



Creating Sustainable Aquaculture Feeds

Sustainable Fisheries Partnership (SFP) shares the view of the conservation community and many in the seafood industry that the marine ingredients of aquaculture feeds need to be sourced from fisheries that are managed sustainably. However, creating guidance for how such fisheries can be identified in practice is not necessarily straightforward and involves a number of considerations. Consequently, SFP has laid out in a brief note below a proposal for how this issue can be moved forward in practice, rather than theory, given the urgent need to protect and maintain marine ecosystems.

Identifying Sustainable Marine Ingredients for an Aquaculture Feed Standard

Long Term Aim

In the long term all fisheries should be managed according to sound, eco-system based principles which ensures sustainably managed fishing alongside a high degree of protection for the marine ecosystems that support those fisheries.

Medium Term Aim

The medium term target for any standard, which seeks to exclusively source feed ingredients from sustainably managed fisheries, should be an independent, third party, FAO and ISEAL compliant eco-label scheme such as the Marine Stewardship Council. This does not preclude other additional considerations in the future. For instance, expanding aspects of eco-system based fisheries management – but for practical reasons it is necessary to aim for an available standard which brings a relatively high level of responsible management to fisheries.

Ideally, it would be possible to point to a number of existing certified fisheries right now and expect participants in an aquaculture accreditation scheme to ensure that their feeds are only derived from those fisheries and no other. Unfortunately this is not possible because there are insufficient certified fisheries to provide the amount of feed required.

Consequently, it is necessary to set the target (of exclusively sourcing feed ingredients from sustainably managed fisheries which are certified by an independent, third party, FAO and ISEAL compliant eco-label scheme) in the future. SFP suggests that this period should not exceed five years, starting from the beginning of 2010.

Interim Period

In the interim period between 2010 and the end of 2014 it is necessary to find some workable set of guidelines for choosing feed ingredients that avoids sourcing from fisheries that available data indicates would fail MSC minimum requirements. Such guidelines should be based on information that is:

- Currently available (ie not based on information that can only be obtained through future research)
- As up-to-date as possible
- Useful in allowing stakeholders in the aquaculture supply chain to make practical



decisions about which fisheries to source feed from and which to avoid. Stakeholders need to discriminate between the 'worst' and the 'better' so guidelines that 'pass' or 'fail' all fisheries are of no use.

The guidelines should be clear that these are interim measures that in no way represent a longer term ambition and that do not attempt to define 'sustainability' or represent any kind of ecological perfection. Rather, the guidelines should specifically aim to exclude the worst managed fisheries on the basis of data that is currently to hand with the explicit understanding that this is just a temporary arrangement.

Key factors that can be used in deciding whether to exclude a fishery should include:

- Is the management strategy precautionary?
- Do managers follow scientific advice?
- Do fishers comply with the managers' decisions?
- The status of the spawning stock biomass
- The mortality rate of the current fishery
- Known unacceptable impacts – for instance through by-catch – on PET species

There is also value in adopting (at least in part) a system that mirrors that of the Marine Stewardship Council since this will allow a smooth transition from interim to medium-term arrangements in 2015.

In terms of providing data for these criteria there are clearly a range of sources including FAO and IUCN. All reputable publicly available data sources should be accessed in making judgments although there may be issues about currency and only the most recent information should be considered valid.

FishSource

SFP strongly recommends the use of the FishSource (www.fishsource.org) database as a source of information when considering where to source marine feed ingredients. The database is based on the most recent fishery assessments by governments, regulatory agencies and academics and can provide both scores for many of the criteria under consideration along with narrative, which covers other aspects of the fishery such as wider eco-system impacts.

FishSource is not an eco-label, and does not involve the detailed on-site evaluations and audits of the MSC program, nor is it ISEAL compliant. The database is not peer-reviewed but does have a web-based mechanism for other contributors to make public comments.

FishSource is not a standard in itself but it can be used as a management tool and guide. For instance, FishSource provides an indication of how the MSC would **likely** score a fishery since FishSource scores of 6.0 and 8.0 are intended to mirror MSC scores of 60 and 80 respectively. Note, in the case of small pelagics, MSC has noted that in fisheries where biomass reference points are set without explicit reference to ecosystem concerns, then biomass must be above B_{msy}, as a minimum passing requirement (i.e., score of 60). In such cases, a FishSource score of 8 would be equivalent to an MSC score of 60.



In terms of coverage, almost all of the main pelagic fisheries that are sources for fishmeal and fish oil for salmon are listed on FishSource. However, there is a real lack of data concerning fisheries in SE Asia and some other parts of the world where fisheries are often poorly characterized or regulated, or where stock assessment information is not released publicly.

SFP is already working to fill gaps in coverage but where these gaps still exist an enquirer should clearly identify the fishery and provide SFP with stock assessments and other publicly available information to allow a FishSource profile to be prepared. SFP believes that suppliers should avoid sourcing from fisheries where no data is available.

In those instances where there is some data but the profile is incomplete it would be advisable for a supplier to take the following actions:

- No stock assessment (or equivalent information): Avoid sourcing. Engage suppliers to encourage the fishery to undertake an adequate stock assessment, and/or encourage the fishery to investigate seeking MSC certification under the methods developed for "data deficient" fisheries.
- Stock assessment exists, but is not made public: Avoid sourcing. Engage suppliers to encourage the fishery to make the stock assessment public.
- Target and/or limit reference points have not been defined: Read the explanatory material on FishSource to assess whether the fishery is thought to be overfished or not. If the fishery is thought to be overfished, then avoid sourcing. Engage suppliers to encourage the fishery to set appropriate reference points.
- Quotas have not been set: Read the explanatory material on FishSource to assess whether the absence of quotas is permitting overfishing. If it is, and the fishery is at risk of becoming overfished, then avoid sourcing. Engage suppliers to encourage the fishery to set quotas. Some small pelagic fisheries are limited by measures other than quotas, such as effort controls. As with quotas, to be effective these must be set according to scientific advice, and be complied with by fishers

SFP recognizes that there may be concerns among some stakeholders that incorporating FishSource as a component into a feed standard might be seen as creating some form of institutional role for SFP itself. In response to these concerns SFP has emphasized the importance of using the FishSource **methodology** as the basis for a standard, not the current website/database or owner, and the relative ease with which the methodology can be applied without resort to SFP itself.

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