

Risk-based pedigree-analysis for regulation of prophylactic aquaculture health products and improved smallholder health management in Bangladesh (PEDIGREE)

### AIMS

#### The aims of PEDIGREE are -

To contribute directly to the

- (1) Capacity development in research, education, diagnosis, emergency disease preparedness
- (2) Improve quality of aquaculture medicinal products (AMPs).

The latter action aims to reduce risk associated with AMP use through

- (i) Improved regulation and compliance in their manufacturing, importing and distribution
- Improve industry understanding of regulatory measures/ standards and improve coordination with the Drug Administration in regulatory process and
- (iii) Development of health management practices/ encourage appropriate use and reduced dependence on AMPs.



# **APPROACH**

 ✓ Increased local industry and regulator awareness of these risks and improve regulatory policy



- ✓ Implementation of a risk-based sampling approach to safety and quality assurance by commercial partners
- Adoption of the tool and dissemination of other advice to farmers derived from IMAQulate health management surveys, as part of an independent national farmer advisory helpline operated by NGO partner

# **ACTIVITIES**

- Identification and selection of exchangees from Bangladesh
- Project inception meeting
- Classification and sampling of 'low' and 'high' risk PHPs
- Industry and NGO partner exchangee collaborative visits to UoS (UK)
- Targeted exploitation of findings with primary beneficiaries/ stakeholders
- Dissemination: Final project workshop & reporting

# SCOPE

• Stakeholders involved in Shrimp, Tilapia and Pangasius value chain





## BACKGROUND

Aquaculture in Bangladesh is rapidly growing and trends towards intensification. Ensuring effective health management has become the single most important challenge for sustainable intensification of the smallholder not just increasing restrictions on the use antibiotic and other therapeutants are being imposed. Farmers are increasingly dependent on a proliferating range of poorly regulated prophylactic health products (PHPs). The PHPs include a range of feed supplements; vitamins, immunostimulants, minerals, prebiotics and probiotics with often uncertain provenance and efficacy. Intensifying smallholder fish farmers generating greatest demand PHPs in two aquaculture sectors; shrimp (Penaeus monodon and Macrobrachium rosenbergii) and finfish (Pangasius catfish and Tilapia). Previous BBSRC funded project IMAQulate has developed a PHP risk analysis tool helping users to identify 'high-risk' products based on label-information and other secondary indicators. Earlier Research in Bangladesh highlighted the following issues:

- Regulatory and institutional frameworks are insufficient to monitor assure PHP quality and linked to this
- (ii) A lack any functional registration procedure
- (iii) Inaccurate product label information
- (iv) No clear standards for PHP labelling and categorisation
- (v) Reduced shelf-life due to insufficient/ sub-optimal packaging, storage and distribution facilities

### **CONSORTIUM**



Co-Investigator: Dr. Mohammad Mahfujul Haqu Professor, Department of Aquaculture Bangladesh Agricultural University mmhaque1974@yahoo.com RISK-BASED PEDIGREE-ANALYSIS FOR REGULATION OF PROPHYLACTIC AQUACULTURE HEALTH PRODUCTS AND IMPROVED SMALLHOLDER HEALTH MANAGEMENT IN BANGLADESH (PEDIGREE)



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