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FULL REPORT

ASSESSMENT OF ON-PACK, WILD-CAPTURE SEAFOOD SUSTAINABILITY CERTIFICATION PROGRAMMES AND SEAFOOD ECOLABELS

An independent assessment
by Accenture Development
Partners (ADP)

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Accenture, through its international development unit, Accenture Development Partners (ADP) has supported WWF in conducting a thorough and structured Assessment of sustainable Wild-Capture Seafood Ecolabelling Schemes (further referred to as "Ecolabels"). Accenture is not technically or scientifically expert in this arena, nor are they stakeholders or an interested party in the field of marine conservation. The scope of Accenture's support was to apply Accenture's approach methodology and experience with other assessment exercises to develop and execute the review. Accenture was not engaged in identifying the Ecolabel inventory or in developing the assessment criteria. Since Accenture did not review or comment on the criteria, Accenture takes no responsibility for the resultant ranking of labels.

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Terms and definitions

Term	Definition
Accreditation	Procedure by which a competent authority gives formal recognition that a qualified body or person is competent to carry out specific tasks. (*FAO Guidelines: 8, based on ISO/IEC Guide 2: 1996, 12.11*)
Accreditation body	Body that conducts and administers an accreditation system and grants accreditation. (*FAO Guidelines: 9, based on ISO/IEC Guide 2: 1996, 17.2*)
Accreditation system	System that has its own rules of procedure and management for carrying out accreditation. (*FAO Guidelines: 10, based on ISO/IEC Guide 2: 1996, 17.1*)
Assessment criteria	WWF defined sustainable fishing certification criteria
Certification	Procedure by which a third party gives written or equivalent assurance that a product, process or service conforms to specified requirements. (*FAO Guidelines: 14, based on ISO Guide 2: 15.1.2*)
Certification body	Competent and recognised body that conducts certification. A certification body may oversee certification activities carried out on its behalf by other bodies. (*FAO Guidelines: 15, based on ISO Guide 2: 15.2*)
Chain of custody	The set of measures which is designed to guarantee that the product put on the market and bearing the ecolabel logo is really a product coming from the certified fishery concerned. (*FAO Guidelines: 16*)
Conformity assessment	Any activity concerned with determining directly or indirectly that relevant requirements are met. Note: typical examples of conformity assessment activities are sampling, testing and inspection; evaluation, verification and assurance of conformity (supplier's declaration, certification); registration, accreditation and approval as well as their combinations. (*FAO Guidelines: 18 & 19, based on ISO Guide 2: 12.2*)
Criterion (criteria)	Variable used in this project to specify performance requirements against which compliance can be assessed.
Ecolabel	Mark of approval or certification, usually a product label or scheme logo, that denotes the product meets a specified standard.
FAO Guidelines	Guidelines on Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries (FAO, 2005)
FAO	Food and Agricultural Organisation of United Nations
Interested party	Any person or group concerned with or directly affected by a standard. (ISEAL Code of Good Practice: 3.2)
Standard	Document approved by a recognised organisation or arrangement, that provides for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory under international trade rules. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method. (*FAO Guidelines: 22; based on TBT Agreement, Annex 1*) Standard, in these criteria, refers to a standard for certification. Including requirements, criteria and performance elements in a hierarchical arrangement. For each requirement, one or more substantive criteria should be defined. For each criterion, one or more performance elements should be provided for use in assessment. (*Based on FAO Guidelines: 22*)
Standard setter	Organisation or arrangement that has recognised activities in standard setting. (*ISO/IEC Guide 2:1996*)
Sustainability programmes	Wild-capture seafood programmes that make a sustainability claim. For this study, this term encompasses either ecolabels or other entities such as education programmes, seafood companies, etc.
Traceability	Ability to track the movement of a food product through specific stages of production, processing and distribution along the product's supply-chain.
Third party	Person or body that is recognised as being independent of the parties involved, as concerns the issues in question. (ISO/IEC Guide 2:1996)

Acronyms

Acronym	Definition
ADP	Accenture Development Partnerships
BSI	British Standards Institution
CB	Certification body
COFI	Committee on Fisheries, FAO
DFID	Department for International Development, UK
EBM	Ecosystem-based Management
ETI	Ethical Trading Initiative
EMAS	Eco-management and Audit Scheme (European Union)
FAO	Food and Agriculture Organisation of the United Nations
FLO	FairTrade Labelling Organisations
FSA	UN Fish Stocks Agreement
GHG	Greenhouse gases
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit, Germany
ILO	International Labor Organisation
IMO	International Maritime Organisation
ISEAL	International Social and Environmental Accreditation and Labelling Alliance
ISO	International Organisation for Standardisation
PET	Protected, endangered or threatened species
RFMO	Regional Fisheries Management Organisation
RSB	Roundtable on Sustainable Bio-fuels
SAI	Social Accountability International
TBT	Technical Barriers to Trade (a WTO agreement)
UN	United Nations
UNCLOS	United Nations Convention on Law of the Sea
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organisation
WWF	World Wide Fund for Nature

Executive Summary

Over the past five decades, fisheries practices and management systems have depleted wild stocks, degraded marine habitats, and reduced marine biodiversity and ecosystem functions. Despite global recognition of these issues, the health of world's oceans continues to decline.

In response to the growing public awareness of these negative impacts, an increasing number of market-oriented certification schemes for wild-capture seafood products have been established. The basic concept behind such product labeling schemes is to provide economic incentives to producers and the industry to adopt more sustainable fishing practices while safeguarding or enhancing access to consumer markets. A number of such market-based ecolabels and sustainability certification programmes have been created. The goal of this report is to assess whether they live up to the worthy goals of improving fisheries' management as well as the management of oceans and marine resources. The question such certification programmes ultimately raise is whether they can reverse market forces that are currently driving unsustainable fishing and generate the demand and incentives that support sustainable fisheries.

The development of wild-capture seafood ecolabelling and sustainability certification programmes (further referred as to sustainability programmes) is also a response to the growing demand from the key importing nation retail markets for more sustainably produced seafood. This pressures the industry to adopt more sustainable fishing practices. However, to what extent does a given programme effectively address sustainable fishing practices and does this actually improve the situation in the marine environment? If sustainability programmes - as market-based means to facilitate sustainable fishing - are really to deliver positive benefits, they must be developed and operated according to certain criteria. This study was designed to assess whether seafood ecolabels address the impacts of unsustainable fishing on the marine environment, the extent to which they identify ecologically sustainable fishing practices and management systems, and the degree to which they measurably improve performance over time.

With a view to supporting progress in sustainable fishing and increased confidence in, and understanding of, sustainable seafood ecolabelling, WWF developed a set of criteria that reflect best practice for fisheries ecolabelling certification schemes that certify fisheries management practices. WWF contracted an independent management consultancy, Accenture's non-profit practice Accenture Development Partnerships (ADP), to assess a provided inventory of sustainability programmes that make varying sustainability claims, against the WWF criteria. Accenture's role was to apply Accenture's approach, methodology and experience with other assessment exercises to develop and execute the assessment study. Whilst it is conceptually relatively simple to compare one label against a set of criteria, WWF intended to use this study to seek to improve seafood ecolabelling by building on best practice. Thus this study sought best practice elements of labels within and across the range of sustainability programmes considered. The study analyses various components of sustainable fishing separately to compare the relative strengths and weaknesses of various schemes and highlights best practices in different aspects of sustainable fisheries certification.

The study was aimed primarily at a quantitative assessment of the claims made by various ecolabels for addressing the impacts of unsustainable fishing on the marine environment, and at identifying ecologically sustainable fishing and management systems. Other impacts such as carbon footprint, the environmental impacts of production, social issues, and animal welfare were qualitatively assessed, acknowledging that these are also important dimensions of sustainability.

The study revealed there are many good practices used to foster ecologically sustainable fishing and management practices. However, most of identified ecolabels are neither consistent nor coherent across all

assessed performance areas, preventing them from being fully effective and credible. This also shows there is much room to improve and further develop this field. None of the standards analysed are in complete compliance with the criteria identified and defined by WWF as necessary for credible ecolabels or certification programs. The Marine Stewardship Council (MSC) is the only ecolabel that is close enough to be considered compliant with these criteria.

1 Introduction

Using market forces to influence public policy and private sector activity to achieve sustainable wild-capture fisheries is key to WWF's strategic approach to address overfishing and the impacts of fishing upon ecosystems, including habitats. How the seafood production process impacts the environment holistically is also a growing concern in the public mind and in the seafood supply chain.

One of the big questions facing the realm of marine fisheries certification is "*What makes a credible fisheries ecolabel?*" WWF, as a proponent of marine fisheries certification, through having helped establish the Marine Stewardship Council (MSC) with Unilever in the 1990s[1], recognises that the market for seafood ecolabels has grown considerably, and that the issues of the nineties are now complemented by such challenges as the carbon footprint of fishing and food miles of seafood. Do any wild-capture seafood ecolabels address these additional issues? Which labels have the greatest impact on improving fishery health? Are there opportunities for labels to improve or be harmonised to ensure credible sustainability criteria are common to all? Which ecolabel(s) are sufficiently rigorous to have an effect on fisheries management? Which ecolabel(s) should WWF support? This assessment was commissioned to both inform WWF's positioning on these issues as well as to provide an objective review for seafood buyers and seafood ecolabelling professionals.

In 2005, the United Nations Food and Agriculture Organisation (FAO) created a set of "Guidelines on Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries" (FAO, 2005). These establish minimum standards for operating and implementing credible, robust fisheries ecolabelling schemes. The guidelines were informed by other international norms, standards and instruments such as those established by the International Organisation for Standardisation (ISO), the International Social and Environmental Labelling and Accreditation Alliance (ISEAL) and the World Trade Organisation (WTO). The resulting internationally accepted documents and procedures set minimum standards for processes to develop, and shape the content of, wild-capture fisheries' ecolabels, as well as how ecolabelling schemes should be structured and operated to produce credible, science-based results.

WWF developed an approach for an independent assessment of the relative credibility of wild-capture fisheries' ecolabels against a set of criteria that reflect 'best practice' in fisheries ecolabelling and certification schemes, and standards for ecologically sustainable, well-managed fisheries. These criteria and the assessment results are presented here. In the future, this approach could be used to enhance the practice of wild fisheries seafood ecolabelling further, including assessing the initiatives against a broader set of criteria including the environmental impacts across the entire 'life-cycle' of the production process from "boat to plate". This 'life-cycle' analysis in identifying sustainable seafood is just beginning to get some traction but was not part of this assessment. WWF is, however, engaged in the emerging international dialogue about further bio-ethical trade criteria which has the potential to take fisheries ecolabelling to new levels. For the time being, however, the main conservation priority remains the ecological damage of fishing with the consequent effects on people, communities and the seafood sector caused by overfishing and destructive fishing.

Section 1.3 describes the criteria against which this independent assessment has been conducted, on behalf of WWF, on fisheries eco-label schemes, their institutional or organisational structures, processes, procedures and ecological sustainability and fisheries management standards.

[1] The standards for certification demanded by MSC for their distinctive on-pack ecolabel were developed in consultation with a large range of individuals and organisations, including WWF

1.1 What is an Ecolabel?

Ecolabels are marks on products that are "deemed to have fewer impacts on the environment than functionally or competitively similar products" (Deere, 1999). An ecolabel is aimed at providing buyers with information on a product's environmental or ecological production.

In the context of fisheries, ecolabels are often, but not always, concerned with the overall ecological sustainability of a given fisheries' system, meaning the biological system *and* the management system. These types of ecolabels are therefore not aimed at systemic or macro-level issues, nor are they usually concerned with transparency (although this can be a key credibility criterion), food safety or quality, workers' rights, animal welfare, the impacts of the use of non-fisheries resources, or non-fishing impacts on ecological sustainability. Nor are they concerned with micro-level issues such as individual fishing vessel operation or individual crew processes or standards.

The approach WWF developed was based on both ISEAL's 'best-in-class' recommended practice and the minimum standards expected for operating and implementing credible, robust fisheries' ecolabelling schemes as defined by the FAO Guidelines (FAO, 2005). These were enriched with other established and internationally accepted norms, standards and instruments.

1.2 Seafood Ecolabelling Today

The seafood market has shown a remarkably strong response to seafood products able to claim they come from better managed fisheries via on-pack ecolabels. The growth of the MSC over the last ten years, and more recently of other seafood ecolabels reviewed in this assessment, is evidence of the strong demand from consumers who want seafood from 'better fisheries'.

In the last decade the realm of sustainable seafood has matured to include many seafood ecolabelling programmes, a relatively comprehensive inter-governmental policy framework, many national level policy approaches, consumer outreach campaigns, and a strong engagement of the entire seafood supply chain. It is a massive undertaking to develop a robust, comprehensive and credible ecolabel, especially for an area as complex as wild-capture seafood.

However, as this report shows, the number and range of seafood ecolabelling initiatives is proliferating along with the range of claims made and the variability of the impact different programmes are designed to make. The risk of potential confusion, or worse still a lack of confidence in seafood eco-labeling, amongst buyers along the supply chain (processors, retail seafood outlets, chefs, or the end consumer) only increases. Clearly, there is a need to ensure the credibility of seafood ecolabels if the overarching goal of improving the sustainability of marine fisheries is to be achieved. That is one of the intentions of this study.

Ecolabelling programmes and their staff, seafood buyers, certifiers and assessment team members are all significant players in ensuring seafood ecolabelling contributes meaningfully to fishery and marine ecosystem health. There has been an increasingly loud call for clear and independent evaluation of existing seafood ecolabels, including at the recent (April 2009) OECD workshop in The Hague.

1.3 Trends and outlook

In the last ten years the sustainable seafood community has developed many tools to advance market incentives for sustainable seafood. The challenge of the next ten is to ensure these incentive mechanisms actually deliver positive biodiversity outcomes. Additionally, it is increasingly evident that concerns such as carbon footprint, environmental impacts of production, social issues and animal welfare are growing in the public mind, at least in very developed ethical consumer markets such as the UK and Switzerland. One of the purposes of this study was to place seafood ecolabelling in the context of these emerging areas and qualitatively assess the selected

seafood ecolabels in their incorporation of these issues. The premise was that no seafood ecolabel currently effectively addresses all of these areas: could examples of better practice be identified and described to improve seafood ecolabelling? However, given the current relative youth of these emerging areas in seafood ecolabelling, and the lack of any specific internationally criteria akin to the FAO's Guidelines (FAO, 2005), a quantitative evaluation was not appropriate or possible at this point.

The assessment below shows areas of relative strength and weakness of different ecolabels in incorporating these additional issues and provides some direction to enhance seafood ecolabelling. Firstly, however, the seafood ecolabelling community needs to develop internationally agreed criteria for priority issues, and secondly it needs to develop evaluation mechanisms. As sections 1.3.1 to 1.3.5 below describe, trying to incorporate these issues within seafood ecolabelling is fraught with technical challenges.

1.3.1 Climate change

The impact of fishing and post-harvest activities on climate change is a debate that is gathering momentum. In its most recent report on the state of world fisheries, the FAO discusses some of the issues related to the carbon footprint of the fisheries sector and the variable contributions to greenhouse gas (GHG) emissions made by different elements of the harvest, processing and transport cycle. (*FAO*, 2008b). There is still some debate about the relative contributions that fishing and on-shore activities make to overall GHG and where the main focus of mitigation activity should be. However, FAO suggests that reducing overcapacity and fishing effort, in those fisheries that need it, should make a useful contribution to overall fuel efficiency and reduction in energy consumption (*FAO*, 2008b).

In the future, ecolabel schemes may want to broaden their scope to include some criteria to assess the impact of fisheries-related activity on climate change. A proxy indicator for climate change impact may be issues such as 'food miles', where ecolabel schemes would require the recording of the number of food miles a product travels throughout the supply chain. A significant and current challenge in this arena is achieving international agreement about the definition and calculation of food miles.

Another approach to the climate change impact issue may be to establish 'carbon footprint benchmarks' that ecolabel schemes could apply, regardless of whether they are aimed at individual or multiple fishing vessel activity or at post-harvest activity. The challenge here is that sustainability standards for both enterprises and whole commercial sectors of production activity are also still the subject of discussion and debate internationally and, where established, are not universally applied. Examples of standards to assess and calculate carbon footprint are: the British Standards (BSI) standard on life cycle emissions of goods and services (*BSI*, 2008); and the ISO 14064 and 14065 standards for GHG accounting, verification and emissions trading. These standards, and others, involve the consideration of life cycle emissions of goods and services and include the use of surveys and continuous improvement plans on such issues as: the use of biofuels; emissions standards; energy efficiency initiatives; and innovation, incentives and investment to encourage low carbon technologies and enterprises. The key challenges are their applicability to the fisheries sector and, for concerned stakeholders such as WWF, determining which standards offer the most credible and desirable outcomes.

Additionally, the direct and indirect impacts of climate change on fish stocks and ecosystems themselves would logically be factored into assessments of the natural variability and vulnerability of fish stocks and ecologically related communities in terms of distribution, seasonality, recruitment success and abundance. The responses to such impacts should logically be accounted for within the fisheries management system, although few fisheries management systems are actively trying to take account of this yet. Adjusting harvest rates or fishing effort accordingly and building adaptive capacity within the management system to account for climate change in a precautionary manner is an area to urgently consider for development in fisheries ecolabelling schemes. The

appropriate place within such schemes for auditing of impacts and management responses would be within any ecological criteria and management system criteria of a given scheme.

1.3.2 Environmental impact of on-shore and supply chain facilities

Beyond climate change impacts, there are the potential impacts of post-harvest activities on other aspects of the environment. Some of the issues include minimising the environmental impact of: water use; pollution and waste; the use of other natural resources (other than fish, energy and water) such as packaging materials; and minimising the environmental impacts of transport and distribution. The challenges for seafood ecolabelling schemes in broadening their scope to encompass these issues are again related to the lack of agreed standards for the seafood sector, as well as the decisions that would need to be made about making the macro/micro distinctions and the implications for the cost effectiveness of a scheme and its affordability.

1.3.3 Impacts of other human activities on fish and ecosystems

Some stakeholders in the fisheries and marine sphere cite other human activities and their impacts upon the ecological sustainability of wild fisheries ecosystems as a cause for concern and suggest that fisheries ecolabelling schemes should cover these issues. Concerns include habitat modifications like the creation of dams and fish-races in salmon habitat in the US and Canada, for example, but also extend to any and all human activity in the coastal zone, such as: coastal zone development; oil, gas and mineral exploration and extraction; shipping; transport; agricultural runoff; and tourism. The scope of most ecolabelling schemes does not extend this far. This may be due to the considerable challenges involved in establishing consistent, credible standards against which audits may be performed, as well as cost effectiveness and affordability, and historically the lack of market demand for this.

1.3.4 Social and ethical trade criteria

Social and ethical trade issues can relate to the individual, community and societal dimensions of sustainability, including the economic dimension in terms of livelihoods for individuals, communities or companies, as well as the economic performance of fisheries or the sector as a whole. The extent to which they are included in fisheries ecolabelling scheme standards will largely be a factor of the scope of the scheme itself, as well as the ability to conduct a credible conformity assessment. One of the challenges with social and ethical trade criteria is the level at which a conformity assessment is going to occur: at macro-level (i.e., fisheries management system) or micro-level (i.e., individual operator in a fishery or company in a supply chain). If the scope of an ecolabelling scheme is aimed at the fisheries management regime, perhaps at a multi-national or even a national level, then any conformity assessment would have to focus on criteria relevant and *measurable* at that macro-level.

For example, criteria could express the principles of compliance with, or adherence to, ratified trade or labour conventions and agreements, or observation of the principles and good practices contained within such conventions (*UNCTAD*, 2007). At national levels, has a nation actually ratified a relevant convention or agreement? If so, is the government complying with the convention by introducing and adopting relevant laws and regulations under its own legal framework (potentially measured by the absence/presence of complaints at the ILO or IMO)? Similarly, concerns about how fisheries management systems and regimes, national or international, deal with the interests and rights of indigenous peoples and others who depend on fish for food or for generating their livelihoods may need to be considered at a macro level within social or ethical fisheries standards, perhaps by reference to formalised or customary structures or frameworks of 'laws'.

By contrast, at local levels, when an ecolabelling scheme is focussed upon the micro-levels of fishing activity, i.e., single operators, or small communities, more specific, measurable standards and criteria may be relevant. Some standard systems that may offer insights into appropriate micro-level social or ethical criteria (and that would require adaptation to suit the fisheries arena) include: the Social Accountability International's Standard SA8000;

the Ethical Trading Initiative which is an alliance of companies, NGOs and trade union organisations to improve supply chain working conditions of workers producing for the UK market to meet or exceed ILO standards: FairTrade Standards; and the BioTrade Initiative to promote trade and investment in products and services in line with the objectives of the Convention on Biodiversity.

1.3.5 Humane treatment of animals

Animal welfare can mean different things to different people and ranges from the humane treatment of animals, to animal liberation and animal rights. The discussion here focuses on the humane treatment of animals and literature searches on fisheries-related issues in connection with this issue mainly reveal articles about aquaculture/fish farming or recreational fishing: for example, welfare standards for farmed fish are under discussion within the European Union and other governments. However, there is a relative scarcity of peer reviewed literature on the welfare dimensions of wild-capture fisheries and ecologically related species, although some do link welfare issues and the bycatch of large marine species such as cetaceans (whales, dolphins and porpoises), pinnipeds (seals and sea lions) and marine reptiles (turtles).

Additionally, animal welfare campaigning organisations that take a position on the issue in fisheries may call for limits or regulations relating to the reduction, minimisation, mitigation, or elimination of: stress or other forms of suffering; injury; or mortality of animals caught in, or released from, fishing gear. This may take the form of focussing on seeking reductions in bycatch of particular species, either at appropriate biologically sustainable levels or in other cases approaching zero. Or it may focus on rewarding the use of fishing gears or fishing operations that do not hold the targeted fish for long periods of time and enable the stunning and killing of the fish individually. This approach would only be applicable to small scale fishing where the catching process enables people to stun and kill each fish as it comes out of a net or off a line. Medium to large scale fishing would not meet these sorts of criteria.

The scope of a fisheries ecolabelling scheme will determine whether the standards encompass ideas relating to ethical attitudes towards animal welfare and whether those ideas can be translated into auditable measures of performance.

1.4 Purpose of this study

The assessment approach used in this study has been designed to support progress in sustainable fishing and increase confidence in sustainable wild capture seafood ecolabelling programmes which make various sustainability claims.

WWF developed a set of **criteria that reflect 'best practice' for fisheries ecolabelling certification schemes which certify fisheries management.** WWF provided ADP with these criteria and an inventory of sustainability programs to be assessed. ADP has used these to assess and compare the approaches and relative strengths of elements of the currently available wild-capture fisheries sustainability programs. As the "Guidelines on Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries" (FAO, 2005) are generally accepted as a minimum standard for operating and implementing credible, robust, fisheries ecolabelling schemes, WWF used these as the baseline for the criteria set. Additionally, some dimensions are extended to incorporate elements of WWF's ecosystem-based management of marine fisheries framework[2].

Whilst it is conceptually relatively simple to compare one label against a set of criteria, the greater purpose of this study was also to improve seafood ecolabelling by identifying 'best practice' elements of labels within and across the range of sustainability programmes considered. Various components of sustainable fishing were also analyzed separately to compare the relative strengths and weaknesses of various schemes and highlight 'best

[2] *"Policy Proposals and Operational Guidance for Ecosystem-Based Management of Marine Capture Fisheries" (Ward et al, 2002)*

practice' in different aspects of sustainable fisheries certification. For example, if an ecolabel is particularly rigorous in addressing an ecosystem impact such as bycatch, this was highlighted, even if the assessment showed it to be weak in other areas.

This assessment was aimed primarily at a quantitative assessment of the compliance of various ecolabels towards addressing the impact of fishing on the marine environment and at identifying ecologically sustainable fishing and management systems. Other impacts such as carbon footprint, environmental impacts of production, social issues and animal welfare are described only qualitatively.

This study also identifies and raises some key questions and emerging issues around the realm of wild-capture seafood ecolabelling and future trends in sustainable seafood and marine conservation.

2 Wild-Capture Standards

2.1 Scope of the Ecolabel Scheme

The scope and objectives of ecolabel schemes vary widely. In order to assess these schemes and place the results in an appropriate context, we should understand why a particular scheme was created and what its scope is, clarifying:

- the issues covered by the scheme;
- its geographical coverage;
- the kinds of products that can be certified and/or labelled under the scheme and possibly the potential markets where labelled products can be sold.

There is a school of thought that says that ecolabel scheme standards should cover the widest possible range of bio-ethical standards. However, the reality is that many on-pack labels in the marketplace are issue, geography, and/or product specific. For example, the Social Accountability International (SAI) standard SA8000 was created specifically to "promote human rights for workers around the world" (SAI, a) through certifying working conditions in companies and contractors' facilities (SAI, b). This standard does not enquire into, nor require certification against, the ecological or environmental impacts of the products made or processes used by facilities certified to the SA8000 standard.

Similarly, an ecolabel that is aimed at a systemic environmental problem such as over-fishing (which is a macro-level issue potentially involving multi-national entities, hundreds of fishing vessels, and complex ecosystem dynamics) may not have the scope to include complex and context-specific socio-economic or ethical trade layers of issues such as fair trade, vessel safety or workers' rights. All of these would have to be evaluated at the micro-level (e.g. vessel by vessel or company by company). In a report commissioned by the UK and German development departments, (DFID and GTZ), the authors suggested that this approach could create additional layers to audit that may further restrict trade and supply, as well as increase certification costs, particularly for developing countries (Tindall, Walmsley, Pollard & Agnew, 2008).

Therefore it is important to understand the scope and potential boundaries of a particular labelling scheme. The scope of a scheme should not, in and of itself, be an indicator of credibility, but an aid to understand its context and determine whether its structures, procedures and standards are appropriate given the scheme's objectives or the reason for its creation.

Even though the scope of standards may vary, it is important to note that once established, the application of standards to fisheries should be consistent. Indeed, the FAO Guidelines on fisheries ecolabelling stipulate that standards should apply equally to developed, transitional and developing countries (FAO, 2005). In other words, lower standards for developing countries should not be applied, nor should higher standards for developed or transitional countries.

2.1.1 Scheme objectives

Scheme objectives

Question	Answer
What was the driving force for the scheme's creation? Why was the Ecolabel created?	
What are the main objectives or aims of the Ecolabelling scheme? What is its mission?	

2.1.2 Issue scope

Issue scope

Issue scope	Indicate	Details
Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks or protecting fisheries and marine ecosystems)	☐	
Fisheries management or legality issues (e.g. measuring adherence to FAO codes of conduct or prevention of IUU fishing or compliance with national laws)	☐	
Traceability of certified products through the supply chain	☐	
Economic (e.g. ethical or fair trade)	☐	
Social-ethical (e.g. workers' rights)	☐	
Environmental impacts of production processes (e.g. fishing vessel operations, processing plant operations, other human uses of marine ecosystems, CO2 or carbon footprint issues)	☐	
Other (e.g. single issue labels such as 'dolphin friendly' or 'ethical treatment of fish') (please specify)	☐	

2.1.3 Geographical scope

Geographical scope

Geographical scope	Indicate	Details (specify where indicated)
Global	☐	n/a
Regional (multi-national, but not global) (please specify)	☐	
National (please specify)	☐	
Sub-national (province, state, etc) (please specify)	☐	
Local (county, borough, township, coastal community, etc) (please specify)	☐	

2.1.4 Product and market scope

Product and market scope

Product / market scope	Indicate	Details
Marine species	☐	(Include how scheme defines 'fish' – does it include shellfish, sharks, etc and/or exclude marine mammals, reptiles and birds?)
Inland (freshwater) species	☐	
Wild-capture only	☐	
Wild-capture & some enhanced fisheries	☐	(Include how enhancements are defined)
Aquaculture	☐	(Include how aquaculture is defined)
Markets (please specify, if relevant)	☐	(Include only if "markets" limit scope)

2.2 Type of Ecolabel Scheme

To begin to understand how credible and robust an ecolabel initiative may be, it is important to understand the type of ecolabel scheme being examined. There are three dimensions to ecolabelling that need to be

considered: 1) into which category (see below) does the scheme fit; 2) who is responsible for running the scheme; and 3) whether the scheme is mandatory or voluntary (i.e., participation and openness).
There are three generally accepted categories of ecolabelling scheme (Deere, 1999):

- ***First party*** labelling schemes are 'self declarations', often established by individual companies who may or may not verify their own compliance against a set of self determined criteria. These self declarations are usually a marketing tool to distinguish their product in the marketplace.
- ***Second party*** labelling schemes are usually established by an industry association or other form of representative body to certify their own members' products. Criteria may be developed by reference to standards declared by the association, or standards developed externally to the association. Verification of members' compliance with criteria is often, but not always, conducted internally by the association.
- ***Third party*** labelling schemes are usually established by independent entities rather than by producers, distributors or sellers of labelled products. Verification of compliance with standards and criteria is conducted by independent certification bodies – independent and separate from producers etc, as well as from the standard setter and label owner. Oversight and accreditation of independent certification bodies is also separate and conducted by independent organisations – independent from certification body, standard setter and label owner.

The most credible ecolabelling schemes accepted in international forums such as WTO, ISO, FAO and ISEAL are voluntary, third party and operated independently of those with interests in the issue in question. Third party schemes are generally thought to offer buyers of labelled products the greatest confidence and levels of credibility because compliance with criteria is usually based on verifiable, impartial and transparent certification procedures and standards.

2.2.1 Category

Category

Category	Indicate
1st Party	☐
2nd Party	☐
3rd Party	☐

2.2.2 Scheme owner and operator

Scheme owner and operator

Scheme operator	Indicate	Details
Government	☐	
Private – industry (e.g. fishing association; processing organisation/association; industry body; wholesaler; retailer) (please specify)	☐	
Private – non-governmental environmental, organic, conservation organisation (NGO) (please specify)	☐	
Private – other (please specify)	☐	

2.2.3 Participation and openness

Is participation in the scheme (i.e., the ability to become certified) mandated by law or is it voluntary? Is the scheme open or is it restricted to certain types of operation, person or entity (i.e., discriminatory or non-discriminatory)? Schemes that are mandatory (often government-backed) or restricted to certain types of

entrants may not meet the standards that prohibit barriers to foreign trade under WTO rules. FAO Guidelines require ecolabelling schemes to be voluntary (FAO, 2005).

Participation and openness

Participation	Indicate	Details (if asked to specify)
Voluntary		-
Mandatory (please specify)		
Open (non-discriminatory)		-
Restricted (please specify)		

2.2.4 Scheme overview

Summary of scope for each ecolabelling scheme assessed
Narrative summary: **References:**

3 Assessment Study Approach

This assessment study primarily focuses on analyzing wild-capture sustainability programmes which are classified as ecolabels with regards to:

- The *compliance of ecolabels standards in the dimension of fisheries management*
- How the selected ecolabels address the *environmental impact of fishing*

The selected ecolabels have been quantitatively assessed in all performance areas of **the impact of unsustainable fishing on the marine environment, and identifying ecologically sustainable fishing and management systems.**

The study also examined a select number of other sustainability certification programmes. This involved evaluating the various components of their approach to sustainable fishing separately and selectively. Their relative strengths and weaknesses were compared to highlight best practice within and across different aspects of sustainable fisheries certification. Whilst it is recognised that only sustainability programmes that are classified as ecolabels can be compared within the same categories, this analysis was intended to identify the particularly rigorous and exceptional practices of other relevant seafood sustainability programmes. Consequently, this allows for best practices to be highlighted and thus shared with the intention of strengthening seafood ecolabelling impact overall.

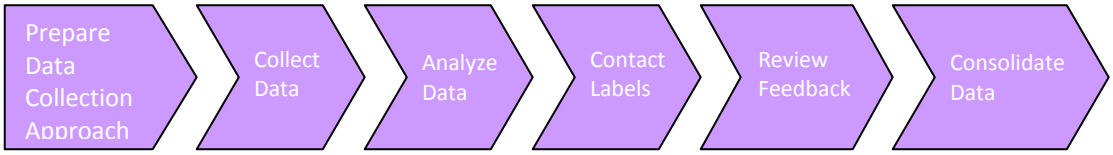
In order to address the content of standards in relation to ecological sustainability, fishery management systems and traceability as well as other sustainability dimensions of sustainability programmes, this study used content found on relevant websites – either from the standard setting body (sustainability programme owner), or from accredited certification bodies. The accuracy of information of some specific methods or detailed performance standards directly influenced the relative transparency and openness of a sustainability programme. In relation to traceability, specific reports on supply chains of particular products and traceable linkages were not declared and typically were classified as commercially confidential. However, available standards and methods used to determine traceability through supply chains were sometimes readily available directly from standard setters, accreditation and/or certification bodies.

As mentioned above, issues concerning *environmental impacts of production processes, social* and *animal welfare, food safety* and *economic aspects* are not part of the quantitative assessment criteria or conduct of this study. However, as these are also important dimensions of sustainability, descriptive summary material about these issues has been provided and reviewed. This material was qualitatively assessed and relates to all sustainability programmes and not only ecolabels. Note: Relevant dimensions have been classified to construct a descriptive framework to highlight the present state of these dimensions overall. Given the lack of any coherent criteria in any of these areas, no attempt was made to quantitatively review them. This is an important area for future development of seafood ecolabelling.

It is important to state that this was a desk study limited only to publicly available information and data. No effort was made to evaluate, verify, critically review and/or affirm the actual truth of fisheries programmes' sustainability claims and standards. Hence, this assessment study is not an actual audit of sustainability programmes and their standards, i.e. the extent to which they do what they say they do. It is only an evaluation of programmes against each other based on their publicly available claims.

3.1 Assessment Methodology

The assessment methodology was applied, as follows, to all data, regardless of its qualitative or quantitative character:



Whilst the approach adopted is consistent for all data, the information gathered and the study outcomes differ considerably between qualitative and quantitative data.

After consolidation, quantitative data was scored, aggregated and compared within an applicable sustainability programmes' category to assess their compliance against the relevant criteria such as fisheries management and environmental impacts of fishing. In contrast, qualitative data is consolidated into a narrative summary with only a simple classification. This allows for the categorisation of a multitude of available data concerning environmental impacts of production processes, social and animal welfare, food safety and economic aspects.

Each sustainability programme's standard was individually analyzed. Any qualitative information with regard to the scope, scheme type and other dimensions[3], together with all available assessment data of the six defined performance areas (further referred to as 'topics') was collected and matched with qualitative categories or quantitative individual criteria. All the information and data gathered about a sustainability programme was captured into separate files. The data collected was primarily gathered through desk research, predominantly using individual ecolabel's internet sites, annual reports and other publicly available data. As completely as possible, the relevant labelling institutions were contacted by telephone to establish contact, review data and/or discuss the study methodology and data collection content as needed.

Once an individual file with gathered data mapped by criteria was completed, it was shared with the appropriate sustainability programme, along with assessment criteria and a qualitative summary of each individual sustainability programme. Each sustainability programme assessed received communication on preliminary individual data with guidelines and a request for feedback on the accuracy and relevance of gathered data. This was done to ensure an even approach to all sustainability programmes assessed. No distinction by type or scope of scheme was made at this stage of the assessment. Each label was also contacted either by telephone or via e-mail to confirm receipt of the information. If not otherwise confirmed each label was sent two subsequent reminders to provide feedback. The principle of this stage was to verify the gathered data and its accuracy.

After all sustainability programmes were contacted, the gathered data shared, and feedback received (except where the sustainability programme did not respond within 10 business days), the database was updated and consolidated.

Based on their scope and type, all originally identified sustainability programmes were classified into four different categories with a distinct level of qualitative and quantitative involvement that ranged from the full assessment and consideration as ecolabels to complete exclusion from the study scope. A different methodology was applied to consolidate and further elaborate the qualitative and quantitative data within this study and within actual selected groups. More details are described below.
During the data gathering stage, an effort was made to:

- Refrain from paraphrasing or using incorrect information stated on or available through respective internet sites;
- Focus only on objective facts and eliminate subjective information without factual basis as declared on respective internet sites;

[3] Note: see an exact list of dimensions (other than the quantitatively assessed governance, structures & procedures and Content of Ecolabel Standards) in section 3.5 Qualitative Assessment.

- Consider only facts and feedback ensuring the independent and objective application of criteria to all selected sustainability programmes;
- State the best information available and/or identified during research on internet sites;
- Understand correctly any jargon used on respective web sites and avoid misinterpretations;
- Ensure all topics of study criteria were had complete data regardless of the scheme scope, and;
- Use only information available in English to avoid any disputes on data available only in specific languages.

While all selected sustainability programmes were free to actively participate, all the information used by this study is either based on publicly available data, or on information shared by individual sustainability programmes during the collection and verification stage. Thus, the relevance and reliability of this study is limited only by the accuracy and credibility of the information available and provided.

3.2 Quantitative Assessment

As defined above, the quantitative assessment part of this study primarily aimed to compare the impact of all topics of unsustainable fishing on the marine environment, and to identify ecologically sustainable fishing and the management systems of selected ecolabels. These topics are detailed together with assessment criteria in section 3.3 Quantitative Assessment Criteria. This section analyzes and evaluates the extent to which selected sustainability programmes' standards correspond to the specified WWF assessment criteria which is structured into six topics, and fully assesses only ecolabel schemes. Only applicable programmes are discussed in detail within the quantitative part of this study.

The inventory of sustainability programmes and the criteria were based on the relevant WWF policy area, ISEAL recommended best-in-class practice, and on the international FAO ecolabelling standards. The criteria were not made available for public review.

Quantitative data gathered on the six topics (governance, structures and procedures and content of Ecolabel Standards) was updated and consolidated based on individual sustainability programmes' feedback and comments. It was further consolidated into an aggregated data pool organised by quantitative criteria and sustainability programmes previously identified for a full or partial quantitative assessment. Each criterion was then assessed and scored using the data gathered. Further, each applicable sustainability programme was assessed separately, and each criterion was evaluated independently from other criteria which guaranteed better definition of the scoring scale.

Finally, scored quantitative data was consolidated and weighted by each respective topic of the governance, structures and procedures and Content of Ecolabel Standards and calculated into results that indicate an average of overall scoring of selected sustainability programmes for each defined topic. This gives a basis for mutual comparison across ecolabels of sustainable fishing and the management systems. This should reflect the current situation globally across wild capture fisheries sustainability certification programmes.

3.3 Quantitative Assessment Criteria

This is presented in sections that divide the issues into stand-alone topics for independent examination, description and scoring and to allow comparison of the relative strengths and weaknesses of the wild-capture fisheries ecolabel schemes assessed.

Section 1 sets out the first suite of criteria which focus on the structures and procedures that govern how ecolabelling schemes themselves are run, including: the procedures for setting the substantive standards; the structures in place for accreditation and certification; and the procedures for stakeholder participation in the activity of the ecolabel scheme and its application. The focus then turns to the substantive content of the

standards themselves: the criteria for ecological sustainability; the criteria for fisheries management systems; and the criteria for traceability of certified fish and fish products.

3.3.1 Structure of the criteria

A hierarchical, multi-criteria analytical approach was developed, which assumed every variable (criterion) has equal weight. The hierarchy breaks ecolabel schemes down into logical, manageable elements to enable analysis and understanding of individual schemes as well as comparison between different schemes.

There are two high-level concerns which help determine the credibility of an ecolabelling scheme: how a scheme is governed and operated; and the content and quality of the standards used by the scheme.

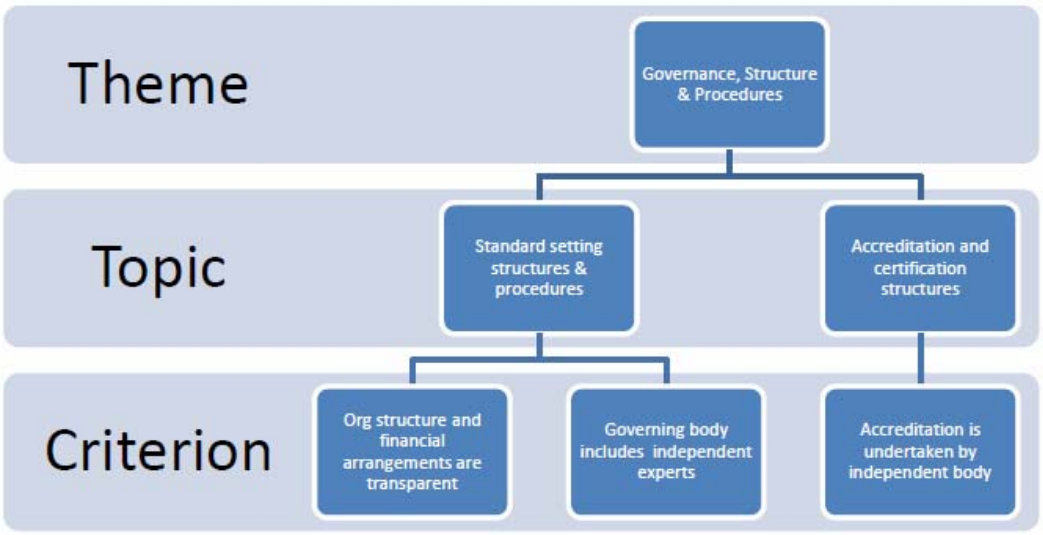
For the purposes of this study, the highest level was termed as a "Theme". Underneath each Theme are three "Topics" of interest:

Theme 1: "Governance, Structure and Procedures"
Topic 1 – Standard Setting Structures and Procedures
Topic 2 – Accreditation and Certification Structures
Topic 3 – Accreditation and Certification Procedures

Theme 2: "Content of Standards"
Topic 4 – Ecological Criteria
Topic 5 – Fishery Management System
Topic 6 – Traceability

Beneath the Topic level are a total of 103 Criteria and it is at this level that scoring of individual variables occurs. Each Criterion has a natural integrity of its own and therefore, is equally weighted within its Topic. The scores for each Criterion contribute to a Topic score, which in turn can be used to compare across ecolabel schemes. The difference in numbers of Criteria under each Topic does not denote that more or less weight is given to the individual Topics. The values assigned to the Topics are simple metrics showing how each scheme compares to each other on each of the Topics.

The flow chart below is a graphic example of the hierarchy, showing a small slice of the themes, topics and criteria.



Number of criteria per each topic			
Topic 1		24	
Topic 2		5	
Topic 3		21	
	Total Theme 1		***50***
Topic 4		20	
Topic 5		27	
Topic 6		6	
	Total Theme 2		***53***
Total all criteria		**103**	

The sections below summarises the assessment elements and list individual criteria topics which were selected and applied in this study. For every criterion a relevant international guideline specifying the minimum expectation is given. See the Annex for a detailed version of the assessment tool.

3.3.2 Structural and procedural criteria for ecolabel schemes

This set of criteria assesses whether ecolabel schemes include participatory, open and transparent standard setting structures and procedures, as well as independent conformity assessment and oversight. The FAO's Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries (*FAO*, 2005) are the primary reference for this section. These were informed by reference to the following normative standards and documents:

- WTO rules and agreements.
- ISO/IEC Guide 61:1996. General requirements for assessment and accreditation of certification / registration bodies. (Note: this was replaced by ISO/IEC Guide 17011:2004. General requirements for accreditation bodies accrediting conformity assessment bodies.)
- ISO/IEC Guide 62: 1996. General requirements for bodies operating assessment and certification / registration of quality systems. (Note: this was replaced by ISO/IEC Guide 17021:2006. Requirements for bodies providing audit and certification of management systems.)
- ISO/IEC Guide 65: 1996. General requirements for bodies operating product certification systems.
- ISEAL Alliance Code of Good Practice for Setting Social and Environmental Standards, which was in turn informed by:
  - ✓ ISO/IEC Guide 2:2004. Standardisation and related activities - General vocabulary.
  - ✓ ISO/IEC Guide 59:1994. Code of good practice for standardisation.
  - ✓ ISO/IEC Guide 14024:1999. Environmental labels and declarations - Type 1 environmental labelling - Principles and procedures.
  - ✓ OECD GD(97)137. Processes and Production Methods (PPMs): Conceptual Framework and Considerations on Use of PPM-based Trade Measures.
  - ✓ WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS).
  - ✓ WTO Agreement on Technical Barriers to Trade (TBT) Annex 3: Code of good practice for the preparation, adoption and application of standards.
  - ✓ WTO Agreement on Technical Barriers to Trade (TBT) Second Triennial Review Annex 4: Principles for the Development of International Standards, Guides and Recommendations with Relation to Articles 2, 5 and Annex 3 of the Agreement.

Source: (*ISEAL*, 2006a)

3.3.2.1 Standard setting structures & procedures

"Standard setting structures" refers to the institutional arrangements, bodies or organisations involved in setting standards, and how they are structured to ensure participation by interested parties, while remaining independent of verification and oversight organisations or capture by particular stakeholder interests.

"Standard setting procedures" refers to the methods employed by standard setting bodies to establish standards and/or criteria for verification and/or oversight of entities involved in verification of compliance with standards.

Table i. Standard setting structures & procedures

Issue	Criteria	Notes / references
Transparency principle	The organisational structure and financial arrangements of an ecolabelling scheme are transparent.	*If not published on the internet, then available through annual reports or on request. (FAO Guidelines 3)*
Governance	The governing body (e.g., Board) of an ecolabelling scheme has members that include independent experts, interested parties and other stakeholders.	*(WWF internal operating principles of stakeholder participation, transparency and accountability)*
Independence	The standard setting body does not perform accreditation functions nor receive payment from certification bodies for accreditation services.	*(FAO Guidelines: 66, 69)*
	The standards setting body does not perform certification of fisheries or supply chains nor receive payment from certification clients for certification services.	*(FAO Guidelines: 107)*
Organisational structure / institutional arrangements	The organisational structure of a standard setting body or arrangement includes a technical committee of independent experts whose mandates are established.	*(Based on FAO Guidelines: 45)*
	The organisational structure of a standard setting body or arrangement includes a consultation forum for interested parties whose mandates are established.	*(Based on FAO Guidelines: 45)*
Transparent standard setting procedures	Written (documented) rules of procedure for development, review and approval of standards exist, including written procedures to guide decision-making.	*(FAO Guidelines: 47, 49, 56, ISEAL Code: 5.1)*

Issue	Criteria	Notes / references
Terms of reference for standard setting	Upon commencement of any new standard development activity, terms of reference are prepared for the proposed new standard.	*(ISEAL Code: 5.2)*
	Terms of reference justify the need for the standard and establish clear objectives for the standard.	*(ISEAL Code: 5.2)*
Dispute or complaints resolution for standard setting activity	Procedural rules for standard setting activities contain a mechanism for the impartial resolution of substantive or procedural disputes or complaints about the handling of standard setting matters.	*(FAO Guidelines: 47, ISEAL Code: 5.1)*
Notification of standard setting activity	When actively engaged in standard setting activity (development or review), a work programme is published nationally, regionally and internationally and/or on the internet every six months containing: • name of organisation; • address; • list of standards under preparation; • list of standards under review or revision; • list of standards adopted in preceding six months.	*(FAO Guidelines: 48, 50, 51)*
Availability of procedures, standards and notices	Standard setting procedures, draft and final standards, notices about standard setting work programmes are available and accessible to interested parties via the internet and other forms of distribution upon request.	*(FAO Guidelines 49, 51, 52)*
	Within the means of the standard setting body, translations of standard setting procedures into English, French or Spanish can be provided upon request.	*(FAO Guidelines 53)*
Contact point	A contact point for standard setting matters is identified.	*(FAO Guidelines: 59)*
Review & revision of standards	Standards are reviewed at regular published intervals and, if appropriate, revised after such reviews.	*(FAO Guidelines: 60)*
	Standard setting bodies enable interested parties to submit proposals for revision of standards which are considered through a transparent process.	*(FAO Guidelines: 61)*
Validation of standards	A procedure exists to validate standards with respect to the FAO's minimum requirements for sustainable fisheries to ensure the standard does not contain criteria of no relevance to sustainable fisheries or could cause unnecessary barriers to trade or mislead the consumer.	*(FAO Guidelines: 63)*
Review of procedures	Procedures for setting standards are reviewed periodically in the light of new information and experience in standard setting.	*(FAO Guidelines: 62)*
Complying with new standards	Certified fisheries are given at least three years to comply with revised standards.	*(FAO Guidelines: 60)*

3.3.2.2 Stakeholder participation in standard setting

Table ii. Stakeholder participation in standard setting

Issue	Criteria	Notes / references
Participation in standard setting activities	Standard setting bodies ensure balanced participation in standard setting by independent experts and interested parties.	(*FAO Guidelines: 54*)
	Standard setting bodies facilitate access and participation of interested parties especially those of developing countries and countries in transition.	(*FAO Guidelines: 46*)
	Interested parties can participate in standard setting activities through an appropriate consultation forum or alternative appropriate mechanisms.	(*FAO Guidelines: 55*)
Consultation period on new or revised standards	Before adopting a new or revised standard, standard setting bodies allow at least 60 days for interested parties to submit comments on a draft standard.	(*FAO Guidelines: 57*)
Transparent decision-making	Standard setting bodies can demonstrate how comments from interested parties have been considered.	(*FAO Guidelines: 58*)

3.3.3 Accreditation and certification structures

One of the key credibility features of ecolabelling schemes is the separation between, and independence and impartiality of, standard setting bodies, accreditation bodies and certification bodies (i.e., creating a third party ecolabelling scheme).

Accreditation provides assurance that certification bodies responsible for conducting conformity assessments, using fisheries sustainability and traceability standards, are competent to carry out such tasks using the specific standards set by individual ecolabelling schemes. By awarding accreditation to a certification body, accreditation bodies provide assurance to the standard setter, interested parties and the wider public that the certification body is able to assess and certify that a certain fish or fishery product comes from a fishery that meets established sustainability and traceability standards (*FAO*, 2005).

Certification provides assurance to the standard setter, interested parties and the wider public that fisheries and supply chains conform to relevant sustainability and traceability standards. Certification is an integral and indispensable part of any ecolabelling scheme. Impartial certification based on an objective assessment of all relevant factors ensures that ecolabels convey truthful information. This is a necessary condition for the ecolabelling scheme to attain its objectives.

Table iii. Accreditation and certification structures

Issue	Criteria	Notes / references
Accreditation	Accreditation is undertaken by an independent, impartial, competent and transparent accreditation body which does not perform standard setting for fisheries sustainability or traceability, nor certification of fisheries against such standards.	(*FAO Guidelines: 66, 69*)
	Accreditation bodies can objectively demonstrate conformity to the requirements set out in ISO/IEC Guide 17011, as appropriate.	(*ISEAL Alliance*)

Issue	Criteria	Notes / references
Certification	Certification is undertaken by independent, impartial, competent and transparent certification body which does not perform standard setting for fisheries sustainability or traceability, nor accreditation of other certification bodies to use such standards	(*FAO Guidelines: 108*)
	Certification bodies are recognised and accredited by an independent, impartial, competent and transparent accreditation body to conduct conformity assessments using the specific standards of the ecolabelling scheme being assessed.	(*FAO Guidelines: 107*)
Dispute, complaint or objection mechanisms	Adjudication of disputes, complaints or objections to certification body decisions about fisheries meeting sustainability or traceability requirements that have not been resolved by certification bodies and are forwarded to the accreditation body or ecolabelling scheme, is conducted by an independent and impartial person(s) or committee.	(*FAO Guidelines: 83, 147*)

3.3.4 Accreditation and certification procedures

Table iv. Accreditation and certification procedures

Issue	Criteria	Notes / references
Accreditation	Accreditation requirements and procedures are documented and provided to applicants and accredited entities who aim to use the ecolabelling scheme's standards to conduct conformity assessments.	(*FAO Guidelines: 74*)
Certification	Certification procedures are documented by the ecolabelling scheme or accreditation body and provided to those applicant and accredited certification bodies that are competent to use the ecolabelling scheme's standards for conformity assessment.	(*FAO Guidelines: 27, 117*)
	Measurable performance requirements (or indicators) against the standards are documented and provided to applicant and accredited certification bodies by the ecolabelling scheme or accreditation body.	(*FAO Guidelines:22 , 27*)
	Methodologies for applying sustainability and traceability requirements are documented and provided to applicant and accredited certification bodies.	(*FAO Guidelines: 27, 117*)
	Guidance material is documented and provided to the applicant and accredited certification bodies to aid the application and interpretation of the standards.	(*FAO Guidelines: 117*)
	Certification bodies are required to use the best scientific evidence available, also taking into account traditional, fisher and community knowledge of the resources provided that its validity can be objectively verified.	(*FAO Guidelines: 2, 28, 29, 30, 31*)
	The certification procedures include minimum requirements for technical, scientific and auditing skills or experience for auditors, certifiers or others involved in auditing compliance with the ecolabelling scheme standard.	(*WWF internal guidelines for engaging in certification programmes*)

Issue	Criteria	Notes / references
Certification (contd)	The certification procedures require the use of expert judgement to determine whether a fisheries sustainability performance requirement has been met by the fishery seeking certification.	(*WWF internal guidelines for engaging in certification programmes*)
	The certification procedures enable the use of a robust, science-based, objectively verifiable risk assessment approach to assess the performance requirements or indicators of the ecolabel standard in data-poor circumstances.	*Expert consultation in March 2008 recommended to COFI Sub-Committee on Trade in June 2008, which agreed, that COFI should develop technical guidelines for using risk assessment approaches for data-poor fisheries, under the ecolabelling guidelines. (FAO, 2008)*
Transparency	Certification bodies or ecolabelling schemes publish written records of the outcome of the science-based judgements made by certification assessment teams, including the rationale behind such judgements against each performance requirement and how the views of interested parties have been considered.	(*FAO Guidelines: 27*)
Dispute, complaint or objection mechanisms	Procedures for handling complaints are published by certification bodies, ecolabelling schemes and accreditation bodies.	(*FAO Guidelines: 82, 151*)
	Certification bodies, ecolabelling schemes or accreditation bodies keep written records of disputes, complaints and objections concerning certification and/or accreditation, noting that confidentiality of information shall be safeguarded during the process.	(*FAO Guidelines: 84, 150*)
Auditing & inspection	Certification procedures require certification bodies to monitor certified fisheries and conduct regular audits, including ad hoc audits if necessary to ensure that the fishery continues to meet the standard and to monitor progress against any non-conformances, conditions or corrective actions that may have been specified by the certification body.	(*FAO Guidelines: 128*)
	Certification procedures require certification bodies to require fisheries certification clients to notify them promptly of any changes to the management of the fishery or other changes that may affect continued conformity to ecolabelling standards.	(*FAO Guidelines: 129*)
	Certification procedures give certification bodies the ability to conduct reassessments of the fishery in the event of changes or analysis of complaints that may affect the fishery's ability to conform to ecolabelling standards.	(*FAO Guidelines: 130*)
Use of label, logo or certification claim	The certification body, accreditation body or owner of the ecolabelling scheme (standard setter) has documented procedures describing the requirements, restrictions or limitations on the use of any label, logo or certification claim relating to the ecolabelling scheme's standards.	(*FAO Guidelines: 141*)
Period of certification	Standards allow fisheries certification to be valid for up to five years.	(*FAO Guidelines: 132*)

Issue	Criteria	Notes / references
Training	Relevant training is provided to applicant and accredited certification bodies by standard setting bodies on the interpretation and implementation of the ecolabelling scheme's standards and certification procedures, methodologies and guidance.	(*WWF internal guidelines for engaging in certification programmes*)

3.3.4.1 Stakeholder participation in conformity assessment

Table v. Stakeholder participation in conformity assessment

Issue	Criteria	Notes / references
Certification – transparency	Certification procedures for fisheries sustainability require certification bodies to engage with and consult interested parties about the fishery in question and its likelihood of meeting the specified performance requirements of the standard.	(*FAO Guidelines: 2.4, 3*)
	Certification procedures for fisheries sustainability require certification bodies to consider the views of any interested parties, including States, RFMOs and the FAO.	(*FAO Guidelines: 2.4, 3, 27*)
Dispute, compliant or objection mechanisms	Certification procedures allow interested parties to dispute complain or object to the findings of an independent certification body in relation to sustainability or traceability standards.	(*FAO Guidelines: 147*)

3.3.5 Ecological criteria

The criteria for ecological sustainability described in this section are relevant to achieve sustainable fisheries and ecosystems. Discussion of the criteria relating to other environmental impacts of non-fishing activity such as onshore production processes and uses of non-fish resources can be found in the Annex

The FAO's Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries (*FAO*, 2005) is a primary reference for this section. The minimum standards ("minimum substantive requirements") contained therein were informed by reference to the following documents:

- United Nations Convention on Law of the Sea, 1982 (UNCLOS).
- The Agreement for the Implementation of the Provisions of UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, 1995 (FSA or the UN Fish Stocks Agreement).
- FAO Code of Conduct for Responsible Fisheries, 1995.
- Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem, 2001.

In March 2008 an Expert Consultation was convened by the FAO to discuss its Committee on Fisheries (COFI) request for review and clarification of "stock under consideration" and "minimum substantive requirements", i.e., minimum standards and defining unit of certification and how to treat fish stocks under ecolabelling standards (*FAO*, 2008). The report was submitted to COFI's Sub-committee on Trade meeting in June 2008 which recommended that COFI adopt the recommendations. These recommendations and the conventions and code listed above also informed the ecological criteria which follow.

Further nuance was added to the ecological criteria developed below through application of WWF's policy framework on ecosystem-based management (EBM) in marine capture fisheries (*Ward et al*, 2002). Where an

FAO Guideline set an ecological standard too low to be consistent with, or similar to, WWF's principles and policy positions, a higher standard was adopted with reference to the WWF EBM policy framework.

3.3.5.1 Unit of certification and stock under consideration

The "unit of certification" is defined by the FAO as the fishery for which ecolabelling certification is sought, as defined by the stakeholders who are seeking certification (*FAO*, 2008). A "fishery", in this context, can be defined by a method or gear type used to harvest one or more species; a sub-component of a larger fleet, such as a national fleet fishing a shared stock; or several fleets using different methods and gears to fish the same resources.

The "stock under consideration" is a term also defined by the FAO. It is an important concept linked to the unit of certification because a unit of certification may be a sub-set of a stock or stocks under consideration, *never* the other way around. The stock under consideration therefore refers to one or more biological stock(s), that the fishery exploits (as defined by the unit of certification), and have also been nominated by stakeholders for certification (*FAO*, 2008). The most important reason for the distinction is that the biological status of whole stocks, over their entire range of distribution must be assessed and pass sustainability benchmarks or reference points, regardless of which sub-set of fleet, method or area is the defined unit of certification. Certification can only apply to fish and fishery products that come from the nominated stock(s) under consideration. This means that in order to qualify for a label, logo or make a public claim of sustainability, a stock must have been nominated and assessed as a stock under consideration.

Table vi. Unit of certification and stock under consideration

Issue	Criteria	Notes / references
Unit of certification	The ecolabelling standard defines "unit of certification" in way that is consistent with the FAO definition.	(*FAO Guidelines: 25, as modified by FAO, 2008*)
	The ecolabelling standard requires certification clients and certification bodies to declare transparently which species, stocks, methods, fleet(s) and/or geographical boundaries or other relevant distinguishing features are included in the unit of certification.	(*FAO Guidelines: 25, as modified by FAO, 2008*)
Stock under consideration	The ecolabelling standard requires that certification clients and certification bodies declare transparently which stock or stocks are under consideration.	(*FAO Guidelines: 25, modified by FAO, 2008*)
	The ecolabelling standard requires that all fishing and other mortality of fish from any nominated stocks under consideration over their entire area of distribution are considered under a sustainability assessment for ecolabelling certification.	(*FAO Guidelines: 25, modified by FAO, 2008*)
	The ecolabelling standard requires that only fish or fishery products that come from nominated stocks under consideration, and that pass the relevant standard, may be entitled to carry the ecolabel, logo or make any public claim to meet the ecolabel standard for a sustainable fishery.	(*FAO Guidelines: 25, modified by FAO, 2008*)

3.3.5.2 Outcome oriented

"*The purpose is not to create an ecolabel that all fisheries can achieve, but rather an ecolabel that all sustainably managed fisheries can achieve. In this it is the sustainability outcome and its transparent demonstration that is paramount to the credibility and fairness of the ecolabel.*" (*Sainsbury*, 2008)

Table vii. Outcome oriented

Issue	Criteria	Notes / references
Sustainability outcome (biological or ecological status)	The ecolabelling standard is outcome oriented – i.e., the standard includes criteria and/or performance indicators where the use of which in conformity assessment will objectively demonstrate that the fishery's stock status and the impacts of the fishery on the ecosystem are sustainable according to appropriate measures and/or proxies.	(*WWF EBM Fisheries Framework Component 7*)

3.3.5.3 Status of the stock(s) under consideration (target stocks)

According to the FAO Guidelines, a sustainable outcome is where fish stocks are not overfished (i.e., recruitment overfishing is avoided) and stock levels allow 'optimum use' and are maintained for the long term. This will necessarily involve taking account of all forms of fishing mortality on the stock under consideration (not just that of the unit of certification), the stock's natural variability, the ecological role of the species (predator /prey /food web considerations) and impacts other than fishing (FAO Guidelines 29.2bis, 30, 31.2). From an EBM perspective, WWF is also concerned with target stock status being understood (and managed) taking into account its ecological role within a marine ecosystem.

Table viii. Status of the stock(s) under consideration (target stocks)

Issue	Criteria	Notes / references
Ecological role	The ecolabelling standard requires the ecological role of the stock under consideration to be taken into account in determining stock status and/or limit and target reference points (or proxies), including with it is a key prey species and the potential impacts of its removal on dependent predators.	(*FAO Guidelines: 31.2*)
Stock status	The ecolabelling standard requires the stock under consideration to be above its limit reference point (or appropriate proxy) if a biomass reference point, or below its limit reference point (or appropriate proxy) if a fishing mortality reference point.	(*FAO Guidelines: 30.1, 30.3*)
Stock rebuilding	The ecolabelling standard allows rebuilding of stocks that are above fishing mortality (or proxy) reference points or below biomass (or proxy) limit reference points, but requires action to be taken to rectify the situation and evidence of stock rebuilding.	(*FAO Guidelines: 30.2*)
Evidence	The ecolabelling standard allows generic evidence based on similar fisheries in the absence of specific stock information. However, the standard also requires more specific evidence the greater risk to stocks particularly in intensive fisheries.	(*FAO Guidelines: 30.4*)

3.3.5.4 Impacts of the fishery on the ecosystem

In relation to ecosystem considerations, the FAO Guidelines (*FAO*, 2005) and the recent expert consultation (FAO, 2008) agree with generally accepted views in the scientific community: that there is likely to be greater uncertainty in assessing the impacts of fishing on ecosystems than on target stocks. This is simply because the science of assessing ecosystems is much 'younger' than that of single species stock assessment, although it is improving. This can be overcome, however, by using a "risk assessment / risk management approach" (FAO Guidelines: 31). The Guidelines suggest that standards should include the ability to consider the most probable adverse impacts using available scientific information and traditional, fisher or community information that can be objectively verified. FAO Guidelines also suggest that standards should also require that those impacts likely

to have serious consequences be addressed through management or further analysis of the risks. This is consistent with WWF's EBM policy framework to a certain extent, however WWF's framework goes further by suggesting ecological risk assessments are an important contributor to understanding *any* potential risks, regardless of whether they are prejudged to have the "most probable adverse impacts" (*Ward et al*, 2002).

In setting criteria against which to assess ecolabelling schemes, WWF's approach is such that risks and impacts to marine ecosystems should be understood within a risk management context, that ecolabelling scheme standards need to be concerned about ecosystem health (sustainability) outcomes, and that ecolabel standards may also use appropriate proxy indicators or criteria and allow uncertainty and risk assessment methods to be used to assess relevant outcomes and impacts. Both FAO and WWF acknowledge that the special circumstances of 'developing and transition' countries should be recognised through financial and technical assistance, technology transfer, training and scientific cooperation. However, to acknowledge that many developing and transition countries may not have comprehensive 'data-rich' information to offer as proof of meeting an ecolabelling scheme standard, the use of risk-based assessment approaches (such as Ecological Risk Assessment or others) may be an acceptable criterion within an ecolabel standard, provided there are checks and balances within the approach to ensure results are objective and robust. Additionally, caution must be used to ensure such assistance doesn't compromise the credibility of any subsequent certification process.

Table ix. Impacts of the fishery on the ecosystem

Issue	Criteria	Notes / references
Key elements of ecosystems	The ecolabelling standard defines the important elements of ecosystems that must be audited for certification.	(*WWF EBM of Fisheries Framework*)
Non-target species	The ecolabelling standard requires knowledge of, and the potential impacts of the fishery on: Stocks other than stocks under consideration including discards, retained non-target, other bycatch species and unobserved mortality of species.	(*FAO Guidelines: 31.1*)
	The ecolabelling standard requires that non-target catches should not threaten non-target stocks with *serious risk of extinction*.	(*FAO Guidelines: 31.1*)
	The ecolabelling standard requires knowledge of the potential impacts of the fishery on Protected, Endangered and Threatened (PET) species.	(*WWF EBM of Fisheries Framework Components 4, 7 and 8*)
	The ecolabelling standard requires that the fishing impacts on protected species are within safe biological limits as measured by relevant proxy indicators, or if endangered or threatened, that fishing impacts are not compromising the ability of the species' population to rebuild.	(*WWF EBM of Fisheries Framework Components 4, 7 and 8*)
Habitats	The ecolabelling standard requires knowledge of essential and highly vulnerable habitats and the potential impacts of the fishery.	(*FAO Guidelines: 31.3*) (*WWF EBM of Fisheries Framework Components 4,7 & 8*)
	The ecolabelling standard requires the assessment of fishery impacts on habitat to consider the full spatial range of relevant habitats, not just the part of the spatial range that is potentially affected by fishing.	(*FAO Guidelines: 31.3*)

Issue	Criteria	Notes / references
Habitats (contd)	Impacts on essential habitats or habitats that are highly vulnerable to damage are to be avoided, minimised or mitigated.	(*FAO Guidelines: 31.3*) (*WWF EBM of Fisheries Framework Components 4,7 & 8*)
Key elements of wider ecosystem structure and function	The ecolabelling standard requires knowledge of the potential impacts of the fishery on key elements of ecosystem structure and function.	(*WWF EBM of Fisheries Framework Components 4, 7 & 8*)
Evidence	The ecolabelling standard allows generic evidence based on similar fisheries in the absence of specific information on impacts of fishing for the unit of certification. However, the standard also requires more specific evidence the greater risk to stocks particularly in intensive fisheries.	(*FAO Guidelines: 31.4*)

3.3.6 Fisheries management system criteria

The system of management for the fishery and the stock(s) under consideration is important to the extent that it delivers the positive outcomes described in the previous criteria. In other words, the management system needs to be capable of achieving productive fish stocks and healthy, functioning ecosystems. The management approach, however, needs to be balanced by the scale (size), complexity and cultural context of the fishery. Not all management approaches are appropriate to all circumstances. Ecolabelling standards should recognise this. Similarly, ecolabelling standards should recognise that highly quantitative and data-demanding approaches to stock assessment are not appropriate for all fisheries. The FAO Guidelines recognise that less elaborate methods should not preclude fisheries from possible certification and where there is greater uncertainty as a result more precautionary management approaches are required. Further, a past record of good management performance could be considered as supporting evidence of the adequacy of management measures and the management system (*FAO*, 2005, Guideline 32).

The FAO Guidelines recognise the need for special circumstances in developing countries and countries in transition for financial, technical assistance, technology transfer, training and scientific cooperation (FAO, 2005). Importantly, this should not mean that standards (and therefore sustainability outcomes) should be lower. The FAO acknowledges that robust, science-based risk assessment approaches may be of great value and use in data-poor situations. This could be further enhanced by encouraging the use of innovative stakeholder engagement processes to help certification bodies obtain objectively verifiable traditional, fisher and community information.

Similar to our approach to developing the ecological sustainability criteria for use by the independent auditors, where the FAO Guidelines are either incompatible with, or silent about, a WWF policy concern within EBM of Fisheries, the criteria have been adjusted or complimented by reference to the relevant WWF policy source.

Table x. Fisheries management system criteria

Issue	Criteria	Notes / references
Good management practice	The ecolabelling standard requires the fishery to be conducted under a management system that operates in compliance with the requirements of relevant local, national and international law and regulations, including the requirements of any RFMO that manages the fisheries on the stock under consideration.	(*FAO Guidelines: 28*)

Issue	Criteria	Notes / references
Good management practice (contd)	The ecolabelling standard requires that fishery management focuses on long term sustainable use and conservation not short term considerations.	(*FAO Guidelines:29.4*)
Appropriate management	The ecolabelling standard requires fishery management to be appropriate for the scale, type or context of the fishery.	(*FAO Guidelines:29*)
Legal framework	The ecolabelling standard requires that an effective legal and administrative framework, at the appropriate level, is established for the fishery.	(*FAO Guidelines:29.5*)
	The ecolabelling standard requires that compliance with fishery management rules, measures, etc is ensured through effective mechanisms for monitoring, control, surveillance and enforcement.	(*FAO Guidelines:6,29.5*)
	The ecolabelling standard requires the existence of appropriate and transparent dispute resolution mechanisms.	*(WWF EBM of Fisheries Framework Box* 19.)
Objectives	The ecolabelling standard requires objectives for managing the stock under consideration and the ecosystem effects of fishing.	(*FAO Guidelines:28.2, 31*)
Adequate data and information collected	The ecolabelling standard requires adequate data and/or information on target stocks (stocks under consideration) to be collected and maintained to enable stock status and trends to be evaluated and the effectiveness of management measures.	(*FAO Guidelines:29.1*)
	The ecolabelling standard requires adequate data and/or information to be used to identify risks and adverse effects of the fishery on key elements of ecosystems and the effectiveness of management measures.	(*FAO Guidelines:29.3*)
Traditional, fisher or community knowledge	The ecolabelling standard allows traditional, fisher or community knowledge to be considered when evaluating fisheries, provided its validity can be objectively verified.	(*FAO Guidelines:29.1, 29.2, 29.3*)
Stock assessment	The ecolabelling standard requires that appropriate stock assessments are conducted to determine stock status and trends for the stock under consideration.	(*FAO Guidelines: 29.1, 29.2, 32*)
Timely and best available science	The ecolabelling standard requires that the best science available be used in the fisheries management process.	(*FAO Guidelines: 29.2, 29.3, 29.4*)
	The ecolabelling standard requires that timely scientific advice on the likelihood and magnitude of fishery impacts be provided in the fishery management process.	(*FAO Guidelines: 29.3*)
Reference points (or proxies)	The ecolabelling standard requires the fishery to have appropriate target reference points (or proxies) that are consistent with B_{MSY}.	(*FAO Guidelines: 29.2, 29.2bis 29.6*)
	The ecolabelling standard requires the fishery to have appropriate limit reference points or directions (or proxies) that are consistent with avoiding recruitment overfishing.	(*FAO Guidelines: 29.2, 29.2bis 29.6*)
Management measures	The ecolabelling standard requires designated fisheries management authorities or entities to adopt and implement appropriate measures for sustainable use and conservation of the stock under consideration and avoid severe adverse impacts on dependent predators if the species is a key prey species.	(*FAO Guidelines:29.4, 31.2*)

Issue	Criteria	Notes / references
Management measures (contd)	The ecolabelling standard requires designated fisheries management authorities or entities to adopt and implement measures to avoid, minimise or mitigate, as appropriate, adverse impacts on key elements of the fishery's ecosystem.	(*FAO Guidelines: 31.3*)
	The ecolabelling standard requires that management approaches are documented, take into account uncertainty and imprecision and have a reasonable expectation that management will succeed.	(*FAO Guidelines: 28.1*)
	The ecolabelling standard requires that a precautionary approach be used and that the absence of scientific information not be used as a reason for postponing or failing to take conservation or management measures.	(*FAO Guidelines:29.6*)
	The ecolabelling standard allows the management system to use suitable methods of risk assessment to take into account relevant uncertainties.	(*FAO Guidelines:29.6*)
	The ecolabelling standard requires the management system to adopt remedial actions if reference points are approached or exceeded.	(*FAO Guidelines:29.6*)
	The ecolabelling standard allows recovery, restoration or rebuilding of stocks or key ecosystem elements within reasonable timeframes.	(*FAO Guidelines:30*)
Research	The ecolabelling standard requires research to be conducted that is aimed at addressing the ecosystem, stock and fishery management information needs.	(*WWF EBM of Fisheries Framework Component 10*)
Subsidies	The ecolabelling standard requires that there are no harmful or perverse subsidies used in the fishery that could result in unsustainable fish stocks or unhealthy, dysfunctional ecosystems.	(*WWF subsidies policy position*) (WWF, 2009)
Performance assessment and review processes	The ecolabelling standard requires that the performance of the fishery and its management approach are reviewed and assessed against management objectives.	(*WWF EBM of Fisheries Framework Components 9 & 11*)
Stakeholder engagement and participation	The ecolabelling standard requires fishery managers or decision-makers to engage with, or enable the participation of, stakeholders with an interest in, or who are affected by fisheries management decisions, in the decision-making process.	(*WWF EBM of Fisheries Framework Components 1-12*)
Accountability & transparency	The ecolabelling standard requires fisheries management decision makers to be accountable and transparent to interested parties about the fisheries management decisions they make.	*(WWF EBM of Fisheries Framework Component* 1.)

3.3.7 Traceability criteria

The credibility of ecolabelling schemes designed to encourage buyers to select products from sustainable or ethical sources is undeniably linked to the ability to guarantee that products do in fact come from the certified source: i.e., their traceability. In fisheries where illegally caught fish make up a significant enough proportion of the market to cause international concern and where non-compliance is a way of life, opportunities to fraudulently claim that their products come from a certified fishery would be greater if they did not have to verify the chain of custody of products. One sure way to do this is to require that products meet strict traceability standards and that supply chains be certified by independent certification bodies. The FAO

Guidelines make this link explicitly and require that 'chain of custody' measures cover both the tracking and traceability of the product all along the processing, distribution and marketing chain, as well as the proper tracking of the documentation (FAO, 2005).

Table xi. Traceability criteria

Issue	Criteria	Notes / references
Chain of custody	If an ecolabel, logo or sustainability claim is to be made about fish or fishery products at any time, standards require chain of custody certification at each point of transfer in the supply chain, including the first point of landing, transshipment at sea or other vessel to vessel transfer.	(*FAO Guidelines: 135*)
Segregation and separation	Standards require that all certified fish or fishery products are clearly identified and kept separate (either spatially or temporally) from all non-certified fish or fishery products at each point of transfer along the supply chain.	(*FAO Guidelines: 135*)
Records	Standards require that records relating to incoming and outgoing shipments, receipts and invoices are kept by the recipients of certified fish or fishery products.	
Audits & inspections	Standards require that certification bodies have documented audit and inspection procedures, including the frequency of audits and the use of ad hoc inspection.	(*FAO Guidelines: 137*)
	Standards require that certification bodies produce written audit reports which include records of any breaches of standards and relevant corrective actions required.	(*FAO Guidelines: 138, 139, 140*)
Certification period	Standards allow chain of custody certification to be valid for up to three years.	(*FAO Guidelines: 132*)

3.4 Scoring procedures for individual ecolabel schemes

The following section sets out the scoring procedures for individual ecolabel schemes, explaining the scoring values and how they are applied to each criterion. It also specifies how the criteria which are not scored (because they are outside the scope of the individual scheme which is being assessed) are dealt with. The scoring templates are provided in the Annex.

3.4.1 Scoring Scale

A simple scoring scale has been adopted to enable assessors to distinguish between different levels of compliance with the criteria. The table below sets out the values that should be applied to each of the 103 criteria. Scores may be partial, full or exceeding compliance with each criterion. A negative score may also be assigned for the absence of a particular issue or subject related to a criterion – this may be an obvious and deliberate omission of an important issue from a standard or the governing or operational structure of a scheme. To allow for the possibility that an absence of information prevents the assessment from determining whether an issue is present or absent from a scheme or standard, a scoring value of zero has been allocated.

To account for the differing scope and contexts of ecolabelling schemes, auditors may discard one or more criteria from the analysis. If this occurs, auditors must adjust the scoring template for the scheme and provide a clear, written rationale for doing so. Assigning the various scores should be based upon the available information.

Criteria Scoring Scale	
0	Not enough information to determine presence or absence of criterion-subject within standard scheme
1	Partially meets criterion
2	Fully meets criterion
3	Exceeds criterion

3.4.2 Scoring Templates

There are two templates to aid scoring the criteria and subsequent comparative analysis:

1. "Scheme scoring template"
2. "Scoring calculation template"

Snapshots of both templates are shown on the next two pages. Full versions of the templates can be found in the Annex.

Table xii. Scheme Scoring Template

THEME 1 Governance, Structure & Procedures of Ecolabelling Scheme						
Topic 1: Standard setting structures and procedures						
Issue	**Criterion**		**Relevant guidance to auditors and/or source of criterion**	**Findings**	**Noteworthy remarks**	**References / sources of information used to score criterion**
Transparency principle	1	The organisational structure and financial arrangements of an ecolabelling scheme are transparent.	*If not published on the internet, then available through annual reports or on request.*			

The Scheme Scoring Template provides the criteria and includes a column for the score from 0 to 3 (please note scores are not disclosed in this document), followed by two columns with findings for the score, any noteworthy remarks (particularly useful when the score is at the extremes of the range), and finally, space to record the references or other sources of information.

Each column should be completed for each criterion scored. If a criterion is discarded due to scope reasons, the score column should record an N/A.

Example of the scoring calculation

Scheme name	Ecolabel		
Overall Topic scores	Topic 1	Assessed	0.00
	Topic 2	Assessed	0.00
	Topic 3	Assessed	0.00
	Topic 4	Assessed	0.00
	Topic 5	Assessed	0.00
	Topic 6	Assessed	0.00
Criterion	Equal weight	Score	Contribution to topic score

Theme 1 Topic 1

Standard setting structures & procedures	Standard setting structures & procedures	Stakeholder participation in standard setting	1	0.0417 Not disclosed N/A
			2	0.0417 Not disclosed N/A
			3	0.0417 Not disclosed N/A
			4	0.0417 Not disclosed N/A
			5	0.0417 Not disclosed N/A
			6	0.0417 Not disclosed N/A
			7	0.0417 Not disclosed N/A
			8	0.0417 Not disclosed N/A
			9	0.0417 Not disclosed N/A
			10	0.0417 Not disclosed N/A
			11	0.0417 Not disclosed N/A
			12	0.0417 Not disclosed N/A
			13	0.0417 Not disclosed N/A
			14	0.0417 Not disclosed N/A
			15	0.0417 Not disclosed N/A
			16	0.0417 Not disclosed N/A
			17	0.0417 Not disclosed N/A
			18	0.0417 Not disclosed N/A
			19	0.0417 Not disclosed N/A
			20	0.0417 Not disclosed N/A
			21	0.0417 Not disclosed N/A
			22	0.0417 Not disclosed N/A
			23	0.0417 Not disclosed N/A
			24	0.0417 Not disclosed N/A

Theme 1 Topic 2

Accreditation & Certification Structures	Accreditation and certification structures		25	0.2000 Not disclosed N/A
			26	0.2000 Not disclosed N/A
			27	0.2000 Not disclosed N/A
			28	0.2000 Not disclosed N/A
			29	0.2000 Not disclosed N/A

The scoring calculation provides the ability to input and consolidate the individual scheme scores for each criterion and to calculate their contribution to the overall Topic score, for each of the six Topics. This allows for the generation of a single score for each Topic of between 0 and 3, enabling a comparison of the six main Topics across sustainability programmes.

3.4.3 Applicable Topics Selection

Applicable topics selection applies to the processing of scored criteria relating to non-ecolabel sustainability programmes. The following logic was applied for particular topics inclusion in or exclusion from the assessment of non-ecolabel sustainability programmes:

Table xiii. Applicable Topics Selection

Applicable topic	Details
Assessed	Topic is assessed. There is enough available information to assess a particular topic of a given sustainability programme in order to analyze its strengths and practices.
Excluded	Topic is excluded from the assessment. There is some information available on this particular topic of a given sustainability programme but it is not compatible with the assessment criteria logic. No rational results would be produced.
Not enough information	Topic is excluded from the assessment. There is not enough available information to assess a particular topic of a given sustainability programme.
N/A	Topic is excluded from the assessment. A topic is not compatible with the assessment criteria logic in regards to a given sustainability programme.

3.5 Qualitative Assessment

There are other influential dimensions such as carbon footprint, environmental impacts of production, social issues and animal welfare which are not a primary focus of this assessment study, but because they are emerging issues in the field they should not be ignored. However, although these factors are also important dimensions of sustainability, it is not currently possible to capture these within a quantitative framework. Consequently, only a descriptive summary of each dimension is provided and a qualitative assessment has been done across the programmes.

The basis for the qualitative assessment section is a consolidation and aggregation of all existing initiatives with these impacts organised in the following dimensions:

1. Environmental impacts
2. Social and ethical dimension
3. Economic aspects
4. Animal welfare and other impacts

We used an approach of empirical analysis of the publicly available information of respective sustainability programmes to construct a descriptive, qualitative assessment framework, reviewing all selected sustainability programmes against each of the four dimensions above. This resulted in significant initiatives being identified. Based on the frequency and sharing of initiatives across all sustainability programmes in the respective dimension, a classification was constructed to capture and give an overview of current main initiatives in these dimensions without any attempt to quantify them.

Table xiv. Qualitative Assessment

The following initiatives were identified and used:

Dimension	Initiative
Environmental impacts of production processes	
	Fishing operations restrictions
	Equipment restrictions
	Carbon footprint
	Food miles
	Reducing waste
	Preserving biodiversity
	Increase environmental awareness
	Other or not specific
Social-ethical dimension	
	Ethical conduct guidelines
	Workers rights
	International social& ethical initiatives
	Workers health and insurance
	Social impacts
	Education and training
	Other or not specific
Economic aspects	
	Price incentives
	Assist gaining market share
	Marketing promotion
	Local economy support
	Funding or donations
	Other or not specific
Animal welfare dimension and other impacts	
	Food safety
	Animal welfare
	Innovation
	Other or not specific

Each sustainability programme was reviewed from the perspective of aggregated initiatives against each highlighted dimension. Only sustainability programmes with a relevant claim in a given dimension were analyzed. For the sake of clarity, a quantitative indicator based on a multitude of initiatives in a given dimension was used. This indicator simply separates indicated sustainability programmes into three different classes based on number of initiatives in a given dimension. This should not be confused with any assessment of the rigor or depth of these initiatives themselves. This indicator is only a simple classification tool to provide an indication of the number of initiatives of a given sustainability programme in a specific dimension:

Advancement Indicator
Best in class
Above average
Basic programme

1. Best in class – a range of initiatives, their level of detail and their originality and pioneering nature.
2. Above average - sustainability programmes that are outstanding in comparison with others in regards to number of initiatives.
3. Basic programme – sustainability programmes that recognise a basic initiative in a specific dimension, typically providing rather general statements without much detail.

Sustainability programmes without any initiatives in a given dimension are not listed or considered.

3.6 Basis for Quantitative Evaluation

In order to provide quantifiable and objective measures for a recommendation about fishery management and ecological dimensions, the following appraisal indicators were quantitatively applied to categorise all ecolabels and potentially some other sustainability programmes based on their relative performance. N.B the term 'compliant' is used to describe whether a label met the criteria gathered by WWF rather than implying any form of standard setting by WWF.

Table xv. Basis for Quantitative Evaluation

Appraisal indicator	Performance details
Compliant	Min score of 1.5 per each topic
Semi-compliant	Average score above 1 but a min score at least per 1 topic is lower than 1.5
Non-compliant	Min average score for all topics lower than 1

4 Selected Wild Capture Initiatives

WWF compiled an inventory of wild capture seafood certification programmes that make varying sustainability claims (further referred to as sustainability programmes) as the basis for this study. All of these sustainability programmes were considered for this study but not all were considered for both qualitative and quantitative assessment.

Based on the sustainability programmes' scope and type, an inventory of all selected participants was classified into 4 different categories:

1. **Ecolabels** – this group of sustainability programmes is exposed to full quantitative assessment and also considered for a qualitative review;
2. **Sustainability programmes with on-pack label** – this group of sustainability programmes is considered for a partial quantitative assessment of some topics and a qualitative review;
3. **Other sustainability programmes** – sustainability programmes considered for an analysis of best practices within a quantitative assessment and a qualitative review;
4. **Deselected programmes** – sustainability programmes originally included in the inventory as potential candidates for the study but proved to dispose of no or very limited publicly available information. They are excluded from being considered either for any quantitative assessment or a qualitative review.

Primary conditions and selection criteria were used to identify relevant groups and their corresponding standards:

- The sustainability programme's certification structure: examination of an extent to which a sustainability programme invokes principles of procedural and institutional components of ecolabelling schemes (1. the setting of certification standards, 2. the accreditation of independent certifying bodies and 3. the certification that a fishery and the product chain of custody are in conformity with the required standard and procedures).
- Sustainability programme's label/logo: identification of sustainability programmes that package or place a unique label/logo etc. on a product assuring its provenance or responsible production.

The following sections discuss the sustainability programmes which have been considered for any kind of the quantitative and a qualitative part of this study. These programmes have been categorised into the groups as mentioned above.

4.1 Inventory of wild capture seafood organisations with a sustainability claim

A consolidated inventory of wild capture seafood certification programmes with varying sustainability claims identified by the WWF is provided below along with a basic descriptive introduction prepared by ADP.

4.1.1 Ecolabels

Table xvi. Ecolabels: AIDCP

Name & logo	Summary of scope for each ecolabelling scheme audited
AIDCP 	The countries and regional economic integration organisations participating in the Agreement on the International Dolphin Conservation Program (AIDCP) announced a program to certify and label tuna caught in the eastern Pacific Ocean consistent with the AIDCP and without mortality or serious injury to dolphins. The AIDCP Dolphin Safe Tuna Certification is supported by a comprehensive and transparent multilateral tracking and verification system administered by member governments and the treaty organisation that ensures full consumer confidence in the AIDCP Dolphin Safe label and the certification behind it. The Agreement on the International Dolphin Conservation Program, a legally-binding multilateral agreement which entered into force in February 1999, established this program. The Inter-American Tropical Tuna Commission (IATTC) provides the Secretariat for the program. All participating states have the duty to take, or to cooperate with other States in taking, such measures as may be necessary for the conservation and management of living marine resources.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the eco-label created?	In the late 1950s, fishermen discovered that yellowfin tuna in the eastern tropical Pacific Ocean (ETP) aggregated beneath schools of dolphin stocks. Hundreds of thousands of dolphins died due to original predominant fishing method in the ETP which was to encircle schools of dolphins with a fishing net to capture tuna concentrated below. Since its enactment in 1972, the provisions of the MMPA have resulted in greatly reduced annual dolphin bycatch by U.S. vessels participating in the tuna purse seine fishery in the ETP. By the early 1980s, only a few U.S. vessels remained in the fishery as a result of MMPA prohibitions on encircling dolphins. However, foreign participation in the ETP fishery continued to increase, and for many years dolphin mortality was managed under the voluntary International Dolphin Conservation Program (IDCP) supported by the Inter-American Tropical Tuna Commission (IATTC). In February 1998, the countries participating in the IDCP successfully negotiated the AIDCP. Since it became effective, the AIDCP has been amended to reflect decisions made by member nations as they seek to better implement this instrument for dolphin conservation.
What are the main objectives or aims of the eco-labelling scheme? What is its mission?	The objectives of AICDP are: 1. To progressively reduce incidental dolphin mortalities in the tuna purse-seine fishery in the Agreement Area to levels approaching zero, through the setting of annual limits 2. To eliminate dolphin mortality in this fishery AICDP is seeking ecologically sound means of capturing large yellowfin tuna not in association with dolphins 3. To ensure the long-term sustainability of the tuna stocks in the Agreement Area, as well as that of the marine resources related to this fishery, taking into consideration the interrelationship among species in the ecosystem, with special emphasis on, inter alia, avoiding, reducing and minimising by-Capture and discards of juvenile tunas and non-target species.
References	
	http://www.iattc.org/

Table xvii. Ecolabels: Clean Green of the Southern Rocklobster Fishery

Name & logo	Summary of scope for each ecolabelling scheme assessed
Clean Green of the Southern Rocklobster Fishery	
	Industry organisation South Australian Rocklobster Advisory Council (SARLAC) recognised a need for pro-active strategies to address wide range of issues in the fishing industry regarding the environment, food safety, OH&S and perception. SARLAC decided to build its own labelling programme the 'Clean Green' scheme, which sits somewhere between an ecolabel and a self-declaration scheme. In this case the fishery owns the label, but standards are independently audited. The Clear Green programme is a product certification scheme on "pot to plate" environmental, work place and food safety, quality and animal welfare standards for Southern Rocklobster. The elements of the program were trialed in 2004 with just three fishers and three processors. Following an audit by an independent body these standards were then finalised and approved. The Australian Southern Rocklobster industry is committed to ecological sustainable development (ESD). It recognises the imperatives of delivering an exclusive and safe ('clean') food product of the highest quality to our customers through to best practice ('green') in dealing with sustainability of the marine environment in its broadest context. It also values the delivery of a safe working environment for industry participants measurable in improved safety standards aboard its vessels and in its processing facilities. The Program product certification standards allow evaluation to be carried out by Conformity Assessment Bodies (CAB), who are accredited against the ISO/IEC Guide 65:1996 and JASANZ Procedure 15. The ecolabel itself is owned by the Southern Rocklobster Limited. Recently, the Australian Quarantine Inspection Service (AQIS) has assessed the Clean Green EMS and approved certified boats for handling live crustaceans for export to all live markets, which positively impacts credibility of the program and has created greater efficiencies in saving processor and industry audit time. The Clean Green program is supported by the industry and also by the Australian Government.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	The Clean Green program is the industry vehicle to train and maintain industry operations at world's best practice standards. The program allows industry to demonstrate to government, community, environmental groups, consumers and the marketplace, that the industry is organised and mature enough to address its responsibilities and interests through an industry managed and independently audited, standards-based program.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	Its mission is to: - Have an industry culture that recognises providing customer value underpins success - Provide a safe, secure, and productive working environment for its participants - Maintain and continue to develop sound proactive environmental practices - Be an internationally recognised brand that is renowned for its quality, taste and value - Employ new processes and practices which enhance the development of a profitable industry for all members - Generate sufficient profit to add value to the whole of the industry As part of achieving our mission, the "Clean Green' strategy has been established to meet emerging market, community and Government challenges at all levels of the supply chain.
References	
	http://www.southernrocklobster.com/cleangreen/default.aspx http://www.jas-anz.com.au/ www.sai-global.com

Table xviii. Ecolabels: Friend of the Sea

Name & logo	Summary of scope for each ecolabelling scheme assessed
Friend of the Sea	
	Friend of the Sea is a non-profit non- governmental organisation (NGO) for the conservation of marine habitat by means of market incentives, in particular the certification and promotion of sustainable seafood and products from sustainable fisheries and aquaculture. Friend of the Sea is currently a significant sustainable seafood certification scheme in the world, having assessed more than 10 million MT of wild-catch and 500 thousand MT of farmed products.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	Friend of the Sea was founded by Dr Paolo Bray, the European Director of the Earth Island Institute's Dolphin-Safe Project which was the precursor of all seafood and fisheries certification schemes. In fact, this project managed to save millions of dolphins from getting targeted, by caught and killed by the industrial tuna industry.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	Friend of the Sea is a non-profit non- governmental organisation (NGO) for the conservation of marine habitat by means of market incentives, in particular the certification and promotion of sustainable seafood and products from sustainable fisheries and aquaculture.
References	
	http://www.friendofthesea.org

Table xix. Ecolabels: KRAV

Name & logo	Summary of scope for each ecolabelling scheme assessed
KRAV	
	Sustainable fishing standards are created to drive development in the fishing industry towards a sustainable fishing and processing. They have been developed during a long process involving experts in many areas. In 2004, KRAV issued standards for sustainable fishing in the Scandinavian jurisdiction. The standards consist of five (5) sets of rules that cover all aspects of fishing, processing, and sales. The standards include all parts of the chain of custody from the fishery to the retailers: 1. Quality assurance 2. Stock assessment 3. Fishing vessels 4. Fishing methods 5. Landing and processing These standards were developed for conditions in Scandinavia and are neither tested nor intended for other areas. The KRAV standards include also include: requirements concerning fuel used by fishing vessels, the type of motor, the paint used on ships, etc. The environmental and fisheries management dimension focuses more on the equipment and operational impacts (fuel pollution, etc) than on the actual habitat and marine stock environment. From 2010 KRAV will also accept applications for fish stocks outside Scandinavia.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	There is a broad agreement internationally that most of the world's fish and shellfish of economic value are overfished, and in some cases near to being exhausted. This has led to an insight and agreement on the need for an improved and long-term sustainable management of the fish population and thereby an improved protection of marine biodiversity.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	• Contribute to a long-term sustainable management of marine resources • Increase the environmental requirement in management and processing of resources • Improve possibilities for the fishing industry and other interested parties to actively support a good fishery management • Give information about the products' environmental effects and thereby make it possible for consumers and processors, retailers, and traders to make conscious decisions about purchases • Encourage retailers, traders, and consumers to select fish and shellfish that come from sources of sustainable resource management • Create a price differentiation between the ecolabelled products compared to those lacking a label. • Enhance the motivation for producers to supply the market with products that fulfil ecolabelling criteria to improve profitability (a "green" bonus) or to increase market shares for their products. • Create competitive advantages, introduction to the market, or larger market shares for fish products that originate from sustainable fisheries.
References	
	http://www.krav.se/

Table xx. Ecolabels: Marine Ecolabel Japan

Name & logo	Summary of scope for each ecolabelling scheme assessed
Marine Ecolabel Japan	
	The Marine Ecolabel Japan was established in December 2007 as a system to support fisheries that are friendly both to marine resources and the oceans. Recognising the global nature of the seafood industry and that Japan is one of the largest markets for fishery products, Japanese stakeholders in the fishing industry and fisheries management have decided to respond to the situation proactively and establish their own ecolabelling scheme, MEL-Japan, which is most suitable to the situation of the Japanese fisheries. This system is designed to certify fisheries that are conducted in a sustainable and responsible manner. Specifically, it is intended to encourage and promote such fisheries by providing ecolabels for their products. As a result, practical and effective resource management-oriented fisheries, incomparable in other parts of the world, have developed and expanded in Japan. In the background of this development, one can point out the presence of many small-scale fishers and fishing boats as well as a variety of target fish species in fisheries. A framework has functioned that encourages fishers and others related to fisheries, who are users of the resources, to fulfill their role in resource management voluntarily and individually. Fishermen, regional and central governments are all united in participating in the current framework for resource recovery as well. MEL Japan, therefore, effectively applies the concept of co-management to certification as a means to facilitate and reinforce the work of the scheme. MEL Japan aims to create a positive cycle in which fishers, through ecolabel certification, give closer attention to resource management, reinforce cooperation with scientists and administrators, and contribute to the accumulation of scientific data and the improvement of information through fishing activities.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	Recognising the global nature of the seafood industry and that Japan is one of the largest markets for fishery products, Japanese stakeholders in the fishing industry and fisheries management have decided to respond to the situation proactively and establish their own ecolabelling scheme, which is most suitable to the situation of the Japanese fisheries.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	The basic principles are: 1. Promotion of the conservation and sustainable use of marine resources and the conservation of marine ecosystems 2. Co-management 3. Scientific and objective certification
References	
	http://www.melj.jp/

Table xxi. Ecolabels: Marine Stewardship Council

Name & logo	Summary of scope for each ecolabelling scheme assessed
Marine Stewardship Council	
	The Marine Stewardship Council (MSC) is an independent non-profit organisation that was set up in 1997 to offer a solution to the global problem of overfishing. The MSC's fishery certification program and seafood ecolabel recognise and reward sustainable fishing. MSC is a global organisation working with fisheries, seafood companies, scientists, conservation groups and the public to promote the best environmental choice in seafood. The MSC runs a sustainability program, working with partners to transform the world's seafood markets and promote sustainable fishing practices. With experts MSC developed standards for sustainable fishing and seafood traceability. They ensure that MSC-labelled seafood comes from, and can be traced back to, a sustainable fishery. The MSC environmental standard for sustainable fishing is the standard that a fishery must meet to become certified, and is based on 3 principles and 31 performance indicators. Only seafood from an MSC certified fishery can carry the blue MSC ecolabel. The standard is science-based and applies to wild-capture fisheries only – whatever their size, type or location but does not apply to farmed fish. Under the MSC program every fishery is measured against these principles, but the unique circumstances of the fishery are taken into account. The actions that different fisheries take to show they meet the 3 principles vary in every case.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	The MSC environmental standard was developed following an international consultation with stakeholders between 1997 and 1999. This consultation included eight regional workshops, two expert drafting sessions and involved more than 300 organisations and individuals around the world. The standard is based on the FAO Code of Conduct for Responsible Fisheries and other international conservation instruments. MSC standards for sustainable fishing and seafood traceability seek to increase the availability of certified sustainable seafood and our distinctive blue ecolabel makes it easy for everyone to take part.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	MSC vision is of the world's oceans teeming with life, and seafood supplies safeguarded for this and future generations. MSC mission is to use our ecolabel and fishery certification programme to contribute to the health of the world's oceans by recognising and rewarding sustainable fishing practices, influencing the choices people make when buying seafood, and working with our partners to transform the seafood market to a sustainable basis.
References	
	http://www.msc.org/ http://www.accreditation-services.com/

Table xxii. Ecolabels: Naturland

Name & logo	Summary of scope for each ecolabelling scheme assessed
Naturland 	November 2006, the Naturland Assembly of Delegates adopted the first Standards for Sustainable Capture Fishery. The standards are not only addressing the responsible management of natural resources and the protection of the entire aquatic ecosystem, but also the social aspects of fishery, e.g. in developing countries. The guidelines for sustainability focus on environmentally friendly use of fish stocks and the entire ecosystem, avoidance of critical and environmentally-harmful fishing methods, ecologically-sound processing without artificial additives or genetic engineering and a publicly-open, transparent approval process for all parts of the value chain. Sustainability in the sense of Naturland standards is a holistic concept, therefore including the ecological, social, and economical dimension of fisheries. Ecological sustainability requires that not only the stock of target species, but also the other components of the ecosystem are maintained in their integrity. An additional aspect is safeguarding fish as a high-value food item, not impaired by environmental toxins or critical processing methods, additives etc. Social sustainability of a fishery means that the persons involved encounter fair working conditions, and that livelihood of the wider society is not negatively impacted. Economical sustainability demands that the marketing of fishery products facilitates stable links between the members of the value chain, characterised by mutual responsibility and commitment.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	Other capture fishery programs were leaving a gap open by certifying very few artisanal fisheries, so Naturland decided it was really worth going into that niche and setting up a certification program for small scale capture fisheries and an idea to bring together organic farming and sustainable fisheries, e.g. in the field of processed/value added products, both, additionally, under social standards.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	Sustainability in the sense of Naturland standards is a holistic concept, therefore including the ecological, social, and economical dimension of fisheries: Ecological sustainability requires that not only the stock of target species, but also the other components of the ecosystem are maintained in their integrity. An additional aspect is safeguarding fish as a high-value food item, not impaired by environmental toxins or critical processing methods, additives etc.
References	
	http://www.naturland.de/

4.1.2 Sustainability programmes with on-pack label

Table xxiii. Sustainability programmes with on-pack label: Alaska Seafood Marketing Institute

Name & logo	Summary of scope for each ecolabelling scheme assessed
Alaska Seafood Marketing Institute	
	Wild, natural & sustainable, from the beginning. Though the science and fishery management that's behind the Alaska Seafood logo is rigorous and sound, ASMI does not view this logo as an ecolabel – it is an origin identifier and the ASMI mark of the best-managed fisheries. ASMI is not an ecolabel company. It is a state of Alaska entity and its brand mark is meant to identify only seafood produced in Alaska waters. Information on Alaska fisheries management comes directly from the state and federal fisheries managers. Statements about Alaska fisheries made by ASMI are official state of Alaska positions. Sustainability means fisheries can exist long-term without compromising the surrounding ecosystem. All Alaska seafood is wild and sustainable, and it is managed for protection against over-fishing, habitat damage, and pollution. Alaska is dedicated to preserving and protecting this superior seafood for future generations. Since 1959, the Alaska constitution has mandated that "fish...be utilised, developed and maintained on the sustained yield principle". Every aspect of Alaska's fisheries have been strictly regulated, closely monitored and rigidly enforced for nearly five decades where Alaska claims to set the standard for precautionary resource management. Alaska Seafood Marketing Institute (ASMI): • State of Alaska's official seafood marketing arm. • Partnership of Alaska fishermen, processors and the State of Alaska. • ASMI is not fisheries managers but rather promotes Alaska's fisheries management. • Goal: Increase awareness of Alaska as a source of wild and sustainable seafood. • Achieve our goal through our various promotion, education and training programs. • ASMI markets on an international and domestic basis. • Domestically we work in the following areas: Retail, Foodservice, and Consumer. A focus on the science behind the discussion paves the way to responsible seafood sourcing and merchandising, resulting in corporate responsibility.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	Alaska has a long history of sustainable fishing practices. Alaska is a state, a people and an industry steeped in the tradition of fishing and whole communities have been intimately involved with harvesting and processing Alaska seafood for generations. Alaskans depend on sustainable fish harvests, year after year, and are dedicated to protecting this important natural resource for future generations. Since 1959, the Alaska constitution has mandated that "fish...be utilised, developed and maintained on the sustained yield principle" every aspect of Alaska's fisheries have been strictly regulated, closely monitored and rigidly enforced for nearly five decades. And that means Alaskan seafood will remain the world's finest for future generations, without compromising the pristine natural beauty of Alaska.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	Alaska is dedicated to preserving and protecting this superior seafood for future generations. ASMI Goals: • Provide guidance for what to look for in responsible seafood • Demonstrate Alaska as the world's model for wild and sustainable fisheries • Sustainable Alaska fisheries are good for Washington Common themes running through each of Alaska's major fisheries are science, precaution, transparency, and enforcement.
References	
	http://www.alaskaseafood.org/sustainability/

Table xxiv. Sustainability programmes with on-pack label: Carrefour "Peche responsible"

Name & logo	Summary of scope for each ecolabelling scheme assessed
Carrefour "Peche responsible"	
	The Carrefour Group is developing a proactive policy to conserve the natural resources of forests, seas and earth. As for sea resources, the Group initiated a Responsible Fishing approach in 2004. Giving the crucial problem of over-exploitation of ocean resources, and decreasing fish stocks, the Group has decided to promote sustainable fishing which contributes to a sustainable management of resources. In France, compliance with regulatory fish sizes is included in suppliers' specifications. Since 2000, at Carrefour platforms, inspectors have been monitoring the compliance of incoming fish (over 3,000 controls annually in France). In 2005 in France and Belgium, the Group launched a line of "Pêche responsible" responsible fishing frozen products, guaranteeing optimal traceability and stock management as well as respect for the ecosystem. Finally, in 2008 Hypermarkets France are launching Marine Stewardship Council (MSC) frozen products under the Carrefour Agir Éco Planète brand, as well as MSC fresh products. The "Responsible Fishing" standard was developed by Carrefour and adopted by selected fisheries. The standard applies only on selected species fished in Iceland, delivered as frozen seafood and sold in Carrefour supermarkets in France and Belgium. It is not an ecolabel but an environmental private specification on fish and not on the product. It is based on an innovative approach to Hazard Analysis and Critical Control Points (HACCP) which is adapted to fishery management aspects and stock considerations. The Group attempts to raise other economic players' and consumers' awareness on this kind of product.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	With 64,000 tonnes of fresh seafood and 40,000 tonnes of frozen products sold each year, Carrefour is the leading retailer of seafood products in France. Given the crucial problem of over-exploitation of ocean resources and decreasing fish stocks, Carrefour has decided to raise consumer awareness and offer sustainable supply sources. The Group therefore offers everyday products, which are recognisable.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	The goal of Carrefour is to achieve commercial and economic success, but it cannot be separated from their social and environmental responsibilities. Promote and develop offer of environmentally friendlier products.
References	
	http://www.carrefour.com/cdc/responsible-commerce/our-commitment-to-the-environment/responsible-sourcing/

Table xxv. Sustainability programmes with on-pack label: Dolphin Safe of Earth Island Institute

Name & logo	Summary of scope for each ecolabelling scheme assessed
Dolphin Safe of Earth Island Institute	
	Earth Island Institute (EII) monitors tuna companies around the world to ensure the tuna is caught by methods that do not harm dolphins and protect the marine ecosystem. EII standards prevent harm to dolphins and are adhered to by more than 90% of the world's tuna companies. EII has established a tuna monitoring program with staff monitors around the world who observe operations at tuna canneries, offloading ports, and cold storage facilities, as well as on board fishing vessels and transshipment sites, to ensure that tuna supplies are indeed "Dolphin Safe." It is one of the largest private food monitoring systems in the world. It works with tuna companies - import associations, fishing fleets, canners, and brokers - to establish "Dolphin Safe" policies for each company.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	In 1986, IMMP developed a campaign, including a consumer boycott of tuna, to press U.S. tuna companies to end the practice of intentionally chasing and netting dolphins with purse seine nets and to adopt "dolphin safe" fishing practices to prevent the drowning of dolphins in tuna nets. In 1990, the three largest tuna companies in the world - StarKist, Bumblebee, and Chicken of the Sea - agreed to stop purchasing, processing, and selling tuna caught by intentional chasing and netting of dolphins in order to catch the tuna which swim beneath. This standard of "non-encirclement" of dolphins became the U.S. legal standard for the "Dolphin Safe" tuna label, due to legislation in the U.S. Congress and supported by IMMP and the tuna industry.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	The aim is to ensure the tuna is caught by methods that do not harm dolphins and protect the marine ecosystem.
References	
	http://www.earthisland.org/dolphinSafeTuna/

Table xxvi. Sustainability programmes with on-pack label: Ecofish

Name & logo	Summary of scope for each ecolabelling scheme assessed
Ecofish	EcoFish is not an ecolabel or certification program. EcoFish is a seafood company with a strong environmental mandate, which uses other certification bodies to identify the most sustainable fisheries in the world. All of Ecofish wild fisheries are MSC certified or currently in assessment, therefore providing the MSC with a chain of custody and traceability. EcoFish is dedicated to serving only the most sustainable sources of seafood. To achieve this, they have assembled a Seafood Advisory Board comprised of some of the world's leading marine conservation scientists who help to research and recommend which species and fisheries to feature. The Board uses a diverse array of existing guidelines at their organisations as reference when assessing a fishery. Research scientists at the Monterey Bay Aquarium's Seafood Watch Program, Environmental Defense, Blue Ocean Institute and New England Aquarium recommend these fisheries to EcoFish.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	The belief that there are many concerned people who care about where their food comes from, care for the environment, and desire a source of all natural premium quality seafood from environmentally sustainable fisheries.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	• To provide only the most sustainable, highest quality, healthiest, all natural, most delicious seafood to customers. • Help support sustainable fisheries (wild & aquaculture), and their fishing communities by featuring their sustainable seafood products and adding value to their catch. • Help reverse the decline of marine bio-diversity by encouraging a shift in consumer demand away from over-exploited fisheries. • Offer a level of customer service unmatched in the seafood industry. • Accentuate the positive — highlight fishery success stories by increasing demand for these products, creating an incentive for others to adopt sustainable fishing practices. • Support marine conservation efforts through collaboration with conservation, research and educational organisations worldwide. • Raise consciousness of the threats to the world's oceans by providing a credible source of environmentally responsible seafood to the rapidly growing consumer demographics seeking environmentally sustainable products. • Set a good example for corporate America by striving for the "Triple Bottom Line" — operate a profitable business that's also responsible to its community and the environment.
References	http://www.ecofish.com http://www.seafoodsafe.com/

Table xxvii. Sustainability programmes with on-pack label: Responsible Fisheries Iceland

Name & logo	Summary of scope for each ecolabelling scheme assessed
Responsible Fisheries Iceland	
	A new logo as a symbol for responsible Icelandic fisheries was introduced at the Icelandic Fisheries Exhibition on 3 October 2008. The logo refers to Icelandic origin and to the Statement on Responsible Fisheries in Iceland. Further, it symbolises a clean sea, a school of fish and a stamp of approval, and it indicates product origin in Iceland from responsible fisheries. This logo is beginning to be used in the market. The logo is a marketing tool. Icelandic fishing vessel owners, processing plants as well as other stakeholders in the value chain of Icelandic seafood products can apply for a permit to use the logo. The logo can be used on packaging of products produced from catch of Icelandic seafood or in advertisements. Logo use is governed by rules adopted by the Fisheries Association of Iceland. Third party certification of sustainable harvesting of some Icelandic fish stocks, as well as an associated ecolabel, is in the preparatory stage. Progress on the certification front will be made public when appropriate. Based on a press release from the International Boston Seafood Show on March 18th 2009, the Icelandic Ministry of Fisheries and Agriculture anticipates certification of the first stocks will be in place by spring 2010. A new distinct version of a logo will be offered for stakeholders in the Icelandic fisheries value chain who are interested in identifying products from certified fisheries with a logo. The main emphasis will be on the certification itself. A logo, however, is a voluntary marketing tool for those who find it beneficial to use it as a confirmation of the certification.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	In recent years, demand for sustainable use of renewable resources, including fish stocks, has increased greatly throughout the world, not least in leading markets for Icelandic seafood. Few nations are as dependent upon sustainable fisheries as Iceland is, making it of prime importance to harvest fish stocks responsibly and sustainably. In August 2007, Iceland issued a Statement on Responsible Fisheries in Iceland. The statement was signed by the Minister of Fisheries, the Director of the Marine Research Institute, the Director of Fisheries and the Chairman of the Fisheries Association of Iceland.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	
References	
	http://www.fisheries.is http://liu.is http://eng.sjavarutvegsraduneyti.is/

Table xxviii. Sustainability programmes with on-pack label: Responsible Fishing Scheme

Name & logo	Summary of scope for each ecolabelling scheme assessed
Responsible Fishing Scheme	
	This is not an ecolabel scheme, yet environmental considerations are integrated. Inspired from the 1995 Code of Conduct for responsible fishing The Responsible Fishing Scheme was launched in May 2006. It is an independent, audited assessment of the application of good practice by a vessel skipper and crew in their fishing operations. RFS operates for single vessels. Developed in UK by Seafish Industry Authority the scheme is now reaching a wider application. The Responsible Fishing Scheme was created in response to the needs of the seafood supply chain to demonstrate their commitment to the responsible sourcing of seafood.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	The Responsible Fishing Scheme has been developed to raise standards in the catching sector, enabling those within the seafood supply chain to demonstrate their commitment to the responsible sourcing of seafood. The aim is that, over time, accreditation will become a condition of supply. In order to provide industry with a tool which allows fishing vessels to prove their responsibility to the onward supply chain, Seafish have developed the Responsible Fishing Scheme. The scheme has been designed to cover a diverse range of vessels and fisheries.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	The mission is to support the seafood industry for a sustainable, profitable future. The Responsible Fishing Scheme has been developed to raise standards in the catching sector.
References	
	http://rfs.seafish.org/

4.1.3 Other sustainability programmes

Table xxix. Other sustainability programmes: Fair-Fish

Name & logo	Summary of scope for each ecolabelling scheme assessed
Fair-Fish 	Fair-Fish differs fundamentally from other certification schemes which concentrate on sustainability. It includes environmental, social and animal welfare criteria. The multifactor approach of Fair-fish offers a unique chance to small scale fisheries which usually cannot do so on the world market. Fair-fish is not an ecolabel. While industrial fisheries will never be able to cope with Fair-fish criteria, these can become the argument for many small scale fisheries. It is domiciled in Switzerland and was founded in January 2000 by animal welfare organisations. Since 2004 it has been involved with a project in Senegal to export "fair fish" from Senegalese coastal fisher-folk to Europe. The first small imports from Senegal began in March 2006 for direct marketing to Migros in Switzerland. In April 2007, the Fair-Fish labeled fishery in Senegal was certified against Fair-Fish directives (a mix of social and animal welfare criteria) by the Société Générale de Surveillance (SGS), and by Friend of the Sea. Fair-Fish has been concentrating its efforts in the disadvantaged region of the Saloum area, in the far south of Senegal, next to Gambia. This certification sets fair conditions and a fixed minimum price for fishers and their families while at the same time seeking to conserve fish stocks. The label guarantees that fisheries enterprises respect traceability standards and use capture methods which minimise suffering to fish. At present, the fish are sold exclusively in Switzerland. Fair-fish animal welfare criteria for fisheries: "We accept … fishing methods which do not hold the fish for a long time in the fishing gear and which allow to stun and kill every fish immediately after it is taken off the water. Traditional fishing at coasts and on lakes can cope with these criteria with good will and suitable methods. Industrial fishing however will hardly be able to keep up."
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	The starting point was the conviction that fish do feel pain.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	Fair-fish is aiming at changing the ways of providing fish for food. Together with concerned consumers and conscious producers worldwide. Ways to reach these goals: • Information of the public about the problems of the nowadays predominant manners of providing fish and about possible alternatives. • Dialoguing with experts, scientists, fishermen, fish farmers, fishmongers, retailers and organisations of related fields. • Definition of criteria for fair methods in fishing and fish farming. • Establishing a label for fish produced according to these criteria.
References	http://www.fair-fish.ch/english

Table xxx. Other sustainability programmes: FISHWISE

Name & logo	Summary of scope for each ecolabelling scheme assessed
FISHWISE	
	The FishWise retail program in particular, is an educational labelling program that indicates the level of sustainability of each seafood item using green, yellow and red color-coded labels. Catch method and location of catch is also conveyed, making FishWise a comprehensive labelling program for seafood cases in the U.S. **What:** Fishwise is a non-profit organisation designed to improve the sustainability and financial performance of seafood retailers, distributors, and producers. **How:** FishWise does not invoke any of the principle procedural and institutional components of ecolabelling schemes nor package or place a physical singular label/logo etc. on product assuring its provenance or responsible production. Rather, the onus is on the organisations who follow the advisories [...] to use the information with integrity, recognising issues of traceability, and ultimately in the fashion that their corporate philosophy deems most appropriate. Positioned between the seafood industry and marine conservation organisations, FishWise offers a range of services between seafood vendors and their customers, enabling businesses to sell more sustainable seafood, more profitably. FishWise joins business imperatives with leading ocean conservation strategies. **Why:** FishWise believes that healthy ocean ecosystems and freshwater habitats are vital to maintain biological diversity and are the building blocks of a long term and sustainable seafood industry. By combining credible science and NGO expertise, the innovation of seafood businesses, and the power of informed consumers, FishWise believes that we can chart a new course for the seafood industry. FishWise's belief is that everyone in the supply chain has an important role to play, from the coastal communities and companies that farm and catch fish, to the specialty retailers and distributors that differentiate themselves through sustainable business practices, to the largest companies that possess the leverage to drive innovation and conservation in their supply chains. All of us must work together to enact the change necessary to protect our ocean resources long into the future.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	FishWise was founded in 2002 to enable consumers and grocery retailers to support seafood sustainability and thereby protect ocean ecosystems. The organisation's co-founders, Teresa Ish and Shelly Benoit, identified a critical gap in which consumers did not have information to make informed choices and well-intentioned businesses did not have the tools and resources necessary to accurately and credibly incorporate sustainability into their seafood cases. Through a test program with New Leaf Community Markets in Santa Cruz, California, FishWise was born. FishWise expanded in 2006 to Andronico's and Nugget Markets, two of California's leading independent retailers. The FishWise retail program can now be found on both coasts of the United States, and continues to expand its geographic scope.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	Fishwise provides organisations advice on best available information about the sustainability of seafood species, expecting that companies will use the information with integrity, recognising issues of traceability, and ultimately in the fashion that their corporate philosophy deems most appropriate (letter to Accenture, May 29, 2009). FishWise seeks to educate consumers, retailers, distributors and other companies on sustainable fishery issues, with the goal of decreasing the unsustainable harvest of fish, while improving fisher livelihoods, fish populations and ocean ecosystems.
References	
	http://www.fishwise.org/ communication letter sent in regards to this study

Table xxxi. Other sustainability programmes: ISO

Name & logo	Summary of scope for each ecolabelling scheme assessed
ISO[4]	
	Seafood is the number one traded food in the world and one in five people depend on fish as their primary source of protein. With growing populations and with the extinction of some wild fish stocks, sustainable solutions are necessary to meet world demand. Aquaculture has become an important part of the food supply chain (Ludvigsen & Aarefjord 2009). Sustainability in the seafood sector depends on transnational agreements and practices, but to date, there are no recognised international standards specifically for the sector. Thus in order to develop International Standards for the sector, ISO established a new technical committee - ISO/TC 234, Fisheries and aquaculture. So far, they have in plan to issue ISO/WD 12875 standard which will contain traceability of fishery products and specification on the information that must be recorded in captured fish distribution chains and ISO/WD 12878 standard which will contain Environmental monitoring of marine fish farms. The ISO standards will promote the sustainable development of the fisheries and aquaculture sectors; will develop specifications for technical equipment adapted to the local environment; will improve surveillance and management of marine resources; will enable international agreement on sampling methods; will improve the safety of employees and will establish a common terminology. The new ISO committee provides private and governmental stakeholders with a unique opportunity to participate in the international development of fisheries and aquaculture. Implementation of international standards is recognised as one of the best measures to remove technical barriers to trade. It is also expected that the use of international standards will contribute to a more sustainable development of the sector.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	ISO, the largest standard developing organisation, started its activity in 1947. Aquaculture is becoming an increasingly important part of the food supply chain. However, this can only be sustained with good practices, for the health of both the industry and the consumer. The development of well-chosen International standards in area of fisheries and aquaculture will be a valuable contribution to ensure safe and sustainable fisheries and aquaculture. Thus, in order to develop International Standards for the sector, ISO established a new technical committee - ISO/TC 234, Fisheries and aquaculture. ISO/TC 234 held its first meeting in October 2007 in Bergen, Norway. A second meeting was hosted by the Asociación Española de Normalización y Certificación (AENOR) in Madrid in November 2008.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	Standardisation in the field of fisheries and aquaculture, including, but not limited to, terminology, technical specifications for equipment and for their operation, characterisation of aquaculture sites and maintenance of appropriate physical, chemical and biological conditions, environmental monitoring, data reporting, traceability and waste disposal. ISO/TC 234 will develop standards to: • Enable a sustainable development of the fisheries and aquaculture sectors • Improve the international surveillance and management of marine resources • Provide exact specifications for technical equipment so it fits local conditions and farmed

[4] Note: ISO fishery sustainability programme is currently under development and limited public information on the fishery management and ecological aspects available is available. Partially, this was a reason why ISO fishery sustainability programme is listed in the given category. It is also due to a fact that in the theme of Governance, Structures & Procedures many criteria are either based or refer to many ISO standards. This study believes that it is not appropriate and beneficial to measure the ISO standard against itself. Thus ISO could neither be currently listed as an ecolabel for it's under development nor as a sustainability programme with on-pack logo and therefore quantitatively appraised.

	species • Provide the sectors with tools to ensure environmental compatibility • Improve the health and welfare of aquacultured species • Enable traceability of technical equipment with respect to production, trade and use • Enable traceability of seafood from ”fjord to fork” • Provide the producers with tools for efficient registration, exchange and use of data • Ensure international agreement on methods for sampling and analyses • Improve the safety for employees • Ensure a precise multilingual terminology.
References	http://www.iso.org/

Table xxxii. Other sustainability programmes: Pêche Responsible Intermarche

Name & logo	Summary of scope for each ecolabelling scheme audited
Pêche Responsible Intermarche	The largest owner of fishing ships in France, Scapêche, is part of popular French supermarket chain Les Mousquetaires. They launched a responsible fishing initiative in 2005, to preserve fish stocks, which are recognised and audited by Bureau Veritas. To increase awareness and debate about sustainable fishing, Fabien Dulon, Scapêche's director, presented the initiative at the 2009 Salon de l'Agriculture (an annual French agricultural fair). Today, 5 threatened fish species are protected under the responsible fishing program: southern Patagonian toothfish, black cod, blue ling, monkfish and black scabbard. The Mousquetaires -Intermarché "responsible fishing" scheme with Bureau Veritas inspection is not an "ecolabel" regarding FAO guideline -2005. Bureau Veritas used its "recognition" on Vessels -fleet / regarding ISO 17020 accreditation. It is not a certification but an inspection scheme. Methodology used for inspection is the same technical level like certification. It is a B2B tool. In shops, Intermarché "Mouquetaires" use its own private mark "responsible fishing", without Bureau Veritas logo.
Scheme objectives	
What was the driving force for the scheme's creation? Why was the ecolabel created?	The Patagonian toothfish (dissostichus eleginoides), is a deep-water species caught in southern ocean waters near and around Antarctica. During the 1990s, its firm and delicious white meat won over consumers, especially in the U.S. For fishermen, it became a highly prized catch for its cash value and was branded as “white gold”. This combined with a decline in worldwide stocks, the remoteness of fishing grounds and lack of surveillance has encouraged harmful fishing practices from pirate and illegal boats. A campaign in the U.S. has been encouraging consumers to ban toothfish altogether. In order to assure Americans that its toothfish fishing practices are ethical and legal, Scapêche decided to build and execute a concrete sustainable development plan specific to the industry. Although general theories on how to fish responsibly existed, there were no practical guidelines on toothfish fishing.
What are the main objectives or aims of the ecolabelling scheme? What is its mission?	The responsible fishing initiative was launched in 2005 to preserve fish stocks based on five security axes: - security of the natural resource, - environment, - employees, - sanitation and product quality.
References	http://www.scapeche.fr/trad_anglais/index_english.htm http://www.intermarche.com/default.aspx http://www.bureauveritas.com

4.1.4 Excluded programmes

A number of sustainability programmes initially identified by WWF for this study were excluded from this study after data was gathered, due to the fact that there was no or very limited, unreliable publicly available information on them. Within the study framework the following programmes were not considered to be as any kind of a wild-capture seafood sustainability certification programme:

- Pescanova
- NORMA
- Government of France

4.2 Sustainability Programme Typology

This section provides an overview of the structure and robustness of all involved seafood organisations selected for this study. Note it is important to understand the type of organisation being examined.

Table xxxiii. Sustainability Programme Typology

Types of Assessed Sustainability Programmes															
	Category					Scheme owner and operator					Participation and openness				
Name	1st Party	2nd Party	3rd Party	Other	Ecolabel scheme	Government	Private – industry	Private – environmental	Private – other	Details	Voluntary	Mandatory	Open (non-discriminatory)	Restricted	Details
Alaska Seafood Marketing Institute		☑				☑				Alaska Seafood Marketing Institute (ASMI) is a State of Alaska's official seafood marketing arm.				☑	Geographical restriction: only fish from Alaska.
Carrefour "Peche responsible"		☑					☑			The Peche responsible label is a Carrefour France and Belgium private supermarket fishery initiative.				☑	Available only for fisheries from Iceland and Greenland supplying Carrefour.
Clean Green of the Southern Rocklobster Fishery		☑			☑		☑			The ecolabel itself is owned by the Southern Rocklobster Limited, which is the national peak body owned by licence holders across South Australia, Tasmania and Victoria.			☑		
Dolphin Safe of Earth Island Institute		☑						☑		Earth Island Institute (EII).			☑		
Peche responsible Intermarche		☑					☑			Intermarche (owned by the Mousquetaires group).				☑	Scapêche is a subsidiary of the French supermarket chain Intermarché. Its vessels supply 40 percent of Intermarche's fresh fish needs.

Types of Assessed Sustainability Programmes															
Name	Category					Scheme owner and operator					Participation and openness				
	1st Party	2nd Party	3rd Party	Other	Ecolabel scheme	Government	Private – industry	Private – environmental	Private – other	Details	Voluntary	Mandatory	Open (non-discriminatory)	Restricted	Details
Responsible Fisheries Iceland		☑					☑			Iceland issued a Statement on Responsible Fisheries in Iceland. The statement was signed by the Minister of Fisheries, the Director of the Marine Research Institute, the Director of Fisheries and the Chairman of the Fisheries Association of Iceland. The scheme is being developed by the Fisheries Association of Iceland.				☑	This logo indicates product origin in Iceland. The logo is a marketing tool.
AIDCP			☑		☑	☑				AIDCP is a legally-binding multilateral agreement. All participating states have the duty to take, or to cooperate with other States, such measures as may be necessary for the conservation and management of living marine resources.			☑		It is open for states with a coastline bordering the Agreement Area and by States or regional economic integration organisations which are members of the IATTC or whose vessels fish for tuna in the Agreement Area while the Agreement is open for signature.
Friend of the Sea			☑		☑			☑		Friend of the Sea	☑				
ISO			☑			☑				16 ISO member countries have registered to participate in the works, including Norway, Canada, France, Iceland, India, Malaysia, South Africa, Thailand, U.K., U.S.A, and Vietnam. Another 16 countries have observer status including Croatia, Germany, Italy, Poland, Ukraine, Japan.	☑				
KRAV			☑		☑			☑		Swedish Association for Control of Organic Production.				☑	KRAV is not open for fisheries/fishery products other than those coming from the Scandinavian EEZs.

Types of Assessed Sustainability Programmes																
Name	Category					Scheme owner and operator					Participation and openness					
	1st Party	2nd Party	3rd Party	Other	Ecolabel scheme	Government	Private – industry	Private – environmental	Private – other	Details	Voluntary	Mandatory	Open (non-discriminatory)	Restricted	Details
Marine Ecolabel Japan			☑		☑	☑				MEL Japan was announced and developed by JFA, the Japan Fisheries Association, which is closely associated with the government. The government is intensely involved in this initiative.			☑		
Marine Stewardship Council			☑		☑			☑		Established by a WWF and Unilever initiative.	☑				
Naturland			☑		☑			☑		Naturland – Association for Organic Agriculture was founded in 1982. It is a non-profit organisation.			☑		
Responsible Fishing Scheme			☑				☑			Seafish Industry Authority, UK established by the Government in 1981 as a Non Departmental Public Body.				☑	Applied to UK fisheries only but interest from other EU countries has been noted (e.g. Spain).
Ecofish				☑				☑		Ecofish Seafood Company.				☑	A particular fishery is chosen by a Seafood Advisory Board. Fisheries access to this scheme depends on biological characteristics.
Fair-fish				☑					☑	The Swiss based association Fair-fish was founded in January 2000 by animal welfare organisations and is/has been supported by several foundations and members.			☑		
Fishwise				☑				☑		FishWise was established through a test program with New Leaf Community Markets in California and co-founded by Teresa Ish and Shelly Benoit. The organisation is a 501(c)(3) non-profit that operates with a staff, guided by an Executive Director and advisory Board.			☑		FishWise is an open program, which businesses voluntarily subscribe to.

4.3 Sustainability Programmes Scope Definition

Table xxxiv. Sustainability Programme

Scope of Sustainability Programmes

Issue scope:
1. Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)
2. Fisheries management or legality issues (e.g. measuring prevention of IUU fishing)
3. Traceability of certified products through the supply chain
4. Economic (e.g. ethical or fair trade)
5. Social-ethical (e.g. workers' rights)
6. Environmental impacts of production processes (e.g. carbon footprint)
7. Other (e.g. ethical treatment of fish)

Name	Geographical scope					Issue scope								Product and market scope						
	Global	Regional	National	Sub-national	Local	1	2	3	4	5	6	7	Details	Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Details
Alaska Seafood Marketing Institute				☑		☑								☑		☑				• Five species of Wild Salmon: King, Sockeye, Coho, Keta, Pink • Whitefish Varieties: Halibut, Cod, Pollock, Sole/Flounder, Black Cod, Rockfish, Surimi Seafood • Shellfish: King Crab, Snow Crab, Dungeness Crab, Weathervane Scallops, Spot Prawns
	Alaska												All Alaska seafood is wild and sustainable, and it is managed for protection against overfishing, habitat damage, and pollution. Effort to minimise bycatch and discards.							
							☑													
													A concept of Total Allowable Catch (TAC) – set as a firm limit, beyond which fishing must stop. Balancing finite fish stocks with improvements in catching efficiency must be regulated by: 1. Time-and-area closures: These methods allow fishing during certain times or in certain areas, but not in others 2. Restrictions on size of boats: Certain fisheries have limits on the size of fishing boats 3. Restrictions on type of fishing gear: Virtually every fishery has limitations on fishing gear, such as the size, design, and use of each type of gear 4. Gear prohibition: Certain gear types are completely prohibited, such as pelagic longlines, sunken gillnets, and fish traps.							
								☑												
													Traceability is a necessary part of global business seafood market.							
									☑											
													Economic rationalisation (e.g. IFQ Individual Fishing Quotas).							
										☑										
													In Alaska sustainability also means family and community sustainability: •Fisheries are the life-blood of Alaska coastal communities •Many harvesters are family-based operations •Many Alaska residents also depend on seafood as a form of subsistence •In Alaska, there is an "organic" connection; a relationship between Alaskans and the resource base-NOT just a job-but a lifestyle.							
											☑									
													Vessel and Gear restrictions							

Scope of Sustainability Programmes																				
	Geographical scope					Issue scope								Product and market scope						
	Global	Regional	National	Sub-national	Local	1 Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)	2 Fisheries management or legality issues (e.g. measuring prevention of IUU fishing)	3 Traceability of certified products through the supply chain	4 Economic (e.g. ethical or fair trade)	5 Social-ethical (e.g. workers' rights)	6 Environmental impacts of production processes (e.g. carbon footprint)	7 Other (e.g. ethical treatment of fish)		Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	
Name	Details					1	2	3	4	5	6	7	Details	Details						
Carrefour "Pêche responsible "		☑				☑								☑		☑			☑	Only fish from Iceland (cod, catfish, dab, redfish and halibut)
	France, Belgium					The scope of the Responsible Fishing Icon is to guarantee the conservation of stocks and environmental protection due to controlled requirements and maximum traceability. Carrefour has opted for an overall biological approach and fishing techniques offering maximum respect for the ecosystem. Five varieties of uncooked frozen filets (cod, catfish, dab, redfish and halibut) were on sale at 2007 in France (hypermarkets and supermarkets) and Belgium (hypermarkets and supermarkets).														
								☑												
						Traceability is guaranteed as declared throughout Annual Carrefour Sustainability reports.														
										☑										
						Carrefour is committed to building sustainable relationships with their suppliers and partners. In 2004, the Group adopted a Code of Ethics submitted for signature to Group management and new recruits. Updated and precise it has been renamed Code of Conduct in 2007. This Code of Conduct expresses the Group's core values and commitments and formalises standards of ethical conduct to be adopted every day both in-house and externally with the Group's stakeholders. In order to preserve the rights of its employees worldwide, Carrefour has signed an agreement with the UNI (Union Network International) in 2001. Regarding the respect for these rights within its supply chain, the Group has been working for over 10 years with the FIDH (Federation for Human Rights) and pools the results of its social audits within the framework of the French standard ICS (Social Clause Initiative). Extending its approach, the Group has been involved in the GSCP programme (Global Social Compliance) since 2006 in order to better assert the workers' rights within the global supply chain. Peche responsible has no specific agenda indicated in this area.														
											☑									
						Environment Carrefour group priorities: - General act of CO_2 emissions reduction through regulations of energy consumption in stores and transport - Preserving biodiversity and natural resources through a policy of responsible sourcing - Promoting responsible production methods and reducing waste - Fostering methods of "sustainable consumption" - Promoting and developing environmentally friendlier products - Strengthening environmental considerations in the design of products and packaging														

Scope of Sustainability Programmes

Geographical scope: Global, Regional, National, Sub-national, Local

Issue scope:
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7. Other (e.g. ethical treatment of fish)

Product and market scope: Marine species, Inland species, Wild-capture only, Wild-capture&enhanced, Aquaculture, Markets

Name	Geographical scope	Geographical details	Issue scope	Issue details	Product and market scope	Product and market details
				- Reducing the environmental impact of store and head office construction and operations - Strengthening environmental considerations in logistics operations - Raising awareness and informing environmental issues both internally and externally "Peche responsible" Line has no specific agenda indicated in this area.		
Clean Green of the Southern Rocklobster Fishery	☑ National	To date over 400 industry members covering 250 vessels (around 50% of the industry) have participated in the program with most through to the full audit across South Australia, Tasmania and Victoria.	☑ 1	Addresses: - Sustainability - Bycatch - Environmental Interactions Throughout the supply chain process: - Animal welfare The environmental standards in the program address the sustainability of the resource (lobster stocks) and broader environmental concerns (ecological interactions). Also Increasing awareness and protection of seals, whales and sea lions.	☑ Marine species ☑ Wild-capture only	Southern Rocklobster found off the coast of South Australia, Victoria, Tasmania.
			☑ 3	Individual lobsters branded with the Clean Green Trade Mark are traceable from the point of harvest to the point of consumption. Each individual lobster is tagged and traced through the supply chain (pot to plate).		
			☑ 4	Contributing to achievement of price premiums in new markets for certified Clean Green lobster.		
			☑ 6	- Removing environmentally unfriendly practices such as the use of plastic bait box straps; - Managing responsible disposal and recycling of marine wastes – oil, plastics & cardboard; - An examination of the feasibility of including carbon and/or eco-footprint in to the Clean Green certification will be undertaken as a part of reduction of adverse environment interactions initiative.		

Scope of Sustainability Programmes

Issue scope:
1. Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)
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7. Other (e.g. ethical treatment of fish)

Name	Geographical scope: Global	Regional	National	Sub-national	Local	Issue scope: 1	2	3	4	5	6	7	Issue scope: Details	Product and market scope: Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Product and market scope: Details
Dolphin Safe of Earth Island Institute		☑				☑							In order for tuna to be considered "Dolphin Safe", it must meet the following standards: - No intentional chasing, netting or encirclement of dolphins during an entire tuna fishing trip; - No use of drift gill nets to catch tuna; - No accidental killing or serious injury to any dolphins during net sets; - No mixing of dolphin-safe and dolphin-deadly tuna in individual boat wells (for accidental kill of dolphins), or in processing or storage facilities; and - Each trip in the Eastern Tropical Pacific Ocean (ETP) by vessels 400 gross tons and above must have an independent observer on board attesting to the compliance with points above. Other non-target species, such as sea turtles, sharks, and billfish, can be caught in purse seine nets, so IMMP's "Dolphin Safe" policies also addresses bycatch to reduce the harm to the oceans' ecosystems.	☑		☑				Yellowfin tuna as the target specie. Dolphins and other non-target species, such as sea turtles, sharks, and billfish are addressed as bycatch to reduce the harm to the oceans' ecosystems.
								☑					No mixing of dolphin-safe and dolphin-deadly tuna in individual boat wells (for accidental kill of dolphins), or in processing or storage facilities.							
									☑				Find sources and markets for "Dolphin Safe" tuna.							

Scope of Sustainability Programmes

Issue scope:
1. Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)
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6. Environmental impacts of production processes (e.g. carbon footprint)
7. Other (e.g. ethical treatment of fish)

Name	Global	Regional	National	Sub-national	Local	Geographical scope Details	1	2	3	4	5	6	7	Issue scope Details	Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Product and market scope Details
													☑	Earth Island Institute has recently participated in the formation of an organisation in the United Kingdom, the Dolphin Safe Monitoring Organisation (DSMO). The purpose of the DSMO is to: Establish a uniform "Dolphin Safe" label, with Earth Island Institute "Dolphin Safe" standards, to avoid consumer confusion, and To provide a method to support nonprofit monitoring organisations, including Earth Island Institute, to maintain both the funding and the independence of tuna monitoring efforts.							
Ecofish			☑			USA	☑							Prior to offering a new species, the Advisory Board evaluates issues including, but not limited to: bycatch, existing stock level, harvest method, and fishery management. If there is unanimous approval of a species by the Advisory Board, then it may be added to the Ecofish product list. If there are any environmental, sustainability, or biological issues surrounding a species, EcoFish will not offer it.	☑						Main species are Wild Alaskan Salmon (MSC), Wild Alaskan Pollock (MSC), Ecuadorian Handlin Maui (MSC Final Assessment), Argentinean Bay Scallops (MSC), Farmed Ecuadorian Shrimp (Naturland).
								☑						Support marine conservation efforts through collaboration with conservation, research and educational organisations worldwide.				☑			For EcoFish's approval, wild-caught fish must be landed in a manner that does not compromise the marine environment or unduly harm other species. Similarly, populations of the targeted species need to be able to support themselves and the fishery well into the future.
										☑				Accentuate the positive — highlight fishery success stories by increasing demand for these products, creating an incentive for others to adopt sustainable fishing practices. Set a good example for corporate America by striving for the "Triple Bottom Line" — operate a profitable business that's also responsible to its community and the environment.					☑		EcoFish supports aquaculture that is environmentally and socially responsible. For EcoFish's approval, aquaculture operations need to be integrated into the natural ecosystem, diverse on local and regional scales, and beneficial to local communities.

Scope of Sustainability Programmes

Name	Geographical scope: Global	Regional	National	Sub-national	Local	Geographical scope: Details	Issue scope: 1 Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)	2 Fisheries management or legality issues (e.g. measuring prevention of IUU fishing)	3 Traceability of certified products through the supply chain	4 Economic (e.g. ethical or fair trade)	5 Social-ethical (e.g. workers' rights)	6 Environmental impacts of production processes (e.g. carbon footprint)	7 Other (e.g. ethical treatment of fish)	Issue scope: Details	Product and market scope: Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Product and market scope: Details
											☑			Set a good example for corporate America by striving for the "Triple Bottom Line" — operate a profitable business that's also responsible to its community and the environment.							
												☑		The EcoFish features a Seafood Advisory Board. This body is comprised of reputed marine conservation scientists. Each Advisory Board member's organisation is actively involved in assessing the environmental effects of fisheries and aquaculture. The Board members donate their time, vast knowledge and expertise assisting EcoFish in selecting among the world's most environmentally sustainable fisheries.							
													☑	Seafood Safe: Ecofish is developing a new comprehensive testing program, whereby independent labs test Ecofish retail products for mercury and PCB's. The label helps inform consumers of how many meals they can consume per month, without exposing themselves to dangerous levels of these contaminants. The recommendation is derived from EPA's Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. To protect those adults that are at highest risk, women of childbearing age, the Seafood Safe label reflects safe consumption levels for this sub-population. Every year, EcoFish donates a portion of its profits to organisations that share their commitment to healthy oceans and communities. Most recently, Ecofish has started pairing their retail products to individual causes.							
Fair-fish			☑			Switzerland	☑							Fair-fish wants to develop and promote fair methods in the production of fish: – With respect to the needs of the animals – By protecting species, resources and environment – With appropriate remuneration of fishermen and their communities Thus it aims to apply extensive fishing methods only to areas which do not overexploit the stocks: – handline –encircling gillnet «félé-félé» –beach seine	☑	☑			☑		Fair-fish accepts breeding and farming methods which allow the fish to live the essential needs and behaviours of the species, and which protect the fish from stress, fear, suffering, injuries and pain. They pay attention to structured basins, low stock density, rare manipulation of the fish, renunciation of genetic engineering, and so on.

Scope of Sustainability Programmes

Issue scope:
1. Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)
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Name	Geographical scope: Global	Regional	National	Sub-national	Local	Issue scope: 1	2	3	4	5	6	7	Issue scope: Details	Product and market scope: Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Product and market scope: Details
									☑											
	Details:												Sustainability, fair-fish standard 8: Exports are not to be on the account of inland provision. A company exporting fair-fish products is to market a minimum of fair-fish products in the country of origin.							
										☑										
	Details:												With respect to social certification there is virtually no involvement of fisheries with social certification/schemes (RAP Publication 2007/24, FAO). The of exception is the Fair-Fish initiative which claims the following benefits to producers: - Prices are fixed together with the fisherfolk, and are at least 10 percent above the price offered by local fish merchants, combined with the guarantee that Fair-Fish will buy the quantity ordered if fish conform with label prescriptions. - A fair trade premium (an additional 10 percent of the fisherfolk price) given to local communities to help them create alternative incomes outside the fishery. - Life-jackets for fisherfolk involved, as well as health insurance for them and their families. - Exclusion of child labour in the fishery and control of school attendance of the children of involved fisherfolk. - Assistance in defining sustainable fishery criteria. - Empowerment by training fisherfolk and women fish merchants to cope with the demands of food safety, hygiene and traceability and by integrating them in the decision-making of the local Fair-Fish licensee.							
											☑									
	Details:												Fair-fish wants to develop and promote fair methods in the production of fish: – With respect to the needs of the animals – By protecting species, resources and environment, – With appropriate remuneration of fishermen and their communities Sustainability, fair-fish standard 7: Reduction and compensation of carbon footprint caused by fishing, cooling and transportation through investing in local climate protection projects, e. g. outboard motors driven by locally grown vegetable oil or by solar power or replacing motors at all by sailing katamarans.							

Scope of Sustainability Programmes

Issue scope key:
1. Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)
2. Fisheries management or legality issues (e.g. measuring prevention of IUU fishing)
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Geographical scope: Global, Regional, National, Sub-national, Local

Product and market scope: Marine species, Inland species, Wild-capture only, Wild-capture&enhanced, Aquaculture, Markets

Name	Geographical scope	Geographical scope: Details	Issue scope	Issue scope: Details	Product and market scope	Product and market scope: Details
Fishwise	☑ National	USA - FishWise partners with receiving members of the supply line at the national level. Products for FishWise retailers/distributors can be produced/ sourced internationally.	☑ 1	FishWise uses a suite of science-based tools to deliver measurable environmental gains. FishWise is increasingly working behind the scenes with seafood buyers and upper management to develop comprehensive seafood policies. As a result, FishWise has become a seafood consultancy dedicated to providing companies the credibility, expertise and tools to achieve sustainable seafood.	☑ Marine species; ☑ Wild-capture only	The Fishwise program draws on respected methods for assessing wild fisheries and aquaculture, with criteria developed by Monterey Bay Aquarium's Seafood Watch Program and the Environmental Defense Fund.
			☑ 2	These factors are considered under Monterey Bay Aquarium's criteria for capture fisheries, which are used to color code products for FishWise member retailers. Of the five main criteria that are considered, fisheries management is one. The criteria are publicly available here: http://www.fishwise.org/images/stories/pdfs/mba_seafoodwatch_capturefisheriesmethodology.pdf	☑ Aquaculture	The Fishwise program draws on respected methods for assessing wild fisheries and aquaculture, with criteria developed by Monterey Bay Aquarium's Seafood Watch Program and the Environmental Defense Fund. Their methods can be applied broadly across marine and aquatic systems on species ranging from shellfish to crustaceans to finfish.
			☑ 4	It's good for business: - Ensure long-term revenues by protecting and conserving our resource supply - Credibly reinforces company commitments to corporate social responsibility.		
			☑ 5	It's good for the community: - Reward the fishermen and local producers that act as stewards of our natural resources - Protect the economic viability of our ports and fishing communities - Help to educate the consumer public and enables them to make informed choices		

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Name	Global	Regional	National	Sub-national	Local	Geographical scope Details	1	2	3	4	5	6	7	Issue scope Details	Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Product and market scope Details
												☑		Environmental considerations are treated extensively via the Monterey Bay Aquarium criteria for capture fisheries and aquaculture which can be found here: http://www.fishwise.org/images/stories/pdfs/mba_seafoodwatch_capturefisheriesmethodology.pdfhttp://www.fishwise.org/images/stories/pdfs/mba_seafoodwatch_aquaculturecriteramethodology.pdf. It's good for the environment: - Help to protect oceans and ailing fisheries by shifting demand from unsustainable, and towards sustainable seafood - Reward businesses within the industry that are running "green" operations, creating incentives for environmental stewardship - Promote sustainable seafood in the public arena, increasing awareness of, and concern about, threats to the marine environment - Help reduce the carbon footprint throughout the seafood supply chain by favoring local producers.							
Pêche responsible Intermarche		☑				France, Belgium	☑							No night fishing and the following of strict capture quotas; using only biodegradable cleaning products and non-polluting paint, and others.	☑						Southern Patagonian toothfish, black cod, blue ling, monkfish and black scabbard.
											☑			Planned rest for sailors and health insurance for all employees, etc.			☑				
												☑		Establish guidelines to bring Scapêche well above the expected level for its responsibility to the fish, the environment and its employees.							Fishing boats that fish in French territories in the Atlantic, Austral and Antarctic oceans.
													☑	Lab testing for fish to demonstrate high quantities of omega 3 oils.							

Scope of Sustainability Programmes

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6. Environmental impacts of production processes (e.g. carbon footprint)
7. Other (e.g. ethical treatment of fish)

Name	Global	Regional	National	Sub-national	Local	Geographical scope – Details	1	2	3	4	5	6	7	Issue scope – Details	Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Product and market scope – Details
Responsible Fisheries Iceland			☑			Iceland	☑										☑				The logo may be used on Icelandic seafood products that are processed from catches, within the Icelandic Economic Zone, of stocks that are not classified as straddling stocks, whether they are within the catch quota system or outside it. The logo can be used to identify the catch of Icelandic vessels from straddling stocks which are in part in Icelandic territorial waters and that are under integrated management.
								☑						Fisheries management in Iceland has a long history and the fisheries management system has been under development for decades with a focus on the fisheries being both economical and sustainable with respect to the natural resources' utilisation and renewal.							
												☑		Icelanders have the ambition to be in the forefront of responsible treatment of the natural resources of the ocean. Hence, steady improvements are made of the fisheries management in Iceland and its scientific basis and measures are taken to strengthen the dissemination of information on the Icelandic fisheries.							
AIDCP		☑				States and Regional Economic Integration Organisations bound by the AIDCP: 1. States which have ratified or acceded to the Agreement: Costa Rica, Ecuador, El Salvador, European Union, Guatemala, Honduras, Mexico,	☑							Ensure the long-term sustainability of the tuna stocks in the Agreement Area, as well as that of the marine resources related to this fishery, taking into consideration the interrelationship among species in the ecosystem, with special emphasis on, inter alia, avoiding, reducing and minimising bycatch and discards of juvenile tunas and non-target species.	☑		☑				Yellow-fin tuna fished in the area of the eastern tropical Pacific Ocean (ETP).
								☑						Referring to principles contained in the Rio Declaration on Environment and Development of 1992, as well as the wish to implement the principles and standards of the Code of Conduct for Responsible Fisheries adopted by the FAO Conference in 1995. Contribute to enhancing the effectiveness of fisheries conservation and management measures, through the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, adopted by the FAO Conference in 1993.							

Scope of Sustainability Programmes										
Name	Geographical scope (Global, Regional, National, Sub-national, Local) — Details	Issue scope: 1 Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)	2 Fisheries management or legality issues (e.g. measuring prevention of IUU fishing)	3 Traceability of certified products through the supply chain	4 Economic (e.g. ethical or fair trade)	5 Social-ethical (e.g. workers' rights)	6 Environmental impacts of production processes (e.g. carbon footprint)	7 Other (e.g. ethical treatment of fish)	Issue scope — Details	Product and market scope (Marine species, Inland species, Wild-capture only, Wild-capture&enhanced, Aquaculture, Markets) — Details
	Nicaragua, Panama, Peru, United States, Vanuatu, Venezuela . 2. States and Regional Economic Integration Organisations which are applying the Agreement provisionally: Bolivia, Colombia.			☑					Restrictions placed on purse seine fisheries under the AIDCP created a need to monitor the disposition of tuna from its capture to its retail sale. This system is based on a Tuna Tracking Form (TTF) and additional verification procedures that build on the premise that dolphin safe tuna shall, from the time of capture, during unloading, storage, transfer, and processing, be kept separate from non-dolphin safe tuna.	
						☑			Considering the importance of the tuna fishery as a source of food and income for the populations of the Parties and that conservation and management measures must address those needs and take into account the economic and social impacts of those measures.	
							☑		The fishery for tunas by purse-seine vessels in the EPO shall be closed from either (1) 1 August to 11 September; or (2) 20 November to 31 December. Each IATTC Party, cooperating non-party, fishing entity or regional economic integration organisation ("CPC") shall prohibit fishing by all of its purse-seine vessels during one of the two periods. Landings, transshipments and commercial transactions in tuna or tuna products originating from fishing activities that contravene this resolution are prohibited. List of countries belonging to group (1) or (2) is provided on web sites.	
								☑	Dolphin safe labels scope is to enable dolphin safe tuna to be distinguished from non-dolphin safe tuna from the time it is caught to the time it is ready for retail sale. This should lead to the aim of eliminating dolphin mortality in the purse-seine tuna fishery in the eastern Pacific Ocean and of seeking ecologically sound means of capturing large yellowfin tunas not in association with dolphins.	

Scope of Sustainability Programmes

Issue scope:
1. Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)
2. Fisheries management or legality issues (e.g. measuring prevention of IUU fishing)
3. Traceability of certified products through the supply chain
4. Economic (e.g. ethical or fair trade)
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6. Environmental impacts of production processes (e.g. carbon footprint)
7. Other (e.g. ethical treatment of fish)

Name	Geographical scope: Global	Regional	National	Sub-national	Local	Issue scope: 1	2	3	4	5	6	7	Issue scope: Details	Product and market scope: Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Product and market scope: Details
Friend of the Sea	☑					☑							Criteria for Sustainable Fisheries require, among the others, that: - The fishery targets a stock which is not considered to be overexploited according to the most updated stock status report from FAO, Regional Fishery Bodies or National Marine Authorities - The fishing method does not bycatch species listed in the IUCN Redlist - The fishing method does not discard more than 8% in weight of the total catch - The fishing method does not impact the seabed	☑				☑		Certified sustainable seafood and products from all continents include anchovies, caviar, clams, cuttlefish, halibut, kingfish, mackerel, mulloway, mussels, prawns, salmon, sardines, seabass, seabream, shrimps, squid, sturgeon, trout, tuna, turbot. Fishmeal, fishfeed and Omega-3 Fish oil have also been certified.
							☑						Criteria for Sustainable Fisheries require the fishery complies with regulations (TAC, no IUU nor FOC, mesh size, minimum size, MAPs, etc).							
								☑					Traceability is audited onsite, while a yearly traceability surveillance is run on all purchase reports.							
										☑			Criteria for sustainable fisheries include requirements on Social Accountability: - Respect Human Rights - Respect National and International Labor legislation (International Labor Organisation (ILO) Core Conventions - Pay fair wages, i.e. a fair share of the profits on the sale of the catch, or where applicable, wages that are at least equal to the highest of legal minimum wages or local average wages for similar activities - Apply health and safety measures at a minimum at the level of legal requirements - Ensure employee access to adequate medical care, wherever possible; Have requirement for social impact assessment and mitigation of adverse impacts, particularly on the social fabric of local populations.							
											☑		Criteria for sustainable fisheries include requirements on Carbon Footprint reduction and offset: - Engage at assessing its products' carbon footprint not later than 12 months after certification - Offset its carbon production by 20% every year, by purchasing certified carbon offsets not later than 12 months after certification - In alternative to 7.2.b, provide evidence of yearly total energy consumption reduction of 20%							

Scope of Sustainability Programmes

Name	Geographical scope					Issue scope							Product and market scope					
	Global	Regional	National	Sub-national	Local	1	2	3	4	5	6	7	Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets
												☑						
	Details:					Details: SMS text message information system, which functions like a real-time, always current Seafood Watch pocket guide, allowing consumers to learn specific, up-to-date info on the fish they're considering eating. If the fishery is sustainable, the system will tell it's a Good Choice. If the fishery is unsustainable, the stock is depleted or on the IUCN Redlist of endangered species, consumer will be notified about the conservation concerns regarding the fishery.							Details:					
ISO	☑							☑					☑		☑		☑	
ISO	Details:					Details: Standardisation in the field of fisheries and aquaculture, including, data reporting, traceability and waste disposal.							Details: The NS 9410 Environmental monitoring of marine fish farms standards requires all fish farmers to monitor marine fish farms and describes methods for determining and monitoring bottom conditions, based on the assumption that environmental conditions in the surrounding areas of fish farms are directly related to fish farm waste. The NS 9415 – Marine fish farms – Requirements for design, dimensioning, production, installation and operation is designed to reduce the risk of escape, due to technical failure and incorrect operation of fish farming installations.					
ISO									☑									
ISO	Details:					Details: Standardisation in the field of fisheries and aquaculture, including maintenance of appropriate physical, chemical and biological conditions, environmental monitoring and waste disposal.							Details:					
ISO											☑							
ISO	Details:					Details: Standardisation in the field of fisheries and aquaculture, including maintenance of appropriate physical, chemical and biological conditions, environmental monitoring and waste disposal.							Details:					

Issue scope:
1. Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)
2. Fisheries management or legality issues (e.g. measuring prevention of IUU fishing)
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Scope of Sustainability Programmes

Issue scope:
1. Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)
2. Fisheries management or legality issues (e.g. measuring prevention of IUU fishing)
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7. Other (e.g. ethical treatment of fish)

Name	Global	Regional	National	Sub-national	Local	Geographical scope Details	1	2	3	4	5	6	7	Issue scope Details	Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Product and market scope Details
KRAV		☑				Scandinavian	☑							A number of objectives are defined to clearly describe the limits of this ecolabelling: - Protect and preserve stocks of fish and shellfish - Fisheries certified according to these standards operate fishing to the extent that it does not exceed the reproduction capacity of the stock and with methods and gear that do not irreparably damage the ecosystem's structure, productivity, and diversity. - Catches that do not meet requirements for minimum landing size and are bycatches including sea birds, marine mammals, and endangered invertebrates are minimised. - Others. Species exclusion: Giant prawns, i.e. large tropical prawns, farmed or wild-caught, cannot be KRAV-labeled. Beam trawlers are not permitted in certified fishing.	☑						Stocks of fish and shellfish
								☑						Standards must be accepted by the fishing industry, environmental and preservation interests, and create credibility with consumers.		☑					No applications so far but the standard is open for inland water fisheries
									☑					One of principal scope objectives is to guarantee traceability making it possible for consumers to perceive ecolabelling as credible.			☑				Wild-captured fish and wild-captured shellfish
										☑				To encourage a vital fishing industry ensuring a reasonable income and a safe and secure working environment. Stimulate development of viable fishing and coastal towns.						☑	Scandinavia

Scope of Sustainability Programmes

Issue scope:
1. Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)
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Name	Geographical scope: Global	Regional	National	Sub-national	Local	Geographical scope: Details	Issue scope: 1	2	3	4	5	6	7	Issue scope: Details	Product and market scope: Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Product and market scope: Details
											☑			KRAV-affiliates should have a written policy concerning social justice. Exempt from this documentation requirement are producers with fewer than 10 employees, as well as those active in countries where social justice policy is governed by current legislation. Products cannot be KRAV-certified if crimes against human rights or clear cases of social injustice exist in connection with the production. KRAV-affiliates cannot use forced or involuntary labour. In addition, they should treat their employees equally, give them equal opportunities and not act in a discriminatory manner. KRAV-affiliates should in addition provide opportunities for underage employees to participate in basic education. Employees within organic production should be given the possibility to organise themselves and have the right to negotiate collectively. Plus other ILO conventions, www.ilo.org					☑		KRAV-certified aquaculture covers cultivation of different species in fresh-, salt-, and brackish waters and transporting and slaughter of these species. Species allowed can be carnivorous, herbivorous or omnivorous (eating meat, plant or both) in all stages. These can be cultivated in all types of land-based or floating/submersible enclosures in seawater or freshwater or in a dam/lake with natural demarcation and where the activity can be controlled. Plant production in aquaculture may not be certified according to these standards. These standards contain specific standards for salmonoid fish (Salmonidae), the perch family (Percidae), and blue mussels (common mussel) (Mytilus edulis)
												☑		- Promote fishing methods and gear that are selective (only capturing the target species) and do not damage marine biotopes (seabed). - Certified vessels minimise discharge of polluting organic and inorganic agents to water. - Others From 2010 the standard will be completed with more specific regulations to minimise carbon footprints.							

Scope of Sustainability Programmes

Issue scope:
1. Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)
2. Fisheries management or legality issues (e.g. measuring prevention of IUU fishing)
3. Traceability of certified products through the supply chain
4. Economic (e.g. ethical or fair trade)
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7. Other (e.g. ethical treatment of fish)

Name	Geographical scope: Global	Regional	National	Sub-national	Local	Geographical scope: Details	Issue scope: 1	2	3	4	5	6	7	Issue scope: Details	Product and market scope: Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Product and market scope: Details
Marine Ecolabel Japan			☑			Japan	☑							Marine Ecolabel Japan (MEL Japan) "is intended to make provision for informed decisions by purchasers whose choice can be relied upon to promote and stimulate the sustainable use of fishery resources, "as stipulated in the FAO guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries.	☑		☑				MEL Japan fishery certification: red snow crab flathead flounder stardust shrimp MEL Japan chain of custody certification: - Sea of Japan Crab Pot Fishery Association all products - Sakaiminato Fisheries Promotion Association of the red snow crab
								☑						The basic framework of MEL Japan is established in line with the FAO guidelines in order to ensure the legitimacy and integrity of the system.							
										☑				MEL Japan pursues utilising the merits of co-management that builds upon an idea of fishermen sharing the role of fisheries management and resource enhancement. MEL Japan aims to create a positive cycle in which fishers, through ecolabel certification, give closer attention to resource management, reinforce cooperation with scientists and administrators, and contribute to the accumulation of scientific data and the improvement of information through fishing activities.							
												☑		Tottori Prefecture Offshore Trawl Fishery Association: this fishery targets snow crab and flathead flounder in the Sea of Japan by single-vessel Danish seining.							

Scope of Sustainability Programmes

Issue scope:
1. Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)
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Name	Geographical scope: Global	Regional	National	Sub-national	Local	Issue scope: 1	2	3	4	5	6	7	Issue scope: Details	Product and market scope: Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Product and market scope: Details
Marine Stewardship Council	☑					☑							Principle 1: Sustainable fish stocks. The fishing activity must be at a level which is sustainable for the fish population. Any certified fishery must operate so that fishing can continue indefinitely and is not overexploiting the resources. Principle 2: Fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem.	☑	☑					Wild-capture fisheries include species but are not limited to shellfish, crustaceans and cephalopods. Freshwater capture fisheries are included within scope of the MSC Standard.
							☑						Principle 3: Effective management. The fishery must meet all local, national and international laws and must have a management system in place to respond to changing circumstances and maintain sustainability.				☑			In order for an enhanced fishery to fall within the scope of the MSC programme: a. The link to and maintenance of a wild-stock b. How the fish are fed and looked after c. The impact the enhanced fishery has on the habitats and wider ecosystem
								☑					Chain of Custody Standard - 1.Control system; 2. Confirmation of inputs; 3. Separation and/or demarcation of certified and non-certified inputs; 4. Secure product labeling; 5. Identification of certified outputs; 6. Record keeping							
										☑			The MSC further recognises the need to observe and respect the long-term interests of people dependent on fishing for food and livelihood to the extent that it is consistent with ecological sustainability.							
											☑		Principle 2: Minimising environmental impact. Fishing operations should be managed to maintain the structure, productivity, function and diversity of the ecosystem on which the fishery depends.							

Scope of Sustainability Programmes

Name	Geographical scope						Issue scope								Product and market scope						
	Global	Regional	National	Sub-national	Local	Details	1 Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)	2 Fisheries management or legality issues (e.g. measuring prevention of IUU fishing)	3 Traceability of certified products through the supply chain	4 Economic (e.g. ethical or fair trade)	5 Social-ethical (e.g. workers' rights)	6 Environmental impacts of production processes (e.g. carbon footprint)	7 Other (e.g. ethical treatment of fish)	Details	Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Details
Naturland		☑				Based in Germany but with projects all over the world (more than 40 countries)	☑							Ecologically sound processing without artificial additives or genetic engineering.	☑	☑	☑				The Naturland certification of products from sustainable capture fishery covers unprocessed products from both freshwater and marine fisheries, namely species of finfish, invertebrates, and plant. It says "Unprocessed", because for processing steps, other parts of Naturland standards apply.
								☑						Part of the Naturland capture fishery standards (Part B 4: 4. Legal framework and management)							
									☑					Very basic requirement for all Naturland certified products							
										☑				A calibration scale has been put in place to ensure that fishermen are getting fair prices. The partnership has formed a trust fund for the project, and 10 to 15 cents for every kilo of fish sold from the area will contribute to the fund.					☑		Aquaculture relates to the species of fish, crustaceans and molluscs cited in the aquaculture standards which are cultivated under the conditions such as culture system, geographical or climatic conditions.
											☑			Strict social standards are observed throughout the entire processing chain, guaranteeing fair and modern working conditions for all labourers. Social programs already enacted by the project include an adult education program, HIV awareness, HIV testing, health programs, lake safety, fair trading, a clean and safe drinking water program, a children's amusement program, an anti-malaria program, sustainability awareness and a fish landing sites upgrading program. The holistic claim of Naturland standards includes the social treatment of the people who work and live on the fishery projects: 1. Human rights 2. Forced labour 3. Freedom of association, access to trade unions 4. Equal treatment and opportunities rights 5. Child labour 6. Health and safety 7. Employment conditions							

Scope of Sustainability Programmes																				
	Geographical scope					Issue scope								Product and market scope						
Name	Global	Regional	National	Sub-national	Local	1 Ecological sustainability of fisheries and ecosystems (e.g. fixing overfishing or reversing declines in fish stocks; or protecting fisheries and marine ecosystems)	2 Fisheries management or legality issues (e.g. measuring prevention of IUU fishing)	3 Traceability of certified products through the supply chain	4 Economic (e.g. ethical or fair trade)	5 Social-ethical (e.g. workers' rights)	6 Environmental impacts of production processes (e.g. carbon footprint)	7 Other (e.g. ethical treatment of fish)	Details	Marine species	Inland species	Wild-capture only	Wild-capture&enhanced	Aquaculture	Markets	Details
	Details																			
											☑		Environmentally friendly use of fish stocks and the entire ecosystem, avoidance of critical and environmentally harmful fishing methods.							
Responsible Fishing Scheme			☑			☑							Fisheries resources are strictly managed which means that fishermen have to be more selective about what they catch. They must apply a more responsible approach to their activities and role in managing marine resources.	☑						Fish as defined in RFS Specification (BSI PAS72) includes all species harvested from the sea, including crustaceans, shellfish etc.
	U.K.																			
								☑					Fishing practices cover storage, hygiene standards, quality control methods and traceability onboard the vessel, as well as the fishing methods used to catch the fish and how selective fishing gears are utilised.					☑		Not defined in current specification although good practice guidance has been developed to incorporate aquaculture
											☑		The Responsible Fishing Scheme considers lost fishing gear recovery, vessel discharges and marine litter recovery. It is also important to use selective fishing gear technologies and best practice to minimise capture of non target species; such as cetaceans, seals, turtles, seabirds and undersize fish, as well as reduce discard levels.							
												☑	Crew competence: It is essential that all crew members have completed the mandatory Maritime and Coastguard Agency (MCA) approved basic safety training courses in sea survival, fire fighting, first aid and safety awareness, which are stipulated for all fishermen working on UK registered fishing vessels.							

5 Assessment Results

It is apparent that not all sustainability programmes are at equal levels of development. Overall there are two basic groups: those that have been in operation or development for a considerable amount of time with established basic premises and standards (e.g. the MSC and Friend of the Sea) and; those recently established with less complex structures, standards or terminology (e.g. MEL-Japan or the Icelandic Responsible Fishing Scheme). Given these differences, it is important to compare 'like' programmes and the study was structured accordingly. However, it is also clear that marine conservation and the use of fisheries certification is becoming more complex and there is a need for standards, simple and clear positions, statements and directions to ensure ecolabels and/or sustainability programmes do actually contribute to improving the sustainability of wild fisheries and the health of the marine environment. Of note is that whilst the maturity of selected sustainability programmes has been considered within this study, no single or simple yet robust indicator could have been identified to compare this aspect in particular, i.e. what impact are seafood ecolabels having in addressing the crisis. The study has only shown the relative contribution the labels should be able to make, based upon how rigorously their standard addresses fisheries management and ecological impact.

Results and findings of this study are structured in sections below.

5.1 Qualitative descriptions

This part of the study is a simple descriptive summary of wild-capture seafood sustainability dimensions and information listed below is relative to, and highly influenced by, the public availability of such information. Information on sustainability programmes not listed below does not indicate that a sustainability programme is not making any effort in any of these dimensions; it may simply be that information on such initiatives is not publicly available.

A check mark or tick within a particular aspect does not refer to the strength or credibility of the sustainability programme; rather it indicates only that a programme claims to be active in this area. No attempt has been made to evaluate actual performance of these claims or quantitative comparison between the labels on them. Consequently, this section should be considered as informative only, providing possible direction for future, more rigorous evaluations in these areas. Sustainability programmes that have no relevant claim in a specific dimension(s) are not listed in the following sections.

5.1.1 Environmental impacts of production processes

Environmental impacts of production processes (e.g. fishing vessel operations, processing plant operations, other human uses of marine ecosystems, CO2 or carbon footprint issues) are qualitatively captured in the table below, identifying all seafood ecolabelling sustainability programmes that claim they are active in this dimension.

Table xxxv. *Environmental impacts of production processes*

Environmental impacts of production processes											
Logo	Name	Fishing operations restrictions	Equipment restrictions	Carbon footprint	Food miles	Reducing waste	Preserving biodiversity	Increase awareness	Other or not specific	Advance-ment	Details
	Alaska Seafood Marketing Institute		☑							Basic programme	Vessel and Gear restrictions.

Environmental impacts of production processes											
Logo	Name	Fishing operations restrictions	Equipment restrictions	Carbon footprint	Food miles	Reducing waste	Preserving biodiversity	Increase awareness	Other or not specific	Advance-ment	Details
	Carrefour "Pêche responsible "			☑	☑	☑	☑	☑	☑	Best in class	Environment Carrefour group priorities: - General act of CO2 emissions reduction through regulations of energy consumption in stores and transport - Preserving biodiversity and natural resources through a policy of responsible sourcing - Promoting responsible production methods and reducing waste - Fostering methods of “sustainable consumption” - Promote and develop more environmentally friendlier products - Strengthen environmental considerations in the design of our products and packaging - Reduce the environmental impact of store and head office construction and operations - Strengthen environmental considerations in logistics operations - Raise awareness and inform on environmental issues both internally and externally One principle of the Environment Carrefour group priorities: Respect for the environment being an issue for all Carrefour believes that their responsibility as a world leader in food retailing is to limit the impact of a commercial activity on the environment at all stages (production, transport, stores, merchandise mix) while helping to raise public awareness (internal and external) on these issues.

Environmental impacts of production processes											
Logo	Name	Fishing operations restrictions	Equipment restrictions	Carbon footprint	Food miles	Reducing waste	Preserving biodiversity	Increase awareness	Other or not specific	Advance-ment	Details
	Clean Green of the Southern Rocklobster Fishery		☑			☑	☑	☑		Above average	As part of achieving its mission, the "Clean Green' strategy covers the need to address current environmental legislation and policy and others: Removing environmentally unfriendly practices such as the use of plastic bait box straps; Managing responsible disposal and recycling of marine wastes – oil, plastics & cardboard; Increasing awareness and protection of seals, whales and sea lions; An examination of the feasibility of including carbon and/or eco-footprint in to the Clean Green certification will be undertaken as a part of reduction of adverse environment interactions initiative.
	Ecofish						☑		☑	Basic programme	The EcoFish features a Seafood Advisory Board. This body is comprised of marine conservation scientists. Each Advisory Board member's organisation is actively involved in assessing the environmental effects of fisheries and aquaculture. The Board members donate their time, vast knowledge and expertise assisting EcoFish in selecting among the world's most environmentally sustainable fisheries.
	Fair-fish		☑	☑			☑		☑	Above average	Fair-fish wants to develop and promote fair methods in the production of fish: – with respect to the needs of the animals, – by protecting species, resources and environment, – with appropriate remuneration of fishermen and their communities, – assistance in defining sustainable fishery criteria. Sustainability, fair-fish standard 7: Reduction and compensation of carbon footprint caused by fishing, cooling and transportation through investing in local climate protection projects, e. g. outboard motors driven by locally grown vegetable oil or by solar power or replacing motors at all by sailing catamarans.

Environmental impacts of production processes											
Logo	Name	Fishing operations restrictions	Equipment restrictions	Carbon footprint	Food miles	Reducing waste	Preserving biodiversity	Increase awareness	Other or not specific	Advance-ment	Details
	Fishwise			☑		☑	☑	☑		Above average	Environmental considerations are treated extensively in Monterrey Bay Aquarium criteria for capture fisheries and aquaculture. Fishwise for the environment: - Help to protect oceans and ailing fisheries by shifting demand from unsustainable, and towards sustainable seafood - Reward businesses within the industry that are running “green” operations, creating incentives for environmental stewardship - Promote sustainable seafood in the public arena, increasing awareness of, and concern about, threats to the marine environment - Help reduce the carbon footprint throughout the seafood supply chain by favoring local producers. Fishwise has a Common Vision within the Conservation Alliance for Seafood Solutions: An explicit articulation and commitment to preserve the health of ocean and freshwater ecosystems and to ensure a long-term seafood supply. More than a dozen conservation organisations from the United States and Canada have partnered to pursue a common vision for sustainable seafood together with Fishwise.
	Pêche responsible Intermarche								☑	Basic programme	Establish guidelines to bring Scapêche well above the expected level for its responsibility to the fish, the environment and its employees.

Environmental impacts of production processes											
Logo	Name	Fishing operations restrictions	Equipment restrictions	Carbon footprint	Food miles	Reducing waste	Preserving biodiversity	Increase awareness	Other or not specific	Advance-ment	Details
	Responsible Fisheries Iceland		☑				☑	☑	☑	Above average	Icelanders have the ambition to be in the forefront of responsible treatment of the natural resources of the ocean. Hence, steady improvements are made of the fisheries management in Iceland and its scientific basis and measures are taken to strengthen the dissemination of information on the Icelandic fisheries. The Marine Research Institute in Iceland carries out wide ranging and extensive research on the status and productivity of the commercial stocks, and long-term research on the marine environment and the ecosystem around Iceland. The results of this research are the foundations of the advice on sustainable catch level of the fish stocks. Additionally, the institute investigates fishing gear and its impact on the ecosystem, including bottom trawl, line, net and mid-water trawl fisheries and the fishing gear's selectivity. Research on the impact of fishing gear is among other things aimed at minimising to the extent possible such impact
	AIDCP	☑							☑	Basic programme	The fishery for tunas by purse-seine vessels in the EPO shall be closed from either (1) 1 August to 11 September; or (2) 20 November to 31 December. Each IATTC Party, cooperating non-party, fishing entity or regional economic integration organisation ("CPC") shall prohibit fishing by all of its purse-seine vessels during one of the two periods. Landings, transshipments and commercial transactions in tuna or tuna products originating from fishing activities that contravene this resolution are prohibited. List of countries belonging to group (1) or (2) is provided on web sites.

Environmental impacts of production processes											
Logo	Name	Fishing operations restrictions	Equipment restrictions	Carbon footprint	Food miles	Reducing waste	Preserving biodiversity	Increase awareness	Other or not specific	Advance-ment	Details
	Friend of the Sea			☑				☑		Basic programme	Criteria for sustainable fisheries include requirements on Carbon Footprint reduction and offset: Engage at assessing its products' carbon footprint not later than 12 months after certification; Offset its carbon production by 20% every year, by purchasing certified carbon offsets not later than 12 months after certification; In alternative to 7.2.b, provide evidence of yearly total energy consumption reduction of 20%. SMS text message information system, which functions like a real-time, always current Seafood Watch pocket guide, allowing consumers to learn specific, up-to-date info on the fish they're considering eating. If the fishery is sustainable, the system will tell it's a 'Good Choice'. If the fishery is unsustainable, the stock is depleted or on the IUCN Redlist of endangered species, consumer will be notified about the conservation concerns regarding the fishery.
	ISO					☑			☑	Basic programme	Standardisation in the field of fisheries and aquaculture, including, maintenance of appropriate physical, chemical and biological conditions, environmental monitoring and waste disposal.
	KRAV	☑	☑			☑	☑			Above average	The credit value the KRAV-mark stands for can be summarised in the "four pillars of the KRAV-mark" out of which the Sound, natural environment applies in this dimension. In addition: - Certified vessels minimise discharge of polluting organic and inorganic agents to water. - and others From 2010 the standard will be completed with more specific regulations to minimise carbon footprints.
	Marine Eco-Label Japan		☑							Basic programme	Tottori Prefecture Offshore Trawl Fishery Association: this fishery targets snow crab and flathead flounder in the Sea of Japan by single-vessel Danish seining.

Environmental impacts of production processes											
Logo	Name	Fishing operations restrictions	Equipment restrictions	Carbon footprint	Food miles	Reducing waste	Preserving biodiversity	Increase awareness	Other or not specific	Advance-ment	Details
	Marine Stewardship Council						☑		☑	Basic programme	Principle 2: Minimising environmental impact. Fishing operations should be managed to maintain the structure, productivity, function and diversity of the ecosystem on which the fishery depends.
	Naturland	☑	☑				☑		☑	Above average	Environmentally friendly use of fish stocks and the entire ecosystem, avoidance of critical and environmentally harmful fishing methods. Organic focus thanks to the rest of the Naturland group.
	Responsible Fishing Scheme	☑	☑			☑	☑			Above average	The Responsible Fishing Scheme considers lost fishing gear recovery, vessel discharges and marine litter recovery. It is also important to use selective fishing gear technologies and best practice to minimise capture of non target species; such as cetaceans, seals, turtles, seabirds and undersize fish, as well as reduce discard levels.

In summary, the most advanced programme in the many initiatives relating to environmental impacts of production processes appears to be the Carrefour “Pêche responsible" scheme, whose scope is determined by the Carrefour Group. However, it is unclear how much of Carrefour’s environmental management initiatives extend to sustainable fishing via the “Pêche responsible" programme. It is evident that once seafood products enter the Carrefour Group retail chain, all mentioned initiatives take place; however it is uncertain if any or all of these apply during the fishing processes themselves, since the relationship with actual fishing operations is not specified.

Overall, the most frequent initiatives within environmental impacts of production processes seem to be preserving biodiversity, reducing waste and restricting the use of certain equipment. Sound examples of reducing waste and equipment restrictions initiatives are the Clean Green of the Southern Rocklobster Fishery that supports removing environmentally unfriendly practices, such as the use of plastic bait box straps, and managing responsible disposal and recycling of marine wastes – oil, plastics and cardboard, or the Responsible Fishing Scheme of Iceland that considers lost fishing gear recovery, vessel discharges and marine litter recovery. With respect to preserving biodiversity, Naturland provides a good example in its promotion of the environmentally friendly use of fish stocks and the entire ecosystem, and avoidance of critical and environmentally harmful fishing methods.

In terms of future trends, carbon footprint is definitely an emerging area of focus. Some of the sustainability programmes, such as Carrefour “Pêche responsible", Fishwise, Fair-fish or Friend of the Sea, reviewed already

have this issue on their agenda and many others are announcing an extension of their initiatives specifically relating to carbon footprint in the near future.

For initiatives within this environmental impacts dimension it is notable that for the most part, initiatives are based upon general statements and lack any kind of robust and detailed structural basis or institutional framework, again, as far as is reflected through publicly available information. Nonetheless, there are exceptions to this statement, with KRAV, Naturland and the Responsible Fishing Scheme, (which is especially detailed on equipment restrictions) providing more rigorous approaches to these initiatives.

5.1.2 Social and ethical dimension

The table below captures sustainability programmes claiming activity in social and ethical dimensions (e.g. workers' rights).

Table xxxvi. Social and ethical dimension

Social-ethical dimension										
Logo	Name	Ethical conduct guidelines	Workers rights	International initiatives	Workers health and insurance	Social impacts	Education and training	Other or not specific	Advancement	Details
	Alaska Seafood Marketing Institute							☑	Basic programme	In Alaska sustainability also means family and community sustainability: •Fisheries are the life-blood of Alaska coastal communities •Many harvesters are family-based operations •Many Alaska residents also depend on seafood as a form of subsistence •In Alaska, there is an "organic" connection; a relationship between Alaskans and the resource base-NOT just a job-but a lifestyle.

Social-ethical dimension											
Logo	Name	Ethical conduct guidelines	Workers rights	International initiatives	Workers health and insurance	Social impacts	Education and training	Other or not specific	Advancement	Details
	Carrefour "Pêche responsible "	☑	☑	☑					Above average	Employing more than 490,000 people and working with thousands of suppliers and partners worldwide give Carrefour Group special responsibilities. As a responsible player in the world economy, the Carrefour Group works for the respect for universal fundamental rights internally, as well as externally. In 2004, the Group adopted a Code of Ethics. Updated and precised it has been renamed Code of Conduct in 2007 and it expresses the Group's core values and commitments and formalises standards of ethical conduct to be adopted every day both in-house and externally with the Group's stakeholders. In order to preserve the rights of its employees worldwide, Carrefour has signed an agreement with the UNI (Union Network International) in 2001. Regarding the respect for these rights within its supply chain, the Group has been working since more than 10 years with the FIDH (Federation for Human Rights) and the French standard ICS (Social Clause Initiative). The Group has been also involving since 2006 in the GSCP (Global Social Compliance) to better assert the workers' rights within the global supply chain.
	Clean Green of the Southern Rocklobster Fishery				☑				Basic programme	As part of achieving its mission the "Clean Green' strategy covers the need to address current workplace health and safety issues.
	Ecofish							☑	Basic programme	Set a good example for corporate America by striving for the "Triple Bottom Line" — operate a profitable business that's also responsible to its community and the environment.

Social-ethical dimension											
Logo	Name	Ethical conduct guidelines	Workers rights	International initiatives	Workers health and insurance	Social impacts	Education and training	Other or not specific	Advancement	Details
	Fair-fish		☑		☑		☑	☑	Above average	With respect to social certification there is virtually no involvement of fisheries with social certification/schemes (RAP Publication 2007/24, FAO). The exception is the Fair-Fish initiative which claims the following benefits to producers: - Life-jackets for fisherfolk involved, as well as health insurance for them and their families. - Exclusion of child labour in the fishery and control of school attendance of the children of involved fisherfolk. - Empowerment by training fisherfolk and women fish merchants to cope with the demands of food safety, hygiene and traceability and by integrating them in the decision-making of the local Fair-Fish licensee.
	Fishwise							☑	Basic programme	Fishwise for the community: - Reward the fishermen and local producers that act as stewards of our natural resources - Protect the economic viability of ports and fishing communities - Help to educate the consumer public and enables them to make informed choices.
	Peche responsible Intermarche				☑				Basic programme	Planned rest for sailors and health insurance for all employees, etc.
	AIDCP	☑						☑	Basic programme	Considering the importance of the tuna fishery as a source of food and income for the populations of the Parties and that conservation and management measures must address those needs and take into account the economic and social impacts of those measures.

Social-ethical dimension										
Logo	Name	Ethical conduct guidelines	Workers rights	International initiatives	Workers health and insurance	Social impacts	Education and training	Other or not specific	Advancement	Details
	Friend of the Sea		☑	☑	☑	☑			Above average	Criteria for sustainable fisheries include requirements on Social Accountability: Respect Human Rights; Respect National and International Labor legislation (International Labor Organisation (ILO) Core Conventions; Pay fair wages, i.e. a fair share of the profits on the sale of the Capture, or where applicable, wages that are at least equal to the highest of legal minimum wages or local average wages for similar activities; Apply health and safety measures at a minimum at the level of legal requirements; Ensure employee access to adequate medical care, wherever possible; Have requirement for social impact assessment and mitigation of adverse impacts, particularly on the social fabric of local populations; others.
	KRAV	☑	☑		☑		☑		Above average	The credit value that the KRAV-mark stands for can be summarised in the “four pillars of the KRAV-mark” out of which the Social responsibility applies here. KRAV-affiliates should have a written policy concerning social justice. Exempt from this documentation requirement are producers with fewer than 10 employees, as well as those active in countries where social justice policy is governed by current legislation. Products cannot be KRAV-certified if crimes against human rights or clear cases of social injustice exist in connection with the production. KRAV-affiliates cannot use forced or involuntary labour. In addition, they should treat their employees equally, give them equal opportunities and not act in a discriminatory manner. KRAV-affiliates should in addition provide opportunities for underage employees to participate in basic education. Employees within organic production should be given the possibility to organise themselves and have the right to negotiate collectively. Plus other ILO conventions, www.ilo.org

Social-ethical dimension											
Logo	Name	Ethical conduct guidelines	Workers rights	International initiatives	Insurance	Social impacts	Education and training	Other or not specific	Advancement	Details
	Marine Stewardship Council							☑	Basic programme	The MSC further recognises the need to observe and respect the long-term interests of people dependent on fishing for food and livelihood to the extent that it is consistent with ecological sustainability.
	Naturland	☑	☑	☑	☑		☑		Best in class	Strict social standards are observed throughout the entire processing chain, guaranteeing fair and modern working conditions for all labourers. Social programs already enacted by the project include an adult education program, HIV awareness, HIV testing, health programs, lake safety, fair trading, a clean and safe drinking water program, a children's amusement program, an anti-malaria program, sustainability awareness and a fish landing sites upgrading program. The holistic claim of Naturland standards includes the social treatment of the people who work and live on the fishery projects: 1. Human rights 2. Forced labor 3. Freedom of association, access to trade unions 4. Equal treatment and opportunities 5. Child labor 6. Health and safety 7. Employment conditions Elaborated and more detailed requirements are included in the project specific standards as elaborated by the Project Round Table.
	Responsible Fishing Scheme				☑		☑		Basic programme	Crew competence: It is essential that all crew members have completed the mandatory Maritime and Coastguard Agency (MCA) approved basic safety training courses in sea survival, fire fighting, first aid and safety awareness, which are stipulated for all fishermen working on UK registered fishing vessels.

There is a clear distinction between Naturland and all other sustainability programmes in this aspect. Naturland has transparent and detailed standards on the treatment of people working in fisheries (whether farmed or wild) and incorporates the greatest range of social and ethical issues.

There is a good spread of social and ethical initiatives covered by sustainability programmes. The issue that appears to be of the greatest concern is with respect to workers' health and insurance and is covered by majority of the sustainability programmes investigated. Fair-fish, Friend of the Sea, KRAV and Naturland have strong language in this respect in particular and the social and ethical dimension overall.

This study does not attempt to explain the motives or composition of relevant social and ethical initiatives. However, it could be anticipated that sustainability programmes that are active in developing countries might have a different agenda in the social and ethical area compared to sustainability programmes designed for developed country contexts where many of these issues may already be safeguarded by state regulations. A rigorous socio-economic and social-welfare analysis would need to be developed to compare labels in this respect.

The existing moderate to high levels of emphasis coupled with the actual outstanding approach of some sustainability programmes' in this area, indicate that a more structured and formalised approach could be applied. The future may see a move to develop a more institutionalised approach on the social and ethical dimensions of seafood ecolabels with the potential to quantifiably and more exactly express common values.

5.1.3 Economic dimension

The economic dimension (e.g. fair trade) is briefly captured in the overview below.

Table xxxvii. Economic dimension

Economic dimension									
Logo	Name	Price incentives	Assist gaining market share	Marketing promotion	Local economy support	Funding or donations	Other or not specific	Advancement	Details
	Alaska Seafood Marketing Institute						☑	Basic programme	Economic rationalisation (e.g. IFQ Individual Fishing Quotas).
	Clean Green of the Southern Rocklobster Fishery	☑						Basic programme	Contributing to achievement of price premiums in new markets for certified Clean Green lobster.
	Dolphin Safe of Earth Island Institute		☑					Basic programme	Find sources and markets for "Dolphin Safe" tuna.
	Ecofish	☑	☑	☑		☑		Best in class	Accentuate the positive — highlight fishery success stories by increasing demand for these products, creating an incentive for others to adopt sustainable fishing practices. Set a good example for corporate America by striving for the "Triple Bottom Line" — operate a profitable business that's also responsible to its community and the environment. Every year, EcoFish donates a portion of its profits to organisations that share their commitment to healthy oceans and communities.

Economic dimension									
Logo	Name	Price incentives	Assist gaining market share	Marketing promotion	Local economy support	Funding or donations	Other or not specific	Advancement	Details
	Fair-fish	☑			☑			Above average	Sustainability, fair-fish standard 8: Exports are not to be on the account of inland provision. A company exporting fair-fish products is to market a minimum of fair-fish products in the country of origin. - Prices are fixed together with the fisherfolk, and are at least 10 percent above the price offered by local fish merchants, combined with the guarantee that Fair-Fish will buy the quantity ordered if fish conform with label prescriptions. - A fair trade premium (an additional 10 percent of the fisherfolk price) given to local communities to help them create alternative incomes outside the fishery.
	Fishwise		☑	☑				Basic programme	Fishwise for business: - Ensure long-term revenues by protecting and conserving our resource supply - Credibly reinforces company commitments to corporate social responsibility. Within the Conservation Alliance for Seafood Solutions there is a growing recognition that innovative tools are needed to help members of the supply line to navigate the complexities of sustainable seafood. To this end, FishWise – in collaboration with more than a dozen organisational partners – is participating in a series of projects that will leverage the capacities within diverse member organisations, to transform seafood markets. Fishwise intends to be a "FishChoice". A website that will help buyers throughout the supply line to find sources of nearby seafood, color-coded to guide buying practices.
	KRAV	☑			☑			Basic programme	To encourage a vital fishing industry ensuring a reasonable income and a safe and secure working environment. Stimulate development of viable fishing and coastal towns.

Economic dimension									
Logo	Name	Price incentives	Assist gaining market share	Marketing promotion	Local economy support	Funding or donations	Other or not specific	Advancement	Details
	Marine Ecolabel Japan	☑			☑		☑	Above average	MEL Japan pursues utilising the merits of co-management that builds upon an idea of fishermen sharing the role of fisheries management and resource enhancement. MEL Japan aims to create a positive cycle in which fishers, through ecolabel certification, give closer attention to resource management, reinforce cooperation with scientists and administrators, and contribute to the accumulation of scientific data and the improvement of information through fishing activities.
	Naturland	☑			☑	☑		Above average	A calibration scale has been put in place to ensure that fishermen are getting fair prices. The partnership has formed a trust fund for the project, and 10 to 15 cents for every kilo of fish sold from the area will contribute to the fund.

Ecofish seemingly offers the best economic incentives which may be partially due to the fact that Ecofish is a seafood company with a strong sustainability agenda. It recently cooperated with the MSC and Naturland to bring ecolabelled products into the Ecofish portfolio. It also has excellent marketing potential and proven links to the seafood supply chain, mainly through numerous US restaurants. In any case, Ecofish appears to have found a balance between seafood sustainability, the economic interests of fisheries and the interests of customers. It is questionable whether a selective approach based on Ecofish's economic dimension could be widely used for other sustainability programmes given the specific North American market they operate within, but nevertheless it certainly deserves recognition as an outstanding initiative and sound inspiration in this area.

The most attractive economic element of any ecolabel is the economic impact felt by those seeking the label, primarily the fishers. Is there a price incentive in the form of a price premium or improved market access? Can this be based on either a fair-trade background (e.g. Fish-wise) or an economic incentive (e.g. Ecofish or the Clean Green Southern Rocklobster Fishery initiative)?

It is vital to highlight that most of the initiatives identified in this dimension within selected sustainability programmes are neither ethically nor fair trade focused, but rather they have more of a marketing and business incentive approach. Given the number of studies published on the seafood market, the lack of hard data on the real contribution an ecolabel makes to fishing company sales and profits is of concern. Rectifying this is critical but the seafood sector needs to make this information available and this would have a significant impact on the expansion of seafood ecolabelling schemes. Currently, there is little agreement as to whether an ecolabel logo

should or would lead to premium prices of seafood[5]. However, current trends show a broader agreement on the fact that there is a need for governments to create content regarding seafood ecolabelling[6] and business initiatives to support sustainable fishing, and these should be priority areas to address.

Most of the sustainability programmes articulate incentives in terms of price, marketing or business development premiums resulting from the adoption of a given sustainability programme. There is more limited information relevant to business impacts and tangible ways of achieving such business objectives, however, it is understood that this information may not be freely available, and could be part of market knowledge of sustainability programmes.

5.1.4 Animal welfare and other impacts

Animal welfare and other impacts are not addressed by many sustainability programmes. Nevertheless, there are some initiatives active in this area as summarised below.

Table xxxviii. *Animal welfare and other impacts*

Animal welfare dimension and other impacts							
Logo	Name	Food safety	Animal welfare	Innovation	Other or not specific	Advancement	Details
	AIDCP		☑	☑		Basic programme	Dolphin safe
	Clean Green of the Southern Rocklobster Fishery	☑				Basic programme	As part of achieving its mission the "Clean Green' strategy covers the need to address food safety legislation.
	Dolphin Safe of Earth Island Institute		☑			Basic programme	Dolphin safe

[5] Note: see Sally Washington. 2008. Ecolabels and Marine Capture Fisheries: Current Practice and Emerging Issues. GLOBEFISH Research Programme, Vol.91 Rome, FAO. 2008. p. 52

[6] Note: see EC: Proposal for a Regulation of the European Parliament and of the Council on a Community ecolabel scheme {SEC(2008) 2118} {SEC(2008) 2119}, July 16th 2008

Animal welfare dimension and other impacts							
Logo	Name	Food safety	Animal welfare	Innovation	Other or not specific	Advancement	Details
	Ecofish	☑				Basic programme	Seafood Safe: Ecofish is developing a new comprehensive testing program, whereby independent labs test Ecofish retail products for mercury and PCB's. The label helps inform consumers of how many meals they can consume per month, without exposing themselves to dangerous levels of these contaminants. The recommendation is derived from EPA's Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. To protect those adults that are at highest risk, women of childbearing age, the Seafood Safe label reflects safe consumption levels for this sub-population. Most recently, Ecofish has started pairing their retail products to individual causes.
	Pêche responsible Intermarche	☑				Basic programme	Lab testing for fish to demonstrate high quantities of omega 3 oils.
	Fair-fish	☑	☑		☑	Above average	Fair-fish principle animal welfare criteria for fisheries: We accept but fishing methods which do not hold the fish for a long time in the fishing gear and which allow to stun and kill every fish immediately after it is taken off the water. Traditional fishing at coasts and on lakes can cope with these criteria with good will and suitable methods. Industrial fishing however will hardly be able to keep up. Fair-fish provides a study summary of negative impacts on welfare and quality shown by different slaughtering methods.
	KRAV		☑		☑	Above average	The credit value the KRAV-mark stands for can be summarised in the “four pillars of the KRAV-mark” out of which the Solid care for animals applies here. Animal husbandry according to KRAV's standards shall be characterised very good animal welfare and respect for the animal species specific distinctive character in relation to physiology, behaviour, fodder and immediate environment. The standards give the frameworks for the minimum level, i.e. what is permitted and what is required.

At present, none of the sustainability programmes stand out as a leader in this respect and very little attention is given to the issue of animal welfare by mainstream seafood ecolabelling programmes. The exceptions to this may be KRAV and Fair-fish, who indicate some initiatives. In regards to other impacts such as food safety or health, programmes have begun to capture food safety concerns relating to omega-3 elements present in fish. Ecofish appears to be the most advanced in this area, with its Seafood Safe programme.

An issue that must be discussed in relation to animal welfare is the dolphin safe/friendly issue. It is important to note that for the purposes of this study, sustainability programmes are recognised to be either "animal friendly" or "species friendly". Species friendly programmes are selectively aimed at a particular species, such as AIDCP and Dolphin Safe of the Earth Island Institute, and broadly, do not consider other species within the remit of their programmes. These particular sustainability programmes are certainly recognised for contributing to reducing dolphin and other marine mammal mortality. However, questions arise when taking a more ecosystem-based view that whilst being dolphin safe, these programmes may in fact be tuna unfriendly/unsafe or ecosystem unfriendly or unsafe. Many species friendly programmes evolved in a period when marine mammal conservation rather than a broader ecosystem view was much more the focus of fisheries' conservation efforts. Whilst it is clearly important to have dolphin protection focused programmes such as AIDCP and EII, it is also important to include consideration of other marine species to make these sustainability programmes even more balanced and thorough.

5.2 Quantitative assessment summary

The quantitative section of this study is based on an assessment of individual sustainability programmes against the criteria WWF compiled and as described in section 3 and in more detail in section 3.3 Quantitative Assessment Criteria. The performance of each sustainability programme is calculated per topic based on aggregated results of a weighted average scoring of all relevant criteria that belong to that topic. Each sustainability programme has its own criteria scored and topic results calculated separately. A consolidated comparison of all topics, and thus of the dimension of fisheries management and environmental impacts of fishing, is drawn upon for the individual ecolabels' performances over all topics. Sections below discuss the relative performance of ecolabels and sustainability programmes with on-pack labels against the assessment criteria and their topics.

For example, for AIDCP, the table shows that it has achieved a total weighted score contribution of 0.961 out of 2, the score needed to meet the assessment criteria fully. This performance level means that AIDCP meets the WWF assessment criteria to a level of 48.05%. If AIDCP had met and exceeded the criteria, it could have obtained a weighted score contribution higher than 2, which would translate into over 100% compliance. The same logic applies to individual topics and their elements. For instance, with regards to ecological criteria, AIDCP with its weighted score contribution of 0.850 meets 42.5% of the assessment criteria.

5.2.1 Ecolabel Schemes

5.2.1.1 AIDCP

Table xxxix. Ecolabel Schemes: AIDCP

Theme	Topic	Topic within topic	Contribution needed per topic to meet assessment criteria	Performed contribution per topic in %	Performed contribution to topic score
Governance, Structure and Procedures					
	Structural & procedural criteria for ecolabelling schemes				
		Standard setting structures & procedures	1.583	52.63%	0.833
		Stakeholder participation in standard setting	0.417	50.00%	0.208
	Total per topic		**2.000**	**52.08%**	**1.042**
	Accreditation and certification structures				
		Accreditation and certification structures	2.000	50.00%	1.000
	Total per topic		**2.000**	**50.00%**	**1.000**
	Accreditation and certification procedures				
		Accreditation and certification procedures	1.714	61.11%	1.048
		Stakeholder participation in conformity assessment	0.286	16.67%	0.048
	Total per topic		**2.000**	**54.76%**	**1.095**
Content of Standards					
	Ecological criteria				
		Unit of certification and stock under consideration	0.500	60.00%	0.300
		Outcome oriented	0.100	50.00%	0.050
		Status of the stock(s) under consideration (target stocks)	0.400	50.00%	0.200
		Impacts of the fishery on the ecosystem	1.000	30.00%	0.300
	Total per topic		**2.000**	**42.50%**	**0.850**
	Fisheries management system criteria				
		Fisheries management system criteria	2.000	37.04%	0.741
	Total per topic		**2.000**	**37.04%**	**0.741**
	Traceability criteria				
		Traceability criteria	2.000	75.00%	1.500
	Total per topic		**2.000**	**75.00%**	**1.500**
Total Score Weighted Average of all Topics			**2.000**	**48.05%**	**0.961**

5.2.1.2 Friend of the Sea

Table xl. Ecolabel Schemes: Friend of the Sea

Theme	Topic	Topic within topic	Contribution needed per topic to meet assessment criteria	Performed contribution per topic in %	Performed contribution to topic score
Governance, Structure and Procedures					
	Structural & procedural criteria for ecolabelling schemes				
		Standard setting structures & procedures	1.583	36.84%	0.583
		Stakeholder participation in standard setting	0.417	40.00%	0.167
	Total per topic		**2.000**	**37.50%**	**0.750**
	Accreditation and certification structures				
		Accreditation and certification structures	2.000	100.00%	2.000
	Total per topic		**2.000**	**100.00%**	**2.000**
	Accreditation and certification procedures				
		Accreditation and certification procedures	1.714	69.44%	1.190
		Stakeholder participation in conformity assessment	0.286	83.33%	0.238
	Total per topic		**2.000**	**71.43%**	**1.429**
Content of Standards					
	Ecological criteria				
		Unit of certification and stock under consideration	0.500	0.00%	0.000
		Outcome oriented	0.100	100.00%	0.100
		Status of the stock(s) under consideration (target stocks)	0.400	75.00%	0.300
		Impacts of the fishery on the ecosystem	1.000	60.00%	0.600
	Total per topic		**2.000**	**50.00%**	**1.000**
	Fisheries management system criteria				
		Fisheries management system criteria	2.000	48.15%	0.963
	Total per topic		**2.000**	**48.15%**	**0.963**
	Traceability criteria				
		Traceability criteria	2.000	91.67%	1.833
	Total per topic		**2.000**	**91.67%**	**1.833**
Total Score Weighted Average of all Topics			**2.000**	**55.85%**	**1.117**

5.2.1.3 KRAV

Table xli. Ecolabel Schemes: KRAV

Theme	Topic	Topic within topic	Contribution needed per topic to meet assessment criteria	Performed contribution per topic in %	Performed contribution to topic score
Governance, Structure and Procedures					
	Structural & procedural criteria for ecolabelling schemes				
		Standard setting structures & procedures	1.583	55.26%	0.875
		Stakeholder participation in standard setting	0.417	20.00%	0.083
	Total per topic		**2.000**	**47.92%**	**0.958**
	Accreditation and certification structures				
		Accreditation and certification structures	2.000	90.00%	1.800
	Total per topic		**2.000**	**90.00%**	**1.800**
	Accreditation and certification procedures				
		Accreditation and certification procedures	1.714	66.67%	1.143
		Stakeholder participation in conformity assessment	0.286	33.33%	0.095
	Total per topic		**2.000**	**61.90%**	**1.238**
Content of Standards					
	Ecological criteria				
		Unit of certification and stock under consideration	0.500	90.00%	0.450
		Outcome oriented	0.100	100.00%	0.100
		Status of the stock(s) under consideration (target stocks)	0.400	75.00%	0.300
		Impacts of the fishery on the ecosystem	1.000	10.00%	0.100
	Total per topic		**2.000**	**47.50%**	**0.950**
	Fisheries management system criteria				
		Fisheries management system criteria	2.000	27.78%	0.556
	Total per topic		**2.000**	**27.78%**	**0.556**
	Traceability criteria				
		Traceability criteria	2.000	91.67%	1.833
	Total per topic		**2.000**	**91.67%**	**1.833**
Total Score Weighted Average of all Topics			**2.000**	**50.00%**	**1.000**

5.2.1.4 Marine Stewardship Council

Table xlii. Ecolabel Schemes: Marine Stewardship Council

Theme	Topic	Topic within topic	Contribution needed per topic to meet assessment criteria	Performed contribution per topic in %	Performed contribution to topic score
Governance, Structure and Procedures					
	Structural & procedural criteria for ecolabelling schemes				
		Standard setting structures & procedures	1.583	86.84%	1.375
		Stakeholder participation in standard setting	0.417	100.00%	0.417
	Total per topic		**2.000**	**89.58%**	**1.792**
	Accreditation and certification structures				
		Accreditation and certification structures	2.000	100.00%	2.000
	Total per topic		**2.000**	**100.00%**	**2.000**
	Accreditation and certification procedures				
		Accreditation and certification procedures	1.714	100.00%	1.714
		Stakeholder participation in conformity assessment	0.286	100.00%	0.286
	Total per topic		**2.000**	**100.00%**	**2.000**
Content of Standards					
	Ecological criteria				
		Unit of certification and stock under consideration	0.500	100.00%	0.500
		Outcome oriented	0.100	100.00%	0.100
		Status of the stock(s) under consideration (target stocks)	0.400	100.00%	0.400
		Impacts of the fishery on the ecosystem	1.000	95.00%	0.950
	Total per topic		**2.000**	**97.50%**	**1.950**
	Fisheries management system criteria				
		Fisheries management system criteria	2.000	94.44%	1.889
	Total per topic		**2.000**	**94.44%**	**1.889**
	Traceability criteria				
		Traceability criteria	2.000	100.00%	2.000
	Total per topic		**2.000**	**100.00%**	**2.000**
Total Score Weighted Average of all Topics			**2.000**	**95.65%**	**1.913**

5.2.1.5 MEL-Japan

Table xliii. Ecolabel Schemes: MEL-Japan

Theme	Topic	Topic within topic	Contribution needed per topic to meet assessment criteria	Performed contribution per topic in %	Performed contribution to topic score
Governance, Structure and Procedures					
	Structural & procedural criteria for ecolabelling schemes				
		Standard setting structures & procedures	1.583	68.42%	1.083
		Stakeholder participation in standard setting	0.417	50.00%	0.208
	Total per topic		**2.000**	**64.58%**	**1.292**
	Accreditation and certification structures				
		Accreditation and certification structures	2.000	40.00%	0.800
	Total per topic		**2.000**	**40.00%**	**0.800**
	Accreditation and certification procedures				
		Accreditation and certification procedures	1.714	50.00%	0.857
		Stakeholder participation in conformity assessment	0.286	0.00%	0.000
	Total per topic		**2.000**	**42.86%**	**0.857**
Content of Standards					
	Ecological criteria				
		Unit of certification and stock under consideration	0.500	70.00%	0.350
		Outcome oriented	0.100	0.00%	0.000
		Status of the stock(s) under consideration (target stocks)	0.400	12.50%	0.050
		Impacts of the fishery on the ecosystem	1.000	0.00%	0.000
	Total per topic		**2.000**	**20.00%**	**0.400**
	Fisheries management system criteria				
		Fisheries management system criteria	2.000	25.93%	0.519
	Total per topic		**2.000**	**25.93%**	**0.519**
	Traceability criteria				
		Traceability criteria	2.000	66.67%	1.333
	Total per topic		**2.000**	**66.67%**	**1.333**
Total Score Weighted Average of all Topics			**2.000**	**40.30%**	**0.806**

5.2.1.6 Naturland

Table xliv. Ecolabel Schemes: Naturland

Theme	Topic	Topic within topic	Contribution needed per topic to meet assessment criteria	Performed contribution per topic in %	Performed contribution to topic score
Governance, Structure and Procedures					
	Structural & procedural criteria for ecolabelling schemes				
		Standard setting structures & procedures	1.583	68.42%	1.083
		Stakeholder participation in standard setting	0.417	40.00%	0.167
	Total per topic		**2.000**	**62.50%**	**1.250**
	Accreditation and certification structures				
		Accreditation and certification structures	2.000	60.00%	1.200
	Total per topic		**2.000**	**60.00%**	**1.200**
	Accreditation and certification procedures				
		Accreditation and certification procedures	1.714	77.78%	1.333
		Stakeholder participation in conformity assessment	0.286	100.00%	0.286
	Total per topic		**2.000**	**80.95%**	**1.619**
Content of Standards					
	Ecological criteria				
		Unit of certification and stock under consideration	0.500	100.00%	0.500
		Outcome oriented	0.100	50.00%	0.050
		Status of the stock(s) under consideration (target stocks)	0.400	37.50%	0.150
		Impacts of the fishery on the ecosystem	1.000	15.00%	0.150
	Total per topic		**2.000**	**42.50%**	**0.850**
	Fisheries management system criteria				
		Fisheries management system criteria	2.000	64.81%	1.296
	Total per topic		**2.000**	**64.81%**	**1.296**
	Traceability criteria				
		Traceability criteria	2.000	91.67%	1.833
	Total per topic		**2.000**	**91.67%**	**1.833**
Total Score Weighted Average of all Topics			**2.000**	**64.55%**	**1.291**

5.2.1.7 Southern Rocklobster

Table xlv. Ecolabel Schemes: Southern Rocklobster

Theme	Topic	Topic within topic	Contribution needed per topic to meet assessment criteria	Performed contribution per topic in %	Performed contribution to topic score
Governance, Structure and Procedures					
	Structural & procedural criteria for ecolabelling schemes				
		Standard setting structures & procedures	1.583	28.95%	0.458
		Stakeholder participation in standard setting	0.417	0.00%	0.000
	Total per topic		**2.000**	**22.92%**	**0.458**
	Accreditation and certification structures				
		Accreditation and certification structures	2.000	100.00%	2.000
	Total per topic		**2.000**	**100.00%**	**2.000**
	Accreditation and certification procedures				
		Accreditation and certification procedures	1.714	27.78%	0.476
		Stakeholder participation in conformity assessment	0.286	33.33%	0.095
	Total per topic		**2.000**	**28.57%**	**0.571**
Content of Standards					
	Ecological criteria				
		Unit of certification and stock under consideration	0.500	10.00%	0.050
		Outcome oriented	0.100	0.00%	0.000
		Status of the stock(s) under consideration (target stocks)	0.400	0.00%	0.000
		Impacts of the fishery on the ecosystem	1.000	5.00%	0.050
	Total per topic		**2.000**	**5.00%**	**0.100**
	Fisheries management system criteria				
		Fisheries management system criteria	2.000	24.07%	0.481
	Total per topic		**2.000**	**24.07%**	**0.481**
	Traceability criteria				
		Traceability criteria	2.000	58.33%	1.167
	Total per topic		**2.000**	**58.33%**	**1.167**
Total Score Weighted Average of all Topics			**2.000**	**26.70%**	**0.534**

5.2.2 Sustainability programmes with on-pack label

It is important to be aware that the quantitative assessment criteria applied in this section are the same criteria that were applied to the ecolabel sustainability programmes discussed previously but only a subset having been

used. The complete criterion set contains relevant criteria for any sustainability programme, but also some specific criteria for ecolabelling. Consequently, the results must be analyzed carefully to avoid misinterpretation.

This section intends to provide a high level analysis of the relative strengths of on-pack label sustainability programmes that are not actual ecolabels to improve ecolabelling certification programmes. For instance, sustainability programmes run by industry organisations such as ASMI can be influential in key areas, in this case having good 'structural and procedural criteria for ecolabelling schemes' - normally the domain of ecolabels.

The analysis in this section does not aim to prove which sustainability programmes adhere to specific ecolabels' standards and structures; but rather it identifies some of the strengths and best practices of these programmes. The assessment also highlights that ecolabels are not the only method of developing a more sustainable marine environment. Results from the assessment cannot be interpreted as negative appraisals of listed sustainability programmes, but should draw attention to sustainability programmes (which are not ecolabels) as also having positive impacts on fishery management and ecological dimensions.

5.2.2.1 Theme 1: Governance, Structure and Procedures

Table xlvi. Governance, Structure and Procedures

Topic	Contribution needed per topic to meet assessment criteria	Sustainability programme with on-pack label	Applicable topic	Performed topic score in %	Performed topic score
Structural & procedural criteria for ecolabelling schemes	2.000	ASMI	Assessed	56.25%	1.13
	2.000	Carrefour Pêche responsible	N/A		
	2.000	Ecofish	N/A		
	2.000	EII	N/A		
	2.000	LIU-Iceland	N/A		
	2.000	RFS	Assessed	33.33%	0.67
Accreditation and certification structures	2.000	ASMI	Excluded		
	2.000	Carrefour Pêche responsible	Assessed	40.00%	0.80
	2.000	Ecofish	Excluded		
	2.000	EII	Excluded		
	2.000	LIU-Iceland	N/A		
	2.000	RFS	Assessed	50.00%	1.00
Accreditation and certification procedures	2.000	ASMI	Assessed	33.33%	0.67
	2.000	Carrefour Pêche responsible	Not enough information		
	2.000	Ecofish	Assessed	30.95%	0.62
	2.000	EII	Excluded		
	2.000	LIU-Iceland	N/A		
	2.000	RFS	Assessed	54.76%	1.10

5.2.2.2 Theme 2: Content of Standards

Table xlvii. Content of Standards

Topic	Contribution needed per topic to meet assessment criteria	Sustainability programme with on-pack label	Applicable topic	Performed topic score in %	Performed topic score
Ecological criteria	2.000	ASMI	Assessed	47.50%	0.95
	2.000	Carrefour Pêche responsible	Not enough information		
	2.000	Ecofish	Assessed	37.50%	0.75
	2.000	EII	Assessed	35.00%	0.70
	2.000	LIU-Iceland	Assessed	40.00%	0.80
	2.000	RFS	Assessed	32.50%	0.65
Fisheries management system criteria	2.000	ASMI	Assessed	66.67%	1.33
	2.000	Carrefour Pêche responsible	Not enough information		
	2.000	Ecofish	N/A		
	2.000	EII	Not enough information		
	2.000	LIU-Iceland	Assessed	35.19%	0.70
	2.000	RFS	Assessed	25.93%	0.52
Traceability criteria	2.000	ASMI	Assessed	66.67%	1.33
	2.000	Carrefour Pêche responsible	Excluded		
	2.000	Ecofish	N/A		
	2.000	EII	Assessed	33.33%	0.67
	2.000	LIU-Iceland	Assessed	41.67%	0.83
	2.000	RFS	Assessed	58.33%	1.17

5.3 Good and Best Practices Highlight

Section 6.3 attempts to address concepts, initiatives or practices that have been noted during the data research and collection that are considered to be genuine or unique. In WWF's view, as marine conservation is the most critical aim of any ecolabelling programmes, the practices mentioned below are relevant to the topics of fisheries management, ecologically sustainable fishing and wild-capture seafood. Identification of a good/best practice is based either on a score exceeding a particular criteria in the quantitative assessment of this study or on the content of an initiative that is considered by this study as noteworthy, outstanding and/or innovative. All practices listed below are a subjective selection collected during the study and should be approached as such. This list does not intend to offer an extensive inventory of all potential initiatives, but rather highlights a selection of innovative initiatives. A more conclusive study would need to be conducted in order to prove any actual added-value. Nonetheless, this section highlights such initiatives and key questions over their potential use or more formal institutionalisation within the seafood industry.

Table xlviii. Table of selected practices

No.	Issue	Sustainability programme	Details	Rationale
1	The organisational structure of a sustainability programme, its governing body (e.g. Board) and other structural arrangements.	MEL-Japan	Transparent and a good overview of each structure goal and powers is given on web sites: - Council - Technical Committee - Public relations Committee - Audit Committee - Board - Certification body - Industry Organisations - Secretariat The MEL-Japan Board is independent of the Council and the Audit Committee and does not consist of any members of the Council, its two committees or the Audit Committee. The Board is composed mainly of experts and academics from various fields with the goal to ensure that MEL Japan widely acceptable. The Board oversees basic administrative matters and advises MEL Japan. In addition there are Industry organisations by sector supporting the activities of MEL Japan are recruited to positively participate in, propagate the system and engage in the exchange of views. The scheme is managed with the participation of a wide range of stakeholders including fishers, scientists, distributors and consumers.	Very clear and transparent structure with distinct responsibilities that do not overlap. A simple but powerful organisational structure.
		MSC	The MSC Stakeholder Council enables a wide range of stakeholders to advise the MSC Board. Its 30-50 members represent a broad range of sectors and geographical areas to ensure that the opinions of all groups with a stake in sustainable fishing are heard.	MSC's consultation forum for interested parties whose mandates are established includes a significantly wide range of many stakeholders and interested parties.
2	Pot to plate Track&Trace system	Clean Green Southern Rocklobster	Clean Green Southern Rocklobster applies a concept of "pot to plate" and Track&Trace system. This means that each individual lobster harvested for southern Australian waters meeting specific product specifications has been tagged and traced through the supply chain. Pot to plate standards - environment and product standards - were developed with guidance by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ). Feedback & information about particular lobsters is available by entering the unique tag number on respective web sites.	A unique concept to control each point of Capture transfer in the supply chain, including the first point of landing, transshipment at sea or other vessel to vessel transfer.

No.	Issue	Sustainability programme	Details	Rationale
3	Auditors, certifiers or others involved in auditing compliance with the ecolabelling scheme standard.	AIDCP	On-board Observer Program of AIDCP. The participation of national and IATTC observers defines that all observers must have completed the technical training required by the guidelines, be capable of performing. Details are provided in respective standards.	Good, comprehensive and seemingly robust auditing system.
		EII	Earth Island's International Monitoring Program maintains twelve staff members in seven countries around the world, who regularly inspect tuna in canneries, at dockside, and aboard fishing vessels in order to insure consumers that the tuna they buy is truly "dolphin safe". EII may at any time without prior arrangement carry out monitoring of products from producers and distributors which display the trade mark. They are also required provide to the EII all such information and documentation that may be required and to permit access to all processing and storage facilities.	Earth Island Institute's International Monitoring Program helps to promote transparency and increases credibility of dolphin friendly initiative of EII. This program has also received awards from the United Nations Environmental Program.
4	Use of expert judgment and science on fisheries and sustainability.	MEL-Japan	MEL-Japan declares that their seafood products are expected to have been harvested sustainably and in a manner complying with the conservation of the ecosystem based on the best scientific evidence available to involved experts of the scheme. In implementing the research on the effects on fisheries, the Association (certification body) organises a committee composed of outside experts, and implements the research under the guidance and advice from a specialist's standpoint in such phases as planning, implementation of the research, assessment of the research results and the preparation of reports.	The use of best available science and its implementation with a scientific guidance.
		Iceland	Iceland put emphasis on research and development of fishing methods, and on fisheries advice that takes into account various interrelated factors in the ecosystem, such as the interaction of the species, environmental change and multi-species impacts. The focus is furthermore on strengthening research on the effects of fishing gear on the ecosystem, particularly on the seabed and the living bottom communities.	Effects of fishing and fishing gear on the ecosystem are an important aspect of fisheries impact on marine environment.

No.	Issue	Sustainability programme	Details	Rationale
4	Use of expert judgment and science on fisheries and sustainability.	Naturland	An expert survey is assembled for each project has to supply the experts with pertinent data for them to be able to assess the situation of a fishery. The experts on the list should cover the following fields: scientific institutions which deal with the respective type of fishery (primarily for current information on the status of the stock and on the aquatic ecosystem) fishing authorities (legal requirements, national and international development aims) NGOs (social and ecological aspects) organisations from the fishing and/or processing industries (technical, social and economic aspects).	A project approach allows them to consider specific aspects of small fisheries and particular sustainability conditions. However, this attribute needs to be carefully managed from the transparency and standardisation point of view for potential use outside of Naturland.
5	By-Capture	Iceland	Vessels are authorised to land a small percentage of the Capture, usually by-Capture, without the use of quota. The Capture in question is sold at auction and the proceeds go to a research fund that supports marine research.	This measure might be viewed as a controversy due to an existence of by-Capture and its use but in situations where some minimum level of by-Capture is not evitable this might be flexible and "least evil" approach.
6	Ecological measures and indicators on toxicity	Naturland	Naturland views the ecological sustainability not only as the stock of target species, but recognises also the other components of the ecosystem that need to be maintained in their integrity. An additional aspect is safeguarding fish as a high-value food item, not impaired by environmental toxins or critical processing methods, additives etc.	The seafood nutrition and health aspects are important factors to the sustainable use of marine environment. Naturland indicates an important seafood dimension.
		Ecofish	Seafood Safe Programme (it has own web sites http://www.seafoodsafe.com). Seafood Safe is a testing program for mercury and PCBs in seafood, two of the most prevalent contaminants found in seafood today. The program helps inform consumers of how many meals they can consume per month, without exposing themselves to dangerous levels of these contaminants. The recommendation is derived from EPA's Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. To protect those adults that are at highest risk, women of childbearing age, the Seafood Safe label reflects safe consumption levels for this sub-population.	Some seafood has been found to contain industrial and environmental contaminants, like mercury and PCBs. Seafood Safe helps informing and educating consumers who then in turn can make a better choice of sustainable and healthy seafood.

No.	Issue	Sustainability programme	Details	Rationale
7	Interactivity	ASMI	The on-line interactive Seafood U training tool for foodservice and retail staff includes information on sustainability.	Innovative, convenient and effective.
		ASMI	FAO Checklist is a tool for evaluating a fisheries' conformance to the Code of Conduct is the FAO Checklist completed and available on ASMI website. This checklist provides a straightforward, comprehensive, objective measure against an independent standard and it can be applied to any wild fishery.	Innovative and user friendly way of sharing of information.
8	Best practice 2005 by Carrefour	Carrefour	In Portugal, priority is given to local suppliers. Carrefour has thus developed the Traditional Fishing project to directly link the stores to local fishmongers. There is a dual goal: offering fresh fish to customers and promoting traditional fishing methods.	This initiative is a great example of a retailer being able to enhance quality of the seafood and support local fisheries. It indicates a clear need not only for sustainability programmes with stronger and clearer economic dimension to elevate sustainability to a higher impact level.
9	Co-management	MEL-Japan	MEL Japan pursues utilising the merits of co-management which have been practiced in order to ensure the sustainable use of aquatic resources in Japan and Asia from older times. The idea of co-management is that fishermen share in the role of fisheries management and resource enhancement. In fishing communities in Japan, fishers have developed the concept of managing local fishery resources jointly and on their own will in order to ensure the subsistence of their communities. As a result, practical and effective resource management-oriented fisheries have developed and expanded in Japan. In the background of this development, one can point out the presence of many small-scale fishers and fishing boats as well as a variety of target species in the fisheries. A framework has functioned that encourages fishers and others related to the fisheries, who are users of the resources, to fulfill their role in resource management voluntarily and individually. Fishers and regional and central governments are united in participating in the current framework for resource recovery as well.	This concept of MEL Japan effectively helps to facilitate and reinforce the work of the scheme and sustainable fishing.

No.	Issue	Sustainability programme	Details	Rationale
10	Environment protection	ASMI	All vessels fishing for Pacific cod or Alaska Pollock must participate in the National Marine Fisheries Service Vessel Monitoring System, which transmits each vessel's location, by satellite, to the National Marine Fisheries Service Office of Law Enforcement (OLE). This allows for monitoring fishing restrictions in Steller sea lion areas.	Vessel Monitoring System for Pacific cod or Alaska Pollock is a unique system that allows them to monitor and control all fishing activities in a specific geographical area. Such an approach might be very useful for critical, protected and other endangered or important areas and species. However, potential economic impacts on fisheries might be significant.
11	Accreditation and certification	ISO	ISO does not carry out accreditation of certification bodies. ISO/IEC 17000:2004 specifies general terms and definitions relating to conformity assessment, including the accreditation of conformity assessment bodies, and to the use of conformity assessment to facilitate trade.	Clearly in the entire seafood sustainability certification programmes industry, there is no comparison with ISO in regards to accreditation and certification structures and procedures. ISO framework is very strong in transparency and independency of such certification. ISO itself has no authority to control conformity assessment activities and thus remains perfectly unbiased in regards to certified fisheries. It can be a great source of inspirations in these topics to other sustainability programmes and ecolabels above all.
		ISO	ISO does not itself audit or assess the management systems of organisations to verify that they have been implemented in conformity with the requirements of the standards. Certification refers to the issuing of written assurance (the certificate) by an independent external body that it has audited a management system and verified that it conforms to the requirements specified in the standard.	

6 Conclusions

6.1 Perspective of the Study

6.1.1 Study Parameters and Results

There are several important aspects to note in the study framework that have shaped and determined its scope. With respect to the inputs, the outreach and significance of findings primarily depended on the composition and interpretation of criteria, which sustainability programmes were selected, which aspects were analyzed, and finally the availability of information and data relating to the sustainability programmes. Given these potential variables the methodology was shaped to ensure the greatest objectivity, robustness and credibility.

The methodology enabled a structured and thorough review and assessment of wild-capture seafood sustainability programmes against criteria developed by WWF that focused on fishery sustainability and certification frameworks and results. This emphasis on the ecological health of the fishery reflects the need to assess the effectiveness, efficiency and credibility by which a certification programme delivers on its stated goals. The criteria are based on WWF's EBM of Fisheries Framework and extensive field and policy experience in product certification programmes and fisheries management worldwide. Furthermore, they have been defined in accordance with the internationally acknowledged consensus expressed in FAO, ISEAL documentation and processes and on common objectives of wild capture certification programmes.

The study was based primarily on desk-research, and has not included any on-site evaluations or field-studies. The authors did not establish contact with any producers and operators participating in the certification programmes or with relevant inspection and certification bodies (with the exception of standard-setting bodies that are also certification bodies). The study was not designed to improve the certification programmes at the field level and this is a valuable area for future investigation. As previously described, this study is not an audit of intention versus performance and it is limited by the reliability of claims published by the individual sustainability programmes selected for assessment. Result validity depends upon information availability and the openness of the relevant sustainability programmes to share and comment on received communications and data. The value and content of collected data and information was influenced by the quality of review that individual sustainability programmes provided and by interpretations of the information available about a sustainability programme i.e. the level of clarity about its standard. Notwithstanding these influences, the study integrated appropriate aspects of wild-capture fishing into the assessment criteria. Overall, the study was able to assess the quality of key elements in place in the different schemes and thus determine whether the schemes are likely to lead to measurable improvements in fisheries management. Consequently the study results do provide an indicator of how well a certification programme is likely to be implemented in the field and the extent to which it can make credible claims about the benefit it delivers.

6.1.2 Objectivity of the Assessment

The qualitative part of the study was based on an objective gathering of publicly available data. No quantifiable assessment or evaluation was performed.

The quantitative part of the assessment scored individual selected sustainability programmes against criteria that WWF considers of primary importance to the future health of the oceans and the fisheries therein and that are thus crucial for any credible sustainable wild-capture seafood ecolabelling certification scheme. Most aspects mentioned in section 6.1.1 Study Parameters and Results contain, by their nature, some level of subjectivity and interpretation. Given this emphasis on fishery health, the assessment was structured to ensure an objective assessment of the contribution the labels make to sustainable fisheries.

Methodologically, each sustainability programme was approached with an identical analytical framework. ADP sought comparable levels of information from each programme and used a consistent timeframe. The qualitative assessment was applied to each of the selected sustainability programmes. The quantitative analysis and scoring was applied equally to ecolabels and sustainability programmes with on-pack labels.

6.2 Final Quantitative Appraisal of Ecolabels

6.2.1 Ecolabel Ranking

Below is a simplified visualisation of the ranking of each ecolabel put through this assessment. Each of these labels claim to improve fishery and marine ecosystem health and sustainability.

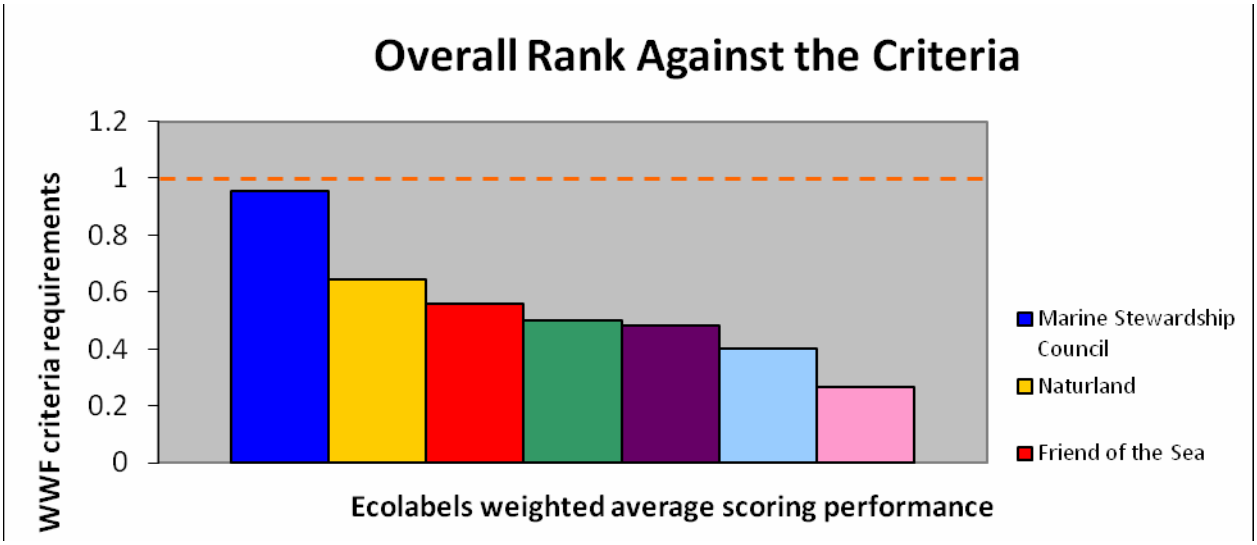

Table xlix. *Weighted average scores of individual ecolabels*

The Table below summarises weighted average scores of individual ecolabels for all topics in total.

Ranking	Ecolabel name	Weighted average score	Weighted average score in % to Assessment criteria score requirements	Appraisal indicator
1	Marine Stewardship Council	1.91	95.63%	Compliant
2	Naturland	1.29	64.56%	Semi-compliant
3	Friend of the Sea	1.12	55.83%	Semi-compliant
4	Krav	1.00	50.00%	Semi-compliant
5	AIDCP	0.96	48.06%	Non-compliant
6	MEL-Japan	0.81	40.29%	Non-compliant
7	Southern Rocklobster	0.53	26.70%	Non-compliant

6.2.2 Comparative Analysis of Ecolabel Elements

The kite chart below demonstrates comparative strengths of specific ecolabels across the assessed topics. Individual topics were not weighted against each other given the differences in the number of criteria and each

section of the review stands on its own. It is important to note that Traceability and Accreditation & Certification Structures have the lowest number of criteria (see Annex for criteria). Thus it was relatively easy for ecolabels to score higher within these topics than for example in the topic of ecological sustainability or fisheries management with a higher number of criteria considered. As explained above, assessing the fisheries management performance was the purpose of the study and thus this level of detail was necessary and deliberately emphasised.

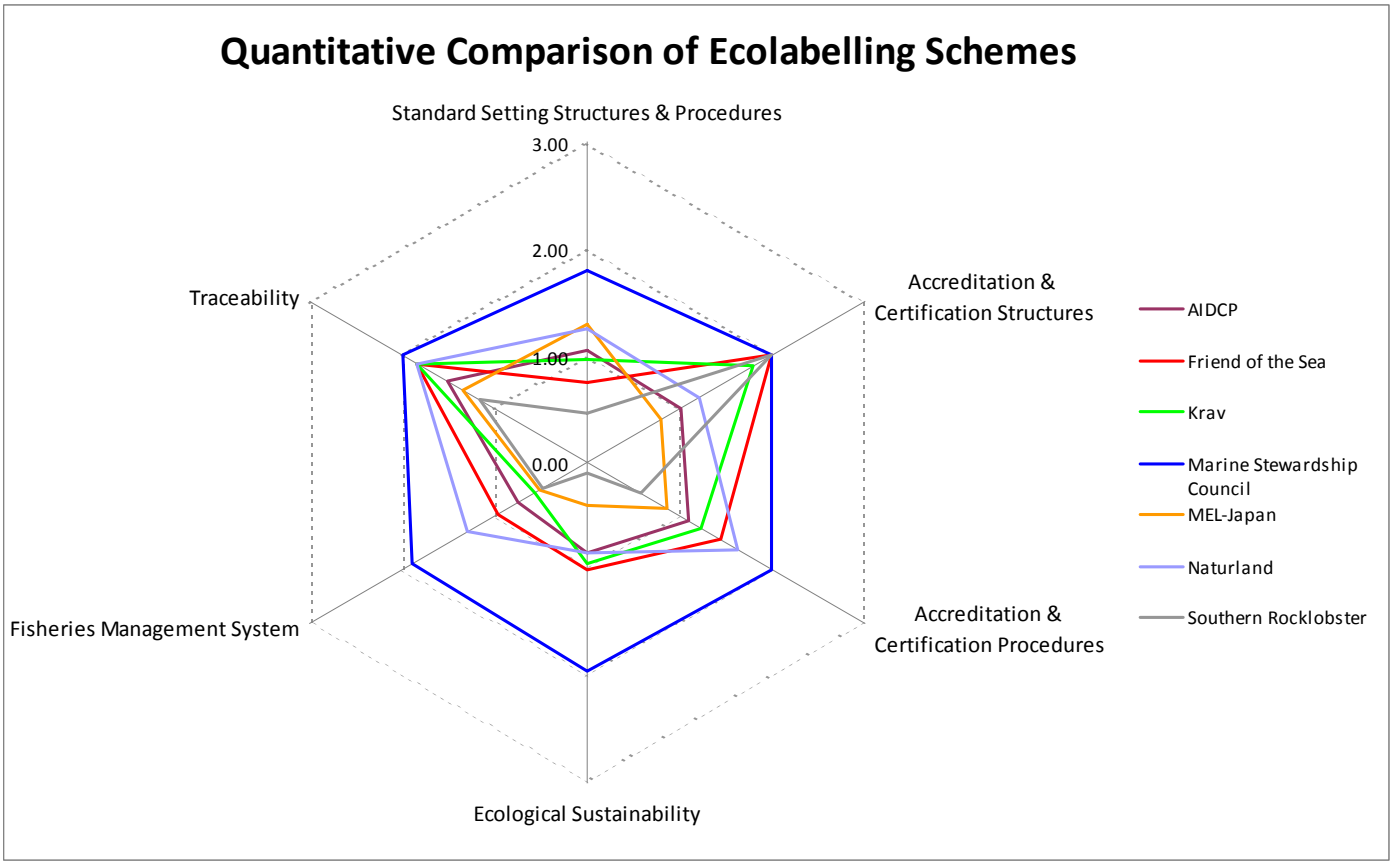

Table I. Aggregated scores of individual topics of selected ecolabels

The Table below shows the aggregated scores of individual topics of selected ecolabels. The highest scores per topic are highlighted in green.

	THEME 1 Governance, structures & procedures			THEME 2 Content of Ecolabel Standards		
	Topic 1	Topic 2	Topic 3	Topic 4	Topic 5	Topic 6
Ecolabelling Scheme	Standard setting structures & procedures	Accreditation & Certification Structures	Accreditation & Certification Procedures	Ecological Sustainability	Fisheries Management System	Traceability
AIDCP	1.04	1.00	1.10	0.85	0.74	1.50
Friend of the Sea	0.75	**2.00**	1.43	1.00	0.96	1.83
Krav	0.96	1.80	1.24	0.95	0.56	1.83
Marine Stewardship Council	**1.79**	**2.00**	**2.00**	**1.95**	**1.89**	**2.00**
MEL-Japan	1.29	0.80	0.86	0.40	0.52	1.33
Naturland	1.25	1.20	1.62	0.85	1.30	1.83
Southern Rocklobster	0.46	**2.00**	0.57	0.10	0.48	1.17

6.3 Summary

Clearly the various sections of the study differ given the qualitative and quantitative assessment approaches. Comparisons between them are therefore inappropriate. However, overall it can be concluded that standard setting, certification and accreditation structures and procedures along with fisheries management and ecological dimensions are considerably more advanced for most of the programmes being evaluated than the other dimensions that were qualitatively reviewed. Whilst the study endeavored to highlight exceptions, the other dimensions of environmental impacts of production, social and ethical issues, economic dimension and animal welfare are typically vague or not addressed. This result, that wild seafood ecolabel certification is more focused on fishery impacts, is to be expected given the plight of the oceans and the evolution of this field endeavoring to respond to this situation. The study also highlights where there are areas for improvement in this regard.

6.3.1 Quantitative assessment

The main findings of the quantitative assessment are:

- None of the assessed ecolabels are fully compliant or exceed the criteria in the assessed topics - standards setting, certification and accreditation structures, procedures and fisheries management and ecological dimensions.

- The Marine Stewardship Council scores closest to the criteria compliancy threshold, but even it faces some issues in Standard Setting Structures & Procedures. It could be argued that this was a potentially expected outcome of this study given WWF was a partner in creating the MSC, however WWF specifically sought an independent assessment from a party not in the marine certification realm to ensure the greatest objectivity. Additionally this study is the first independent assessment of the credibility of such programmes. To date, no evaluation of whether existing programs are adequate, much less credible, has been done. There also has been little learning, self-assessment, or cross programme comparison to date. Hopefully this analysis will help to change that.

- Except for the Marine Stewardship Council, the other assessed ecolabels are not well balanced across all six segments to the extent required to support sustainable fishing. No other ecolabel has a consistent approach across all assessed segments. This indicates the shortcomings of these other ecolabels and casts doubts on their overall contribution to effective fisheries management and ecological sustainability.

Most areas of strong compliance tend to be in the segments of Traceability and Accreditation and Certification Structures. As previously stated, both of these segments have the least number of assessed criteria.

- The lowest area of performance against the assessment framework is in the topics of Ecological Sustainability and Fisheries Management System, which emphasises the sustainability shortcomings of such ecolabels

- The study revealed significant differences in transparency, information availability, structure and accuracy of each programme. The MSC is clearly ahead of the rest of the ecolabels assessed. Although this element was not quantitatively assessed, ***it needs to be made clear that all other on-pack seafood ecolabels have substantial shortcomings in the area of transparency and information provision. If this had been quantitatively assessed, the final assessment results would have been considerably less favorable for the other ecolabels resulting in an even greater distinction between them and the MSC***. . These labels score well in areas with fewer criteria which produces higher scores. However, the purpose of this study is to objectively and methodically assess all relevant sustainability programmes so as to reveal their relative strengths and weaknesses and not to point out why one is better.

- This last point clearly illustrates and emphasises the genuine intent of this study as being to improve ecolabelling overall. None of the labels assessed fail as such as firstly, the criteria they score well on had fewer indicators which meant a higher score was easier to achieve. Secondly, in not reviewing transparency or information provision they also weren't assessed in an area where there appear to be quite serious short-comings. Again, this is material for future studies of this kind.

For each topic, the points below describe the major flaws identified in this assessment:

1. Standard Setting Structures & Procedures:

- Many sustainability programmes compromise their independence by supporting fisheries seeking certification with financial aid or other direct assistance;
- Most sustainability programmes are very weak in stakeholder and other interested party involvement in the setting of standards and particularly their ongoing review;
- Most sustainability programmes use inaccurate and imprecise terminology;
- Most sustainability programmes lack transparency and clarity about their standard setting structures and procedures. Of particular note is the lack of transparent rules or procedures for recruitment and staffing of positions in sustainability programme organisations.

1. Accreditation & Certification Structures:

- Some sustainability programmes face difficulties in managing disputes including adjudicating complaints or objections to certification body decisions and their satisfactory resolution by a relevant and competent accreditation body or ecolabelling scheme;
- Some sustainability programmes fail to use an independent, impartial, competent and transparent accreditation and certification body including it being possible to eventually link them which is highly irregular.

2. Accreditation & Certification Procedures:

- Most sustainability programmes use inaccurate and imprecise terminology;
- Many sustainability programmes have poor requirements for documentation and evidence during the fishery certification process;
- Many sustainability programmes have poorly available and badly documented certification procedures, methodologies and other certification requirements;
- The poor use and application of robust, science-based, objectively verifiable technical assessment approaches of sustainability standards and requirements that use the best scientific evidence, knowledge and judgment available. Additionally certification bodies do not sufficiently engage with or consult interested parties.

3. Ecological Sustainability:

- Most sustainability programmes and certification bodies fail to specify which species, stocks, methods, fleet(s) and/or geographical boundaries or other relevant distinguishing features are within the scope of a given certification;
- Most sustainability programmes do not require that the certification fully accounts for stock status and/or limit and target reference points to be determined by the management system in question including the use of proxies (biomass reference and fishing mortality reference points, etc.);
- Most also do not require consideration of the status of key prey species and the potential impacts on dependent predators.

4. Fisheries Management System:

- Most sustainability programmes do not require the use of any specified objectives for managing the stock under consideration and the ecosystem effects of fishing;
- Most sustainability programmes neither consider nor require traditional, fisher or community knowledge when evaluating fisheries, (N.B. clearly provided its validity can be objectively verified);
- Most sustainability programmes do not require fishery management systems to be documented, adopt and implement appropriate measures for sustainable use and conservation of the stock under consideration and avoid severe adverse impacts on dependent species within specified and reasonable timeframes;
- Most sustainability programmes do not specify the performance of the fishery and its management approach to be reviewed and assessed against management objectives;
- Many sustainability programmes fail to require the existence of appropriate and transparent dispute resolution mechanisms within the fisheries management system.

5. Traceability:

- Most sustainability programmes lack proper specification of documented audit and inspection procedures, including the frequency of audits and the use of ad hoc inspection and written audits;
- Many sustainability programmes use poor language and documentation to specify their chain of custody certification traceability requirements.

Overall, while this assessment finds that there is neither any ecolabel nor sustainability programme that fully meets the criteria WWF compiled to guide this assessment, it also shows the significant difference between the assessment the MSC and all other ecolabels especially in Governance, Standard Structures & Procedures and Content of Ecolabel Standards. Several ecolabels and sustainability programmes are strong in certain topics of sustainable fishing but only the MSC is coherent across all assessed topics. Remaining sustainability programmes are relatively strong in the topics of Traceability and Accreditation & Certification Structures but rather weak in the topics of Ecological Sustainability and the Fisheries Management System. However, it needs to be remembered that this study is not an audit of the programmes operational effectiveness, i.e. whether they

actually comply with their own procedures or stated intentions. This assessment and the results presented refer only to sustainability programmes themselves and compare their standards against WWF's criteria rather than providing any indication of how well or how badly they are implemented.

6.3.2 Qualitative review

Dimensions such as carbon footprint, environmental impacts of production, social issues and animal welfare were only qualitatively characterised by this study due to the relative immaturity of these areas in seafood ecolabelling and the lack of any existing quantitative evaluation frameworks for them. This is a worthy area for future focus both of the ecolabel programs as well as independent assessments.

6.3.2.1. Qualitative review conclusions

The following basic conclusions can be drawn from the qualitative review of these aspects:

1. Environmental Impacts
   - This dimension has the widest span of initiatives within the sustainability programmes qualitatively reviewed;
   - These initiatives have fairly concrete definitions, many with goals and targets, and some with quantifiable outcomes and indicators;
   - There are many sustainability programmes with various claims and agendas covering the environmental impacts of fishing operations but only a few have a systematic or organised approach;
   - Most of the sustainability programmes lack a holistic and integrated approach in this regard leading to selective approaches to addressing environmental issues;
   - Carbon footprint is the key area emerging as a focus for investment by many sustainability programmes but few have done anything concrete on this topic to date.
2. Social and ethical Aspects
   - There are a limited number of sustainability programmes with initiatives addressing this dimension through detailed directives;
   - Apart from these few rigorous programmes, some other basic initiatives are outlined by a number of sustainability programmes. These appear to be largely focused on claims without specific initiatives, outcomes or results;
   - Based on the extensive and formal frameworks of some outstanding sustainability programmes, there appears to be the potential for greater institutionalisation of social and ethical dimensions in seafood ecolabelling programmes including quantifiable and more exact expression of common values in the social and ethical dimension of sustainable seafood ecolabelling.
3. Economic Aspects
   - Generally, very few initiatives target economics as an area of criteria in seafood sustainability programmes. Even those mentioning this area specifically lack transparency, sound business principles and credible business incentives;
   - Apart from Ecofish which is a seafood company with substantial economic impact and strength, the remaining sustainability programmes are limited to general statements;
   - The main focus of programmes tends to be creating price incentives (e.g. some sustainability programmes claim to guarantee higher prices or minimum ordering quantity over a period of time), support of the local economy and trade, or lowering certification costs.
4. Animal Welfare and other Impacts
   - Very few initiatives have published material about this. The most visible and profound initiatives are the dolphin protection programmes. However, as discussed previously, these programmes are limited in the species they address e.g. addressing non-target species of the fishery but not the target species themselves;

- In principle there is no sustainability programme that would have a systematic or targeted approach to animal welfare, indeed it is not clear what "animal welfare" actually means and how it might vary based on target species as well as gear type and the processing facilities for different fisheries;
- With regards to seafood safety for human consumption, which seems to be a developing area, there are several well managed and elaborated food watch programmes either connected or belonging to several sustainability programmes.
- To date, no wild caught fisheries ecolabel has joined forces with a separate food health and safety label (e.g. GlobalGAP or the Food Marketing Institute) to deliver against health and safety standards.

6.3.2.2 Qualitative review development areas

Overall, there appear to be some efforts to address the issues of carbon footprints and social and ethical dimensions, but these issues have not yet been mainstreamed into existing sustainability programmes' standards. Animal welfare and economic impacts do not appear to be receiving even minimal attention. This assessment has shown that the uptake of sustainability programmes and their depth and effectiveness would be significantly enhanced if the economics of sustainable fishing could be more explicitly integrated within programme standards and criteria. An effective synergy with strong retailers and business partners would allow sustainability programmes to become more powerful, developed, widely accepted and most importantly have a positive impact on the sustainability of fishing and conservation of the marine environment.

6.4 Observations from this Study

As seafood sustainability is an evolving field, this study has endeavoured to a) identify the relative strengths of seafood ecolabels, b) highlight shortcomings in how seafood ecolabels address fisheries management and c) put seafood ecolabels in the context of other emerging aspects such as carbon footprint. To strengthen this realm, any future assessments should consider the following:

- Have independent international organisations with competency in this area (e.g. FAO, ISEAL, OECD) verify the inventory of available seafood sustainability programmes;
- Make publicly available the relevant dimensions before embarking on the study and including the assessment criteria. This would provide the opportunity for feedback, review and comment on the criteria;
- Make public the final version of this study's scope including the assessment criteria prior to the commencement of any subsequent analysis to strengthen the quantitative data collection;
- Having the full cooperation, support and commitment throughout the study, of the majority of the sustainability programmes to be assessed would strengthen the outcomes and ensure the entire field of seafood ecolabelling was advanced;
- Having the proposed assessment endorsed by those retailers and brands that use the different programs would be helpful from the outset. In turn, all will benefit from a credible comparison of such programmes;
- Similarly, governments (who are ultimately responsible for managing fisheries) should have some interest in understanding which programmes are more credible;
- The assessment should be publicly announced via primary communication channels e.g., internet sites and at selected international fora, e.g. the Brussels Seafood Exposition;
- Special care is needed when developing criteria as too specific formulations of criteria can exclude many sustainability programmes and potentially introduce bias;
- The process should be led and driven by one party while other actions or tasks can be shared across participants;
- Any study in this area, including this one, should be conducted and presented in an objective, pragmatic and constructive manner. The goal should be to allow seafood markets to evolve,

- Other elements that are not directly linked to sustainability but indirectly impact sustainability programmes should be considered as well e.g. certification costs.

Whilst full roundtable or stakeholder based exercises can produce strong results, such an approach could also carry a significant risk of losing focus and drive. The benefits of each approach need to be kept in balance. A focused, content based discussion can bring about major improvements and unify the direction of the sustainability efforts in wild-catch seafood fishing. The positive impact of this approach could potentially enhance the rigor and credibility of existing sustainability programs in all potential dimensions and thus the whole wild-catch seafood arena could benefit.

The quantitative methodology has been consistently and cautiously applied yielding sound results as well as a new, reusable and adaptive framework for future studies. This study was designed to ensure that, overall sustainability programmes focus on the ecological health of the fishery. Although sustainability programs may meet particular fishing criteria this may not necessarily result in good sustainability outcomes, if, in practice, they fail to fuse individually well managed elements of a well managed sustainability programme.

7 ANNEX

Assessment Template

THEME 1 Governance, Structure & Procedures of Ecolabelling Scheme					
Topic 1: Standard setting structures and procedures					
Issue	**Criterion**	**Relevant source of criterion**	**Findings**	**Noteworthy remarks**	**References used to score criterion**
Transparency principle	The organisational structure and financial arrangements of an ecolabelling scheme are transparent.	*If not published on the internet, then available through annual reports or on request.* *(FAO Guidelines: 3)*			
Governance	The governing body (e.g., Board) of an ecolabelling scheme has members that include independent experts, interested parties and other stakeholders.	(*WWF principles of participation, transparency and accountability*)			
Independence	The standard setting body does not perform accreditation functions nor receive payment from certification bodies for accreditation services.	(*FAO Guidelines: 66, 69*)			
	The standards setting body does not perform certification of fisheries or supply chains nor receive payment from certification clients for certification services.	(*FAO Guidelines: 107*)			
Organisational structure / institutional arrangements	The organisational structure of a standard setting body or arrangement includes a technical committee of independent experts whose mandates are established.	(*Based on FAO Guidelines: 45*)			
	The organisational structure of a standard setting body or arrangement includes a consultation forum for interested parties whose mandates are established.	(*Based on FAO Guidelines: 45*)			

Issue	Criterion	Relevant source of criterion	Findings	Noteworthy remarks	References used to score criterion
Transparent standard setting procedures	Written (documented) rules of procedure for development, review and approval of standards exist, including written procedures to guide decision-making.	(*FAO Guidelines: 47, 49, 56, ISEAL Code: 5.1*)			
Terms of reference for standard setting	Upon commencement of any new standard development activity, terms of reference are prepared for the proposed new standard.	(*ISEAL Code: 5.2*)			
	Terms of reference justify the need for the standard and establish clear objectives for the standard.	(*ISEAL Code: 5.2*)			
Dispute or complaints resolution for standard setting activity	Procedural rules for standard setting activities contain a mechanism for the impartial resolution of substantive or procedural disputes or complaints about the handling of standard setting matters.	(*FAO Guidelines: 47, ISEAL Code: 5.1*)			
Notification of standard setting activity	When actively engaged in standard setting activity (development or review), a work programme is published nationally, regionally and internationally and/or on the internet every six months containing: - name of organisation; - address; - list of standards under preparation; - list of standards under review or revision; - list of standards adopted in preceding six months.	(*FAO Guidelines: 48, 50, 51*)			
Availability of procedures, standards and notices	Standard setting procedures, draft and final standards, notices about standard setting work programmes are available and accessible to interested parties via the internet and other forms of distribution upon request.	(*FAO Guidelines 49, 51, 52*)			
	Within the means of the standard setting body, translations of standard setting procedures into English, French or Spanish can be provided upon request.	(*FAO Guidelines 53*)			
Contact point	A contact point for standard setting matters is identified.	(*FAO Guidelines: 59*)			

Issue	Criterion	Relevant source of criterion	Findings	Noteworthy remarks	References used to score criterion
Review & revision of standards	Standards are reviewed at regular published intervals and, if appropriate, revised after such reviews.	(*FAO Guidelines: 60*)			
	Standard setting bodies enable interested parties to submit proposals for revision of standards which are considered through a transparent process.	(*FAO Guidelines: 61*)			
Validation of standards	A procedure exists to validate standards with respect to the FAO's minimum requirements for sustainable fisheries to ensure the standard does not contain criteria of no relevance to sustainable fisheries or could cause unnecessary barriers to trade or mislead the consumer.	(*FAO Guidelines: 63*)			
Review of procedures	Procedures for setting standards are reviewed periodically in the light of new information and experience in standard setting.	(*FAO Guidelines: 62*)			
Complying with new standards	Certified fisheries are given at least three years to comply with revised standards.	(*FAO Guidelines: 60*)			
Participation in standard setting activities	Standard setting bodies ensure balanced participation in standard setting by independent experts and interested parties.	(*FAO Guidelines: 54*)			
	Standard setting bodies facilitate access and participation of interested parties especially those of developing countries and countries in transition.	(*FAO Guidelines: 46*)			
	Interested parties can participate in standard setting activities through an appropriate consultation forum or alternative appropriate mechanisms.	(*FAO Guidelines: 55*)			
Consultation period on new or revised standards	Before adopting a new or revised standard, standard setting bodies allow at least 60 days for interested parties to submit comments on a draft standard.	(*FAO Guidelines: 57*)			
Transparent decision-making	Standard setting bodies can demonstrate how comments from interested parties have been considered.	(*FAO Guidelines: 58*)			

Topic 2: Accreditation and certification structures

Issue	Criterion	Relevant guidance to auditors and/or source of criterion	Findings	Noteworthy remarks	References / sources of information
Accreditation	Accreditation is undertaken by an independent, impartial, competent and transparent accreditation body which does not perform standard setting for fisheries sustainability or traceability, nor certification of fisheries against such standards.	(*FAO Guidelines: 66, 69*)			
	Accreditation bodies can objectively demonstrate conformity to the requirements set out in ISO/IEC Guide 17011, as appropriate.	*ISO/IEC Guide 17011 (ISEAL Alliance)*			
Certification	Certification is undertaken by independent, impartial, competent and transparent certification body which does not perform standard setting for fisheries sustainability or traceability, nor accreditation of other certification bodies to use such standards.	(*FAO Guidelines: 108*)			
	Certification bodies are recognised and accredited by an independent, impartial, competent and transparent accreditation body to conduct conformity assessments using the specific standards of the ecolabelling scheme being audited.	*(FAO Guidelines: 107)*			
Dispute, complaint or objection mechanisms	Adjudication of disputes, complaints or objections to certification body decisions about fisheries meeting sustainability or traceability requirements that have not been resolved by certification bodies and are forwarded to the accreditation body or ecolabelling scheme, is conducted by an independent and impartial person(s) or committee.	(*FAO Guidelines: 83, 147*)			

Topic 3: Accreditation and certification procedures

Issue	Criterion	Relevant guidance to auditors and/or source of criterion		Rationale for score and/or noteworthy remarks	References / sources of information
Accreditation	Accreditation requirements and procedures are documented and provided to applicant and accredited entities who aim to use the ecolabelling scheme's standards to conduct conformity assessments.	*(FAO Guidelines: 74)*			
Certification	Certification procedures are documented by the ecolabelling scheme or accreditation body and provided to those applicant and accredited certification bodies that are competent to use the ecolabelling scheme's standards for conformity assessment.	*(FAO Guidelines: 27, 117)*			
	Measurable performance requirements (or indicators) against the standards are documented and provided to applicant and accredited certification bodies by the ecolabelling scheme or accreditation body.	(*FAO Guidelines:22 , 27*)			
	Methodologies for applying sustainability and traceability requirements are documented and provided to applicant and accredited certification bodies.	(*FAO Guidelines: 27, 117*)			
	Guidance material is documented and provided to applicant and accredited certification bodies to aid the application and interpretation of the standards.	(*FAO Guidelines: 117*)			
	Certification bodies are required to use the best scientific evidence available, also taking into account traditional, fisher and community knowledge of the resources provided that its validity can be objectively verified.	(*FAO Guidelines: 2, 28, 29, 30, 31*)			

Issue	Criterion	Relevant guidance to auditors and/or source of criterion		Rationale for score and/or noteworthy remarks	References / sources of information
Certification (contd)	The certification procedures include minimum requirements for technical, scientific and auditing skills or experience for auditors, certifiers or others involved in auditing compliance with the ecolabelling scheme standard.	(*WWF common sense principle*)			
	The certification procedures require the use of expert judgment to determine whether a fisheries sustainability performance requirement has been met by the fishery seeking certification.	*(WWF common sense principle)*			
	The certification procedures enable the use of a robust, science-based, objectively verifiable risk assessment approach to assess the performance requirements or indicators of the ecolabel standard in data-poor circumstances.	*Expert consultation in March 2008 recommended to COFI Sub-Committee on Trade in June 2008, which agreed, that COFI should develop technical guidelines for using risk assessment approaches for data-poor fisheries, under the ecolabelling guidelines. (FAO, 2008)*			
Transparency	Certification bodies or ecolabelling schemes publish written records of the outcome of the science-based judgments made by certification assessment teams, including the rationale behind such judgments against each performance requirement and how the views of interested parties have been considered.	(*FAO Guidelines: 27*)			

Issue	Criterion	Relevant guidance to auditors and/or source of criterion		Rationale for score and/or noteworthy remarks	References / sources of information
Dispute, complaint or objection mechanisms	Procedures for handling complaints are published by certification bodies, ecolabelling schemes and accreditation bodies.	(*FAO Guidelines: 82, 151*)			
	Certification bodies, ecolabelling schemes or accreditation bodies keep written records of disputes, complaints and objections concerning certification and/or accreditation, noting that confidentiality of information shall be safeguarded during the process.	(*FAO Guidelines: 84, 150*)			
Auditing & inspection	Certification procedures require certification bodies to monitor certified fisheries and conduct regular audits, including ad hoc audits if necessary to ensure that the fishery continues to meet the standard and to monitor progress against any non-conformances, conditions or corrective actions that may have been specified by the certification body.	(*FAO Guidelines: 128*)			
	Certification procedures require certification bodies to require fisheries certification clients to notify them promptly of any changes to the management of the fishery or other changes that may affect continued conformity to ecolabelling standards.	(*FAO Guidelines: 129*)			
	Certification procedures give certification bodies the ability to conduct reassessments of the fishery in the event of changes or analysis of complaints that may affect the fishery's ability to conform to ecolabelling standards.	(*FAO Guidelines: 130*)			
Use of label, logo or certification claim	The certification body, accreditation body or owner of the ecolabelling scheme (standard setter) has documented procedures describing the requirements, restrictions or limitations on the use of any label, logo or certification claim relating to the ecolabelling scheme's standards.	(*FAO Guidelines: 141*)			

Issue	Criterion	Relevant guidance to auditors and/or source of criterion		Rationale for score and/or noteworthy remarks	References / sources of information
Period of certification	Standards allow fisheries certification to be valid for up to five years.	(*FAO Guidelines: 132*)			
Training	Relevant training is provided to applicant and accredited certification bodies by standard setting bodies on the interpretation and implementation of the ecolabelling scheme's standards and certification procedures, methodologies and guidance.	*ISO 19011*			
Certification – transparency	Certification procedures for fisheries sustainability require certification bodies to engage with and consult interested parties about the fishery in question and its likelihood of meeting the specified performance requirements of the standard.	(*FAO Guidelines: 2.4, 3*)			
	Certification procedures for fisheries sustainability require certification bodies to consider the views of any interested parties, including States, RFMOs and the FAO.	(*FAO Guidelines: 2.4, 3, 27*)			
Dispute, compliant or objection mechanisms	Certification procedures allow interested parties to dispute, complain or object to the findings of an independent certification body in relation to sustainability or traceability standards.	(*FAO Guidelines: 147*)			

THEME 2
Content of Standards: Ecological, Fisheries Management System, Traceability Criteria

Topic 4: Ecological Criteria

Issue	Criterion	Relevant guidance to auditors and/or source of criterion	Findings	Noteworthy remarks	References / sources of information
Unit of certification	The ecolabelling standard defines "unit of certification" in way that is consistent with the FAO definition.	(*FAO Guidelines: 25, as modified by FAO, 2008*)			
	The ecolabelling standard requires certification clients and certification bodies to declare transparently which species, stocks, methods, fleet(s) and/or geographical boundaries or other relevant distinguishing features are included in the unit of certification.	(*FAO Guidelines: 25, as modified by FAO, 2008*)			
Stock under consideration	The ecolabelling standard requires that certification clients and certification bodies declare transparently which stock or stocks are under consideration.	(*FAO Guidelines: 25, modified by FAO, 2008*)			
	The ecolabelling standard requires that all fishing and other mortality of fish from any nominated stocks under consideration over their entire area of distribution are considered under a sustainability assessment for ecolabelling certification.	(*FAO Guidelines: 25, modified by FAO, 2008*)			
	The ecolabelling standard requires that only fish or fishery products that come from nominated stocks under consideration, and that pass the relevant standard, may be entitled to carry the ecolabel, logo or make any public claim to meet the ecolabel standard for a sustainable fishery.	(*FAO Guidelines: 25, modified by FAO, 2008*)			

Issue	Criterion	Relevant guidance to auditors and/or source of criterion	Findings	Noteworthy remarks	References / sources of information
Sustainability outcome (biological or ecological status)	The ecolabelling standard is outcome oriented – i.e., the standard includes criteria and/or performance indicators where the use of which in conformity assessment will objectively demonstrate that the fishery's stock status and the impacts of the fishery on the ecosystem are sustainable according to appropriate measures and/or proxies.	(*WWF EBM Component 7*)			
Ecological role	The ecolabelling standard requires the ecological role of the stock under consideration to be taken into account in determining stock status and/or limit and target reference points (or proxies), including with it is a key prey species and the potential impacts of its removal on dependent predators.	(*FAO Guidelines: 31.2*)			
Stock status	The ecolabelling standard requires the stock under consideration to be above its limit reference point (or appropriate proxy) if a biomass reference point, or below its limit reference point (or appropriate proxy) if a fishing mortality reference point.	(*FAO Guidelines: 30.1, 30.3*)			
Stock rebuilding	The ecolabelling standard allows rebuilding of stocks that are above fishing mortality (or proxy) reference points or below biomass (or proxy) limit reference points, but requires action to be taken to rectify the situation and evidence of stock rebuilding.	(*FAO Guidelines: 30.2*)			
Evidence	The ecolabelling standard allows generic evidence based on similar fisheries in the absence of specific stock information. However, the standard also requires more specific evidence the greater risk to stocks particularly in intensive fisheries.	*(FAO Guidelines: 30.4)*			
Key elements of ecosystems	The ecolabelling standard defines the important elements of ecosystems that must be audited for certification.	(*WWF EBM Components*)			

Issue	Criterion	Relevant guidance to auditors and/or source of criterion	Findings	Noteworthy remarks	References / sources of information
Non-target species	The ecolabelling standard requires knowledge of the potential impacts of the fishery on: Stocks other than stocks under consideration including discards, retained non-target, other by-catch species and, unobserved mortality of species.	(*FAO Guidelines: 31.1*)			
	The ecolabelling standard requires that non-target catches should not threaten non-target stocks with *serious risk of extinction*.	(*FAO Guidelines: 31.1*)			
	The ecolabelling standard requires knowledge of the potential impacts of the fishery on Protected, Endangered and Threatened (PET) species.	(*WWF EBM Components 4, 7 and 8*)			
	The ecolabelling standard requires that the fishing impacts on protected species are within safe biological limits as measured by relevant proxy indicators, or if endangered or threatened, that fishing impacts are not compromising the ability of the species' population to rebuild.	(*WWF EBM Components 4, 7 and 8*)			
Habitats	The ecolabelling standard requires knowledge of essential and highly vulnerable habitats and the potential impacts of the fishery.	*(FAO Guidelines: 31.3)* *(WWF EBM Components 4,7 & 8)*			
	The ecolabelling standard requires the assessment of fishery impacts on habitat to consider the full spatial range of relevant habitats, not just the part of the spatial range that is potentially affected by fishing.	(*FAO Guidelines: 31.3*)			
	Impacts on essential habitats or habitats that are highly vulnerable to damage, are to be avoided, minimised or mitigated.	*(FAO Guidelines: 31.3)* *(WWF EBM Components 4,7 &8)*			
Key elements of wider ecosystem structure and function	The ecolabelling standard requires knowledge of the potential impacts of the fishery on key elements of ecosystem structure and function.	*(WWF EBM Components 4, 7 & 8)*			

Issue	Criterion	Relevant guidance to auditors and/or source of criterion	Findings	Noteworthy remarks	References / sources of information
Evidence	The ecolabelling standard allows generic evidence based on similar fisheries in the absence of specific information on impacts of fishing for the unit of certification. However, the standard also requires more specific evidence the greater risk to stocks particularly in intensive fisheries.	(*FAO Guidelines: 31.4*)			

Topic 5: Fisheries Management System Criteria

Issue	Criterion	Relevant guidance to auditors and/or source of criterion	Findings	Noteworthy remarks	References / sources of information
Good management practice	The ecolabelling standard requires the fishery to be conducted under a management system that operates in compliance with the requirements of relevant local, national and international law and regulations, including the requirements of any RFMO that manages the fisheries on the stock under consideration.	(*FAO Guidelines: 28*)			
	The ecolabelling standard requires that fishery management focuses on long term sustainable use and conservation not short term considerations.	(*FAO Guidelines:29.4*)			
Appropriate management	The ecolabelling standard requires fishery management to be appropriate for the scale, type or context of the fishery.	(*FAO Guidelines:29*)			
Legal framework	The ecolabelling standard requires that an effective legal and administrative framework, at the appropriate level, is established for the fishery.	(*FAO Guidelines:29.5*)			

Issue	Criterion	Relevant guidance to auditors and/or source of criterion	Findings	Noteworthy remarks	References / sources of information
Legal framework (contd)	The ecolabelling standard requires that compliance with fishery management rules, measures, etc is ensured through effective mechanisms for monitoring, control, surveillance and enforcement.	(*FAO Guidelines:6,29.5*)			
	The ecolabelling standard requires the existence of appropriate and transparent dispute resolution mechanisms.	*(WWF Principles of fairness and justice)*			
Objectives	The ecolabelling standard requires objectives for managing the stock under consideration and the ecosystem effects of fishing.	(*FAO Guidelines:28.2, 31*)			
Adequate data and information collected	The ecolabelling standard requires adequate data and/or information on target stocks (stocks under consideration) to be collected and maintained to enable stock status and trends to be evaluated and the effectiveness of management measures.	(*FAO Guidelines:29.1*)			
	The ecolabelling standard requires adequate data and/or information to be used to identify risks and adverse effects of the fishery on key elements of ecosystems and the effectiveness of management measures.	(*FAO Guidelines:29.3*)			
Traditional, fisher or community knowledge	The ecolabelling standard allows traditional, fisher or community knowledge to be considered when evaluating fisheries, provided its validity can be objectively verified.	(*FAO Guidelines:29.1, 29.2, 29.3*)			
Stock assessment	The ecolabelling standard requires that appropriate stock assessments are conducted to determine stock status and trends for the stock under consideration.	(*FAO Guidelines: 29.1, 29.2, 32*)			

Issue	Criterion	Relevant guidance to auditors and/or source of criterion	Findings	Noteworthy remarks	References / sources of information
Timely and best available science	The ecolabelling standard requires that the best science available be used in the fisheries management process.	(*FAO Guidelines: 29.2, 29.3, 29.4*)			
	The ecolabelling standard requires that timely scientific advice on the likelihood and magnitude of fishery impacts be provided in the fishery management process.	(*FAO Guidelines: 29.3*)			
Reference points (or proxies)	The ecolabelling standard requires the fishery to have appropriate target reference points (or proxies) that are consistent with B_{MSY}.	(*FAO Guidelines: 29.2, 29.2bis 29.6*)			
	The ecolabelling standard requires the fishery to have appropriate limit reference points or directions (or proxies) that are consistent with avoiding recruitment overfishing.	(*FAO Guidelines: 29.2, 29.2bis 29.6*)			
Management measures	The ecolabelling standard requires designated fisheries management authorities or entities to adopt and implement appropriate measures for sustainable use and conservation of the stock under consideration and avoid severe adverse impacts on dependent predators if the species is a key prey species.	(*FAO Guidelines:29.4, 31.2*)			
	The ecolabelling standard requires designated fisheries management authorities or entities to adopt and implement measures to avoid, minimise or mitigate, as appropriate, adverse impacts on key elements of the fishery's ecosystem.	(*FAO Guidelines: 31.3*)			
	The ecolabelling standard requires that management approaches are documented, take into account uncertainty and imprecision and have a reasonable expectation that management will succeed.	(*FAO Guidelines: 28.1*)			

Issue	Criterion	Relevant guidance to auditors and/or source of criterion	Findings	Noteworthy remarks	References / sources of information
Management measures (contd)	The ecolabelling standard requires that a precautionary approach be used and that the absence of scientific information not be used as a reason for postponing or failing to take conservation or management measures.	(*FAO Guidelines:29.6*)			
	The ecolabelling standard allows the management system to use suitable methods of risk assessment to take into account relevant uncertainties.	(*FAO Guidelines:29.6*)			
	The ecolabelling standard requires the management system to adopt remedial actions if reference points are approached or exceeded.	(*FAO Guidelines:29.6*)			
	The ecolabelling standard allows recovery, restoration or rebuilding of stocks or key ecosystem elements within reasonable timeframes.	(*FAO Guidelines:30*)			
Research	The ecolabelling standard requires research to be conducted that is aimed at addressing the ecosystem, stock and fishery's management information needs.	*(WWF EBM Component 10)*			
Subsidies	The ecolabelling standard requires that there are no harmful or perverse subsidies used in the fishery that could result in unsustainable fish stocks or unhealthy, dysfunctional ecosystems.	*(WWF subsidies policy position) (WWF, 2009)*			
Performance assessment and review processes	The ecolabelling standard requires that the performance of the fishery and its management approach are reviewed and assessed against management objectives.	*(WWF EBM Components 9 & 11)*			

Issue	Criterion	Relevant guidance to auditors and/or source of criterion	Findings	Noteworthy remarks	References / sources of information
Stakeholder engagement and participation	The ecolabelling standard requires fisheries managers or decision-makers to engage with, or enable the participation of, stakeholders with an interest in, or who are affected by fisheries management decisions, in the decision-making process.	*(WWF EBM Components 1-12)*			
Accountability & transparency	The ecolabelling standard requires fisheries management decision makers to be accountable and transparent to interested parties about the fisheries management decisions they make.	*WWF common sense principle*			

Topic 6: Traceability Criteria

Issue	Criterion	Relevant guidance to auditors and/or source of criterion	Findings	Noteworthy remarks	References / sources of information
Chain of custody	If an ecolabel, logo or sustainability claim is to be made about fish or fishery products at any time, standards require chain of custody certification at each point of transfer in the supply chain, including the first point of landing, transhipment at sea or other vessel to vessel transfer.	(*FAO Guidelines: 135*)			
Segregation and separation	Standards require that all certified fish or fishery products are clearly identified and kept separate (either spatially or temporally) from all non-certified fish or fishery products at each point of transfer along the supply chain.	(*FAO Guidelines: 135*)			
Records	Standards require that records relating to incoming and outgoing shipments, receipts and invoices are kept by the recipients of certified fish or fishery products.	(*FAO Guidelines: 136*)			

Issue	Criterion	Relevant guidance to auditors and/or source of criterion	Findings	Noteworthy remarks	References / sources of information
Audits & inspections	Standards require that certification bodies have documented audit and inspection procedures, including the frequency of audits and the use of ad hoc inspection.	(*FAO Guidelines: 137*)			
	Standards require that certification bodies produce written audit reports which include records of any breaches of standards and relevant corrective actions required.	(*FAO Guidelines: 138, 139, 140*)			
Certification period	Standards allow chain of custody certification to be valid for up to three years.	(*FAO Guidelines: 132*)			

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Hyperlinks used:

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