

BFAR-FAO TCP/PHI/3404



Improvement of Feeding and Feed
Management Efficiency in
Aquaculture Production in the
Philippines

PROJECT BACKGROUND & OBJECTIVES

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BACKGROUND

A. General Context

- Rapid production in aquaculture has reached 2.61MT in 2011 contributing 48.8% to the total fish production;
- MTPDP envisages aquaculture in coastal areas and inland waters an increase in production to 3.54 MT by 2016;
- BFAR-CNFIDP Goals:
 - ✓ Protect fishery habitats
 - ✓ Develop full potential of aquaculture; and
 - ✓ Promote competitiveness of fishery products

MTPDP Projected Production Increment in Milkfish and Tilapia (2010-2016)

CULTURE SYSTEM	2010	2016	% INCREASE
Milkfish Cage Culture	0.43	0.58	34.9
Milkfish Pond Culture	1.06	1.42	34.0
Tilapia Pond Culture	1.16	1.55	33.6

BACKGROUND...

B. Sectoral Context

- ➤ Aquafeeds as a basic input to aquafarming typically account for 50-70% of production costs (Hasan, et. al. 2007);
- Less adequate consideration to economic or nutritional rationale to the use of commercial feeds in aquaculture;
- Factors affecting poor feed utilisation resulting in high FCR:
 - Inappropriate selection of feed type (i.e. sinking/floating, pressed/extruded)
 - Feed quality (i.e. formulation/nutrient composition)
 - Feeding strategy

BACKGROUND...Sectoral Context

- ➤ Norad-assisted EMMA and EU funded PHILMINAQ projects (2008) findings on aquaculture impact to environment:
 - Feed quality (no specific formulation for the species cultured);
 - Water stability of feed (easily dissolved in water before ingestion); and
 - Digestability (inappropriate ingredients composition and poor digestability

➤ Mismanaged Feeding results to: wastage/high organic loading/economic loss

BACKGROUND: Sectoral Context

- B.1 Development Priorities (World Food Summit Plan of Actions)
- Foster local economic conditions
- Alleviate poverty and maximize poor's income
- Contribute to food and nutritional requirements of farming households
- Production of safe food supplies
- Participatory approach that pursues sustainability
- Combat environmental threats to food security
- Promote sound technology transfer
- Indirectly contribute to the achievement of WFS Action Plan and other objectives

B.1 Development Priorities (Millennium Development Goals) Contributions to:

- MDG 1- reduce by half the proportion of people who suffer from hunger;
- MDG 7 integrate the principles of sustainable development into country policies and programmes, reverse loss of environmental resources;
- MDG 8 make available the benefits of new technologies in cooperation with the private sector, particular on info and communication technologies

BACKGROUND: Sectoral Context

B.2 NMTPF and UNPAF

- ❖ Joint RP-FAO Natl. Medium-Term Priority Framework= a planning and management tool outlining how FAO can best assist the country in achieving MDGs;
- Complement the UN Partnership Framework to carry out programmes addressing food safety, quality and export markets, including measures and mechanisms on "GAqP, CoC,", and
- Improve feeding and feed management in freshwater and brackishwater major farmed-fish commodity to ensure compettetiveness in the world market consistent with the WTO-GATT.

OBJECTIVES

The Project aims to address the technical, social and environmental issues related to feed formulation, production, on farm feeding and feed management strategy of two (2) major fish species (milkfish and tilapia) culture in the Philippines

OBJECTIVES

- A. PROBLEMS/ISSUES TO BE ADDRESSED:
- ✓ Development of optimal feed formulations for the different life stages(fry, fingerlings and grow-out);
- ✓ Selection of appropriate feed type in terms of floating, slow-sinking or sinking pellets for tilapia and bangus;
- ✓ Optimization of on-farm feeding and feed management strategies;
- Development of simple mgmt. tools, such as the feedback systems to prevent over-feeding;
- ✓ Development of techl. Manuals and guidelines on improved feeding;
- ✓ Capacity bldg. of SMS farmers in feeding and feed mgmt.
- Devt. /compilation of quality standards for aquafeeds and their implementing guidelines; and Devt. And promotion of appropriate institutional and regularatory frameworks for feed

OBJECTIVES

B. STAKEHOLDERS AND TARGET BENEFICIARIES:

- Small and Medium scale aquaculture producers engaged in tilapia and bangus farming;
- Feed manufacturers and local feed producers;
- Academes and Fisheries Research Institutions
- BFAR and other regulatory partners in the govt.

OBJECTIVES- Project Framework

C. IMPACT:

- Expected significant impact on improving milkfish and tilapia aquaculture in the country;
- ☐ Possibility of application of methodologies and ouputs relevant to other cultured species in the Phil. And in neighboring countries in the region;
- ☐ The project will provide means and measures to improve production thru improving on-farm feeding and feed mgmt. thus increasing opportunity small farmers to reduce vulnerability, improve income, and increase employment

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