Safeguarding against disease in Asian aquaculture to alleviate rural poverty

UKRI is funding a unique collaboration of researchers from the UK, India and Bangladesh with shrimp and fish farming communities to understand the impact, spread and control of disease in shrimp and fish.

The world’s population is set to reach almost 10 billion by 2050\(^1\), putting global food systems under increasing pressure. Aquaculture, the farming of fish and shellfish, is becoming increasingly important globally. Already the fastest growing food production sector\(^2\), some estimates predict that global production of white fish from aquaculture will equal chicken by 2050.

Growth in aquaculture is threatened by infectious diseases which cost the sector US$6 billion per year\(^3\) equivalent to a recent estimate of losses to foot and mouth disease in terrestrial livestock. Many current disease controls have proved ineffective, prohibitively expensive or impractical, especially in low-income countries.

A UKRI-funded team of scientists has worked with farmers in India to implement shrimp screening and water monitoring, doubling shrimp crops and reducing disease outbreaks within test ponds. This sets a powerful model of interaction between authorities and farmers, paving the way for Asian aquaculture to fulfil its potential.

The lead Indian partner CIBA has launched the Vanami ShrimpApp which provides over 6000 farmers and other stakeholders with information and access to CIBA scientists. A Bengali version ShrimpApp has been developed under this project to accompany training in Bangladesh, showing how the collaboration is enabling India to fulfil its role as a regional lead.

“The most satisfying part of this project has been applying our new understanding to help marginal farmers to adopt better practices thereby increasing the socio-economic status of the farming community.”

Dr M. Shashi Shekhar, Central Institute of Brackishwater Aquaculture, India

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\(^1\)UN
\(^2\)UN Food and Agriculture Organisation
\(^3\)UN Food and Agriculture Organisation

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LEADS: Prof Chris Hauton FRSB, University of Southampton, UK; Dr M. Shashi Shekhar, Principal Scientist, CIBA
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