

Angeles Declaration

**PUBLIC-PRIVATE PARTNERSHIPS FOR
DISSEMINATION OF RESEARCH
OUTPUTS TO END-USERS**



Angeles Declaration: Public – Private Partnerships for Dissemination of Research Outputs to End-Users

2003

Published by the Tilapia Science Center, Philippines and the
WorldFish Center, PO Box 500 GPO, 10670 Penang, Malaysia

Tilapia Science Center, Philippines and WorldFish Center. 2003 .
Angeles Declaration: Public – Private Partnerships for Dissemination of
Research Outputs to End-Users. 11 p

Cover Photos by: Tilapia Science Center photo collection
Cover Design: Leelah Kumari

ISBN No. 983-2346-20-7

WorldFish Center Contribution No. 1698

Printed by DocuXpress Printing Sdn Bhd., Penang, Malaysia



WorldFish Center is one of the 16 international
research centers of the Consultative Group on International
Agricultural Research (CGIAR) that has initiated the public
awareness campaign, Future Harvest

BACKGROUND



Beginning in the late 1980s, several Philippine government institutions in collaboration with international agencies, have undertaken research programs for genetic improvement of tilapias. These programs have resulted in methods for genetic enhancement of tropical finfish and improved strains that are being widely distributed and adopted by farmers, leading to the accelerated development of the tilapia industry. Public and private sector institutions have been involved in dissemination and further improvement of different strains in the Philippines. Over time, these partnerships have evolved into different forms of strategic alliances aimed at sustaining the gains achieved in the research and developmental stages. Such have become very unique arrangements being used as a means to retain and further develop expertise and sustain the costs of fish genetic research and, at the same time, serve as distribution mechanisms for the wide dissemination of improved fish.

Against this background, with the financial support of the International Development Research Centre (IDRC) of Canada/Research on Knowledge Systems, the WorldFish Center and the Philippine institutions comprising the partners of the Tilapia Science Center (i.e., the Freshwater Aquaculture Center, College of Fisheries and Phil-Fishgen of the Central Luzon State University; the National Freshwater Fisheries Technology Center, Bureau of Fisheries and Aquatic Resources of the Department of Agriculture; and the GIFT Foundation International Inc.) are conducting research to evaluate the evolving public-private partnerships and determine their effects on the sustainability and achievement of development objectives in fish genetics research.



A workshop was held in Angeles City, Philippines during 25-27 June 2003 to review and improve the protocol of public-private partnerships in disseminating tilapia genetic research outputs to end-users and formulate recommendations with implications on policy. Thirty-seven participants representing various stakeholder groups (i.e., national aquatic research system-NARS, international organizations, advanced scientific institutions, the private sector, hatchery operators, and farmers) participated in the workshop. The participants discussed and evaluated the effectiveness and efficiency of various distribution and dissemination systems; and identified and analyzed issues, problems and constraints for delivery and uptake of genetics-based technologies and their outputs that need to be addressed by relevant agencies/institutions.

Based on the deliberations, the participants of the Workshop adopted the declaration which is in the following pages.

THE DECLARATION



We, the participants of the Workshop on *Public-Private Partnerships for the Delivery of Tilapia Genetic Research Outputs to Philippine End-users*, recognize that:

1. The tilapia industry is the fastest-growing and most dynamic sector of the aquaculture industry of the Philippines and is increasingly an important contributor to national economic development;
2. There has been a significant increase in tilapia production thereby helping to ensure food security, promote livelihoods to alleviate rural poverty, and generate employment and trade;
3. Further improvement of the industry can be brought about by generating new expertise, knowledge and technologies through research;
4. The continuous supply of good quality genetic material for research and broodstock and fish seed for production is vital for the growth and sustainability of the tilapia industry;
5. Outputs of research and the corresponding benefits should be accessible and equitably distributed to the producers and consumers of tilapia;
6. Tilapia culture practitioners, researchers and policy-makers are responsible for the protection of the tilapia industry, the environment and biodiversity;



7. Strengthening and creating a caring environment of cooperative and integrated partnership among the different stakeholder groups is necessary to achieve the development goals of the industry;
8. Continued and meaningful public and private sector participation in research and development is essential to ensure the growth of the industry; and
9. Effective institutional arrangements, policy, and regulatory frameworks provide the support mechanisms for the growth and development of the tilapia industry in particular and aquaculture in general.

The Workshop noted that there are issues and concerns relevant to the dissemination of research outputs and development of the Philippine tilapia industry that should be addressed and given focus. This could best be achieved by providing an environment that promotes stronger public and private sector partnerships.

Public and private sector institutions need to work together for the delivery of improved tilapia breeds and technology to achieve the maximum benefits of genetic research. These linkages and partnerships are needed for effective, efficient and equitable distribution of products and benefits. The following are the recommendations that have been made by the participants:



Distribution of benefits

Current dissemination mechanisms are not ensuring equitable delivery of benefits of genetics-based technologies. There is a need to balance differential interests of the public and private sectors in serving the needs of the poor and geographically isolated farmers and commercialization of the improved tilapia breeds.

Marketing of improved fish seed from most private sector hatcheries (particularly the hatcheries accredited to produce it) is mainly concentrated in Luzon and for large-scale commercial aquaculture. The public sector should ensure that small-scale, poor, and geographically isolated farmers should have access to improved tilapia breeds.

Recommendation: Based on geographical areas, socio-economic conditions and other factors, farmers' needs and how these are being met, require evaluation. While the public sector caters to needs of small-farmers in general, it is essential that government line agencies place greater emphasis on providing services and focus on the small-scale, poor, and geographically isolated farmers, or those who do not have access to private sector hatcheries to ensure that they are not marginalized and have access to improved tilapia breeds.

Promotion of improved breeds

Concern was expressed that public sector agencies may only be promoting their own improved breeds and that there may be competition between public and private sector in dissemination of different improved breeds.



Recommendation: There is a need for public sector policy that will allow recognition and promote greater awareness by the public of all improved tilapia breeds available in the country and targets public sector dissemination efforts on poor and geographically isolated farmers. Effective implementation of such policy should minimize competition between public and private sectors.

Provision of technical assistance

The need for improved extension services to hatcheries and grow-out farmers was recognized. In addition to the traditional extension services provided by the public sector agencies, specialized extension support services (e.g. hatchery technology, feed management, management of improved fish breeds, water/soil quality analyses, etc.) are needed.

Recommendation: Breeding nucleus stations (private/public) should be responsible for providing the necessary technical services for effective management and maintenance of seed quality of improved tilapia breeds. Private sector breeding nucleus stations, in partnership with the public sector institutions, should also extend the specialized extension services needed by the multipliers and the grow-out farmers. The public sector has to continue providing the traditional type of extension services needed by small-scale hatcheries and the grow-out farmers, especially those not reached by existing distribution systems for genetically improved seed. The private sector breeding nucleus stations can also act as a conduit for traditional types of extension information.



Responsible transfer of improved tilapia breeds

Activities involving releases or commercial production of tilapia breeds may result in escapes into the environment and may negatively impact the aquatic biodiversity and the tilapia industry.

Recommendation: The government should ensure that existing policies for conserving biodiversity and safe guarding the tilapia industry, are implemented and where necessary, develop new policies for effective implementation.

Market information

Multipliers and grow-out farmers require information on markets and marketing for tilapia and related products.

Recommendation: The Government should take the lead in collecting/monitoring/disseminating information on markets, prices, etc., of fingerlings and table fish. An effective mechanism needs to be established for collecting and disseminating this information to the producers.

Quality assurance

Economic sustainability of the breeding programs and seed quality are two of the major concerns of the industry. Certification of seed helps ensure the supply of high quality fingerlings to grow-out farmers. It is also essential that awareness is built among stakeholders (public and private) of the properties, benefits, and risks associated with genetically improved fish breeds.

Recommendation: The Government should establish a fish seed certification system.



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