



Feed production, pond management, water pumping, aeration, pharmaceuticals, harvesting, sludge removal, transport, fish processing, chilling, freezing, testing, export, by-products .....

## Opportunities in Aquaculture Trade

March 2012

SEAT is a large-scale collaborative research project enhancing the sustainability of the trade in key aquaculture species between SE Asia and Europe. With two years of research behind us we are picking up on highlighted opportunities with Action Research, and facilitating the participation of small and medium sized enterprises in key global value chains. The range of farming systems, inputs, equipment and services is broad and fast changing.

Bangladesh – China – Thailand – Vietnam | Shrimp – Prawn – Tilapia – Pangasius

Value chain overview posters [here](#)

### Some current activities...

#### Flavour consistency in tilapia



Tilapia pond, Maoming (Shanghai Ocean University)

SEAT is working to improve the consistency and value of tilapia supply (more than \$1 billion traded internationally in 2011). Restricting trade is the fish's susceptibility to flavour inconsistencies resulting from natural environmental factors. In China and Thailand we are bringing importers, processors, farmers and input/ service suppliers together to raise awareness and implement control measures to raise the quality and value of their product. We are working with businesses in Europe on the development of testing kits to monitor the pond environment, and in Thailand on the integration of suitable finishing ponds into the value chain to avoid flavour inconsistencies.

#### By-products

Crustaceans and freshwater fish in Asia are commonly processed into products beyond just fillets for human consumption. Chitosan and glucosamine are commonly extracted from shrimp shells, collagen and gelatin are extracted from pangasius skins, and trimmings are used in value added products. SEAT is bringing European expertise to Asia in bringing industrial and academic experts together, adding value to our target value chains and finding new markets for high value by-products from European aquaculture.



Removal of pangasius skins (Jimmy Young, UOS)

Health drink produced by [Bianfishco](#)

#### Reputational issues



SEAT project has done extensive system scoping and continues with in-depth research around our target value chains. In Bangladesh we are working with [Naturland](#) (organic certifier) and an import/ export network to build on our research and address reputational issues facing Bangladeshi products through evidential work.

SEAT shrimp farmer interview, and farmer at market (Bangladesh Agricultural University)

#### Sediment use

Vietnam's 6,000 ha of pangasius ponds produce around 8000m<sup>3</sup> of sediment per hectare per 6 month crop cycle. This sediment is rich in nutrients making it a threat if disposed of into natural ecosystems and a valuable resource if utilised as fertilizer in agriculture or horticulture. SEAT is testing for any contaminant issues as well as nutrient content, and bringing agricultural scientists, agronomists, agricultural producers, pangasius farmers and those specialising in sludge removal and transport together to add value to the sludge and integrate its use into value chains.

Sludge fertilizing vegetables by pangasius pond, Vietnam (Can Tho University)



Something to offer? Something to gain?

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