## Aquaculture – Over-Use of antibiotics encourages bacterial resistance and disease out-breaks

A recent report in the scientific journal "Environmental Microbiology"<sup>1</sup> reports that it is common practice in the fish industry, particularly in the developing countries, to use large amounts of antibiotics to prevent bacterial infections. The use of a wide variety of antibiotics in large amounts, including non-biodegradable antibiotics useful in human medicine, ensures that they remain in the aquatic environment, exerting their selective pressure for long periods of time.

The report in "Environmental Microbiology" once more clarifies that a long time exposure of the bacteria to antibiotics present in the water will encourage development of bacterial resistance towards antibiotics in the pathogenic bacteria of fish. In the worst case this resistance can be transferred to human and terrestrial animal pathogens and be detrimental to health of human, fish and animals.

Furthermore there will be a risk of having residual antibiotics left in the fish meat, so that people eating these products will inevitably consume unnecessary amounts of antibiotics which may change their normal microflora and make them more susceptible to bacterial infection or creating resistance bacteria.

There are several possibilities for avoiding over-use of antibiotics in fish farming - for further information please contact <u>Dumas</u>.

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