

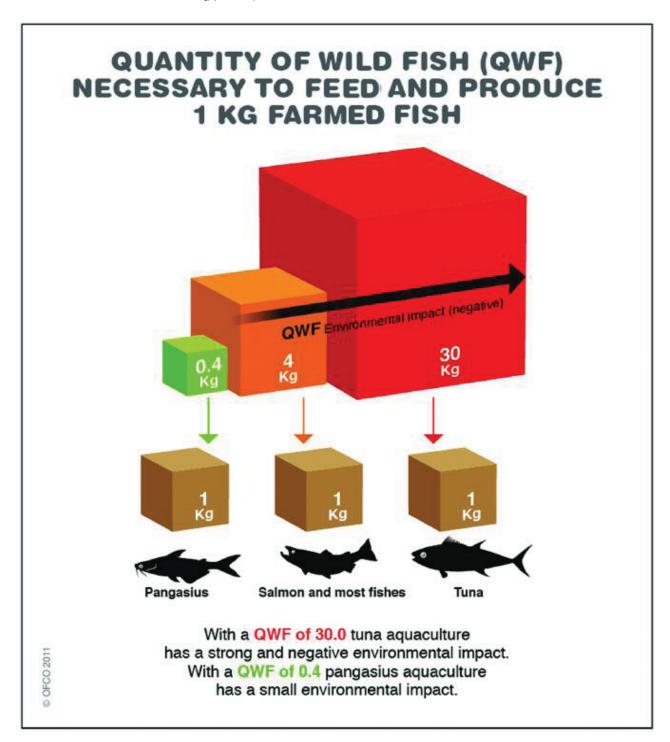


MAGAZINE OF THE VIETNAM ASSOCIATION OF SEAFOOD EXPORTERS & PRODUCERS

To preserve our ocean:

AQUACULTURE SHOULD BE TO FISHING AS FARMING IS TO HUNTING ON LAND

By JEAN-CHARLES DIENER Director and Founder of OFCO Sourcing (Vietnam) Ltd



Aquaculture- a solution to the world's increasing demand for animal protein

Fish provides a vital source of good quality and high protein food for hundreds of millions of people worldwide. The fishery industry sector contributes in an important way to world food security, in fact fish products continue to be the most-traded of food commodities, worth a record \$102 billion in with a total world production of fish and fish products rose from 140 million MT in 2007 to 145 million MT in 2009.

World per capita consumption of fish and fishery products has risen by 50% in the last decades from an average of 11.5 kg during the 1970s to over 17 kg today, supplying over three billion people with at least 15% of their average animal protein intake (FAO 2010).

True that fish protein is more and more needed but fishing has already reached its limit and despite a stronger effort invested on fishing the total capture reduced for the last 10 years. According to FAO, 70% of the world's commercially important marine fish stocks are fully fished, overexploited, or depleted. In a third of the world's major marine fishing regions, the catch has declined by 20% or more from peak years.

To keep up with the increase in demand for fish products and decline of fisheries, aquaculture is a major part of a solution. Aquaculture has become the fastest growing animal food-producing sector as approximately 60% of all consumed fish (and aquaculture



Jean-Charles Diener, Director and Founder of OFCO Sourcing (Vietnam) Ltd

product) are being farm raised today.

Aquaculture is also the best way to produce animal protein at low cost because fishes have better feed conversion rate (FCR) than land animal. The main reason can be attributed to Archimedes's principle as water counterbalances the gravity for fishes while land animal has to spend large part of their energy (and so of their food) to stand and 'fight against gravityé.

Sustainable aquaculture with **Pangasius**

As the world population increases fast the consumption of fish increases even much faster. The fish consumption developed countries is increasing because people understand the health benefits of eating fish and aquatic products. In developing countries on the other hand, the fish consumption increases even faster because people revenue is

improving and the first consequence of better revenue is to increase the proportion of animal protein in their diet. Often fishes are the cheapest and most accessible and that explain its important growth for the last 2 decades.

Aquaculture is not yet a mature and sustainable industry and while it is expected to fill the growing demand, conventional aquaculture methods have problems, including the necessity of using of wild caught fish for fishmeal to feed farmed species.

Other forms of animal-protein, such as beef, poultry and pork were domesticated over four thousand years ago while domestication has just begun in the seafood industry, in large scale, over the past few decades. In fact, what an ecological and economical abnormality it is when aquaculture can have a very strong negative environmental impact and can be so expensive. Many organizations say that aquaculture is good to preserve our ocean. This is agreeable but the selection of species farmed should also be reevaluated. Some scientists are also working to find the way to feed carnivores fish with mainly vegetal protein and for them it should become the 'revolution' in aquaculture in the coming years. better farm Shouldn't we omnivores and vegetarian fish than force carnivores fishes to eat vegetable?

Farming Tuna or salmon on sea can be compared to growing lions or wolves on land: which is costly for the environment and our wallet. Tuna aquaculture has a strong negative environmental impact because this fish is a super predator and need up to 30 Kg wild fishes to grow one Kilogram in captivity! These wild fishes come mainly from industrial fishing which is harmful for the environment and is very expensive. Salmon and most farming fishes are not better either, because they are also carnivorous and it consumes an average of 4Kg wild fishes to produce 1 Kg of most common farming fish. Currently about a third of wildcaught fish are converted into fish meal.

Several countries are now speaking about 'Carbon Tax' as an environmental tax; this idea should be followed in aquaculture as we speak about 'Quantity of Wild Fishes' or QWF index to protect our ocean. We should promote the farmed fishes with the lowest QWF to be respectful of the environment therefore we should focus on growing herbivorous and

omnivorous fishes.

Pangasius is the best candidate: Pangasius, an omnivorous fish, is a very efficient fish to culture (with QWF index of just 0.4) therefore making its environmental impact much less as compared to other farmed or cultured fishes in the world. Today, no other fish in the world is better than Pangasius to produce white boneless fillet in terms of QWF index.

Also, many people are unaware of the full range of potential contaminants in seafood. species that are high on the food chain, such as tuna or swordfish, accumulate greater concentrations of toxins and pollutants. This problem also applies aquaculture since the main source of protein for farmed fish is fishmeal produced from smaller, wild caught fish, which can contain mercury, PCBs or other contaminants. With omnivorous or herbivorous fishes, the problem with contamination is minimized and this is one more advantage of Pangasius.

Ofco believes in the potential of Pangasius and describe it as the best fish

For several aspects, fish is the best source of protein and the worldwide demand increase much faster than the world population but fishing has reached its limit. Aquaculture is needed to fill the growing demand but conventional aquaculture methods have also reach their limit. Aquaculture on a wide scale just begun last past few decades but is not yet sustainable. For a sustainable aquaculture, *Pangasius* is the best candidate and OFCO headed by its director,

Jean-Charles DIENER, believes in this species and is in a strong campaign to promote it as the best fish in the world.

All over the world Pangasius is consumed and this fish has been able to adapt to any cooking and to local culinary custom. Today, no other fish in the world is better for the environment than Pangasius. No other fish can actually safely supply the world growing demand for animal protein (land and aquaculture together) than Pangasius. These are the reason why no other fish in the world conquered the world in so such time.

With *Pangasius*, Viet Nam found the right species for today and tomorrow's Aquaculture. With their know-how, Viet Nam has been able to develop this industry in large scale and export this fish all over the world.

But, the quality of this fish can also destroy its reputation and kill its enormous potential if great effort in communication is not done quickly. *Pangasius* industry is excellent and have all what it needs to become the greatest fish industry in the world but all those quality being concentrated on one species and one country (Viet Nam is the only large scale *Pangasius* exporter) encourage jealousy. To protect their own interests, other seafood industries are working to discredit *Pangasius*.

The last remaining steps to ensure the suitability of *Pangasius* is not technical or environmental but commercial awareness and correct marketing.