Dear Madam/Sir

RE: Import Risk Analysis (IRA) Review - Australian Barramundi Farmers Association (ABFA)

The Australian Barramundi Farmers Association (ABFA) notes that the focus of the IRA is to review the processes, methodologies and timing of consultation associated with management of biosecurity risk for seafood imports to Australia. From an ABFA perspective, this review is timely as we feel the current regulatory framework is inadequate.

In March 2014, ABFA prioritised 'effective management of biosecurity' in their strategic plan. ABFA's concerns are based on:

- The value of barramundi (\textit{Lates calcarifer}) to Australia, both as a farmed species, as a wild species utilized for recreational fishing, commercial fishing and as a traditional food fish for northern indigenous communities
- Reports of high fish mortalities on Asian farms growing \textit{Lates c}, attributed to multiple, rapidly spreading, new diseases
- A perception that current biosecurity measures for imported \textit{Lates c} are inadequate
- The threat that \textit{Lates c} imports pose to wild and farmed barramundi stocks in Australia, both now and in the future.

Issues/background

The import risk assessment process for finfish is based on a 1999 review. The current standard set for \textit{Lates c} is:

i. Finfish- consumer ready form -for human consumption, from all countries (fillets).

ii. Finfish- eviscerated, head off -for human consumption, from all countries (headed, gutted).

iii. Farmed finfish - \textit{Lates c}, for human consumption, from Taiwan and Philippines only.

(i.e. \textit{Lates c} fillets and headed gutted fish can be imported from anywhere without an import license. Whole \textit{Lates c} can be imported from the Philippines and Taiwan, but require an import license. The exporting countries have undertaken to follow risk mitigation protocols before exporting. AQIS undertake procedural compliance checks on imports).

Following is the ABFA’s understanding and views on the current process.

- The standard is managed and updated by professional staff at Biosecurity Australia and administered on imports by AQIS
- Import restrictions can only be applied once the existence of a causative disease organism has been proven, irrespective of how much evidence exists that the syndrome can be attributed to a disease
- No disease testing is done on imported \textit{Lates c}
The consequence for breach of import conditions is potential changes to the exporting country’s procedural requirements.

Biosecurity Australia Officers monitor scientific literature to determine whether any changes in standard are required in response to emerging disease risks - they consider the current standard is adequate, but are open to industry information on the need to change the standard in response to perceived new biosecurity risks.

The current risk situation in the case of *Lates c*, is an issue as the IRA process has not kept up with the rapid escalation of risks.

Diseases overseas are proliferating in areas where *Lates c* are being farmed and are then imported to Australia (see attached report).

The standard is not being kept up to date and informal discussions by some ABFA members with expert personnel in Biosecurity Australia have indicated that they are not up to date with emerging diseases in the region, i.e.;
- they were unaware of some new syndromes/diseases of concern
- the practice of deferring action until there is scientific publication identifying a causative organism may be ‘too little, too late’

Biosecurity are assuming that the eviscerating and deheading fish effectively eliminates disease transfer risk.

Border protection is inadequate
- anecdotal evidence is that AQIS is not effectively policing the standard and ABFA members have indicated that several reliable witnesses were aware of whole fish (guts and all) imports from Indonesia and Malaysia
- when reported, AQIS responses were inadequate to address the risk (either not attending or attending fish markets during public service hours, by which time all the action was over).

It is acknowledged that once a disease enters the environment the chances of eradicating it are negligible.

The national emphasis (AQUAVET) is in levying the Australian fishing industry to compensate affected producers for mandatory destruction of their stock once a disease outbreak has become established, (despite recognition that that the most likely source of an exotic disease outbreak will be via introduced water or organic material carrying an organism originating from overseas).

The primary failing is a structural lack of accountability within the system
- each agency involved is focused on the processes under their control
- none has ownership of the outcome, i.e. preventing establishment of disease in Australia
- without accountability, it is difficult to see the situation improving

The ABFA take the risk seriously and are undertaking a series of actions and have provided a series of recommendations for your consideration;

Subject to the review findings the ABFA are considering commissioning a consultant to undertake a biosecurity risk assessment on barramundi imports.

A “quick response” report, was prepared on short notice, outlining some disease problems (attached). This report is not comprehensive and does not include the many strains of *Streptococcus iniae* found in SE Asia, nor the skin lesion disease described at the ABFA/APFA Annual Conference in August 2014 by Dr Nguyen Huu Dung from the Center for Aquatic Animal Health and Breeding Studies, Nha Trang University – Vietnam.
Recommendations

1. Coordination and Accountability

1.1. Formal mechanisms to coordinate the activities of key agencies to ensure risk management is comprehensive and balanced, e.g.;

1.1.1. instigate a peak advisory oversight mechanisms to;
   1.1.1.1. incorporate non-government stakeholders with Australian barramundi interests
   1.1.1.2. advise government on weighing and prioritizing of programs
   1.1.1.3. keep the focus on outcomes (vs “nimby” and poorly integrated interagency responsibilities).

1.2. Program review

1.2.1. risk analyses and resulting rules for importation be reviewed as a matter of urgency
1.2.2. rigorous standards be developed and kept up to date
1.2.3. external compliance/performance audits be introduced for AQIS activities, in order to ensure that import regulations are effectively policed, with breaches detected and acted upon.

2. Use pays resourcing

2.1. Current situation

2.1.1. imports create the major biosecurity risk
2.1.2. Australian public and industry bear the cost of managing biosecurity and will suffer the consequences if biosecurity is breached
2.1.3. importers will suffer no economic impact from introduction of fish diseases to Australia.

2.2. A customs clearance charge be applied to cover the costs of administration and recommendations in section 1. above (Coordination and Accountability).

2.2.1. it would be set too low to act as a trade barrier (e.g. $0.05/kg on imported barramundi would potentially raise $1,000,000/y). This is about 0.25% of the differential in retail price between domestic and imported barramundi fillet and as such it is not going to affect purchasing decisions.
2.2.2. this charge could be weighted according to assessed risk, and resultant resources required to ensure biosecurity. (i.e. no risk, no charge)
2.2.3. it could be reviewed and adjusted over time in accordance with evolving needs.

3. This mechanism:

3.1. is submitted as a model to improve Australia’s biosecurity which, after a long history of highly effective management, appears to becoming much less effective
3.2. will potentially enable Australia to resource biosecurity activity at the level needed
3.3. i will factors in the 'real' cost of achieving biosecurity into the pricing of imported products in a manner that balances that cost with the biosecurity risk to Australia
3.4. the ABFA propose that it be trialed for barramundi imports as model for wider application.
The focus of the ABFA submission is to have coordination and accountability in the process and to ensure those that are the most likely disease vectors pay for the cost of properly managing their biosecurity risk.

Thank you for the opportunity to have input to the IRA process.

Yours sincerely

on behalf of the ABFA

Chris Calogeras
Executive Officer
There are many devastating diseases that occur in aquaculture and wild populations of Barramundi (Lates calcarifer) throughout South East Asia. This is particularly concerning for the Australian industry because;

i. they currently do not occur in this region
ii. outbreaks can cause severe mortalities (up to 100%)
iii. some of the diseases are viable from fresh and even frozen imports
iv. there are possible vectors for these diseases to make their way directly into our wild and cultured populations with no control on product after the importation stage.

Significant quantities of Barramundi are being imported into Australia from South East Asia. It is estimated to be in the order 75% of our consumption or 15,000 tonnes and rapidly increasing. This includes, but is not limited to, frozen fillets from Taiwan and Malaysia. Frozen gill gutted and scaled plate fish from Taiwan and even whole fresh fish from Indonesia (Heidenreich and Noller 2012, pers communications with wholesale distributors). The latter is a rapidly growing industry as farms in our neighbouring countries are specifically stocking product to target the high valued fresh Australian Market.

The fresh or “fresh frozen” importation of whole fish (or Gill, gutted and scaled) from Indonesia is a serious concern as there is no kill step on the importation process. Many bacterial and viral diseases can survive freezing (particularly short term) and still be viable (pers comm and other diagnostic laboratories).

Some specific viral and bacterial diseases worth discussing are;

“Scale Drop Syndrome” (SDS).

This was first reported in Malaysia in 1992 and caused severe mortality in juveniles and adult fish with accumulative mortality up to 50% (GIBSON-KUEH 2012) Similar outbreaks have since occurred in Penang and Singapore with reports in Penang stating that the resultant effect on industry was the complete withdrawal of all sea cage Barramundi farming operations. The exact Aetiology and causative of Scale drop syndrome is unknown but it is thought to be viral (Gibson-Kueh et al 2012). The fact the cause is unidentified and no treatment available is particularly concerning

“Tenacibaculosis” (Tenacibaculum maritimum and others).

This is a severe bacterial disease that exhibits with similar clinical signs to SDS. Recent reports of severe mortality in juvenile cages in Indonesia and Singapore indicating this disease is becoming more severe and 5 new isolates reported in 2009 from Indonesia by Intervet (95 isolates in total from SE Asia – Wendover 2011). Tenacibaculosis is a small motiel bacteria, difficult to treat and does not respond well to antibiotics due to the rapid loss of appetite and onset of mortality. Mortality can be severe (Ruben Avendaño-Herrera et al 2006)

“Iridovirus”

Iridovirus is one of the most severe diseases of tropical marine species such as barramundi and grouper (Epinephelus spp). In barramundi the disease mainly occurs in fish of 10 to 50g and causes acute peaks of
mortality of up to 80 - 90% (Wendover 2011). Similar mortality has occurred in farms in Java Komar et al 2005). The causative agent is a icosahedral virus and there are no known treatments.

“Pot Belly Syndrome” (PBS) or Big Belly Syndrome.

Big Belly Disease is an intracellular, bi-polar large coco bacillus bacterium present in several South East Asian countries including Indonesia, Singapore and Malaysia (Wendover 2011) This disease can also cause severe mortality (>90% reported) in juvenile barramundi.

The above four diseases pose a significant threat with high risk of chance of outbreak as well as extremely devastating potential effects. They score a 4*5 on the risk matrix based on the following information.

1) They are prevalent in the countries we import product from.
2) They do not currently occur in Australia.
3) They can be reproduced from frozen and fresh fish products in whole, gill gutted and scaled product as well as frozen fillets.
4) They have spread throughout the South East Asian region.
5) Individually (rather less jointly) they have the potential to wipe out our whole industry with no known treatments.
6) There are potential vectors for transmission to the wild population such as (but not limited to) the use of frames from restaurant scraps in crab pots or bait. There is no control post the import process and there is a lot of anecdotal evidence of small restaurant owners using waste products for berley and bait. (pers discussion with local restaurant and wholesale distributors).

Without a serious review of our import situation it is only a matter of time before one or more of these diseases could potentially wipe out our northern finfish culture industry.

References


(Pers comm) Future Fisheries Veterinary Service Pty Ltd
