

editorial

Asia, producing about 60 percent of the world's fish and accounting for about 90 percent of all aquaculture output occupies a prime place in world fisheries. With a growing population comprising roughly a third of humanity and the attendant economic challenges, fish should play a vital role in ensuring the livelihood as well as nutritional security of the continent in the years to come. Thus, planned development of fisheries and aquaculture should be one of the major priorities in Asia.

Asia is poised for a growth in fish production at annual rates ranging from 0.2 to 3.5 percent during 2005 to 2020. The WorldFish Center is an active partner with all the main Asian players, fostering research and capacity building in fisheries related issues. This issue of NAGA, devoted to Asian fisheries, features ten articles dealing with a mosaic of topics related to both inland and marine fisheries.

To meet the growing need for fish at the global level, appropriate aquaculture strategies have to be evolved to augment capture fisheries. One of the promising facets of culture fisheries is genetic improvement of fish species and it has a good potential for Asia in view of its immense diversity of species. The feature article by M.V. Gupta and B.O. Acosta traces the success story of the project on Genetic Improvement of Farmed Tilapia (GIFT). This project, implemented by WorldFish and its partners, has contributed to significant increases in productivity and has emerged as a useful model. The coming years will see a strengthening of this tool and its use on a number of species. An interesting question that arises with regard to improved strains is their transfer to other regions. This has to be very carefully considered with regard to impact on indigenous germplasm. A consultation organized by the WorldFish Center and partners in Nairobi in 2002, adequately reflected this concern and recommended that improved tilapia strains from Asia should not be introduced into Africa.

Aquaculture as practiced today is not without questions. The operations must become more environmentally sustainable. Trends are emerging towards eco-friendly approaches such as the use of pro-biotics. The potential use of some bacteria against pathogenic forms and the use of phytase to enhance the bioavailability of nutrients from plant ingredients are presented. Development of plant-based feeds is essential in order to reduce pressure on marine stocks for production of fishmeal, and in so doing increase the availability of fish for human consumption. These research questions are being addressed globally and we can hope to see solutions emerging in the next few years.

Utilization of aquatic resources must go side by side with conservation measures. In recent years, a number of initiatives driven by the Convention on Biological Diversity and the FAO Code of Conduct for Responsible Fisheries have underscored the need for the sustainable use of aquatic resources. The World Summit on Sustainable Development (2002) reinforced the need for the sustainability of the world's fisheries. Many countries have taken action to broaden and strengthen fisheries management towards achieving sustainable fisheries and aquaculture. Contributed articles in this issue include suggestions to reduce bycatch in marine landings and phasing out practices like bush park fishing. Propositions to improve sandfish resources in Vietnam by restocking and appropriate management practices are also put forward. In a generic sense these strategies are applicable to a number of resources.

Fish plays a major role in the food and livelihoods of the poor in Asia. An analysis based on a study by WorldFish and included in this issue, examines the factors underlying fish supply and demand in Asia – the AsiaFish model. The key questions addressed are availability of fish, growth in production, trade, options for meeting demand and improvements to livelihoods. Also highlighted in another article is the importance of impact pathway analysis for planning research on aquatic resources.

Based on the overall trends, it can be said that Asian fisheries are poised at a very interesting stage. They face challenges, but there are opportunities too. With the right kind of strategies and a holistic approach, the benefits can be immense.

George John
WorldFish Center



Our commitment:

WorldFish Center is committed to contributing to food security and poverty eradication in developing countries.

We aim for:

- poverty eradication;
- a healthier, better nourished human family;
- reduced pressure on fragile natural resources; and
- people-centered policies for sustainable development.

A way to achieve this:

Through research, partnership, capacity building and policy support, we promote sustainable development and use of living aquatic resources based on environmentally sound management. The research thrusts are:

- improving productivity;
- protecting the environment;
- saving biodiversity; and
- improving policies; and
- strengthening national programs.

We believe this work will be most successful when undertaken in partnership with national governments and nongovernmental institutions, and with the participation of users of the research results.

Our corporate makeup:

WorldFish Center is an autonomous, nongovernment, nonprofit organization, established as an international center in 1977. The Center is an operational entity with programs funded by grants from private foundations and governments.

WorldFish Center is governed by an International Board of Trustees and its policies are implemented by the Director General.



WorldFish Center is one of the 15 international research centers of the Consultative Group on International Agricultural Research (CGIAR) that has initiated the public awareness campaign, Future Harvest.