



Panga a sustainable and safe substitute to endangered fish?

Introduction

Worldwide, fish provides essential nutrition for 3 billion people, 400 million of them relying on fish for at least half of their animal protein and minerals. More than 500 million people, particularly in the developing world, depend on fish-related economic activities to subsist.⁴ The role of fish is therefore critical to the developing and developed world alike, providing both nutritive and economic benefits to the population. However, dwindling fish stocks and the environmental impacts of climate change have endangered the sustainability of many fish species around the world. This case study reviews the current situation and provides information on a solution that may allow tackling the problem without creating major shifts in consumption patterns in both the developing world and in Europe: substituting endangered fish for non-endangered fish species with appropriate fertility and living conditions requirements to better sustain worldwide fish consumption. This case study takes the example of the Panga fish, explores the benefits and issues linked to its farming and consumption, and makes the case for its integration to the offering of food companies, both benefiting the company and more endangered fish stocks, such as Cod of Haddock.

Endangered fish

Human consumption and declining fish stocks

According to Animal planet, bluefin tuna is the top endangered fish species in the world. Its growing price, up to \$100,000 per fish, reflects the taste sushi gourmets have for the animal, bound to extinction if no internationally coordinated action is taken soon.¹ The WWF made it the sixth most endangered species in the world and encourages people to stop buying or selling bluefin tuna fish,¹ while the UN recently failed to ban its fishing.¹ However, bluefin tuna is only one of many endangered fish species, some of them we consume

regularly: other species of tuna, salmon, cod etc. The WWF reckons such species are endangered if fish stocks are not given a break from overfishing to replenish stocks and if the environmental effects of climate change continue to destroy their natural habitat.¹ A 2007 study commissioned by WWF-UK, the National Federation of Fishermen's Organisations and Marks & Spencer predicted that by 2017, shallow-swimming fish such as bass and mackerel stocks could decrease by 60% and bottom-living fish such as sole or monkfish by 35%.²

Fish substitution

In order to avoid further fish stock diminutions, a solution may be to farm alternative species of fish, as a substitute to fishing endangered fish, certain species of fish being naturally more suited to our consumption because of reproduction patterns or living conditions. The following reviews Panga, also know in the UK as Vietnamese River Cobbler or Basa, a catfish grown in the Mekong and is used as a cheaper alternative to traditionally consumed white fish, such as cod or haddock, and explores the impact of its consumption on fish stocks and on human health.

Quick fact: Cod

Some action was taken as early as 15 years ago to tackle cod stocks diminishing dangerously fast in certain regions of the globe. A moratorium on fishing Atlantic cod in eastern Canada was adopted, but still Atlantic cod stocks have dwindled, to the point that cod almost disappeared there. Today, other Atlantic cod stocks worldwide are vulnerable and at risk from overfishing.³

Panga consumption and fish stocks

An introduction to Panga

In the past few years, Panga has become a widely-used substitute to white fish and particularly to Cod in supermarkets and restaurants in Europe. It costs less than €10 per kilo (retail price) and around €3 per kilo (wholesale price), twice as cheap as Cod. Farmed in Vietnam, it combines a great fertility rate with the ability to live in extremely densely populated waters. Furthermore, it can be grown anytime of the year, takes 6 months to grow, can mature and weight up to 1.5 kg in such period of time and grow in fish farms as fast as four times faster than in nature, fed a rich protein-based food. It is then cut and frozen in factories in Vietnam, providing local residents with jobs and average salaries (\$60/month).¹

Panga on your supermarket shelves

The consumption of the low-priced fish has thrived during the credit crunch, with a quickly increasing demand, driven by word-of-mouth; it outsold more common varieties of fish such as plaice and sea bass,¹ both red listed by the International Union for Conservation of Nature as in danger.¹ Tesco currently (08.04.2010) offers smoked Vietnamese River Cobbler at £6.99 a kilo¹ and fresh Vietnamese River Cobbler at £6.49 a kg,¹ while it is offered at Sainsbury under the name "Basa" as frozen foods (Youngs, Rahbek, Birds Eye)¹ Experts at the industry authority Seafish concluded consumers chose Panga and Pollock as cheaper alternatives to Cod and Haddock in times of economic crisis,¹ while production of Panga is expected to reach 1 million metric tons in 2010.¹ In addition to supermarkets, some fish and chips shops are reported to use Panga illegally, as a cheaper alternative to Cod in their

"Cod sales decreased by 10%, Panga consumption went up 47.0% along with Pollock (+40.5%)."

Sustainability and health

Sustainability

In terms of carbon footprint, Panga has quite a negative impact on the planet: it comes all the way from Vietnam, is fed a mixture of food coming from South America and injected hormones from China.¹ Consequently, its use has been criticised in the UK for its high food miles,¹ while the current emphasis is rather on reducing food miles and buying local. In addition to a poor carbon footprint, its long-term sustainability credentials are linked to the Mekong River, where it is produced. Recently, the Mekong has experienced very low water levels, following the effect of drought and dams,¹ which begs the question of the sustainability of its production in fish farms using Mekong water in the future. Hence, in spite of providing endangered species of fish with a break in consumer demand, its sustainability is questioned both by its carbon footprint and by the waters it is bred in.

Contamination

Criticism also arises as to levels of contamination of the fish, as the Mekong is notoriously polluted, and various sources comment on the fact they are exposed to toxic and potentially hazardous substances from industry.^{1,1}

However, in 2009, BBC Watchdog tested Panga bought at Asda for such substances, along with other substances internet reports claimed Panga could be contaminated with and found nothing.¹ Likewise, an Italian research by the National Research Institute for Food and Nutrition found the fish had low levels of contaminants such as mercury and was overall of good quality as far as safety aspects were concerned.¹

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Food scares

Panga's diet and breeding conditions have raised concern. As part of its food, it is fed dead fish remnants and bones, along with manioc and remnants of soy and grain by-products,¹⁰ which triggered certain fear in respect to the past mad cow crisis originating from such feeding,¹¹ although the species has an omnivorous diet in the wild and eats small (live) fish and crustaceans in addition to vegetal debris in nature.¹²



Conclusion

Although Panga fails to be sustainable in terms of carbon footprint, because of the long-distance transport associated with its production and consumption, and although it spurred seemingly inexact health concerns, it does provide a much needed relief to Cod populations, for instance, in terms of consumer demand. Driven by lower prices of the substitute fish Panga, such decrease in consumer demand and sales of cod and other species in store may help preserve the stock of fish species it replaces on our plates. Panga represents a growing market for a number of retailers and food outlets, including fish and chips, that choose to offer it. Although switching Cod or Haddock for Panga or Smoked Panga might not be systematically possible from a culinary perspective, companies such as Birds Eye found a way to integrate it to their existing offering and provide consumers with a choice they might not realise helps improving fish stocks of other fish, after contributing to the bottom line of food companies in the credit crunch

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- 1 http://www.panda.org/what_we_do/endangered_species/
 - 2 <http://www.telegraph.co.uk/earth/earthnews/3295446/Popular-fish-stocks-may-only-last-10-years.html>
 - 3 http://www.panda.org/what_we_do/endangered_species/cod/
 - 4 <http://www.fao.org/docrep/005/AC911E/ac911e05.htm>
 - 5 « Panga : enquête sur le poisson à prix cassé » (Capital, M6, 29/10/06 - <http://www.m6.fr/emission-capital/>)
 - 6 <http://www.belfasttelegraph.co.uk/business/business-news/vietnamese-river-cobbler-helps-consumers-beat-credit-crunch-14146100.html>
 - 7 <http://www.iucn.org/>
 - 8 <http://www.tesco.com/fish/prod.asp?prod=61691539>
 - 9 <http://www.tesco.com/fish/prod.asp?prod=060788358>
 - 10 http://www.associatedcontent.com/article/2644611/buyer_beware_a_fish_called_panga_pg2.html?cat=22
 - 11 <http://www.whytaveltofrance.com/2008/01/30/why-you-shouldnt-eat-pangas-fish-in-france-or-anywhere-else-for-that-matter/>
 - 12 <http://www.fishbase.org/Summary/SpeciesSummary.php?id=14154>