



Vietnam's Ministry of
Agriculture and
Rural Development (MARD)

SuPa



Koninkrijk der Nederlanden

Ministry of Economic Affairs,
Agriculture & Innovation (EL&I)
NL/VRF10/WSSD/1

Newsletter 1

Improving waste management for Pangasius culture in the Mekong Delta in Vietnam

SuPa aims to improve the sustainability, i.e. reduce environmental impact, of the catfish sector.

SuPa is funded by contributing companies/institutions of which the logo is shown below, and through the Public Private Partnership Fisheries of Netherland's EL&I and Vietnamese' MARD.

SuPa is led by Wageningen University (WU) and furthermore carried out by the Research Institute for Aquaculture No2 (RIA-2), Can Tho University (CTU) and Ghent University (UGent).

SuPa does research on improved feed (**R-1**) and water management (**R-2**) to safeguard fish health, and to maintain or improve yield, product quality and cost-benefit ratio (**R-3**).

R-1 and R-2 aim to reduce waste discharge and to improve water quality, thereby avoiding diseases and thus the use of antibiotics and chemicals. Improving water quality inside ponds and reducing effluent discharge implies the reduction of faecal waste staying in the water column by:

1) improving feed digestibility to reduce faecal excretion, 2) increasing the stability of the excreted faeces, and 3) increasing the removal of the faecal matter before it settles at the pond bottom.

R-1 **CTU** and **WU/AFI** tested a set of protein rich feed ingredients and will pursue with testing the effect of energy rich ingredients, ingredients with a low nutrient density and binders on the stability of faecal waste. Results will be used to formulate a feed to be tested on-farm.

R-2 **RIA-2** and **AFI** are assessing the nutrient retention and discharge in ponds and in small scale flow-through and recirculation systems in function of protein content in the diets. The data collected will be used to design a pilot system for water recirculation and oxygenation.

R-3 started with a post-hoc economic assessment by **WU/LEI** of the technologies for R-2, and will pursue with monitoring the tests on pilot scale in 2013.

R-4 starts during the pilot phase of R-1 and R-2. Videos will be made of building and testing, to prepare dissemination of the results by **FITES**.

Project partners and contributing parties (names contact persons)

WU/Aquaculture & Fisheries (AFI): Verreth Johan (director), Bosma Roel (manager), Verdegem Marc (aquaculture systems), Schrama Johan (fish nutrition);

WUR outside WU/AFI: vander Pijl Willem (LEI: value chain), Meuwissen Miranda (BEC: farm economy);

EU partners: Jo Dewulf (Ghent University, Belgium: Life Cycle Assessments);

Vietnamese partners: FITES (Nguyen Tu Cuong, Tran Van Vy), RIA-2 (Nguyen Van Hao); CTU (Nguyen Thanh Phuong).

Contributing companies: Vinh Hoan (Nguyen Ngo Vi Tam), Queens Products BV (Harry Hogendoorn), Marine Harvest (Depestele Geert), Provimi-Vietnam (Hang Dao Thi Thu), De Heus (Noteborn Rene).

More information on-line: <http://www.afi.wur.nl/UK/Research/SuPa/>



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