaowei (xiaowei.zhou@enaca.org).



The priority setting workshop was an extremely well-managed and pleasant exercise. Taskmaster was planning consultant Tim Leahy of Canberra whose track record includes assisting ICLARM and various agencies of the Australian government in corporate and development planning. This photo shows some of the participants (divided into 8 working groups) wrestling with the issues.



Satya Nandlal (fourth from right) of the Fisheries Bureau of Fiji and currently a doctoral student at the Marine Studies Programme (Aquaculture) of the University of South Pacific, is a passionate and industrious worker promoting small-scale aquaculture in the Islands. He is shown here briefing participants visiting one of the project sites – an integrated fish farm and a trial mangrove crab ongrowing pond (shown below).



Left: the integrated fishpond operated by a boys' town in Suva; and below, the Naduroulon aquaculture station.



Mr Maciu Lagibalavu, Fiji's director of fisheries (left), is shown with SPC's aquaculture adviser Ben Ponia in the photo below.



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Associate Membership of the South Pacific Community, reciprocal associate membership with APAARI being negotiated

One of two amendments to the NACA Agreement endorsed by the Governing Council at its 13th meeting (on January 16-18 in Langkawi, Malaysia) was the provision of associate membership in NACA of other intergovernmental organizations, regional associations of nations/economic blocs, and regional and international donor agencies.

The other was the change in the title of the head of NACA from Coordinator to Director General.

At the SPC priority setting workshop, an assessment of the benefits of the Pacific Island nations, joining NACA collectively as associate member, represented by the Secretariat of the Pacific Community, was presented by Mr Maciu Lagibalavu, Director of Fisheries of Fiji. Further consultations between NACA and SPC will be held on the issue. Mr Lagibalavu along with SPC's aquaculture adviser Ben Ponia along with Mr Aymeric Desurmont, Information Specialist of SPC, attended the 13th Governing Council Meeting of NACA and held discussions with the NACA Secretariat in January.

Meanwhile, a reciprocal associate membership between NACA and the Asia-Pacific Association of Agricultural Research Institutes whose secretariat and information hub are in FAO RAP in Bangkok with a support staff In FAO New Delhi, is being worked out.

NACA has been invited as early as 1998, to become associate member of APAARI by Executive Secretary Dr Raj S. Paroda, formerly Director General for ICAR and currently coordinator of a regional program on agricultural research and development in the Central Asian region.

The reciprocal associate membership was also offered by Dr Paroda in a subsequent letter to the NACA Secretariat. The 11th Governing Council of NACA (Colombo, 1998) had favourably considered NACA's associate membership in APAARI. NACA meanwhile has been participating in various APAARI consultations including the development of an agricultural research information system, agricultural research priority setting for South and West Asia, and fishery research priority setting for Asia-Pacific. NACA, through APAARI, was invited to present NACA's regional coordination of aquaculture R and D as a policy case at the Global Forum on Agricultural Research held in Dresden, Germany in May 2000.

The Association aims to foster the development of agricultural research in the Asia-Pacific Region by promoting the exchange of scientific and technical know-how and information in agriculture; encouraging the establishment of appropriate co-operative research and training programs; assisting in strengthening of research and management capabilities of member institutions; and strengthening crosslinkages between national, regional and international research centres and organizations, including universities, through involvement in jointly planned research and training programmes. APAARI's associate members include eight CGIAR institutions, the Asian Vegetable R and D Centre in Taiwan, CAB International, the French-based Center for International Cooperation in Agriculture for Development (CIRAD), and AIT. It has also supportive organizations that include FAO, ACIAR, the Global Forum for Agricultural Research, CGIAR or Consultative Group on International Agricultural Research, and the International Fund for Agricultural Development.

Review of the NACA Agreement

The Committee to Review the NACA Agreement, a volunteer group composed of former and current members of the

Governing Council, a representative of FAO's legal department, the former NACA Coordinator, the founder of the Asian Fisheries Society, and a representative of donor agency, recommended associate membership in NACA and came up with the following list of benefits to NACA and to the associate member:

Specific benefits to NACA

- A wider base of experience to draw from;
- · Support to the implementation of the Work Programme;
- · Increases the impact of NACA's work;
- Improves access to information and wider dissemination of information;
- · Provides more resources:
- Increases opportunities for the funding of projects;
- Expands the footprints of the Organization;

Benefits to the Associate Member

- · Access to collaborative work with NACA;
- Benefiting from NACA's professional expertise;
- · Participation in exchange and training activities;
- · Increases the impact of the AM's programs;
- Improves AM's access to information and technical expertise; and
- Facilitates development of collaborative projects and cooperation with other member organizations.

The major benefit to both parties is the maximizing of available resources, minimizing duplication of programs and resources, and increasing the impact on development in the region.

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