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Weaknesses in the ethical framework of aquaculture related standards

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ABSTRACT

This paper presents some results from a critical review of how well aquaculture standards fulfil their intentions to promote sustainable aquaculture. The focus was on revealing possible weaknesses in the ethical frameworks of the investigated documents, particularly with regard to less powerful stakeholders in aquaculture production and trade. The review revealed a bias across the standards in the sense that they devote most attention to an instrumental approach to environmental health, at the expense of social sustainability considerations. This indicated an asymmetry in the sense of more concern for the interests of the relatively affluent European seafood consumers than the interests of the poorer Asian aquaculture producers and their livelihood conditions. Two moves needed in the aquaculture standard industry are advised. One is to practically enhance the involvement and power of the weaker groups. The other is to secure pragmatically and politically feasible implementations of ideal theoretical ambitions.

1. Introduction

With a global capture fisheries levelling off at about 80–90 million tonnes per year during the last three to four decades, aquaculture production has seen steady and rapid growth. From a production of around 1 million tonnes per year in the 1950s, the global aquaculture production attained an all-time high of 90.4 million tonnes in 2012. With aquaculture production almost as high as capture fisheries, it represents a substantial supply of protein to the world's population. As of today, fish provides 4.3 billion people with about 15% of their animal protein intake [1].

With regard to governance and regulatory mechanisms, the rapid growth of the aquaculture sector has to some degree outpaced the traditional approaches to state regulations and management of seafood resources. This has seen the development of, as Stead [2] phrases it, self-governance by the aquaculture industry. This is explained as self-regulating with networks of actors interacting across multiple private and public institutions, and steered largely by voluntary standards. While these standards have acted as important governance mechanisms aiming at sustainable development [3], there have in recent years been raised critical voices about to what degree they really promote sustainable aquaculture [4]. The development of these standards has been contested, as stated by Ponte et al. [5], particularly since the intended positive impact on producers, workers and the environment is by no means guaranteed. Furthermore, the standard initiatives have been criticised for implementing a Northern agenda on Southern producers and workers. An example demonstrating this is the case of Tilapia where resourceful players such as corporations, NGOs and scientists foreground certain framings of sustainability whereas glossing over interests of less prominent players such as small-scale producers and local communities [6,7].

In this context, with uncertainty regarding how well standards fulfil their intentions to promote sustainable aquaculture, a critical review of the current ethical framework of standards related to aquaculture trade globally was undertaken [8]. This was part of the Sustaining Ethical Aquaculture Trade (SEAT) project funded by EU's Seventh Framework Programme. With particular focus on ethical values, this project aimed at enhancing the sustainability of four major aquatic commodities farmed in Bangladesh, Vietnam, Thailand and China, and exported to Europe.

This paper presents some results from the critical review of the current ethical framework of some selected influential standards, guidelines, principles and codes of conduct related to aquaculture trade globally. It adopts a practical ethics lens, coloured by studies in agricultural and food ethics, and focussed on ethical considerations in global aquaculture development and trade. The review of the ethical frameworks was done by revealing to what degree the investigated documents were addressing a set of ethical issues. These issues were associated with some core ethical principles and some specified interest areas. It was also investigated to what extent the documents were handling and balancing some specific stakeholder interests. The focus was on revealing possible weaknesses in the ethical frameworks of the investigated documents, particularly with regard to less prominent players in aquaculture production and trade. These possible weak-

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nesses were identified by reviewing to what extent substantial parts of the ethical issues investigated were lacking in the documents [8].

2. Method

Electronic word counting, supplemented with manual reading of the documents, were used as methods for exploring to what extent the different (i) ethical principles, (ii) interest areas and (iii) balancing of stakeholder interests were covered or addressed in the investigated standards, guidelines, principles and codes of conduct related to aquaculture (here discussed simply as 'standards').

Today there is a veritable litany of aquaculture standards, implying that this research had to select an interesting sample. One basic requirement for the selection was that the standards were available as electronic documents. Other basic criteria were to have a variety of global and regional documents, and to have some documents that were species specific and some that focused on ecolabelling besides those with scopes that were more general. Though most of the documents should be related directly to aquaculture some also should have a more indirect relation, as for animal health and fish feed supply.

Based on these criteria, and the knowledge within the SEAT project consortium of influential standards related to aquaculture trade globally, 12 documents were selected for the investigation. These documents are listed in Appendix A.

Having selected the sample of standards, the next task was to select the specific ethical principles and elements that would be looked for in these standards. The core ethical principles and interest areas used for revealing possible weaknesses in the ethical frameworks of the investigated documents are described in the following.

2.1. Core ethical principles in bioethics

This study drew on core ethical principles that have become prominent in bioethics with the work of Ben Mepham [9]. These four principles are originally derived from medical ethics [10], and include: (i) *Welfare as eliminating negative utilities (orig. non-maleficence); (ii) Welfare as promoting positive utilities (orig. beneficence), (iii) Dignity and autonomy; and (iv) Justice as fairness*. These four principles will not be discussed in detail here, but they have increasingly been applied in agricultural and food ethics, and operationalized for aquaculture [11], as a means for sustainability evaluations.

During the process of the SEAT project it was found that additional Asian ethical principles emerged as important to aquaculture stakeholders, such as harmony, collaboration, reverence and respect. These were therefore added as a group of ethical principles termed *Other*.

2.2. Interest areas

A review of the literature on sustainable and ethical aquaculture was conducted to identify key themes that regularly arise as important concerns for aquaculture stakeholder. On the basis of this review, including discussions by Kaiser [11], Haugen [12] and Little *et al.* [13], the following five interest areas were selected as useful in the search, as a syntheses of possible key sustainability interests of stakeholders within or affected by the aquaculture industry: (i) *Net food supply; (ii) Socio-economic conditions; (iii) Environmental interests; (iv) Food quality, (v) Animal welfare and ecosystem integrity*.

An additional interest area labelled (vi) *General issues* was added as representative of the use of umbrella terms that do not refer to any one interest area, but pervade them all, such as 'ethics', 'morality', 'responsibility' and 'sustainability'. 'Sustainability' is a good example, in that it is sufficiently general to appeal relative to any of the interest areas. This distinguishes the *General issues* as a separate category to avoid any double counting of other interest areas.

2.3. Electronic word counting

A basic methodological move taken in the electronic word counting was to select a number of terms, which where single key words and combinations of key words, to be associated with the core ethical principles and the interest areas.[1)]

The electronic word counting of single key words was done by use of NVivo Software version 8 and 9. The electronic word counting of combinations of key words was done partly by the NVivo software and partly by the search functions in Microsoft Word and PDF files. From this it was found how many times each of the selected terms, constituted by key words or combination of key words, were identified in each of the investigated standards. In addition, for each document the electronic word counting gave the total numbers of words. Based on this the percentage occurrences of the counted terms were calculated relative to the total number of words in the document.

2.4. Manual reading

In recognition of the limits of electronic word counting relative to a contextual understanding of the coverage of core ethical principles and interest areas in the investigated documents, a manual reading was also undertaken. One part of the manual reading was, as for the electronic word counting, to find whether and to what extent the interest areas are covered in the selected standards. This was however not strictly associated with the terms used in the electronic word counting. It was more by a general interpretation of the issues and themes handled in the text.

The focus in the manual reading was on the five key sustainability interest areas *Net food supply, Socio-economic conditions, Environmental interests, Food quality, Animal welfare and ecosystem integrity*.

In addition, it was recorded whether the identified interest areas were associated with specific categories of stakeholders. The stakeholders were divided into four broad categories. The first category, which was termed *Interests of European consumers*, refers to the relatively affluent European consumers of aquaculture products from Asia. The second category, which was termed *Interests of Asian producers*, refers to the relatively poorer aquaculture producers and their communities in developing country contexts in Asia. It must, however, be recognised that this distinction between Asian and European human populations is largely artificial, since many Asian aquaculture producers are in fact very wealthy, and many consumers in Europe would not be well described as affluent. However, the claim is that it serves a certain didactic function to make clear the inequality between Asian developing countries, as aquaculture producers, and European developed countries, as aquaculture product consumers. A third category of stakeholders, termed *General human interest* refers to a more general concern for the well-being of humans globally, rather than a specific focus on Asian producers or European consumers. Finally, a forth category labelled *Nature interests* extends moral standing to the natural environment and animals, and examines to what degree the standards recognise their intrinsic value and moral standing.

In the manual reading it was only recorded if an interest area was addressed on a page and to which of the stakeholder groups this was linked. It was not recorded the number of times this might have been mentioned on the page. The percentage coverage of interest areas is calculated relative to all pages in a document.

Additionally, in the manual reading it was recorded to what extent the need for dialogue between and balancing of the interests of the four stakeholder groups was addressed and encouraged in the selected

[1)] See Appendix B for lists of terms associated with the core ethical principles and the interest areas.