

Challenges of aquaculture research in Asia: Perspectives for Vietnamese-Hungarian R&D collaboration

L. Varadi

Research Institute for Fisheries, Aquaculture and Irrigation, Szarvas, Hungary

Abstract

The Asian region produces nearly 85 % of global aquaculture, provides direct and indirect employment to millions mainly in rural regions, and contributes significantly to food security. The remarkable achievements in aquaculture development in Asia are largely based on the application of R&D results that have been gained in Asian institutions in many cases in collaboration with European aquaculture research institutions. The Network of Aquaculture Centres in Asia-Pacific (NACA) organised an expert consultancy recently in order to conduct a review to identify the main research issues and needs to sustain Asian aquaculture into the first quarter of the 21st century. Recommendations have been elaborated related to the following main issues: (1) general aspects; (2) farming systems (BMPs); (3) Biodiversity/genetics/alien species; (4) climate change; (5) feeds; (6) effective utilization of inland waters; (7) market. The active involvement of Cantho University (CTU), Vietnam and the Research Institute of Fisheries, Aquaculture and Irrigation (HAKI), Hungary in Asian aquaculture development was demonstrated by the fact that representatives of both institutions were invited to the meeting funded by the International Development Research Centre (IDRC), Canada. The involvement of Vietnamese and Hungarian institutions in this strategic meeting also helped to identify possible future R&D collaboration between the two countries in the field of aquaculture development. Based on the traditional collaboration between Vietnamese and Hungarian aquaculture research institutions and the finding and recommendations of the NACA meeting, the following main areas can be considered as perspective future collaboration areas between Vietnamese and Hungarian partner institutions:

- development of BMP for pond fish production;
- breeding and quality seed supply of common carp;
- development of water efficient and environment friendly aquaculture systems;
- fish health management with special regards to the use of immunostimulants.

These R&D areas have already been important elements of the traditional collaboration between Vietnamese and Hungarian aquaculture research institutions, however the recent strategic meeting of NACA confirmed the relevance of these issues and provided additional information for the elaboration of particular research and development projects. The research collaboration between Vietnamese and Hungarian aquaculture research institutions contributes to the development of sustainable aquaculture development not only of the two collaborating countries but also that of the whole Asian region.