

PERSPECTIVES IN AQUACULTURE (1)

Predictions of the near term continued global growth in shrimp farming are not realistic.

Recently a prominent NGO, focused on certification, predicted that there will be a large increase in the amount of farmed shrimp produced annually for the next few years. I think that they are not taking into account global market dynamics, the widespread lack of proper biosecurity and the spread of "new" diseases globally. As the global farming paradigm shifts from low density production in dirt ponds to high density production in lined ponds we will see a significant increase in productivity per unit of area being farmed. These systems will evolve into highly biosecure, highly controlled environments that allow for extremely high levels of productivity by those with the right approach.

Unfortunately there are practical limits to what the markets can absorb. This is currently reflected in prices to the farmer close to or below the costs of production in many cases. Supply exceeds demand in the middle of 2019, the freezers are full and the weak price is encouraging some farmers to take a cycle off. Prices will stay low until the excess supply is absorbed and/or until consumption increases dramatically.

It is not likely that the average consumer of farmed shrimp will increase their consumption unless there is a reason to do so that is compelling. The cost to them should reflect the cost to the farmer and not have it stepped on by many others. The factors that impact the pricing of the consumer ready product are controlled by those in between the farmers and the consumer. The majority of shrimp that is currently farmed comes from a small number of countries. In South America, Ecuador with a very low density production model, is the leader. In SE Asia, where corporate farms are not the norm and small producers are the primary producers, India, Indonesia and Vietnam are the large producers. Most farmers have little to no control over their costs of production.

The wide spread availability of Specific Pathogen Free (SPF) *Litopenaeus vannamei* broodstock has had a consistent positive impact on the success of farmers, although this is not without problems. Disease outbreaks are a ubiquitous element of shrimp farming in most places and there is no reason to believe that this will change. Too many people mix wild or farmed non-SPF broodstock with SPF animals, breaking any biosecurity firewalls that the use of SPF animals ensures. No one spawns animals individually and no one screens individual broodstock for all of the possible pathogens. Post larval shrimp are the major source of the introduction of pathogens into production systems. Farmers all too often are taken advantage by local PL producers and have no option to go elsewhere.

AqualnTech Inc.
16825 48th Ave W. Suite 322
Lynnwood, WA 98037 USA

Tel: 425-787-5218 C: 425-239-7682
Email: sgnewm@aquain-tech.com
URL: www.aqua-in-tech.com and/or
www.bioremediationaquaculture.com

PERSPECTIVES IN AQUACULTURE (1)

How accurate are future predictions of the growth in shrimp farming?

There is a great deal of variability as to the quality of the raw materials and feed formulations that can negatively impact feed performance. Excessively high protein levels are legally mandated in some countries and the widespread lack of use of automatic feeders ensures that shrimp are often underfed and that feed is wasted with subsequent environmental degradation.

Feeds that depend on high quality fish meals continue to increase in price. Viable protein alternatives are slowly being developed although many will cost more than fish meal does. Not only that, in many countries, the only credit available for feed is through third party companies that buy and resell the feed at high margins to farmers for after crop harvest payment. Consistent production faces many challenges.

Despite the optimism regarding future supply, the reality is that the market is limited in scope. Demand is what drives the need to increase supply. China has not been able to produce enough farmed shrimp to satisfy local demand for some time (although they do export some shrimp) and until they clean up their environmental issues and move away from the typical small stakeholder farms to consolidated and vertically integrated corporate farms this will not change. Moreover, the markets in China, the USA and the EU (the three primary markets for farmed shrimp) are not large enough to accept the large volumes of farmed shrimp that are being predicted.

It will take a drop in price, which is simply not an option for most producing nations, as a drop in price can only be a result of a drop in the costs of production and a generous increase in demand, for these predictions to be realized. Both the EU and the US could increase consumption if the will was there. Based on historical rates of consumption however, there is no reason to believe that this can or will rapidly change.

I remain convinced that any future growth in the availability of farmed shrimp will be problematic. At this time shrimp prices are well below the levels seen in prior years. This is widely held to be a result of supply far exceeding the demand. Until this changes, the predictions of continued rapid growth in production are overly optimistic.

AquaInTech Inc.
16825 48th Ave W. Suite 322
Lynnwood, WA 98037 USA

Tel: 425-787-5218 C: 425-239-7682
Email: sgnewm@aquain-tech.com
URL: www.aquain-tech.com and/or
www.bioremediationaquaculture.com

062119