



(<https://debug.globalseafood.org>).



Uncategorized

Change the paradigm and break aquaculture stereotypes

2 March 2014

By Roy D. Palmer, FAICD

Vive la révolution!



In Australia and other regions with plentiful water resources, aquaculture can play a key role in supplying both healthy seafood and economic benefits.

One of the challenges fisheries and aquaculture face is the “pigeonholing” practiced by many nations. Being pigeonholed essentially means being “filed” based on stereotypes. Some things that are pigeonholed are filed for life and need to be challenged.

As discussed at Human Evolution Past, Present and Future – Anthropological, Medical and Nutritional Considerations, a wonderful conference held in London in May 2013, there is compelling evidence that humans evolved from the water, that we traveled along the coasts feeding on shellfish, and that our ancestors relied heavily on the fruits of the ocean.

Yet despite such evidence, the mindset of governments and powers that be seems to be heavily based on utilization of land for food, no matter how environmentally unsustainable that is. If we were trying to establish the beef industry (or many other similar industries) today, would it be allowed?

Paradigm shift needed

The oceans that bring life to so many things in our world and cover 72 percent of the earth’s surface are the secret to the creation of food and food security as our planet’s population continues to grow. The reliance we have had on land for so long must be reconsidered. Do you ever wonder how different the world would be if our planet was called Ocean instead of Earth?

It actually makes more sense for our planet to be called Ocean, and maybe we would give the oceans more priority if that were the case. The best we can currently do is come up with a nickname for Earth: The Blue Planet.

We really need to have a paradigm shift and start pushing buttons for getting the blue revolution on its way. Many large, influential organizations are starting to say this, so maybe the revolution is starting, but it is starting from a difficult position, and there is a long, long way to go.



Aquaculture is a responsible industry with highly regulated operations. If we were trying to establish the beef industry today, would it be allowed?

Australia as example

Take Australia as an example. Australia is a young country that has a massive amount of land and a small amount of people. The majority of those people live around the coasts, with two major population centers in Sydney and Melbourne, where approximately 9 million of the total 24 million people in Australia live.

Most are not aware that the water Australia controls is actually 2.5 times the size of its land – an incredible resource. Yet with all that water, Australia is not food secure in seafood and relies heavily on imported product for around 72 percent of its seafood. Surely this is a massive management waste of natural resources.

Australia is often described as having been created off its sheep's backs. Red meat is still the main protein consumed, although that is clearly dropping year on year. The red meat industry relies very heavily on export business for growth.

Why hasn't Australia, with all those water resources, grown strongly in aquaculture? Actually, history shows that the indigenous Guditj Mara people of Australia's Western Victoria were into aquaculture many thousands of years ago – see www.australiaforeveryone.com.au/aborsites_budjbim.htm for more information.

Fisheries have been ensconced in Conservation and Environment Department thinking and planning. No problems with that. Fisheries are the realm of essentially the last hunter/gatherer activities in which the world is really engaged.

What other “wild” protein are you putting on your plate? Think long and hard about that question, and there may not be any answer. As you think, you may consider how the fishing industry has constantly shortchanged itself through a lack of coordinated marketing for such a unique food – another story for another day!

While aquaculture has an interesting history, it is actually a new activity that entails nurturing and growing seafood and other products in water. The differences between fishing and aquaculture as primary industries are immense, yet they connect through the processing and marketing chains that take both their products to consumers.

Concerning regulation, aquaculture has more connection to agriculture than it does to fishing, yet inexplicably, most governments have fisheries and aquaculture acts. Is this helping or hindering the growth of aquaculture? Are agriculture activities locked into conservation and environment? Or are they seen as important and relevant for food security, growth, employment in rural and regional areas, and earning export dollars?

The South Australian government is one of the few in Australia that has a separate Aquaculture Act, and as a result, you can see and feel the difference. Fisheries and aquaculture are still in the same overall department, but there is a different mindset regarding regulations that takes into consideration the nature of aquaculture.

Case for fisheries

A strong case has been put forward on wild-caught fish. In a recent article in Fish magazine by Catherine Norwood entitled “Fish Seek Equal Footing in Food Debates,” she wrote of Tasmanian researcher Bridget Green, who is trying to help establish new biodiversity measures that will allow the production methods and effects of fishing to be compared more equitably with other food production systems. Unfortunately, Norwood did not address aquaculture, which has a greater case for being included.

“Fisheries seem to get a bad rap when it comes to sustainable food production, but different standards are used to assess the sustainability of fisheries compared to land-based agriculture,” Norwood said. “There are different moral perspectives applied to what is acceptable on land and in the oceans.”

Her article covered a number of research projects around the world, including the work of doctorate student Anna Farmery, who is, among other issues, comparing the effects of fish production with those of other forms of protein. “We already know that fish and seafood are low water users,” Farmery said. “My research showed water use of 22 L/kg of live rock lobster harvested, across the whole supply chain. As a measure of comparison, average global figures put water use for beef production at 15,500 L/kg.”

These discharge points are required to be measured upstream and downstream to meet legislative environmental requirements and limits. At times farms cannot employ water exchange because of the turbidity of the estuary, and all farms undertake as part of their license conditions an annual survey ensuring that mangroves are healthy and not disturbed. The mangroves grow prolifically at and in the vicinity of prawn farms, which indicates prawn farmers have little impact on the receiving environment.

The Australian Prawn Farmers Association said in a government submission: “Clean, healthy water is a critical element of growing prawns, yet the industry is not always in a position to have access to optimal water conditions because of the agriculture or mining sectors that surround existing farms. Even council mosquito spraying can have an adverse effect on prawn production if sprayed upstream from a farm, as insecticides kill prawns. Everything that goes into catchments where prawn farms take their water can affect the whole growout phase, as prawns are very sensitive to all elements they are exposed to. Prawn farming sediment usage and water quality have been the subjects of over 45 peer-reviewed research papers.”

Perspectives

It is amazing to think we have so many bright minds engaged in issues of food, but clearly many have not awakened to the prospects of the unique opportunities that aquaculture, and to a lesser degree, fisheries offer the world. Management expert and economist Peter Drucker obviously could see the issues with which others are struggling when he said, “Aquaculture, not the Internet, represents the most promising investment opportunity of the 21st century.” There is still hope, but in countries like Australia, we need the revolution to get out of the pigeonhole.

(Editor’s Note: This article was originally published in the March/April 2014 print edition of the Global Aquaculture Advocate.)

Author



ROY D. PALMER, FAICD

GILLS
2312/80 Clarendon Street
Southbank VIC 3006 Australia
roydpalmer@gmail.com

www.gillseafood.com (<mailto:www.gillseafood.com>)

Copyright © 2023 Global Seafood Alliance

All rights reserved.