KIT Royal Tropical Institute

Assessment of social impact of GAA's 'Best Aquaculture Practices' certification

KIT Royal Tropical Institute, Amsterdam
March 2021

Colophon

Authors: Froukje Kruijssen, Julie Newton, Rob Kuijpers, Adama Bah, Anne Rappoldt, Eileen Nichols, Rini Kusumawati, Nga Dao Ngoc

Citation: Kruijssen, F., Newton, J., Kuijpers, R., Bah, A., Rappoldt, A., Nichols, E., Kusumawati, R., Nga, D.N. 2021. Assessment of social impact of GAA's 'Best Aquaculture Practices' certification. KIT Royal Tropical Institute: Amsterdam.

KIT Royal Tropical Institute
Mauritskade 63
1092 AD Amsterdam
The Netherlands
Email: f.kruijssen@kit.nl
Phone: +31611203797

CONTENT

Executive summary

Introduction

This report presents the findings of the assessment of social impact of Global Aquaculture Alliance's (GAA) 'Best Aquaculture Practices' (BAP) certification. The study was commissioned by GAA in line with recent efforts to provide support to auditors to assess compliance on the labour and social standards in BAP, and to assist aquaculture practitioners to integrate socially responsible practices into their operations, as well as the introduction of a new data system. The aim of this assessment is to better understand how BAP social and labour standards are applied and how they impact practices among producers, processors and buyers. It thereby excludes hatcheries and feed mills.

The report covers an assessment of the social and labour standards only (and not the other components of the standards), covering three sub-sets: 1) Finfish and crustacean (FFC) farm standards, 2) Salmon farm standards, and 3) Seafood processing plant standards. The study follows a mixed-methods theory-based approach to evaluation to facilitate an in-depth understanding of the effects of BAP certification. This is focused on validating the underlying Theory of Change (ToC) that explains how BAP certification contributes to observed results, by gathering evidence on the achieved outputs and outcomes. The aim of the analysis is to understand if and how the program is contributing to observed and intended results and how other factors influence these results. Two main information sources were used: 1) in-country primary research in three countries: Indonesia, Vietnam and Chile, where semi-structured interviews and focus group discussions with key stakeholders including firm' management, workers and surrounding community members of certified and non-certified firms, and with auditors that carry out the audits for the BAP standards, and 2) an analysis of audit data for the social and labour standards from 2017 and 2018.

Below we summarize our key findings organized by the main themes of the evaluation:

i. Perceptions of BAP social and labour standard;
ii. Ease of compliance with the BAP social and labour standards;
iii. Regional patterns of compliance with the BAP social and labour standards;
iv. Trends of compliance over time;
v. Effectiveness of the BAP social and labour standards;
vi. Economic costs and gains of complying with the BAP social and labour standards;
vii. Sustainability of the certified practices;
viii. Recommendations.

Perceptions of BAP social and labour standard

The primary data show that the ease of compliance with the BAP social and labour standards is similar to other standards, although there is some variation between farms and processing plants depending on the subject (e.g. plants were more positive about the initial understanding of the standards compared to farms, while farms were more positive about the ease of compliance compared to other seafood standards). Perceptions on the usefulness of BAP social and labour standards are positive, especially for farms, while opinions on the effect on profitability are positive for both farms and plants. These results are supported by the qualitative data from the in-depth interviews. The general perspective is that compliance with BAP social and labour standards aligns with compliance with national labour laws. Both plants and farms interviewed in Indonesia faced initial difficulties understanding the BAP social and labour standards compared to other parts of the standards, but this improved over time. For farms this was often as a result of support provided by the processing plants they supply to. Consistently, processing plants indicated that their application for BAP certification was motivates by requirements from buyers, both to maintain existing customers, and to access new ones. This in turn prompted farms to apply for certification as processing plants aim to extend the certification of their products into the value chain (attaining additional stars in the BAP scheme).

Ease of compliance

The ease of compliance was assessed based on the level of non-compliance as shown by the BAP audit data for finfish and crustacean farms (FFC), salmon farms, and seafood processing plants, in 2017 and 2018. These data showed that the overall average rate of non-compliance for the companies audited for the three BAP standards is higher for the FFC standard than for the other two, and that the rate of non-compliance was lowest for the processing plants. Furthermore, the rate of non-compliance was slightly higher in 2017 than in 2018 for all three standards. The rate of non-compliance varied greatly across the different topics that are covered by the social and labour standards, as well as between the three standards. Only one category of clauses, worker health and safety, had more than 5% non-compliance for all three standards. For the FFC standard, there was also 5% or more non-compliance for medical care, discrimination and abuse, staff facilities and hiring and terms of employment. For the salmon standard this is the case for property rights and regulatory compliance, and protective clothing, while for the processing plants there are no other categories of clauses that have more than 5% non-compliance on average. The variation in non-compliance indicates that there are specific compliance issues for species and facility type. There is no clear evidence to suggest that a more conducive institutional environment evidence facilitates compliance in some countries. However, qualitative data showed that where national laws are similar to the requirements in the standards, companies need to make less efforts to meet them. This was especially the case for processing plants in Chile and Vietnam. Farms saw compliance as slightly more challenging, but also stated that BAP standards appear to be less strict than other standards. In each country facilities faced different practical challenges in complying with the BAP social and labour standards.

Regional patterns of compliance

Some regional patterns in non-compliance could be discerned from the audit data. For finfish and crustacean farms, non-compliance with the social and labour standards was higher in India, Guatemala, Philippines, Australia, Indonesia, Ecuador and Brazil. This raises concerns especially for India, Indonesia and Ecuador where the largest volumes of product are certified, and where therefore potential negative societal impacts are relatively larger. At the same time, countries with a lower volume of BAP certified product are important to monitor, to ensure that this high level of non-compliance is not replicated by new farms that become certified there. For the seafood processing plants, the rate of non-compliance on the social and labour standards was highest among companies in Saudi Arabia, Malaysia, Bangladesh, India, Chile, Bangladesh, New Zealand, Turkey and Iceland. Among those countries, Chile and India have the largest volume of certified product. Grouping countries according to income category, showed that overall, lower income countries show non-compliance on more categories than higher income countries, and their rate of non-compliance is generally higher. This suggests that the hypothesis that a firm's location (and the conduciveness of a country's institutional environment) influences the degree of non-compliance, even though we did not find clear evidence for it in the three case study countries (see 'Ease of compliance').

Trends over time

Trends over time in non-compliance need to be seen in the context of the development of the BAP social and labour standards. From the first version of the standards, new topics were added, such as discrimination and abuse, forced labour, and freedom of association, and the level of detail for each of the categories increased (i.e. an increased number of clauses). Furthermore, auditors' skills to audit for social and labour standards have developed over time (through investments by BAP), leading to better quality social audits. The 2017-2018 audit data showed no correlation between the rate of non-compliance and the number of years a facility has been certified, which implies that compliance does not necessarily becomes easier over time. However, a comparison of the rate of non-compliance for 2009-2010 with 2017-2018 for the shrimp farms alone, showed that the *average rate* of non-compliance has significantly reduced. For 6 clauses less than 10% of shrimp farms complied in the period 2009-2010, whereas the highest average non-compliance for any individual clause in 2017-

2018 was 0.17. Furthermore, the *nature* of non-compliance has changed. Whereas in 2009-2010 non-compliance was highest on basic issues such as the provision of meals and protective gear to workers, this has now shifted to risk assessment and training on health and safety. Provision of medical care, employee housing that meets national standards, and interaction with local communities remained among the top 10 issues with high non-compliance in 2017-2018, albeit with much lower levels of non-compliance than in the 2009-2010 period.

Effectiveness of the standards

Whether firms have actually changed their practices as a result of the BAP standards depends on whether they already implemented (most of) the practices required when they adopted BAP certification, and whether they continuously monitor risks related to social responsibility and implement corrective actions. Our data showed that overall, farms and plants monitor social and labour practices to some degree, and that initially they did make minor to major changes in their practices when they first applied. However, the degree to which BAP social and labour standards brought changes in practices varied across the case study countries, and was greater in Vietnam and Indonesia than in Chile, and differed between facility types, being greater for farms than plants. Overall, there is increased attention to due diligence and ensuring compliance, especially through improved monitoring systems, and there is now greater attention for community-farm interactions. In Chile, changes to working conditions were perceived to be limited, as practices were already being implemented. In Indonesia and Vietnam, major changes were made, however whereas in Indonesia this focused on changes in trainings on safety procedures, health insurance, and alignment of wages and allowances for overtime with government regulations, in Vietnam this mainly related to providing contracts to employees, improved interactions between employees and farm managers, and employees having more information on labour rights (wages and welfare).

With respect to due diligence processes, the in-depth interviews with plant and farm managements indicated that most facilities have put in place some measures to monitor risks and implement measures where needed, or strengthened internal structures already in place, although the degree to which this required major changes differed among the three countries. It is however questionable to what degree risk mitigating processes are actually in place. When probed on this in relation to social and labour issues, responses linked practices more to the audit process rather than to a dedicated mechanism for social risks.

There is little evidence of spill-over effects on non-certified actors. It is generally the more advanced and larger firms that apply for BAP certification, that already have some improved practices. The general perception of the smaller firms is that it is difficult for them to afford compliance with standards in general, and that maintaining certain practices would be too much of a burden.

The occupational health and safety clauses and the clauses on the use of protective clothing were those with relatively high non-compliance compared to other topics covered by the BAP social and labour standards. It is not possible to ascertain whether the number of accidents and incidents among BAP certified firms has decreased compared to the situation before certification, as employees are now more encouraged than before to report incidents, and incidents are now systematically recorded. Records from before the first year of certification on incidents and accidents are also largely missing. However, certification has at least led to more awareness of these issues, and improved record keeping. More trainings on occupational safety and health were being held both in plants and on farms, and more protective equipment was provided. Yet, employees of some facilities noted that even though staff are aware of the practices they do not always implement them and that there were challenges amongst the new intakes, as well as older staff. Some farm staff also indicated that implementation of some procedures was challenging as they perceived checklists too bureaucratic and

not suited for the fast pace of production. There were also challenges related to sub-contractors and third parties working for the farms.

There is no information on recruitment practices among migrant workers, due to the selection of the case studies in countries where the use of migrant labour is limited. Overall, there are no changes in how plants and farms recruit workers, however there are some changes in the type of workers hired. The implementation of contractual arrangements, did reduce the number of seasonal workers. In Vietnam only, plants report a shortage of labour, particularly that young people are not interested in factory work. As a result they have increased the wages they pay. There are clear gender norms around what work women and men can and cannot do, which means that in practice both sexes are excluded from certain roles.

In relation to changes for workers, their families and surrounding communities, workers note clear improvements around wellbeing related to shifts and regulations on workers time. This appears to have alleviated stress for workers. They note limited change around decent income, and no changes around child labour. No specific mention was made about forced labour. Employees also do not note major changes related to freedom of association. The status of the implementation of grievance mechanisms is unclear, particularly at farm level, where the manager is often also the first point of contact for reporting grievances.

Economic costs and gains

Generally, both plants and farms in all countries had significant costs to become BAP certified, however, in Indonesia, the costs for farms were often born by processing plants (indicated as their "sponsors"). In Chile especially, the investments were seen as worthwhile, and as "doing the right thing". Investments were needed in a wide range of areas such as health and safety trainings, safety equipment and protective clothing, infrastructure such as for separate rest rooms and locker rooms for women and men, and workers' housing. Benefits listed of having BAP certification in place included a way to demonstrate compliance with domestic normative legal frameworks, being more structured about compliance, and improved employees' wellbeing. Certification did not lead to higher profitably directly. However, it brought a larger and/ or assured market (both for farms and plants) and more sales (by providing access to new clients and new markets, e.g. in USA, Canada, and Europe). Facilities also indicated improved quality of the product, attributed to the BAP standards package as a whole, not just the social and labour standards, however, it is unclear whether this was leading to higher prices. Some plants also indicated Bap certification to be an investment in long term economic sustainability of the firm, as clients in other markets were also increasingly expressing interest in certification. In all countries, there were plants that observed some improvements in productivity as a result of changes in their social and labour practices, but this was less the case for farms. In Vietnam, where shortage of labour was observed as a challenge, the improved practices were also perceived to have led to higher staff retention levels, and lower occurrence of accidents.

Sustainability of the certified practices

The trends in non-compliance of the shrimp farms over time, have shown that compliance with BAP standards has significantly improved. At the same time, we did not find a significant correlation between number of years certified and non-compliance. This implies that all firms that apply for certification, are now better equipped to meet the standards than they were in the past. Given that compliance was found to be facilitated by national laws, and compliance with other standards, it is likely that sector-wide trends are resulting in positive effects on compliance. Certain practices do need refreshing of skills over time and continuous training of staff.

Recommendations

Based on the study, the following recommendations are made to make the BAP social and labour standards more effective:

1. Embark on a learning trajectory to identify strategies that can be used to improve compliance on the BAP social and labour standards, as well as the integrated package of standards.
2. This should include processes to embed more robust due diligence processes.
3. Assess different models to make certification and audit fees more affordable for facilities with a lower level of production.
4. Embark on further research (cost/benefit analysis) with selected firms to identify the business case for social compliance.
5. Evaluate whether auditors can work in teams of two comprising of one environmental auditor and one social/ labour auditor.
6. Clearly define or validate the Theory of Change of the BAP social and labour standards, including the intended long-term social impacts, the medium and short-term social outcomes, with clearly defined indicators.
7. Invest in collecting, analysing and reporting more systematically on (quantitative and qualitative) data on these indicators, beyond the existing audit data.
8. Put in place mechanisms to monitor potential unintended effects of the BAP standards on workers, their families and communities.
9. Further investigate variations in benefits or discrimination for different types of men and women including issues related to maternity benefits and dismissals when pregnant.
10. Engage in the discussions and literature on 'living wage' and assess how BAP could support this in the seafood sector.
11. Liaise with trade unions, civil society and NGOs to identify more effective mechanisms within and outside the working premises to report and act on grievances, and issues beyond the firms' gates.

1 Introduction

Aquaculture has become increasingly important to the global supply of fish, and is now supplying more than half of the fish used for human consumption, with an estimated value of 232 billion USD in 2016 (FAO 2018). An estimated 19.3 million people are employed (full-time or part-time) in fish farming of which 14% women (FAO 2018), and at least another 7 million people in post-harvest nodes of the chain (processing, trade, retail) (estimates based on Phillips et al. (2016)) of which between 62 and 99% are women, depending on the country (Kruijssen, McDougall and van Asseldonk 2018). While the aquaculture sector is considered of key importance to supply the global population with animal proteins and important micro-nutrients, the sector has also been associated with a range of environmental and social issues, such as degradation of habitats and ecosystems, loss of biodiversity, and violation of labour and human rights (Tlusty 2012).

Private voluntary standards have emerged in response to increasing food safety issues, as well as consumer and/ or civil society organizations' concerns about ethical and environmental issues related to global food value chains (Hatanaka 2010). Also in aquaculture, such voluntary sustainability certification schemes have developed to address such concerns. It has however been questioned to what extent these schemes are able to transform the entire sector (Bush et al. 2013). In particular social and labour issues are considered difficult to codify, and it has been argued that standards may create pockets of improved working conditions, while the remainder of the sector is left behind (Bush et al. 2013). Assessing the impact of sustainability standards, and understanding how they contribute to change in a sector is therefore considered of key importance to contribute to their relevance (Petrokofsky and Jennings 2018).

One of these aquaculture sustainability certification schemes is the 'Best Aquaculture Practices' (BAP) certification of the Global Aquaculture Alliance (GAA). These certification standards cover seafood processing plants, farms, hatcheries and feed mills. The standards contain requirements for food safety, environmental management, animal welfare, and labour and social aspects. While there has already been some effort to examine the environmental effects of BAP certification (Tlusty 2012, Tlusty and Tausig 2014), the social impacts have not been assessed yet. The social and labour standards should ensure that fundamental rights at work are met by aquaculture operations. This includes freedom from forced labour and human trafficking, elimination of child labour, freedom of association and non-discrimination and equal opportunities as well as occupational safety and health, community relations, minimum wage, and basic standards for housing, hygiene and meals.

Recent efforts have been undertaken by GAA to support auditors to assess compliance on the labour and social standards in BAP, and to assist aquaculture practitioners to integrate socially responsible practices into their operations, and a new data system has been introduced. GAA therefore considers this an opportune time to embark on a learning exercise to assess the compliance with and effects of the social and labour standards of the BAP certification, and generate learning on how social change happens in aquaculture.

The aim of this assessment is to **better understand how BAP social and labour standards are applied and how they impact practices among producers, processors and buyers**. It thereby excludes hatcheries and feed mills. Insights will be used to further develop BAP and GAA's programs and to promote socially sustainable seafood more broadly. Hence, BAP intends to influence and contribute to discourses and practices in the seafood industry to promote sustainable seafood through identifying, analysing and making available lessons from BAP.

The following evaluation questions are addressed:
About the perceptions of BAP social and labour standards:

- How do farmers and processors view the BAP social and labour standards? Do they consider these as more/equally/less important than other elements of the standards? More/equally/less difficult to comply with? Why are these more difficult?
- How do auditors and certifying bodies view the BAP social and labour standards? Do they consider these as more/equally/less important than other elements of the standards? More/equally/less difficult to audit? Which challenges do they face in auditing the social and labour standards? What can BAP do to address these challenges?

About the ease of compliance:

- Do producers/processors/buyers find any standard(s) more difficult to comply with than others? Is this corroborated by the data from audit reports? Why are these more difficult, and what might be done to assist them to get certified?

About regional pattern:

- Do audit reports show any regional or local patterns in compliance/non-compliance with BAP social and labour standards? If so, which ones? What could be the reasons for difficulties in compliance in these particular locations?

About effectiveness:

- Do producers, processors and buyers think that BAP social and labour standards have contributed to:
    - them changing their practices? Which practices in particular?
    - changes in due diligence processes (identifying potential and actual harm-risk analysis, ceasing, preventing, mitigating harm, verify, monitor and validate progress)
    - their business models? How have they changed?
- Have there been changes in due diligence processes (identifying potential and actual harm-risk analysis, ceasing, preventing, mitigating harm, verify, monitor and validate progress)?
- Are there any spill-over effects of the above on non-certified actors?
- Has BAP certification led to changes in the implementation of occupational health and safety systems and procedures? Is it possible to register changes in accidents and incidents? What grievance mechanisms are in place or what evidence is there of remediation?
- Has BAP certification had any registered impact on recruitment practices and labour retention in the facilities?
- Have workers, their families and communities (around facilities, supplying labour to facilities) noticed any impact/changes at the facility being/becoming BAP certified? Any changes in labour practices and /or dealings with communities? And why/why not?

About efficiency:

- Have producers and processors registered any additional economic costs and/or gains from becoming BAP certified? Have these changed over time?

About sustainability:

- Are the practices certified sustainable? Do producers/ processors/ buyers continue to be certified after applying the first time?

The remainder of this document is structured as follows. Chapter 2 briefly describes our understanding of the BAP standard and the certification process. Chapter 3 presents a Theory of Change for social impacts of BAP certification, and presents the available evidence from literature on the linkages in the impact pathway and the underlying assumptions from the broader literature on certification in food value chains. Chapter 4 then presents the findings, bringing together data from the different sources, organized by evaluation question. Subsequently, Chapter 5 provides a discussion of the implications of these findings for the validity of the Theory of Change. Chapter 6 provides conclusions, followed by some recommendations.

2 Context

2.1 Voluntary standards for aquaculture

Voluntary standards are becoming increasingly common in the aquaculture sector. These standards aim to provide incentives for value chain actors to improve environmental and socioeconomic performance (Blackman and Rivera 2010), while ensuring consumers that the product has been produced in an ethical and environmentally friendly way (Petrokofsky and Jennings 2018). Voluntary standards can be public or private (while mandatory standards are generally public), however in global supply chains private voluntary standards have become increasingly common. This usually happens under the influence of *lead firms* in the supply chain that dictate what is being produced, and under what conditions, among others in a response to pressure by NGOs and consumer groups to improve sustainability (Jespersen et al. 2014). It has been argued that private standards are of such importance because private sector is able to respond faster and more adequately to changing circumstances, due to incentives to avoid increased production costs and reputation damage as a result of sustainability issues (Bush et al. 2013). At the same time, the ability of governments to set and regulate standards has been constrained by increased globalization of trade and consolidation of the food retail industry (Hatanaka, Bain and Busch 2005).

While private standards may be more efficient, these forms of privatized governance have also been criticized for not being able to guarantee the intended positive impact on producers, workers and the environment, and for imposing a Northern agenda on Southern producers and workers that is insensitive to local conditions (Ponte et al. 2011). In addition there is a perceived lack of gender sensitivity in codes of conduct that address employment conditions (Barrientos, Dolan and Tallontire 2003), and a lack of transparency and accountability to workers and consumers (O'Rourke 2006). The use of certification is also seen by some as greenwashing or a marketing tool instead of a driver for actual improvement of practices (Ponte et al. 2011). Finally, credibility can be an issue because of an increase in number and scope of schemes, causing confusion amongst consumers as to what the different certification schemes actually mean, lowering the willingness to pay a premium price (Ponte et al. 2011).

Aquaculture certification programs differ widely in scope and focus. They can cover a wide range of criteria from organic, to responsible, to sustainable aquaculture, representing the range in demand for different product qualities (Bush et al. 2013). Other differentiation in aquaculture certification exists between product or process certification (WWF 2007), the target users (i.e. business or consumers), the degree of value chain coverage (hatcheries, farms, processors, re-packing, feed mills), and the targeting of specific species (Ponte et al. 2011). In aquaculture certification, private production units (farms, firms or value chains) are usually the unit of certification (as opposed to fisheries and forestry that often take a zonal or sectoral approach), which means that it is usually less effective in covering the cumulative impacts of multiple enterprises in a particular location (Belton et al. 2010). Furthermore, whereas some certification schemes focus on a single issue, others target a broad range of criteria.

The most common criteria in sustainability schemes are product quality and food safety, environment, and social and animal welfare issues (WWF 2007). A review conducted in 2011 (Ponte et al. 2011) of 22 certification schemes for aquaculture, including codes of conduct, best practices and other guidelines, showed that standards related to workers were included to some degree in 15 of those schemes, and only 5 covered relationships with local communities, whereas environmental issues were covered by 16 schemes, and food safety by 20. The conclusion of the review was that social issues had started to be included more recently, but that they were becoming more important. In addition, the authors noted that many of those schemes were limited in the degree to which they went beyond farm-level in their coverage (Ponte et al. 2011). FAO's technical guidelines on aquaculture certification

(FAO 2011) also stresses the need to include aspects of animal welfare, environmental issues and socio-economic aspects in aquaculture certification in addition to the usual issues of animal health and food safety. The guidelines suggest labour rights, child labour, and livelihoods of workers and local communities as socio-economic aspects to be included.

2.2 Global Aquaculture Alliance and BAP certification

The Global Aquaculture Alliance (GAA) is an international, non-profit organization that represents individuals, associations and businesses associated with aquaculture and seafood around the world[1]. GAA's mission is "to promote responsible aquaculture practices through education, advocacy and demonstration"[2]. GAA initially developed certification standards, in response to threats posed to the shrimp sector by environmental advocacy campaigns (Havice and Iles 2015). Since 2002, GAA has a third-party aquaculture certification program, 'Best Aquaculture Practices' (BAP), which aims to improve the environmental, social and economic performance of the aquaculture supply chain[3]. BAP certification covers the entire supply chain, including farms, processing plants, hatcheries and feed mills, of farmed finfish, crustacean and mollusc species around the globe[3].

The volume of product originating from BAP-certified facilities has been steadily increasing, going from 1.45 million metric tons at the end of 2015 to 2.17 million metric tons at the end of 2016[4], and with 1850 facilities certified at the end of 2017[5]. It is considered the largest third-party certifier for the aquaculture sector (Havice and Iles 2015). The BAP program employs a tiered system, which uses stars to signify the integration levels of BAP certification along the aquaculture supply chain, with each additional star indicating an additional node in the supply chain certified, going upstream in the chain from the processing plant[6]. There are six sets of BAP standards covering 1) Finfish & Crustacean Farms; 2) Mollusc Farms; 3) Salmon Farms; 4) Finfish, Crustacean & Mollusc Hatcheries & Nurseries; 5) Feed Mills; and 6) Seafood Processing & Repacking Plants[7].

BAP is governed by the GAA Board, the BAP Standards Coordinator, and the Standards Oversight Committee (SOC) (GAA 2017). The BAP's Standards Oversight Committee (SOC) is comprised of representatives from industry, NGO, and academic/regulatory organizations, and is responsible for primary guidance and oversight for the certification process and directs the drafting of all standards by BAP Technical Committees. It reports its recommendations to the GAA Board of Directors for final standards approval. The BAP Technical Committees for species or species groups, which are composed of technical experts and representatives of those groups interested in or affected by the standards, are responsible for the development of standards, and review, revise, and vote upon these specific sets of standards. The standards development process also includes a public consultation stage. The BAP Standards Coordinator works closely with the SOC to carry out the general administration of the BAP standards.

The certification process for facilities consists of a number of steps. For a first time application for certification, facilities are asked to conduct a self-assessment, fill out an online application, undergo an external audit, and correct any potential non-conformities before they are certified[7]. This process means that there are several stages at which facilities can opt out of or fail the certification process;

[1] https://www.aquaculturealliance.org/who-we-are/, accessed on 19 September 2018.
[2] https://www.aquaculturealliance.org/about-gaa/, accessed on 19 September 2018,
[3] https://www.bapcertification.org/, accessed on 19 September 2018.
[4] https://www.aquaculturealliance.org/blog/bap-sets-sights-on-1500-certified-facilities/, accessed on 19 September 2018.
[5] https://www.bapcertification.org/About, accessed on 19 September 2018.
[6] 1 star: Product produced by a BAP-certified processing plant; 2 stars: Product produced by a BAP-certified processing plant and BAP-certified farm(s) only; 3 stars: Product produced by a BAP-certified processing plant, BAP-certified farm(s) only and BAP-certified hatchery and/or feed mill only; and 4 stars: Product produced by a BAP-certified processing plant, BAP-certified farm(s) only, BAP-certified hatchery only and BAP-certified feed mill only. https://www.bapcertification.org/ProgramIntegrity, accessed on 19 September 2018.
[7] https://www.bapcertification.org/Certification, accessed on 19 September 2018.

1) after self-assessment; 2) after the initial audit, or 3) after an unsuccessful attempt to implement corrective measures. In addition, there are likely many facilities that never even attempt to conduct the self-assessment. Certification is valid for one year, after which facilities need to be re-audited. Third-party certification bodies around the world conduct the audits of the facilities, after being approved by GAA-BAP (GAA 2015).

2.3 The BAP social and labour standards

Table 1 provides an overview of the topics that are covered in the present version of the social and labour standards, and shows the number of clauses included for each topic for the three sets of standards (see also Annex A and B for the details). Generally, the standards for the seafood processing plants include an equal or larger number of different clauses for each topic, with the exception of the topic of community relations, which is not covered for plants. Between the two farm types, the salmon standards include a larger number of clauses. In particular Community Relations, Property Rights and Regulatory Compliance, Wages and benefits, and Worker health and safety include more clauses for salmon than for finfish and crustaceans (FFC). In practice however, we found that a number of clauses have not been audited for and are deemed not applicable for certain facilities.

Table 1. Number of clauses by topic and standard type

Topic	Plants[8]	FFC farms[9]	Salmon farms[10]
Child labour & young workers	3	3	3
Community Relations	0	3	7
Discrimination and abuse	4	2	2
Forced labour	4	4	4
Freedom of association and collective bargaining	4	2	2
Hiring & terms of employment	5	3	3
Medical care	4	1	1
Personal Protective Equipment and Clothing	3	1	1
Property Rights and Regulatory Compliance	6	3	6
Staff facilities	4	3	3
Training	4	0	0
Wages and benefits	6	5	6
Worker health and safety	10	8	11
Working hours	4	1	1
Total number of clauses (social and labour standards)	**61**	**39**	**50**

Note: A new version has been made available of the seafood plant standard, which includes additional social and labour clauses, however the audits covered in this report were still using the version presented here.

The topics covered in the standards include ILO's core labour standards, laid out in eight ILO conventions:

- Freedom of association and the effective recognition of the right to collective bargaining (Convention No. 87 & No. 98)
- The elimination of all forms of forced and compulsory labour (Convention No. 29 & No. 105)

[8] Source: Aquaculture Facility Certification, Seafood Processing Plant Standard Issue 4.2 - December 2015, Application Revision 3.1 - 19-June-2017, accessed from https://www.bapcertification.org/Certification, on 14/09/2018.
[9] Source: Aquaculture Facility Certification, Finfish and Crustacean Farm Standard Issue 2.4 - 23-May-2017, Application Revision 6.0 - 18-July-2017, accessed from https://www.bapcertification.org/Certification, on 14/09/2018.
[10] Source: Aquaculture Facility Certification, Salmon Farm Standard Issue 2.3 - October 2016, Application Revision 2.1 - 18-July-2017, accessed from https://www.bapcertification.org/Certification, on 14/09/2018.

- The effective abolition of child labour (Convention No. 138 & No. 182)
- The elimination of discrimination in respect of employment and occupation (Convention No. 100 & No. 111)

In addition to these, other internationally recognized labour rights are covered.

Another observation from comparing the farm and processing plant standards is that the attention for social and labour issues is more pronounced in the plant standards. This is because of the nature of the activities that take place in the different types of facilities, and in particular the number of employees (some processing plants employ several thousands of workers, whereas farms may have less than 50).

2.4 Evidence available on the impact of social standards

There is limited evidence available on the effectiveness or impact of voluntary standards in aquaculture, and in particular for social standards. A number of recent systematic reviews (ITC 2011, Blackman and Rivera 2010, Oya et al. 2017, Petrokofsky and Jennings 2018) have considered the evidence that is available on this topic, and have found that while research is increasingly being conducted on the impact of sustainability standards in general, there are few studies that are longitudinal in nature and include a counterfactual. The number of studies with low risk of bias included for the synthesis of effects is very small. In addition, there are some sectors that have received a lot of attention, whereas others (including aquaculture) are underrepresented. Furthermore, studies have largely focused on impacts at farm-level, while other nodes of the value chain have received less attention. Another challenge for measuring the real improvement in the aquaculture sector as a result of farm-level certification is that farms will make improvements prior to communicating interest to be certified and that is the moment that the assessments will start (Tlustly and Tausig 2014). In addition, there is no data on farms that are not included in the certification program to compare certified farms with.

At the level of the adoption of sustainable practices, such as conservation and biodiversity, input use, community benefits and development, occupational health and safety, good production practices, and management systems, evidence suggests that certification leads to improved democratic organization and decision making or greater engagement with local communities, and adoption of improved health and safety practices (Petrokofsky and Jennings 2018). However, there are limited studies outside Rainforest Alliance, Fairtrade and FSC certification, which makes it difficult to draw wider conclusion.

A systematic review on whether certification schemes improve the wellbeing of agricultural producers and workers in low- and middle-income countries (Oya et al. 2017), included 43 studies that analysed quantitative effects and 136 qualitative studies that assess barriers, enablers and other contextual factors. The review found no evidence on the socio-economic outcomes for agricultural producers and workers. Although there are positive effects on prices, wages do not increase, nor does overall household income. Moreover, improvements of wellbeing of producers and workers are highly dependent on the context. Wellbeing in this study was operationalized through a number of indicators: income from certified production, wages, total household income, assets/wealth, illness and schooling. Prices for certified producers were found to be 14% higher than for non-certified producers and incomes from the sales of produce were 11% higher if produce was certified. However, wages for workers engaged in certified production were 13% lower than for workers in uncertified production. Effects on total household income, assets/wealth and illness were all unclear or not significant. Children in households of certified producers received 6% more schooling than children in households of non-certified producers but the effects from the individual studies ranged widely and had a high risk of selection bias (Oya et al. 2017).

Another systematic review also assessed the evidence regarding socioeconomic and environmental impact of private standards at the producer level (Alvarez (2011). The evidence on the impact in terms of price and profits made by producers was mixed, with sometimes a negative impact for producers because compliance required large costs of additional labour. In addition, increased revenues along the chain were not always distributed equitably and producers therefore did not always reap the benefits of certification. However, indirect positive effects on producers were also found, such as better relationships with buyers, technical support and training, as well as increased access to credit (Alvarez 2011).

Certification programs may also see a selection effect, which entails that certification programs mainly attract producers that already meet the standards and not the producers that need to make additional investments to change their practices (Blackman and Rivera 2010). Therefore certification would benefit producers that already meet standards but it may have limited effects on behaviour of others producers and few environmental and social effects. Certification may also lead to exclusion of aquaculture producers who do not have the managerial capability or cannot make the investments required to comply and they are therefore excluded from markets that require certification (Bush et al. 2013). A study for pangasius in Vietnam found that benefits of standards, as shown by per capita consumption expenditure found that the benefits only reach the upper middle-class farmers because the poorest farmers are excluded and the richest do not apply standards because the added gain is too small (Hansen and Trifković 2014).

Sustainability standards can also have unintended consequences for food security. A study of voluntary certification in palm oil in Indonesia and Ghana found that it can positively impact smallholder food production through crossover effects from improved knowledge, technology and input markets (Oosterveer et al. 2014). However, negative effects may also occur such as exclusion of smallholders, increased food prices, displacement of local production, and shifting from agricultural food production to more attractive export markets for processing (Oosterveer et al. 2014).

3 Methodology

3.1 Approach

This assessment follows a mixed-methods theory-based approach to evaluation to facilitate an in-depth understanding of the effects of BAP certification. In the absence of a clear counterfactual, such an evaluation approach is both practically feasible and delivers a context-specific understanding of why and how observed results occurred. A qualitative approach to evaluation is well suited to build an in-depth understanding of processes of change, and to bring in the perspectives and voices of beneficiaries and stakeholders.

We use a Theory of Change (ToC) that explains how BAP certification contributes to observed results, by defining how activities are expected to lead to results. In addition, a ToC describes the mechanisms of change, as well as the assumptions, risks and context that support or hinder results to be achieved. We use contribution analysis to test the assumed causal chain of results to verify whether expected changes have happened. Contribution analysis examines and tests the ToC against logic and the evidence available from observed results and the assumptions behind the ToC, through feedback from stakeholders and other data sources. The aim of the analysis is to understand if and how the program is contributing to observed and intended results and how other factors influence these results[11].

The Theory of Change was developed in the inception phase of the study, and validated with the BAP's Standards Oversight Committee and some stakeholders at the Boston seafood expo in March 2019. The Theory of Change covers the following stakeholders: communities, employees and their households, firms (farms and processors), auditors, and consumers. We assumed that compliance with social standards is a first step towards the intermediate outcome of improved practices and capacities of all stakeholders.

The focus of the study was therefore on validating the Theory of Change of how social change happens in aquaculture value chains, and the underlying assumptions. Furthermore, the approach aimed at identifying (existing and potential) causal linkages between BAP certification and observable and expected outcomes in a context where there are multiple influencing factors (e.g. other national or international standards and policies). Validating the Theory of Change with empirical evidence thus serves to indicate the extent to which certification has made – or is likely to make – a difference (Mayne 2012). The assessment was carried out through the analysis of data from BAP audit reports in combination with qualitative field work in three countries and interviews with auditors. In discussion with GAA, it was decided to limit field work to Vietnam, Indonesia, and Chile. This allows for coverage of both finfish and crustaceans, and salmon as species, and includes countries in two continents that are important in terms of aquaculture production, and coverage of BAP certification. The data and analysis from the three country studies facilitated a comparative perspective of BAP certification implementation, challenges, and (potential) effects.

The theory-based approach to evaluation recognizes that attributing identified effects – e.g. improved wellbeing of workers – to certification may be difficult, as impact is determined by various factors, including other standards and policies, competitive pressures on companies, and leadership and organizational culture of businesses. At the same time, the qualitative methods used are useful in getting a better understanding of the context and other major external factors that may play a role in shaping social change in aquaculture.

[11] See e.g. Mayne, J., 2001. Addressing attribution through contribution analysis: using performance measures sensibly. *Canadian Journal of Programme Evaluation*, 16: 1-24; Mayne, J., 2012. Contribution analysis: Coming of age? *Evaluation*, 18(3): 270-280.

Even for a qualitative evaluation, the absence of baseline data for this study presents a clear limitation and makes a comparison across time difficult (in essence, comparing the situation before and after certification was obtained). We have resorted to recall techniques, i.e. investigating through asking respondents to position observed changes within a temporal timeframe. Recall techniques can be a useful tool with predictable and, to some extent, controllable errors (for example, unintentional or intentional distortion by respondents), and a potentially valuable way to reconstruct a baseline situation (Bamberger 2010).

As this was a qualitative evaluation, the focus was not on arriving at absolute numbers, but rather on identifying the mechanisms of change, including underlying assumptions, risks and contextual factors which support or hinder certification from achieving its objectives. Methodological limitations apply to the case studies, particularly in terms of (i) data availability and (ii) clarity and plausibility of the Theory of Change.

3.2 Audit data

The analysis of the audit data presented in this report is based on the data made available by GAA-BAP and covers data on compliance with the social standards for 2017 and 2018. The data covers three sub-sets of social standards:

1. Finfish and crustacean (FFC) farm standards
2. Salmon farm standards
3. Seafood processing plant standards

The data includes information on the facilities (location, volume produced, species), and information from the audit (Yes, No – Minor, No – Major, No – Critical, N/A).

A number of assumptions have been made for the data analysis:

- Where observations with a missing audit answer were assumed to be not applicable
- For about 10 FFC farms, seven clauses (3.14; 3.18; 3.26; 3.27; 3.31; 3.32; 3.33) had sub-clauses (a and b). These were combined in the following way: When all answers to the sub-clauses were Yes (or N/A), the answer was coded Yes. When one of the answers to a sub-clause is No, the answer is coded to be No.
- Where 2 audits were available from 2017 (one in January and one in December), the later audit year was changed to 2018.
- In cases of multiple audit dates within one year (not including the situation described just above), only the audit date for which the data is most complete was used.
- Facilities with less than 5 non-missing observations were dropped from the dataset.

Table 2 shows an overview of the available data on certified plants in 2017 and 2018 by country, sorted by total number of certified facilities in 2017 and 2018 together. The three target countries are highlighted, and take up the 3rd, 5th and 6th position in number of BAP certified facilities. Countries with the highest number of certified processing plants in 2017 and 2018 are India, China, Vietnam, United States, Indonesia, Chile, and Thailand. These countries have at least 20 plants each year, up to 81 for India in 2018. The first five countries in terms of number of FFC farms certified in 2017 and 2018 are all located in Asia: India, Thailand, China, Vietnam and Indonesia. For salmon farms, Chile is by far the country with the highest number of facilities, followed by Canada.

Table 2. Overview of certified farms and plants in 2017 and 2018 by country

	Fin fish and crustacean farms		Salmon farms		Seafood processing plants		Total	
	2017	2018	2017	2018	2017	2018	2017	2018
India	75	229			42	81	117	310
Thailand	115	164			21	21	136	185
Chile	**4**	**5**	**105**	**153**	**24**	**28**	**133**	**186**
China	56	72			43	47	99	119
Vietnam	**25**	**44**			**22**	**36**	**47**	**80**
Indonesia	**19**	**33**			**25**	**30**	**44**	**63**
United States	6	17			17	38	23	55
Canada			19	21	12	8	31	29
Ecuador	8	13			5	7	13	20
Honduras	8	10			1	4	9	14
Australia	7	8		5			7	13
Bangladesh	2	3			5	9	7	12
Colombia	4	5			4	5	8	10
Mexico	1	7			3	7	4	14
New Zealand		3	3	7	8	2	4	12
Peru	2	5			2	3	4	8
Guatemala	2	5				2	2	7
Saudi Arabia	2	4			1	2	3	6
Philippines		5			1	2	1	7
Malaysia	2	3			1	1	3	4
Brazil	2	2			2		4	2
Panama	1	2			1	1	2	3
Turkey		3				2	0	5
United Kingdom				2	1	2	1	4
Brunei		3				1	0	4
Costa Rica	1	1					1	1
Egypt					1	1	1	1
Iceland					1	1	1	1
Nicaragua					1	1	1	1
Norway						1	1	1
Poland						1	1	1
Netherlands		1					0	1
Singapore					1		1	0
Total	**342**	**647**	**127**	**188**	**245**	**344**	**709**	**1179**

Source: GAA-BAP audit data 2017 and 2018.

3.3 Fieldwork

3.3.1 Methodology

We conducted in-country primary research in three countries that were selected in consultation with GAA; Indonesia, Vietnam and Chile. Field work was conducted by three national consultants. Semi-structured interviews and (group) discussions with key stakeholders were held based on a detailed set of guidelines and tools for data capture. After developing the Theory of Change of how certification contributes to social change in aquaculture, and validating this with GAA and stakeholders, we developed indicators for each stage in the ToC, to guide data collection. The tools developed had two types of questions, Likert scales to develop scores on each of these indicators, and in-depth questions to provide meaning to these scores. A Likert (1932) scale, is a rating scale that is used to measure attitudes directly. In our case it is a five point scale, used to allow the individual to express how much they agree or disagree with a particular statement.

3.3.2 Sampling framework

Sampling was based on facility size, and numbers of years since first certification. The sampling had to be focused on a limited number of locations, to make travel for fieldwork feasible. The following locations were included:

- Chile: Llanquihue (salmon and plant).
- Vietnam: Ca Mau (FFC farms and plant).
- Indonesia: East Java (FFC farms and plant).

Table 3 presents the respondents for fieldwork, and Table 4 the sampling framework

Table 3. Respondents for field work

Respondent type	Description	Method(s)
Management of facilities (farms, plants	Certified and non-certified (where feasible)	In-depth interviews, survey
Workers of facilities	Certified and non-certified (where feasible)	In-depth interviews / focus groups, survey
Communities surrounding facilities	Those affected by the operations of farms and plants	Focus groups, survey
Auditors	Those involved in auditing of BAP certified facilities in 2018	In-depth interviews

Table 4. Sample

		Chile	Vietnam	Indonesia
Plants	**certified**	4	4	4
	non-certified	2	2	2
FFC farms	**certified**	-	4	4
	non-certified	-	2	2
Salmon farms	**certified**	4	-	-
	non-certified	2	-	-
Total sample		**12**	**12**	**12**

For each facility there were 3 types of respondents, where applicable: management, workers, and communities. In some cases no nearby communities could be identified. In addition, two auditors were interviewed.

4 Findings

This chapter presents the findings by evaluation question, and brings together all data collected through the different sources.

4.1 Implementing BAP social and labour standards

4.1.1 Perceptions of BAP social and labour standards

How do farmers and processors view the BAP social and labour standards? Do they consider these as more/equally/less important than other elements of the standards? More/equally/less difficult to comply with? Why are these more difficult?

In the primary data collection this question was addressed using Likert scales ranging from 1 to 5, with 5 most positive (see Table 5) asking farm and processing facility management about their opinion of BAP social and labour standards. With respect to perceptions on ease of understanding and compliance, farm and plant management average scores ranged between 2.6 and 3.2. A score of 3 signifies the same ease of understanding or compliance compared to either other parts of the BAP standards (e.g. food safety, environment), or other standards (e.g. ASC, GLOBALGAP). This means that the average scores provided by the respondents do not provide a strong indication of either easier or more difficult compliance. Between farms and plants differences in scores are found for ease of understanding at the beginning, compared to other parts of the BAP standards (more positive for plants) and ease of compliance in comparison with other seafood standards (more positive for farms). Perceptions on the usefulness of BAP social and labour standards are positive, especially for farms (score of 4.0), while opinions on the effect on profitability are positive for both farms and plants (with average scores of 4.4 and 4.3 respectively)

Table 5. Scoring of statements related to perceptions of the BAP social and labour standards by management

	Score range	Farm	Plant
At the start, I found the BAP social and labour standards, in comparison with other BAP standards were:	1.much more difficult to understand 3.similar in difficulty to understand 5.much easier to understand	2.8	3.2
At the start, I found the BAP social and labour standards, in comparison with other social and labour standards for seafood were:	1.much more difficult to understand 3.similar in difficulty to understand 5.much easier to understand	2.8	2.8
In comparison with other BAP standards, I find the social and labour standards:	1.much more difficult to comply with 3.similar in difficulty to comply with 5.much easier to comply with	2.8	2.8
In comparison with other social and labour standards for seafood, I find the BAP social and labour standards:	1.much more difficult to comply with 3.similar in difficulty to comply with 5.much easier to comply with	3.0	2.6
I believe the BAP social and labour standards, in comparison with the other BAP standards are:	1.A lot less useful 3.equally as useful 5.A lot more useful	4.0	3.3
I believe, the BAP social and labour standards:	1.are very negative for the profitability of the company 3.make no difference to the profitability of the company 5.are very positive for the profitability of the company	4.4	4.3

Note: Average score of all firms interviewed during fieldwork, on a Likert scale from 1 to 5. Only the scores 1, 3 and 5 are shown here.

The results of the Likert scoring are supported by the results of the in-depth interviews. With regard to the ease of compliance, the more advanced processing plants do not experience many challenges, as they often are already certified for other standards. The general perspective is also that compliance with BAP social and labour standards aligns with compliance with national labour laws. In Chile and Vietnam, BAP standards overall are seen as equal to, or more user-friendly than other standards (e.g. GlobalGap, ASC, BRC, HACCP, OHSAS 1800), and among the BAP standards the social and labour standards are seen as easier because they do not require as much documentation as some of the other parts of the standards. In Chile, respondents noticed improvements in the standards, as they further developed over time. Vietnamese farm respondents do consider the social and labour standards to be more costly to implement than other parts of the standards. For both plants and farms interviewed in Indonesia, the BAP social and labour standards were initially considered to be more challenging than other parts of the standards. One plant explained that they only learnt how to implement those standards after the first audit. Indonesian farms indicate they are supported by their 'sponsor' (i.e. processing plants) to engage with BAP.

"Because the national laws provide us with a good foundation to apply for the BAP certification. Therefore, only little things needed special addressing to reach the BAP certification" (BAP certified processing plant, Chile)

"It is difficult to say what the result would be if we were not following BAP standards, because the market is very uncertain. Currently, many farms do not apply any standards but they may still get profit if the market is good, or lose because of risks. But one thing is certain: if there is a BAP and ASC standard, there will be a durable market" (BAP certified farm, Vietnam).

With respect to the usefulness of the BAP social and labour standards, seafood processing plants across the three countries indicate that applying for certification is mainly driven by requirements from buyers, both to maintain existing customers, and to access new ones (in particular those in the USA, Canada, and Europe). This in turn drives farms to apply for certification as processing plants aim to extend the certification of their products into the value chain (attaining additional stars in the BAP scheme). While there is recognition that certification supports access to new clients, BAP certification does not guarantee a better price. These are based on product specifications alone.

"It's true that we could enter bigger market and get bigger buyers with the BAP certification, mostly in the USA, but in terms of price, it depends on the market price. There is no difference whether the shrimp are certified or not. The prices are set based on the quality and size of the shrimp" (BAP certified processing plant, Indonesia)

Chilean farms are positive about the usefulness of the standards as they experience them as a tool to help them 'organize' and address problems when they emerge and thereby improve. Similarly, some Vietnamese farms indicate the BAP standards to be holistic and to bring better quality of product as well as social benefits. A respondent in Vietnam also pointed out that BAP standards, compared to other social and labour standards, takes corporate social responsibility more seriously in relation to effects on the broader community in which the facility is located.

"Because it is a good control parameter to apply, to organize things. In an audit, you get checked for many different aspects, and if you find something, there is a chance of improving as well (BAP certified farm, Chile)

How do auditors and certifying bodies view the BAP social and labour standards? Do they consider these as more/equally/less important than other elements of the standards? More/equally/less difficult to audit? Which challenges do they face in auditing the social and labour standards? What can BAP do to address these challenges?

Auditors interviewed raised a number of challenges related to the auditing of the BAP social and labour standards. The strength of certification is not only dependent on the strength of the standards, but also on how well the audit is carried out. Where skills are missing, this may result in unrealistically low rates of non-compliance, which in turn may result in risks for the image of the standard among buyers.

Conducting an audit for the full set of BAP standards requires a wide range of skills. As we will show in Section 4.1.3, the social and labour standards changed significantly over time. Technical auditors therefore gradually needed to become capable of social auditing, which required a different set of skills than auditing for the technical standards. This may have resulted in poorer quality of the audits for the social and labour standards, in particular in the beginning. An additional challenge related to the auditing process as perceived by auditors, is that, while the standards have almost doubled in size (i.e. number of clauses) over the years, the time allocated to an audit has stayed the same. Auditors interviewed indicate that especially for larger facilities, where more worker interviews may be needed, time is a limiting factor to do in-depth social auditing.

Recently, changes have taken place in the requirements of auditors and the training they need to undergo to be authorized to conduct social audits. They need to be registered as a social auditor, and to be registered they need to have at least 100 days of social auditing experience. This should in future support improved social audits. Among the social and labour standards there are specific clauses that are more difficult to audit than others. For example, piece rate, forced labour, and recruitment through labour recruitment agencies are all aspects that are considered difficult to audit by the interviewed auditors. Either because they require much detail, or because they are sensitive issues that require skills to uncover.

A final challenge related to the auditing of the social and labour standards is that they require a deep understanding of local context. For example, what might be considered appropriate housing in Western eyes, may not be suitable for the climate and context in Asia. For the social and labour standards, it is therefore important that audits are carried out by local auditors, more so than for the other components of the standards.

4.1.2 Ease of compliance

Do producers/processors/buyers find any standard(s) more difficult to comply with than others? Is this corroborated by the data from audit reports? Why are these more difficult, and what might be done to assist them to get certified?

The basic indicator we use throughout this section is the "rate of non-compliance", which is defined as the number of clauses that are audited as non-compliant divided by the total number of clauses audited (i.e. excluding the cases where the clause was non-applicable)[12].This indicator is defined at the individual clause level, for groups of clauses, or for all clauses combined, and can be used to compare compliance between standards, countries, types of companies, and over time.

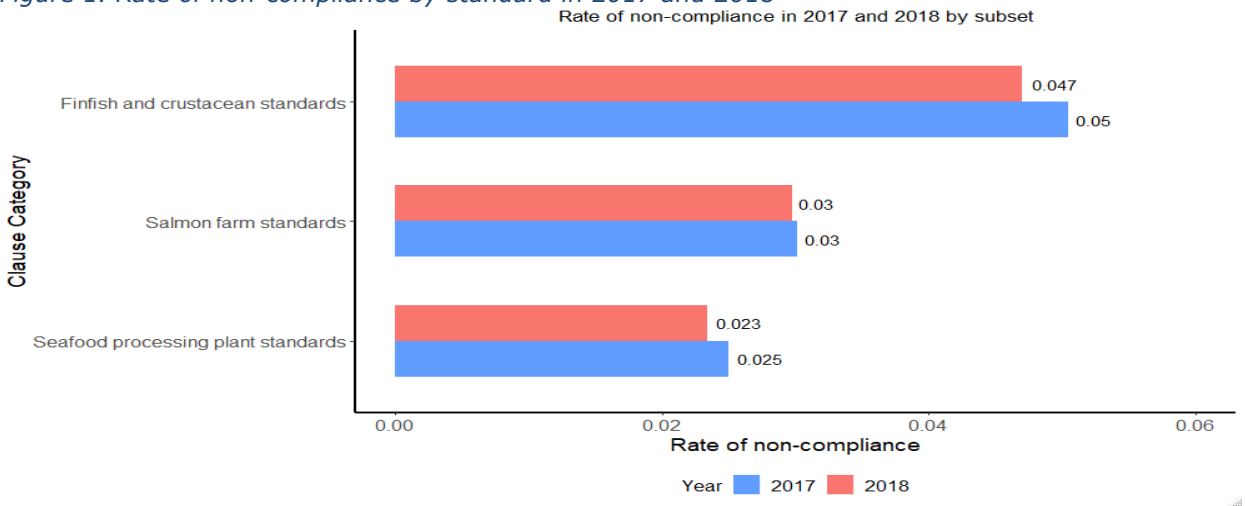
The clauses have been categorized according to the types of topics they cover, as follows (see also Annexes A and B):

[12] The rate of non-compliance should be interpreted as follows; if 100 farms are audited for 3 clauses, and 8 of those farms have non-compliance on 1 clause in this particular category, and 2 farms have non-compliance on 2 clauses the rate of non-compliance is (8*1 + 2*2) / 100*3 = 12/300 = 0.04.

- Property Rights and Regulatory Compliance
- Community Relations
- Wages and benefits
- Working hours
- Staff facilities
- Protective clothing
- Medical care
- Forced labour
- Child labour & young workers
- Worker health and safety
- Hiring & terms of employment
- Discrimination and abuse
- Freedom of association and collective bargaining
- Regulatory Management
- Training

Figure 1 shows the overall average rate of non-compliance for the companies audited for the three BAP standards, i.e. finfish and crustacean farms, salmon farms, and seafood processing plants, in 2017 and 2018. This firstly shows that the rate of non-compliance is higher for the FFC standard than for the other two, and that the rate of non-compliance is lowest for the plants. Furthermore, it shows that the rate of non-compliance was slightly higher in 2017 than in 2018 for all three standards.

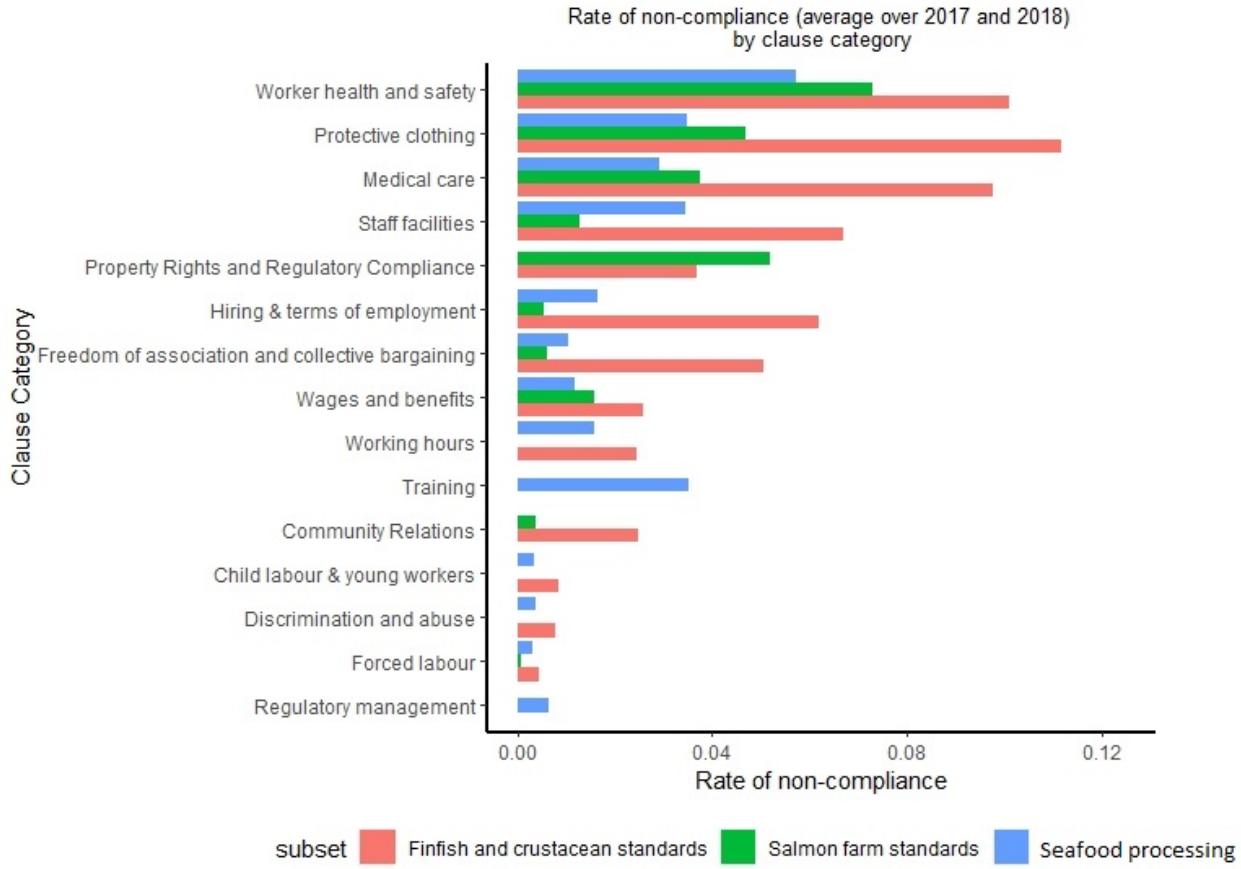
Figure 1. Rate of non-compliance by standard in 2017 and 2018



Note: based on data from a total of 709 facilities in 2017 and 1179 in 2018. Source: BAP audit data 2017-2018.

The rate of non-compliance varies greatly across the different topics that are covered by the social and labour standards, as well as between the three standards (Figure 2).

Figure 2. Rate of non-compliance for finfish and crustacean farm, salmon farm and processing plant standards in 2017 and 2018 (mean)



Source: BAP audit data 2017-2018.

There is only one category of clauses that has more than 5% non-compliance for all three standards, which is worker health and safety (Table 6). For the FFC standard, there is also 5% or more non-compliance for medical care (which has the highest rate of non-compliance for FFC), discrimination and abuse, staff facilities and hiring and terms of employment. For the salmon standard this is the case for property rights and regulatory compliance, and protective clothing, while for the processing plants there are no other categories of clauses that have more than 5% non-compliance on average.

Examining the individual clauses more closely, we find that the top 10 clauses with non-compliance have some overlap between the three sets of standards, but that at least half of the clauses with high rates of non-compliance differ between the standards (Table 7). This indicates that non-compliance issues could be specific for species and facility type or could be influenced by geographical location. These specificities are difficult to disentangle as the species and facility types are not evenly distributed across geographies. The overview of audit data presented in Table 2 shows that for finfish and crustaceans 85% of BAP certified farms are based in India, Thailand, China, Vietnam and Indonesia, while over 80% of BAP certified salmon farms are located in Chile alone. For processing plants the distribution is somewhat wider with eight countries together providing about 80% of certified facilities. Out of these six countries are Asian; the other two are the Unites States and Chile.

Table 6. Top 5 of categories with highest non-compliance for the three standards (2017-2018)

Finfish and crustacean standards		Salmon farm standards		Seafood processing plant standards	
Clause category	Rate of NC	Clause category	Rate of NC	Clause category	Rate of NC
Protective clothing	0.11	Worker health and safety	0.07	Worker health and safety	0.06
Worker health and safety	0.10	Property Rights and Regulatory Compliance	0.05	Training	0.04
Medical care	0.10	Protective clothing	0.05	Protective clothing	0.03
Staff facilities	0.07	Medical care	0.04	Staff facilities	0.03
Hiring & terms of employment	0.06	Wages and benefits	0.02	Medical care	0.03

Source: BAP audit data 2017-2018.

Table 7. Top 10 clauses with highest rate of non-compliance of the three standards respectively (2017-2018)

Finfish and crustacean standards		Salmon farm standards		Seafood processing plant standards	
Clause	Rate of NC	Clause	Rate of NC	Clause	Rate of NC
3.18 Risk assessment to minimize any workplace hazards.	**0.18**	**3.19 Risk assessment to minimize any workplace hazards.**	**0.16**	A2-6.4 Proper measures for fire protection and prevention.	0.18
3.27 All employees receive training on health, hygiene and safety.	**0.16**	1.3 Documents to prove compliance with environmental regulations	0.15	**A2-6.3 Minimization of workplace health and safety hazards.**	**0.11**
3.23 Employee housing meets local and national standards.	0.15	**3.35 Written procedures and staff training for diving emergencies.**	**0.13**	3.3.4 List of first aid items kept on hand and with expiry date	0.09
3.21 Equal opportunity w.r.t. recruitment, compensation, etc.	0.12	**3.33 Electrical pumps and aerators are wired safely.**	**0.12**	**A2-6.5 Equipment and machinery are safe to use.**	**0.09**
3.26 Provision of basic medical care in case of emergencies.	0.11	1.2 Documents to prove all licenses have been acquired.	0.12	A2-6.6 Safety of buildings and equipment in all areas.	0.08
3.22 No engagement in or permitting of abuse or harassment.	0.10	**3.28 All employees receive training on health, hygiene and safety.**	**0.08**	3.1.1 Safe, clean, and healthy working conditions and procedures.	0.07
3.33 Written procedures and staff training for diving emergencies.	**0.09**	3.31 Selected workers are trained on emergency plans and first aid.	0.08	3.2.1 Protective gear and equipment for employees.	0.07
3.15 Used labour services informed about worker rights and conditions.	0.09	3.30 Emergency response plan in place for illnesses or accidents.	0.07	**3.4.2 Training about handling potentially dangerous chemicals.**	**0.06**
3.28 Employees shall be appropriately licensed to use equipment.	**0.07**	**3.29 Employees shall be appropriately licensed to use equipment.**	**0.06**	3.1.3 Sufficient number of toilets and sinks.	0.04
2.3 Interaction with local community to avoid or resolve conflicts.	0.07	3.10 No deductions from wages as part of a disciplinary process.	0.05	**3.4.3 Training on health, safety, product quality and contamination.**	**0.04**

Note: similarities in non-compliance are highlighted in bold and different colours. Red: Same or similar clause for FFC and salmon farms; green: Same or similar clause for all three standards; Blue: Same or similar clause for salmon farms and processing plants. Source: BAP audit data 2017-2018.

It has been suggested that compliance to standards could be facilitated by a more conducive institutional environment (Jespersen, 2014). We therefore summarize a number of key characteristics of the general business environment in the three selected countries, as well as some key indicators for the size of the aquaculture sector (Table 8).

Table 8.Comparison of aquaculture and institutional indicators for Indonesia, Vietnam and Chile

	Indicator	Indonesia	Vietnam	Chile
General characteristics aquaculture sector	Aquaculture food fish production 2016 (thousand mt)[13]	4,950	3,625	1,035
	Aquaculture food fish production 2016 (% of world total)[8]	6.2%	4.5%	1.3%
	Value of fish and fish product exports 2016 (million USD, includes capture fisheries)[14]	4,009	7,.344	5,292
Relevant indices on institutional environment	Ease of Doing Business 2018 *(ranking 190 countries on their regulatory environment for businesses)*[15]	72	68	55
	Transformation Index BTI 2017 *(scoring countries on rule of law, democracy and governance; 0 = worst, 10 = best)*[16]	6.25	4.41	8.87
	Global Corruption Perception Index 2017, Transparency International *(ranking 180 countries by their perceived levels of public sector corruption)*[17]	96	107	26
	ITUC Global Rights Index 2017 *(scoring 139 countries on their workers' rights violations)*[18]	5 (no guarantee of rights)	4 (systemic violation of rights)	3 (regular violations of rights)
	Global Gender Gap Index 2017 *(ranking of benchmarking 144 countries on their progress towards gender parity)*[19]	84	69	63
	Freedom in the World 2017 *(scoring political rights and civil liberties in 195 countries; 0 = worst, 100 = best)*[20]	65 (partly free)	20 (not free)	94 (free)
	Rule of Law Index 2017-2018 *(ranking of measuring rule of law adherence in 113 countries)*[21]	63	74	27

[13] Source: FAO (2018). The State of World Fisheries and Aquaculture 2018: Meeting the sustainable development goals. FAO, Rome.
[14] Source: FAO Fisheries Statistics, retrieved from http://www.fao.org/fishery/statistics/global-commodities-production/query/en.
[15] Source: World Bank, Ease Of Doing Business, retrieved from http://www.doingbusiness.org/rankings
[16] Source: Bertelsmann Stiftung Transformation Index, retrieved from https://www.bti-project.org/en/country-reports/
[17] Source: Transparency International, retrieved from https://www.transparency.org/news/feature/corruption_perceptions_index_2017
[18] Source: ITUC, retrieved from https://www.ituc-csi.org/ituc-global-rights-index-2017
[19] Source: World Economic Forum, retrieved from https://www.weforum.org/reports/the-global-gender-gap-report-2017
[20] Source: Freedom House, retrieved from https://freedomhouse.org/report/freedom-world/freedom-world-2017
[21] Source: World Justice Project, retrieved from https://worldjusticeproject.org/our-work/wjp-rule-law-index/wjp-rule-law-index-2017%E2%80%932018

It is clear that aquaculture is an important industry for all three countries, and that it generates significant export incomes. The indicators for the institutional environment show that Chile scores better on all indicators, and should be expected to provide a more conducive institutional environment for the compliance to the social and labour standards.

Rates of non-compliance for the different standards and countries (Table 9) show that Chile (which is the only country with salmon farming among the selected case studies) has a similar rate of non-compliance for both farm standards (FFC and salmon), and has a lower rate of non-compliance for farms than Indonesia and Vietnam. However, Chili's rate of non-compliance for finfish and crustacean farms is only based on data from 9 farms and may therefore not be representative. The rate of non-compliance for processing plants is slightly higher in Chile than in the other two countries. Therefore, it is not possible to conclude from the audit data that the institutional environment contributes to ease of compliance. It is possible that there are characteristics of salmon farming that make compliance easier than for finfish and crustaceans. If national laws are similar to the requirements in the standards it would imply by default that companies are already (close to) compliance with the standards and would have to make less efforts to meet them.

Table 9. Rate and categories of non-compliance for Indonesia, Vietnam and Chile (2017-2018)

Indicator	All countries	Indonesia	Vietnam	Chile
Finfish and crustacean farms				
Rate of non-compliance 2017-2018 (No. of observations)	0.05 (N=992)	0.05 (N=52)	0.04 (N=69)	0.03 (N=9)
Top 5 categories of non-compliance 2017-2018 (average rate of non-compliance)	1. Protective clothing (0.11) 2. Worker health and safety (0.10) 3. Medical care (0.10) 4. Hiring & terms of employment (0.07) 5. Staff facilities (0.07)	1. Protective clothing (0.19) 2. Worker health and safety (0.10) 3. Medical care (0.10) 4. Staff facilities (0.07) 5. Discrimination and abuse (0.06)	1. Worker health and safety (0.10) 2. Staff facilities (0.07) 3. Protective clothing (0.04) 4. Community relations (0.04) 5. Property rights & regulatory compliance (0.03)	1. Wages and benefits (0.14) 2. Protective clothing (0.11) 3. Worker health and safety (0.05)
Salmon farms				
Rate of non-compliance 2017-2018 (No. of observations)	0.02 (N=315)	-	-	0.03 (N=258)
Top 5 categories of non-compliance 2017-2018 Salmon farms e (average rate of non-compliance)	1. Worker health and safety (0.07) 2. Medical care (0.06) 3. Property Rights and Regulatory Compliance (0.04) 4. Staff facilities (0.04) 5. Discrimination and abuse (0.04)	-	-	1. Worker health and safety (0.07) 2. Property Rights and Regulatory Compliance (0.06) 3. Protective clothing (0.05) 4. Medical care (0.04) 5. Wages and benefits (0.02)
Seafood processing plants				
Rate of non-compliance 2017-2018	0.02 (N=589)	0.02 (N=55)	0.02 (N=58)	0.03 (N=52)
Top 5 categories with non-compliance 2017-2018	1. Worker health and safety (0.06) 2. Training (0.04) 3. Protective clothing (0.03) 4. Staff facilities (0.03) 5. Medical care (0.03)	1. Worker health and safety (0.05) 2. Protective clothing (0.02) 3. Staff facilities (0.02) 4. Medical care (0.02) 5. Training (0.01)	1. Worker health and safety (0.05) 2. Protective clothing (0.03) 3. Medical care (0.02) 4. Training (0.02) 5. Working hours (0.01)	1. Protective clothing (0.10) 2. Worker health and safety (0.07) 3. Working hours (0.06) 4. Regulatory management (0.04) 5. Wages and benefits (0.03)

Source: BAP audit data 2017-2018.

Compared to the overall rate of non-compliance across all countries, Indonesia has particularly high non-compliance for the FFC farm standards, on protective clothing, and discrimination and abuse (for which the overall average - not shown in Table 9 - is 0.008). For Vietnam this is the case for community relations (overall average 0.02). While Chile represents the majority of all BAP certified salmon farms, the categories and rates of non-compliance do not entirely match the overall top 5. Protective clothing, and wages and benefits feature in the top 5 of high non-compliance for Chile, while it is staff facilities, and discrimination and abuse for all salmon farms.

For the processing plants, the three case study countries show highest non-compliance on worker health and safety and protective clothing. Non-compliance on the latter is particularly high in Chile, compared to the other two case study countries, as well as compared to the overall average. Chile also shows relatively high non-compliance on working hours and regulatory management.

The results from the in-depth interviews indicate that processing plants in Chile and Vietnam generally found complying relatively straightforward as BAP standards align with what is needed for other standards and in particular the national laws. This corresponds with the perception of some auditors, that plants that apply for the BAP standards are usually the more advanced ones in the sector. The certification is voluntary, and plants know exactly what they need to comply with. Some plants in Chile voiced appreciation of the more detailed instructions provided with the BAP social and labour standards, which helped them to comply.

"It's the first time for this farm to implement the social and labour standards and audited. Basically, to implement the social and labour standards, we need to comply with the government regulations, however, the BAP standards are more detailed. …. on the knowledge side, the workers in this farms could understand the implementation of the standards. They received some trainings also provided by the processing plant. (BAP certified farm, Indonesia)

Farms see compliance as slightly more challenging, but also state that BAP standards appear to be less strict than other standards. A particular challenge in Chile among farms related to community relations. They reported a lack of time and skills to engage with communities, in particular because they are sometimes at a distance from the farms. They also indicated that this was different from other standards and national laws.

"At the beginning of implementation, there were some difficulties related to labour and social standards. The participation of some workers in social insurance was a problem. Before implementing BAP certification, all workers except management, accounting, and technical staff, were employed without a labour contract, getting paid daily. When implementing BAP, the farm must sign a labour contract as well as offering a labour regime to all employees. However, some workers do not want to sign the contract. Employees are mainly from the local community, they only want to work a few days a month during their free time from household's work. In addition, workers do not want to participate in social insurance. …. they have not participated in social insurance so they cannot see the importance and necessity. The farm must spend a lot of time to explain and recruit new employees. Some employees quit their jobs, causing a disturbance for the farm." (BAP certified farm, Vietnam)

Indonesian farms and plants perceived compliance with the BAP social and labour standards to be difficult initially, as they did not have other certification in place that covered these issues, and therefore did not have experience with implementing such standards. They perceived that it has become easier over time, as they increased their understanding of the standards. Farms received support to comply from processing plants they supply, but indicated that workers sometimes still failed to implement what they had learned.

In Vietnam, practical challenges associated with compliance to social and labour standards for both plants and farms involved making changes in contracts, and reduction of shifts.

Employees were unhappy with the resulting reduction in wages, and/or flexibility, and deductions from their salaries for payment of social insurance. At farm-level this meant that some employees decided to terminate their employment. In processing plants, there was also an effect on productivity due to the reduction in shifts. With BAP processing plants switched to payroll arrangements based on time which guaranteed more rest time for workers, especially women. For farms an additional challenge was related to building rapport with surrounding communities. They also in particular noted the increased amount of paperwork as a result of the employment contracts. In the long term however, this was considered valuable for improved human resource management.

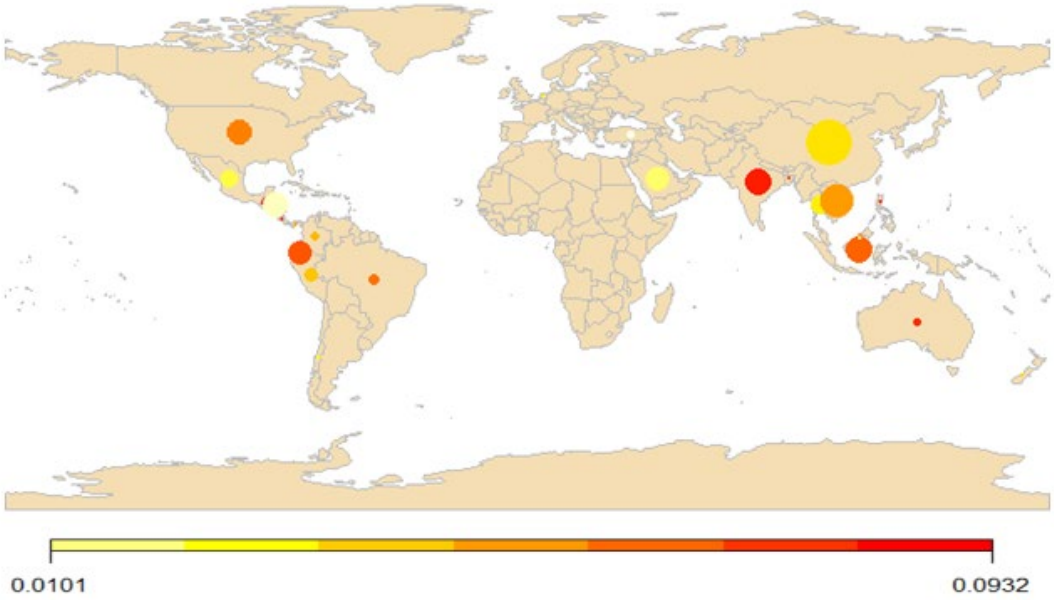
> *"Another issue was the problem with arranging workers in the factory: With the high proportion of female workers, the number of worker entitled with mid-shift break, in accordance with the Law, are also high….. If there are too many workers taking a break in the same shift, the production volume will be affected." (BAP certified plant, Vietnam)*

4.1.3 Regional patterns

Do audit reports show any regional or local patterns in compliance/non-compliance with BAP social and labour standards? If so, which ones? What could be the reasons for difficulties in compliance in these particular locations?

Some regional patterns in non-compliance can be discerned. To put those in perspective of the relative volume that is produced in certified facilities in each country, we show the rate of non-compliance for FFC farms in Figure 3, where the size of the bubbles reflect the relative volume and the colour of the bubble the degree of non-compliance (with red representing a higher level of non-compliance.

Figure 3. Rate of non-compliance across countries FFC, size of bubbles reflects total certified volume



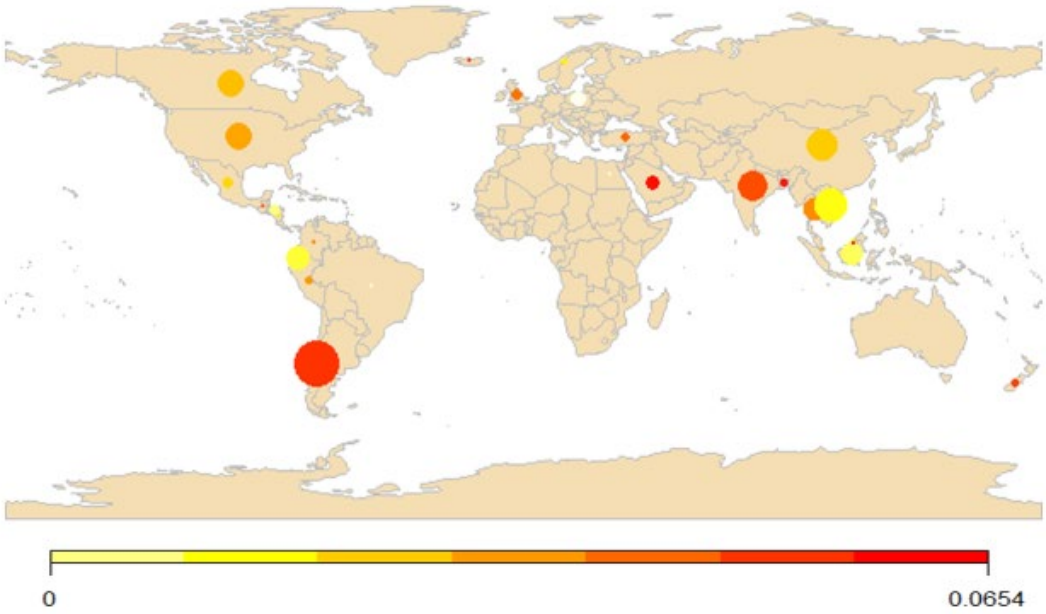
Source: Analysis of BAP audit data on social and labour standards 2017-2018.

The rate of non-compliance among finfish and crustacean farms for the social and labour standards varies across geographies, with higher non-compliance in India, Guatemala, Philippines, Australia, Indonesia, Ecuador and Brazil. As the size of the bubbles indicates the total volume certified, in particular India, Indonesia and Ecuador are of concern, as in those countries it means that it affects more farms and/ or more workers and communities and therefore has a higher potential level of negative societal impact. At the same time, countries that presently have a lower volume of BAP certified product are important to monitor, to ensure that this high level of non-compliance

is not replicated by new farms that become certified there in the future, as there may be specific challenges to compliance in those countries.

For the seafood processing plants, the rate of non-compliance on the social and labour standards is highest among companies in Saudi Arabia, Malaysia, Bangladesh, India, Chile, Bangladesh, New Zealand, Turkey and Iceland (Figure 4). Among those countries, Chile and India have the largest volume of certified product.

Figure 4. Rate of non-compliance seafood processing plants, size of bubbles indicates certified volumes



Source: Analysis of BAP audit data on social and labour standards 2017-2018.

We do not show the map for salmon farms here, as the vast majority of certified salmon (in terms of volume) is produced in Chile. Canada, the country with the second largest volume of certified salmon does have higher non-compliance than Chile (see Annex D).

Table 10 shows the rate of non-compliance by country and category for finfish and crustacean farms. This illustrates that although there are certain categories that show some or high non-compliance for a majority of countries - in particular worker health and safety, protective clothing, freedom of association and collective bargaining, and wages and benefits - patterns of non-compliance vary between countries. For example, Australia, China, Indonesia and Philippines have a relatively high rate of non-compliance related to protective clothing, Guatemala, India, New Zealand, Philippines, and United States for medical care, Brunei for working hours, and Ecuador, Guatemala, India, and Philippines for hiring and terms of employment. It should be noted that the relative weight of non-compliance of an individual farm is larger in the overall rate of non-compliance where there are fewer companies that are BAP certified.

The rate of non-compliance by country and category for seafood processing plants (Table 11) shows that overall, non-compliance is lower for plants than for farms. As expected, worker health and safety has relatively high non-compliance in almost all countries, but again there are differences between countries, albeit less pronounced than for finfish and crustacean farms. For example, Bangladesh and Saudi Arabia have relatively high non-compliance for protective clothing, Malaysia and Nicaragua for staff facilities and Iceland and Turkey for freedom of association.

Table 10. Rate of non-compliance by country and clause category, FFC (2017-2018)

Clause category	Australia (15)	Bangladesh (5)	Brazil (4)	Brunei (3)	Chile (9)	China (128)	Colombia (9)	Costa_Rica (2)	Ecuador (21)	Guatemala (7)	Honduras (18)	India (304)	Indonesia (52)	Malaysia (5)	Mexico (8)	Netherlands (1)	New_Zealand (6)	Panama (3)	Peru (7)	Philippines (5)	Saudi_Arabia (6)	Thailand (279)	Turkey (3)	United_States (23)	Vietnam (69)
Property Rights and Regulatory Compliance (3)	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%	13%	0%	9%	0%	0%	3%
Community Relations (3)	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	5%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	4%
Wages and benefits (5)	0%	6%	0%	0%	14%	2%	6%	0%	4%	3%	0%	2%	2%	4%	0%	0%	0%	0%	4%	5%	0%	3%	0%	1%	1%
Working hours (1)	0%	0%	0%	100%	0%	2%	0%	0%	0%	0%	12%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	3%
Staff facilities (3)	5%	0%	0%	11%	0%	3%	4%	0%	0%	0%	2%	17%	7%	7%	0%	0%	0%	0%	0%	0%	11%	1%	0%	0%	7%
Protective clothing (1)	20%	0%	0%	0%	11%	20%	0%	0%	0%	0%	0%	10%	19%	0%	13%	0%	0%	0%	14%	60%	0%	11%	0%	4%	4%
Medical care (1)	0%	0%	0%	0%	0%	9%	0%	0%	0%	29%	0%	18%	10%	0%	0%	0%	33%	0%	0%	60%	0%	4%	0%	17%	3%
Forced labour (4)	0%	5%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	1%
Child labour & young workers (3)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Worker health and safety (8)	29%	13%	19%	0%	5%	7%	11%	19%	19%	34%	4%	14%	10%	7%	11%	0%	12%	13%	14%	3%	5%	5%	4%	14%	10%
Hiring & terms of employment (3)	0%	0%	0%	0%	0%	2%	7%	0%	15%	27%	0%	17%	3%	0%	0%	0%	0%	0%	0%	23%	0%	3%	0%	0%	1%
Discrimination and abuse (2)	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Freedom of association and collective bargaining (2)	0%	10%	0%	0%	0%	3%	6%	25%	0%	7%	0%	10%	2%	0%	0%	50%	0%	17%	7%	0%	8%	2%	0%	18%	1%

Source: authors' analysis of GAA-BAP audit data for finfish and crustacean standards, 2017-2018. Numbers between brackets behind the country name indicate the number of companies included, and behind the clause category the number of clauses included per category.

Table 11. Rate of non-compliance by country and clause category, processing plants (2017-2018)

Clause category	Bangladesh (14)	Brazil (2)	Brunei (1)	Canada (20)	Chile (52)	China (90)	Colombia (9)	Ecuador (12)	Egypt (2)	Guatemala (2)	Honduras (5)	Iceland (2)	India (123)	Indonesia (55)	Malaysia (2)	Mexico (10)	New Zealand (6)	Nicaragua (2)	Norway (2)	Panama (2)	Peru (5)	Philippines (3)	Poland (2)	Saudi Arabia (3)	Singapore (1)	Thailand (42)	Turkey (2)	United Kingdom (3)	United States (55)	Vietnam (58)
Wages and benefits (6)	0%	0%	0%	2%	3%	1%	7%	3%	0%	10%	0%	0%	1%	1%	0%	2%	0%	0%	0%	0%	4%	6%	0%	0%	0%	1%	0%	0%	0%	0%
Working hours (4)	0%	0%	0%	0%	6%	2%	0%	0%	0%	0%	0%	0%	2%	0%	13%	0%	4%	0%	0%	0%	5%	0%	0%	8%	0%	0%	0%	0%	0%	1%
Staff facilities (4)	4%	0%	0%	0%	1%	2%	11%	0%	0%	0%	0%	0%	9%	2%	25%	6%	0%	17%	0%	0%	0%	0%	0%	8%	0%	1%	0%	0%	2%	1%
Protective clothing (3)	19%	0%	0%	2%	10%	1%	0%	3%	0%	0%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%	0%	11%	0%	22%	0%	3%	0%	0%	1%	3%
Medical care (4)	11%	0%	25%	0%	1%	4%	0%	0%	0%	0%	0%	0%	5%	1%	13%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%	4%	0%	17%	2%	2%
Forced labour (4)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Child labour & young workers (3)	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Worker health and safety (10)	12%	5%	0%	6%	7%	4%	3%	3%	6%	6%	8%	5%	5%	5%	17%	4%	16%	5%	5%	0%	6%	0%	0%	7%	11%	6%	10%	7%	8%	5%
Hiring & terms of employment (5)	0%	0%	0%	3%	2%	0%	4%	3%	0%	0%	0%	0%	4%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	1%	0%
Discrimination and abuse (4)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	1%	0%	0%	3%	0%	0%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Freedom of association and collective bargaining (4)	0%	0%	0%	2%	2%	1%	0%	3%	0%	0%	0%	20%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%	0%	17%	0%	1%	0%
Regulatory management (6)	0%	0%	0%	1%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	0%	0%	2%	0%	0%	0%	0%
Training (4)	0%	0%	0%	4%	2%	6%	3%	2%	0%	13%	0%	13%	5%	1%	0%	3%	4%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	2%

Source: authors' analysis of GAA-BAP audit data for seafood processing plant standards, 2017-2018. Numbers between brackets behind the country name indicate the number of companies included, and behind the clause category the number of clauses included per category.

Finally, we examined the patterns of non-compliance by grouping countries according to income category (Table 12). This shows that overall, lower income countries show non-compliance on more categories than higher income countries, and their rate of non-compliance is generally higher. This suggests that the hypothesis (in Section 4.1.2) that a firm's location (and the conduciveness of a country's institutional environment) influences the degree of non-compliance, does hold even though we did not find clear evidence for it in the three case study countries (in Table 9).

Table 12. Rate of non-compliance by country' income category for all standards

Clause category	Higher Income	Upper Middle Income	Lower Middle Income
Property Rights and Regulatory Compliance	5%	5%	2%
Community Relations	0%	1%	4%
Wages and benefits	2%	2%	2%
Working hours	2%	1%	2%
Staff facilities	2%	2%	10%
Protective clothing	5%	7%	6%
Medical care	3%	4%	7%
Forced labour	0%	0%	1%
Child labour & young workers	0%	0%	2%
Worker health and safety	8%	6%	9%
Hiring & terms of employment	1%	2%	5%
Discrimination and abuse	0%	0%	1%
Freedom of association and collective bargaining	2%	2%	4%
Regulatory management	1%	1%	0%
Training	3%	5%	3%

Source: Analysis of BAP audit data 2017-2018.

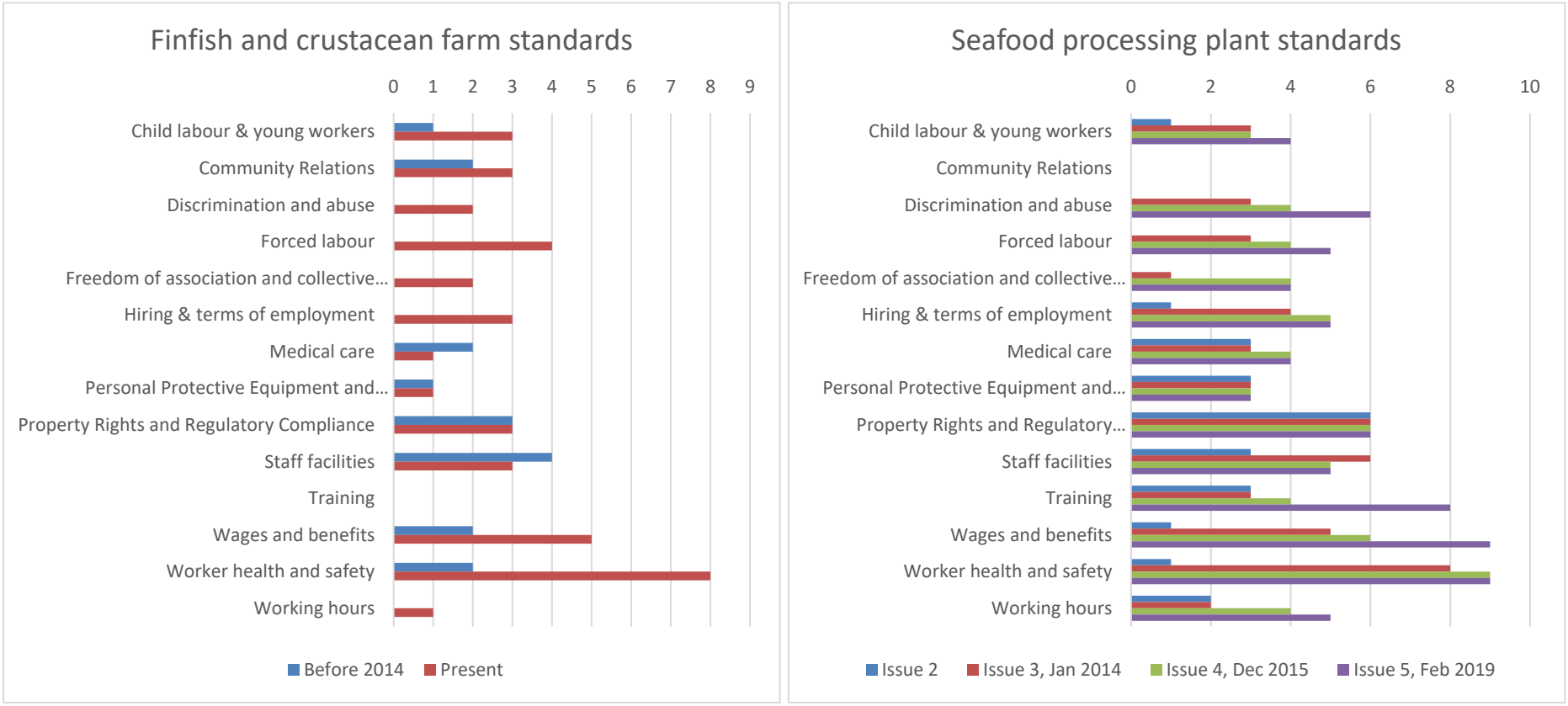
4.1.4 Trends over time

Trends over time in non-compliance need to be seen in the context of the development of the BAP social and labour standards. We therefore first present a brief analysis of how the standards have changed. The farm standards had a major overhaul of the social and labour standards in 2014. The plant standards had several revisions. Firstly, the topics covered were expanded. This is demonstrated in Figure 5, which shows the number of social and labour clauses per category that were included in the finfish and crustacean farm and the seafood processing plant standards over time.

The version of the FFC standards from before 2014 included 17 clauses and did not cover topics such as discrimination and abuse, forced labour, freedom of association and collective bargaining, and hiring and terms of employment. The processing plant standards have had several major revisions in the social and labour standards. In Figure 5 we present the number of clauses in each category for each version. A new version of the processing plant standard was released early 2019 (issue 5). This standard has 73 social and labour clauses, versus 61 in issue 4, 50 in issue 3, and 24 in issue 2.

What this analysis shows, is that new topics were added to the standards, such as discrimination and abuse, forced labour, and freedom of association, and that the level of detail for each of the categories has increased (shown by an increased number of clauses). For example, whereas wages and benefits and worker health and safety in the plant standards started with just one clause each, they now both have nine clauses.

Figure 5. Revisions in number of social and labour clauses per category, FFC and plant standards



Source: compiled by authors based on BAP standards. Clauses have been re-categorized where needed for comparison.

In addition, the level of detail included in the clauses was expanded. An example is provided in Table 13, which shows the clauses that cover child labour and young workers before 2014 and presently in the finfish and crustacean standard. As is shown, the clauses have been further specified, and additional clauses have been added.

Table 13. Change in clauses FFC - child labour and young workers

Clauses until 2013	Present clauses
3.3: Facility complies with national child labour laws	3.2: The applicant shall not engage in or support the use of child labour. The applicant shall comply with national child labour laws regarding minimum working age or ILO Minimum Age Convention 138, whichever is higher. ILO Minimum Age Convention 138 states the minimum age shall be 15, unless local law in developing nations is set at 14 – in accordance with developing nations' exceptions under this convention.
	3.3: The employment of young workers above the minimum age but under 18 years old shall be in compliance with local laws, including required access to compulsory school attendance and any restrictions on hours and time of day.
	3.4: Young workers above the minimum age but under 18 years old shall not subjected to hazardous work that can compromise their health and safety.

Source: BAP standards https://www.bapcertification.org/Standards.

Another issue to be considered in examining trends in compliance over time, is the history of the development of the BAP standards and the associated auditor' skills. BAP initially started mainly as a food safety standard. Audits are usually carried out by the same auditor for all parts of the standards. The auditors we interviewed indicated that these are usually professionals with experience and skills in auditing for the technical standards (food safety, environment), and not specialized in social audits. Over time, BAP has invested in developing the skills of the auditors to conduct social audits, but this means that the quality of the social audits may have suffered in the earlier years.

There are two types of data that can support the analysis of trends over time in compliance. Firstly, we examine whether there is a correlation between the rate of non-compliance and the number of years a facility has been certified. Our analysis showed that there is no indication that the duration of certification systematically affects the occurrence of non-compliance.

Secondly we used audit data of shrimp farms for the period 2007-2011. We have compared the rate of non-compliance for 2009-2010 with that for 2017-2018 for the shrimp farms alone (Table 14). There are two important differences between those time periods that need to be considered when making the comparison. Firstly, fewer farms were certified in 2009-2010 (118 from 2009-2010 versus 569 from 2017-2018). Secondly, as was shown in Figure 5, there were less than half the number of clauses in 2009-2010 than in 2017-2018. Both issues mean that any non-compliance among a few firms or a few clauses will weigh more heavily on the overall rate of non-compliance for the years 2009-2010.

Two observations can be made based on these data from shrimp farms. First the *average rate* of non-compliance has significantly reduced, from 0.56 in the period 2009-2010 to 0.05 in 2017-2018. This reduction cannot be explained by the increase in the number of firms and clauses. For 6 clauses, less than 10% of farms complied in the period 2009-2010, whereas the highest average non-compliance for any individual clause in 2017-2018 was 0.17. Secondly, the *nature* of non-compliance has changed. Whereas in 2009-2010 non-compliance was highest on basic issues such as the provision of meals and protective gear to workers, this has now shifted to risk assessment and training on health and safety. A few issues remained in the top 10, albeit with much lower levels of non-compliance. These are provision of medical care, employee housing that meets national standards and interaction with local communities.

Table 14. Rate of non-compliance shrimp farms and top 10 clauses 2009-2010 and 2017-2018

2009-2010		2017-2018	
Average rate of non-compliance	0.56	Average rate of non-compliance	0.05
Top 10 clauses	**NC**	**Top 10 clauses**	**NC**
3.7 Meals provided are wholesome and commensurate with local eating customs	0.99	3.18 Risk assessment to minimize any workplace hazards	0.17
3.11 Protective gear provided to employees	0.98	3.27 All employees receive training on health, hygiene and safety	0.16
3.8 Basic medical care is provided	0.97	3.23 Employee housing meets local and national standards	0.16
3.4 Employee housing meets local and national standards	0.94	3.21 Equal opportunity w.r.t. recruitment, compensation, etc.	0.15
3.5 Safe drinking water is readily available to employees	0.94	3.15 Used labour services inform about worker rights and conditions	0.11
3.12 First aid kit readily available to employees	0.92	3.22 No engagement in or permitting of abuse or harassment	0.11
3.9 Emergency response plan is available for serious illnesses or accidents	0.89	3.26 Provision of basic medical care in case of emergencies	0.10
2.2 Regular interaction with the local community to avoid or resolve conflicts.	0.89	3.33 Written procedures and staff training for diving emergencies	0.09
3.6 Toilets and hand-washing facilities readily available to employees	0.76	2.3 Interaction with local community to avoid or resolve conflicts	0.08
3.1 Paying minimum wage rate, including benefits, required by local and national labour laws	0.68	1.1 Documents to prove legal land and water use	0.07

Source: Authors' analysis of BAP audit data of shrimp farms only 2009-2010 and 2017-2018. Clauses in orange are similar between the two time periods.

4.2 Effectiveness

4.2.1 Changes in practices

Do producers, processors and buyers think that BAP social and labour standards have contributed to:

- ***them changing their practices? Which practices in particular?***
- ***changes in due diligence processes***
- ***their business models? How have they changed?***

Whether firms have actually changed their practices as a result of the BAP standards, depends firstly on their starting point. As certification is voluntary, those firms that apply, may in some cases already implement most of the practices required, either because they are also certified for other standards, or because they already comply with national laws (or both). Secondly, the effectiveness of the standards depends on whether the practices promoted in the standards have permeated into the business operations, meaning that firms continuously monitor risks related to social responsibility and implement corrective actions. We therefore asked firm' managers to provide scoring on two statements related to implementation of the standards (Table 5).

Table 15. Scoring of statements related to perceptions of the BAP social and labour standards by management

	Score range	Farm	Plant
Social and labour practices are continuously monitored and adjusted in the company	1. Fully disagree 3. Neither agree nor disagree 5. Fully agree	4.0	3.8
Initially, to meet the BAP social and labour standards the company made:	1. no changes 2.minor changes 3.major changes	2.6	2.5

Note: Average score of all firms interviewed during fieldwork, on a Likert scale from 1 to 5.

The results show that overall, farms and plants monitor social and labour practices to some degree, and that initially they did make minor to major changes in their practices when they first applied.

The in-depth interviews indicate that overall, BAP social and labour standards seem to have brought greater changes to Vietnam respective to other countries, and changes seem to be greater at farm level than for plants. Both plants and farms now have greater attention to ensuring compliance, especially through improved monitoring systems (e.g. working overtime) and complying with the law (contracts and social insurance). In addition, across all countries, there is now greater attention for community-farm interactions.

In Chile, both plants and farms indicated they made some internal organizational and policy changes to comply with the social and labour standards and monitor social practices, such as allocating more staff or a whole department towards welfare of workers (in case of plants), although mostly a designated person was already in place for certification (see '4.2.1 Changes in due diligence'). However, changes to working conditions were perceived to be limited, as practices were already being implemented (see Table 16). One farm commented that there has been spill over to its other farms, as it is trying to implement practices across all of them.

In Indonesia, the majority of respondents indicated to have made major changes due to the certification. For plants, there have been noticeable changes to working overtime, more trainings on safety procedures, providing health insurance, and aligned wages and allowances for overtime with government regulations. Farms have also included national insurance (required by government), improved the physical conditions of the farm and living conditions of workers, but they faced challenges in complying with standards around working hours due to the nature of the production cycle, but they have found ways to compensate for that.

"We could not really follow the normal working hour as requested by the government regulation. The farms workers have to work based on the need of the shrimp. In total, the workers will work about 5-6 hours/day, but they have to stay in the farm. To compensate for that, the farms give 10 days' leave after each harvest and 3 days leave per month. (BAP certified farm, Indonesia)

"As I know, the biggest change is shifting from 2 work shifts to 1 main shift with a maximum of 2 hours/day overtime working. In order to change the production organization, the factory has to install more equipment, re-arrange the factory and recruit more employees. Back in the time when there were many orders, the factory made 2 shifts, but the number of short-term workers is high. These workers were paid well but did not have a contract or insurance. Since BAP certification, all employees must be employed with contract labour, social insurance and strict adherence to overtime working regulations. But in the last 3 years, employees can only work overtime for a few days a year due to the decrease in orders." (BAP certified plant, Vietnam)

In Vietnam, the majority of respondents (management) indicated they have made major changes. For plants, the largest change was related to providing contracts to employees which had ramifications on working hours and benefits and production levels. In the past they used to have seasonal workers paid a daily rate, while now, working time has reduced. A reduction in shifts has led to some plants hiring more workers to cover the work, reorganizing the factory. For farms, a major change has been the improved interactions between employees and farm managers, and employees having more information on labour rights (wages and welfare). They perceived some increased workload related to preparing employee records, and organizing jobs.

Table 16. Changes in social and labour practices after certification

Practices	Chile	Vietnam	Indonesia
Decent working hours	Plants provide more systematic attention and rigor to recording attendance, working hours (especially overtime) Farms: no significant changes mentioned.	Stronger changes in plants relative to farms. Plants implemented stricter monitoring of overtime reduced the number of shifts. Introduced more rest time, also tailored to women's need (when women have their period and/ or have younger children). A challenge was that because of the reduced shifts they had to hire more staff to maintain production. Employees also had issues because they wanted to work overtime to receive more income. This required a norm change amongst employees Farms: no significant changes mentioned.	Farms implemented more monitoring but had challenges related to the farm production cycle where 24 hour surveillance was required (oxygen levels of the ponds at night, shrimp feeding, harvesting). Plants have made slight changes around overtime and reducing working hours based on government regulation.
Fair remuneration	Both plants and farms observe no major changes because of BAP. Amongst plants, changes around wages are negotiated with workers union, therefore BAP has no leverage over them. Farms, also noted no changes due to BAP, some always monitor wages to ensure they are paying fairly. As both farms and plants were already complying with national laws, changes are limited.	Changes were felt most here among the three countries. Farms report there has been some discontent amongst staff with introduction of contract, because of reduced income due to less overtime (see above) and payment of insurance. Plants moved away from paying daily rates to seasonal workers.	For plants, wages are based on government legislation and level of education. Amongst farms, less detail was provided on wages. Around benefits, both provide health insurance but only for permanent workers. There were differences for other benefits. One provides three meals a day, and housing, a bonus based on production and cover health costs if sick.
Freedom of association	Both plants and farms note no major changes, most plants have a union in place, or a workers representative.	Plants: most mention that there is some form of trade union. In some they actively support meetings during work hours (and still provide pay), also there is a collective agreement that is revisited and signed annually. For farms, only 1 out of 3 have a trade union. The rest, state they try to solve issues on farm between managers and staff.	No comments on changes made through BAP, just stated what was available. Amongst the plants, one had a union, two had a form of association comprising representatives of workers and management. Amongst farms, there is no union or workers association.

Practices	Chile	Vietnam	Indonesia
Forced/ child labour	Across plants and farms, no changes were observed with regard to child labour as it is has long been policy (even before BAP) to not do this. All have to be above 18.	Plants and farms: all state this does not take place. Have to be 18 to work in factory or forced.	
Health and safety	Plants have improved the induction process of staff (training on occupational health and safety). Farms reported more attention to how they display information, and are investing in more trainings on health and safety. Both plants and farms have increased frequency of training, and added new components, and a higher frequency of monitoring, as well as the use of checklists and safety simulations. There is a stronger effect at farm level than for plants. Farms: Training, awareness, and protective clothing and equipment has improved health and safety practices. Some also implemented swimming lessons and special classes on diving (Vietnam especially)		
Staff facilities	Plants: better working environment (factory reorganized, production chain more efficient, more toilets for women, and more handwashing). Providing meals and encouraging vegetable growing (Vietnam and Indonesia).		
Medical care	Plants: regular medical check-ups for all staff.	Nothing reported	Nothing reported
Grievance mechanisms	More changes amongst plants than for farms. There are dedicated sessions during induction about mechanisms in place. Anonymous complaint boxes have been put in place, but they are not being used.	Anonymous complaint boxes have been put in place, but they are not being used. Farms: grievance mechanisms go through pond managers, this may pose challenges when this person is also the direct supervisor and responsible for productivity.	More changes amongst plants relative to farms
Discrimination and abuse	Grievance mechanisms and orientation of staff is a preventative measure. There is no data on how effective they are. Both plants and farms reported no instances of sexual harassment.		
Community relations	Farms reported more attention to their relations with communities.	Nothing reported	Nothing reported

Source: Interviews of firm management and workers.

4.2.2 Changes in due diligence processes

Have there been changes in due diligence processes (identifying potential and actual harm-risk analysis, ceasing, preventing, mitigating harm, verify, monitor and validate progress)?

As indicated in Table 15, management indicate they have put in place some measures to monitor risks and implement measures where needed. In Chile most plants already had a structure in place to ensure compliance with standards and therefore few changes were made. Most plants had a designated person who is responsible for all standards. Sometimes a whole department with staff was in place to ensure compliance (4-5 people), or this was linked to a human resources unit and/or risk prevention unit. For farms, usually a dedicated person was in place that is responsible to monitor risks for all certification as a full-time job. However, one farm recruited someone especially for compliance with BAP standards. It is however questionable to what degree risk mitigating processes are actually in place. When probed on this issue related to social and labour issues, responses linked practices more to the audit process rather than to a dedicated mechanism for social risks. Amongst plants, different approaches used to assure compliance included coordination with risk prevention department, quality assurance, and internal audits around safety. One farm, had software to monitor compliance; another reported having internal checks before the official audit.

In Indonesia, dedicated staff was mostly in place. Monitoring was covered under either human resources or quality control. Amongst the farms, it was covered by the farm manager. Amongst plants, only workers facilities, equipment, uniform, safety boots, training and productivity was monitored. One plant indicated they get an external expert to provide training and monitor safety.

In Vietnam, both for farms and plants, there was no full-time staff dedicated to risk monitoring, rather various parts of compliance were distributed to different staff members; human resources department for salary, recruitment and labour policy, and others for worker safety, environment and food safety. There was no clear information on risk mitigation processes.

4.2.3 Spill-over effects

Are there any spill-over effects of the above on non-certified actors?

Overall, there is little evidence of spill-over effects on non-certified actors. It is generally the more advanced and larger firms that apply for BAP certification, that already have some improved practices. The general perception of the smaller firms is that it is difficult for them to afford compliance with standards in general, and that maintaining certain practices would be too much of a burden. In particular following the labour standards with regard to contracts and working hours is considered too expensive. Those that supply the domestic market also do not require the standards, and therefore they feel they also do not need to apply the practices that are part of them. The main

> *"I think that it is impossible for small farm owners with small farming areas and few hectares of farming to meet the standards of BAP or other organizations. Every standard requires very strict labour criteria, workers must sign long-term contracts, social insurance, and ensuring working time. These requirements are very complicated to implement. This farm is small, there are 6 workers, divided into work shifts, it is very difficult to ensure work time. Workers here do not want to participate in social insurance. These workers are farmers, they used to work independently. They do not want to work in a working shift. In addition, participating in social insurance means their income is limited, and they don't want to pay for it. In fact, the salary of workers in the farm is very high. For an important positon, their total income (including salary, bonus) is up to 12 million / month. Normal workers also reached 7-8 million. In return, they work actively, workers share shifts to look after ponds and take care of the shrimp 24/24 a day" (Non-certified farm, Vietnam)*

motivation to follow the practices of the BAP standards would be to gain access to more clients. There is some but limited motivation to improve safety and wellbeing of workers. As some of the social and labour standards mainly require complying with national laws facilities already comply with those standards. In other cases non-certified firms near the BAP-certified ones have ASC or other certification, which also requires them to introduce improved practices. There was one instance in Vietnam where a certified farm indicated it provides support to small-scale farmers in the nearby community, but this relates mainly to technical production practices.

4.2.4 Changes in occupational health and safety

Has BAP certification led to changes in the implementation of occupational health and safety systems and procedures? Is it possible to register changes in accidents and incidents? What grievance mechanisms are in place or what evidence is there of remediation?

As emerged from the analysis of the rate of non-compliance, the health and safety clauses, as well as protective clothing were those with relatively high non-compliance compared to other topics covered by the BAP social and labour standards. The in-depth interviews however indicated that overall, facilities pay more attention to occupational health and safety than before they were BAP certified. There was more attention to wearing protective equipment, and improved hygienic working conditions. The data collected on accidents and incidents from BAP certified firms provides a mixed picture of the effect on accidents and incidents (Table 17). The increase in accidents and incidents may relate to the fact that employees are now encouraged to report incidents, and they are now systematically recorded, where in the past they may not have been. There is a lack of data from before the first year of certification, as records are missing, which makes drawing firm conclusions about changes in accidents and incidents difficult. Certification has at least led to more awareness of these issues, and improved record keeping.

Table 17. Changes in accidents and incidents reported after certification

	Chile	Vietnam	Indonesia
Number of workers	Mostly increased	Increased, limited data	No change, limited data
Number of accident free days	Decreased, limited data	No change, limited data	No change, limited data
Number of incidents reported	Unclear, some increased, some decreased	No data	No data
Number of sick leave days taken	Decreased, limited data	No data	No change, limited data

Source: Interviews with firm management. Note: not all firms were willing or able to provide all information, in particular information from before the certification date. Colours indicate the change compared to the situation before BAP certification; red – deteriorated, yellow – no change, green – improved, grey - no data.

In Chile, plants report a number of changes with BAP certification, such as more training on occupational safety and health, provision of protective equipment, periodical health checks extended to all staff (in the past this was only some staff). One plant made extensive changes to the workplace for employee and improved technology in the production chain to ensure a safe and hygienic working environment and increased toilets and washrooms for women. Farm management indicated that BAP has helped them to put procedures in place and provide swimming lessons, training to staff on fire and occupational safety, and protective clothing. Employees of plants however note that even though people are aware of the practices they do not always implement them. There are challenges amongst the new intakes, as well as older staff. In other cases, they noted that some are monitoring each other to ensure they wear protective gloves. Other workers mentioned they have joined a committee on hygiene and safety, have carried out simulations for accidents, and that, if they do not wear protective equipment, they receive a warning letter. Amongst farms, employees were unable to reflect on concrete changes but have seen some intensification of training on health and safety and workers of one

farm mentioned new procedures for tsunamis. Employees saw it as an individual responsibility to follow safety procedures. Implementation of some procedures was seen as challenging as they felt checklists have become too bureaucratic and not suited for the fast pace of production. The biggest risks amongst plants in Chile was a high level of risk of accidents due to equipment used (electricity, specialized machines). Amongst farms, types of risks were more varied. Risks were also related to sub-contractors and third parties working for the company. To mitigate these risks, farms engaged in awareness raising of sub-contractors.

In Indonesia, plants all provide training on health and safety at the work place. This includes issues such as fire safety, first aid, and in one case general check-ups through a local health clinic. For farms, new practices include health insurance, safety gear, and trainings on safety regulations and how to implement them. Farms note that the most significant change is that now they give workers a contract that specifies their rights and responsibilities regarding safety and security, and provide safety equipment for workers, especially those working with electricity. Employees confirm that these changes have happened.

Similarly for Vietnam, plants report more training on occupational health and safety, provision of protective equipment, periodical health checks. Employees of plants note a significant improvement in how occupational health and safety is addressed, as a result of wearing protective equipment or clothing, and improving the safety of the work environment. Employees of farms also note a significant improvement in practices, especially around electrical systems, and wearing protective equipment such as life jackets.

"Since BAP implementation, drowning prevention and control of drowning safety regulations for each shift have been monitored more closely. Therefore, the consciousness of workers also increased. Those who are not proficient in swimming often practice swimming to have good health and practice swimming skills. The pond is quite deep and wide. Workers who do not have good swimming skills can get into trouble" (BAP certified farm, Vietnam).

With regard to **grievance mechanisms**, in general their introduction is new for both plants and especially farms, but there is limited evidence that they are being used as there are no instances of reporting on 'harassment' and issues to do with wages, and working hours. Table 16 already provided a summary of the practices in place and highlighted that although plants indicate they have suggestion boxes and worker unions in place, these options are not being used much. At the farm level (in Indonesia and Vietnam) there are some challenges, especially on smaller farms, where the pond manager is also the person designated to receive complaints from workers. This suggests that unbiased reporting might be difficult in those cases. Workers mostly report that they go to the union if they have issues, however unions are often not in place in farms with few staff members.

Overall, there was no formal evidence of sexual harassment or bullying according to management. Amongst farms, it was clear that there was an assumption that because most staff were 'men', there were no instances of sexual harassment. Employees interviewed did not openly speak about these issues either, but hinted that there may be some instances where this does happen. Generally, national legislation on sexual harassment is weak.

4.2.5 Impact on recruitment practices

Has BAP certification had any registered impact on recruitment practices and labour retention in the facilities?

There is no data on migrant workers, due to the selection of the case studies in countries where the use of migrant labour is limited. Overall, there are no major changes in the location of where plants and farms recruit workers, however there are some changes in the type of workers hired. There are clear gender norms around what work women and men can and cannot do, which means that in practice both sexes are excluded from certain roles. For plants, generally most workers are women, and no changes in recruitment were observed after implementing BAP standards. At managerial level however, fewer women are found. For farms (especially in Indonesia and Vietnam), staff are male and local. Often they bring their family to live on the premises of the farm as all living expenses are covered and food is provided. There has been no change in this practice after BAP. However the implementation of contractual arrangements, did reduce the number of seasonal workers as they disliked paying social insurance, and other forms of insurance, which was interpreted as a cut in their salary. In Vietnam only, plants report a shortage of labour, particularly that young people are not interested in factory work. As a result they have increased the wages they pay. After Lunar New Year, an important holiday in Vietnam when people travel back to their hometown, a significant share of staff often does not return to the plants.

> *"There are some position that could only done by men. Mostly the workers in the company are women. Men usually work in the cold storage, because they're assumed to be stronger than women. In the cold storage section, they have to load boxes" (BAP certified plant, Indonesia)*

4.2.6 Changes for workers and communities

Have workers, their families and communities (around facilities, supplying labour to facilities) noticed any impact/changes at the facility being/becoming BAP certified? Any changes in labour practices and /or dealings with communities? And why/why not?

Generally, workers observed that the main changes following BAP certification related to more trainings (occupational safety) and receiving a contract. All broadly agreed, that they were aware of their rights and had received more trainings on occupational health and safety, but that actual implementation depends on the individual.

> *"The farm recruited employees from the local community, but only a few. Most of workers are from others localities or different districts. Some people in the local community have their own shrimp pond so they work in they own pond." (BAP certified farm, Vietnam)*

Employees note clear improvements around wellbeing related to shifts and regulations on workers time. This appears to have alleviated stress for workers. They note limited change around decent income (because this is determined by national laws and collective agreements of unions), and no changes around child labour (also determined by national laws in place). No specific mention was made of forced labour. Employees also do not note major changes related to freedom of association; most commented there was a form of labour union available. The status of the implementation of grievance mechanisms is most unclear, particularly at farm level where staff are instructed to go to the pond manager, who is also their direct supervisor, which points to a conflict of interest, and a barrier for employees to use the grievance mechanisms. The responses from interviewees are summarized in Table 18.

Table 18. Changes in labour practices and community dealings

Practices	Chile	Vietnam	Indonesia
Changes in the facility	Most staff (particularly at plants) recall being told about their rights during induction and by the workers union. Amongst farms, this was through past work, and in some cases induction, detailed in their contract or specific training on occupational health and safety. Another major change was related to receiving a contract.	Farms notice only some changes; mainly that the living conditions are better (more comfortable) and that workers have to pay social, health and unemployment insurance. One major change was that they have received a contract, and with that came better awareness of rights. Those that wanted to maintain flexibility in work left the firm. Workers also notice improvements in occupational health and safety, in particular around the risk of drowning. Staff of plants note they have reduced overtime which means a reduction in salary, but their pay is now more stable which they see as an improvement.	Farm employees have noticed broader changes in terms of safety (more protective gear worn).
Use of grievance mechanisms	Employees at plants indicate they can speak with the plant manager (confidentially), but some indicate they do not know what the procedures are and are 'too lazy' to read internal regulations. Others recognize they can go to workers union, and that there are notice boards reporting how to register complaint and an ethics committee. Harassment is seen to lead to dismissal.	Employees of both farms and plants do not note any major issues around the grievance mechanisms. They say they are aware of their rights and know who to report to.	Amongst plants, employees indicate they are able to report problems and complaints, they usually report to the union if there is an issue. Farms report issues to the pond management as unions do not seem to exist at this level.
Decent income	Plants observed that wages were higher than the market, whilst at farms they were comparable. What was less clear was how bonuses were calculated.	Staff of plants indicate their salary is based on regulations and collective labour agreement, and on job position and department. Bonus systems vary between different firms (e.g. farms may base it on responsibility, discipline, seniority, years of service, and production, recognition of achievements, or working under difficult conditions, e.g. steam room in the plant). For farms salary is the same regardless of seniority, but bonuses	Plants and farms note their wages are based on regional minimum wage, and is also based on experience, education and position. Employees feel it is high enough to cover their needs (but not enough to save money). For farms bonuses depend on production volume.

Practices	Chile	Vietnam	Indonesia
		vary depending on responsibility. Employees feel satisfied with this system as they do not pay for living expenses. They feel they are paid better than at other companies, and income is sufficient to cover living expenses. Salaries increased slightly every year. The main change as a result of BAP certification is that they have to pay social insurance and health insurance.	While compliance around working hours has reduced pressure for some, others indicate they miss the additional income that overtime provided them.
Improved employment in the community	No major changes reported.	Plants comment that there is a lack of labour available as many young people prefer to go to the city. Some farms are quite isolated (on a small island) and there is only one boat trip to the mainland per day, non in the evening. Most employees are from local communities. Some neighbours come to the farm to ask for farming advice as many local farmers also produce shrimp.	Plants report that workers are from surrounding area. Employees on farms are often from other parts of the country, while locals only work during harvest time.
Improved wellbeing	Amongst plants, the majority report improvements in employees condition relative to other companies (better work shifts); employers spending more time on sharing information, and the way people treat each other. Employees of plants reported additional benefits such as educational bonuses, dental care, and a health clinic on the premises.	Plants note improvement in working protection, better care of women that are pregnant or that have young children, and for workers in cold storage. They note a better working environment (cleaner, toilets, water). Workers feel they have secure jobs. For farm, employees indicate that the most notable improvement after BAP is better living conditions on the farm. They feel free to resign, but are happy where they are. They feel the shifts have improved with better resting periods. Although this has reduced the production they now can spend more time with their families.	Farm employees reported they receive three meals a day. At plants workers report feeling safe due to CCTV. Employees of plants report a tidier work environment. Employees of farms also note more hygienic and clean pond areas and housing is tidier and safety procedures have been improved.
No issues beyond the gate	Amongst plants, one woman reported feeling unsafe late at night to walk home, and that there is no direct transport.	No issues reported for both plants and farms.	No issues reported for both plants and farms.

Source: Interviews of firm management and workers.

4.3 Efficiency

Have producers and processors registered any additional economic costs and/or gains from becoming BAP certified? Have these changed over time?

In Chile, both plants and farms noted an increase in costs to become BAP certified, but they were seen as worthwhile investment. Many saw the practices as 'doing the right thing' and have given it importance by having a designated position for it. For occupational health and safety, costs were not more than usual. One respondent indicated it increased travel costs due to visiting sites more regularly but that in the long term this was helpful to sort issues out on site. For all the plants, environmental compliance was seen as more costly overall. Compliance with RILES (liquid industrial residues) standards was more costly than national requirements. Compared to other certification, BAP is seen as more costly (15,000 USD/ plant). Similarly for farms, costs for certification were seen as a worthy investments to maintain social and labour standards. Plants reported a number of benefits of having the certification in place; a way to demonstrate compliance with domestic normative legal frameworks, being more structured about compliance and evolve in learning, and it supports the employees' wellbeing. One respondent noted that they were unable to see the social and labour standards in isolation from other modules as they require all elements to become certified. Similar benefits are reported by farms.

In Chile, both plants and farms indicate that certification does not lead to higher profitably directly. However, indirectly it brings a larger market and more sales (by providing access to new clients). The certification is an indicator of quality for clients, and helps them to obtain a better price for products. However this cannot be attributed to the social and labour standards alone, as it requires all the other components of the certification. One plant commented that they gradually realized the value of investing in employees. Without certification, they expect that there would be reduced sales and therefore reduced profits due to a loss of prestige, less negotiating power, and lower ability to obtain other certification standards. Even if not required (e.g. for China and Japan) seafood buyers express interest in certification.

In Indonesia, farms had limited additional costs for certification themselves, because their sponsors (plants) paid for these costs and government paid for CBIB certification, which is Indonesia's national Good Aquaculture Practice certification. Additional costs to farms (that were born by plants) included trainings for workers on safety, first aid, and structural improvements. For plants they include the program fee, and training for workers on safety.

In Indonesia, the benefits for plants were a stronger guarantee of food safety of the products, and of safety in the work place, resulting in less accidents. None were able to see links to improved productivity and turn over. For farms, the main benefit was that it ensures that their product is purchased by their sponsor (processing plant), but they indicated not to receive higher prices even though they notice that the quality of the shrimp they produce is better than before. Farms did not observe changes in productivity. Plants have mixed views on the effect of BAP certification on productivity and profitability. However, in some cases improved welfare of farm workers was linked to improved productivity.

In Vietnam, the majority of plants stated that cost of compliance with BAP was high, and that fees were higher than for other standards. For plants, costs related to social and labour standards included training costs for employees (twice per year), fire protection drills, safety instruction, labour rights, occupational safety and health), safety equipment (clothes, boots, gloves). The initial investment in factory infrastructure were also considered high (for separate rest rooms and locker rooms for women and men, new medical rooms, and medical equipment). The largest cost was related to the production technology (such as new machines, and renovation of environmental treatment systems). Farms have invested in workers living conditions (improved drinking water, better roads, and workers' housing), but they indicated that the same improvements were also needed for other standards.

In Vietnam, for plants, the main benefits of BAP certification observed included more productivity and profit by enhancing the scale of production, and workers receiving a higher income. They also

observe low staff turnover by better staff retention levels, presumably as a result of an improved working environment and conditions, although there was a higher turnover initially when payment for social insurance was implemented and daily wages were abolished. Workers stay at the factory due to better wages and benefits compared to other factories (such as bonuses, meals, and travel allowance). Some note the link between better staff retention to improved productivity. Finally plants in Vietnam note that BAP certification has resulted in improved market access, by expanding their customer base in USA, Canada, and Europe. For farms there are noticeable improvements in productivity in terms of technology and less incidents. They also reported smoother relationship with employees (more harmonious working relationships). This is also linked to the fact that they share some of the profits with workers when there is increased production.

4.4 Sustainability

Are the practices certified sustainable? Do producers/ processors/ buyers continue to be certified after applying the first time?

The trends in non-compliance of the shrimp farms over time, have shown that compliance with BAP standards has significantly improved. At the same time, we did not find a significant correlation between number of years certified and non-compliance. This implies that all firms that apply for certification, are now better equipped to meet the standards than they were in the past. Given that compliance was found to be facilitated by national laws, and compliance with other standards, it is likely that sector-wide trends are resulting in positive effects on compliance. Certain practices do need refreshing of skills over time and continuous training of staff.

5 Theory of Change for social impact of BAP certification

An adapted Theory of Change is presented in Figure 6 (for the original see Annex C), and covers the following stakeholders: communities, employees and their households, firms (farms and processors), auditors, and consumers. We assume that compliance with social standards is a first step towards the intermediate outcome of improved practices and capacities of all stakeholders. The diagram is color-coded to indicate to what extent a particular outcome was achieved, and also indicates where evidence was not sufficient to draw conclusions.

Where facilities comply with the standards, and assuming that this leads to real changes in practices, the long-term outcomes at the micro-level for communities are that positive and productive relations with members of the communities are ensured (LOC1), and no conflicts related to use of local resources occur, or when they occur they are handled satisfactorily (LOC2). For employees and their households the long-term outcomes are improved incomes (LOE1), improved employment (LOE2), improved wellbeing, including health and safety, a workplace free from sexual harassment, and employees are receiving secondary benefits (LOE3), and there are no issues "beyond the gate" related to work at the companies (LOE4). At the level of the firms, long-term outcomes are improved productivity of workers (LOF1), lower staff turnover (LOF2), and improved market access (LOF3). Lastly, consumers have assurance that products are ethical, regardless of their country of origin.

Together, the long-term outcomes at the micro-level will contribute to long-term outcomes at the macro-level. Locally, this will lead to a more diversified economy, increased local employment, and increased remittances. At the national level, outcomes will be improved infrastructure and improved contribution to the aquaculture sector to public funds through taxes, economic growth, and protection against seafood bans. Lastly, at the international level, it will lead to the promotion of international trade.

The study revealed progress around long term outcomes on communities but mixed results for employees and firms. For **communities**, the study only had data for Vietnam since there were no communities near the interviewed companies in Chile and Indonesia. For Vietnam, all the assumptions held. After expressing concern about competing water management, communities were satisfied with how they were handled by companies. Many also reported benefits related to increased employment opportunities for their community and improvements in surrounding infrastructure and gained knowledge in shrimp management practices.

For **employees**, there was limited improvement of incomes as a result of BAP certification. Largely because most firms were already implementing minimum wage as advocated by the national labour law and as agreed by collective labour agreements. Hence, the certification had little influence on income levels. Moreover, with the changes implemented by having a contract and stricter over-time hours, employees were reporting lower income to when they worked for a daily rate, and there some employees that left the firms as a result. Interestingly, those that remained, reported a preference for having more rest time, and that their wages were still relatively equal or slightly higher to those paid by other companies. Yet, there was some discontent around how bonuses were calculated. For farms, extra living expenses (accommodation and food) were covered making the wages sufficient. The largest improvement was in terms of improved employment brought about through the institutionalization of the contract (ending seasonal work) in plants and stricter overtime hours. This was less so for farms which struggled with overtime. Employees also noted that with contracts, they were clearer on their rights. What was less clear was whether employees had a chance to progress in their career in processing plants where the majority of employees are women and senior management are men.

In terms of improved wellbeing, there were mixed results depending on the issue. With regards to health and safety, workers remarked that the extra trainings, staff inductions, noticeboards, simulations led to improvements. They were much more aware of procedures and there was a

reduction in accidents. With regard to incidences of sexual harassment and bullying, employees noted that it was prevalent but not always reported, suggesting that the grievance mechanisms were not being used. At farms, it was assumed that there was no harassment since all employees were men, disregarding what might take place within living quarters, and harassment that might take place between men. With regards to secondary benefits, there were variations between farms and processing plants. Farms usually covered living quarters and meals, as well a bonus based on production volume. Plants had a 13th month bonus, and insurances (which sometimes the staff had to cover themselves). There was no mention of maternity benefits.

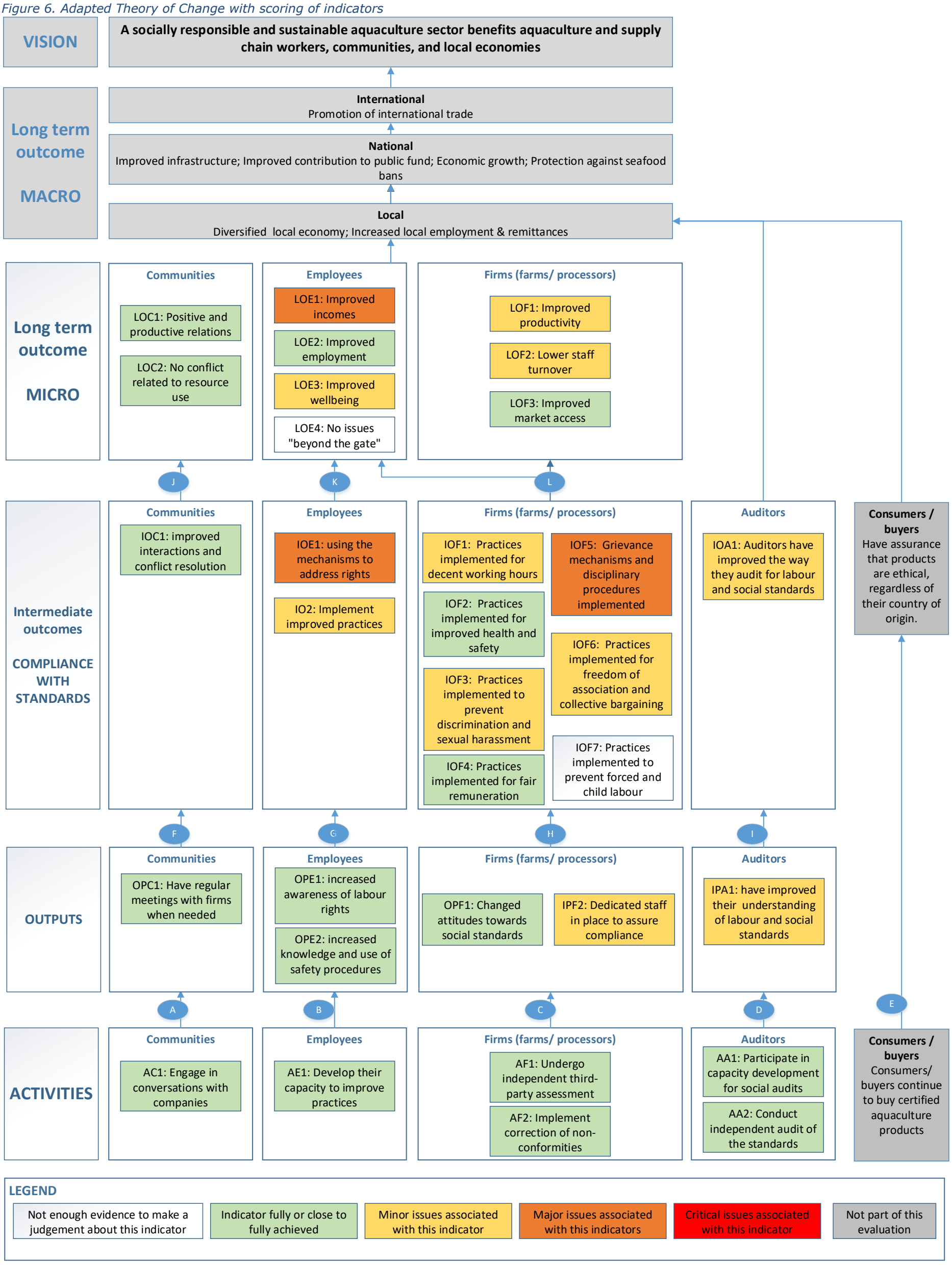
For **firms**, there were marked differences in the benefits reported of BAP certification, depending on whether it was a plant or farm. With regards to improved productivity, farms commented these were more attributable to improved environmental management practices not necessarily improved labour or social standards. For plants, only a few made the link between a tidier and safer working environment and happier workforce, and improved productivity. In one case, production even decreased because of reduction of overtime, leading to the need to hire more staff.

On the assumption that improved attention to labour and social rights results in lower staff turnover, there were mixed results, which proved difficult to untangle. Farms initially noted that with the introduction of contracts and stricter overtime measures, this eliminated seasonal labour, which resulted in losing some employees. For processing plants, this was less the case, with the exception of Vietnam where it was difficult to recruit staff because the younger generation do not want to work in the factories and prefer to migrate to the city. Further investigation revealed that a positive attitude towards social standards and having dedicated staff to assure compliance, did not always translate into improved social and labour standards. Areas that were less challenging were around fair remuneration, practices around health and safety, and stricter overtime and reduced shifts. The latter was more of a challenge for farms given the nature of the work (hence orange and not green). Employees also linked these changes to improved wellbeing, and attributed this to having a contract. There was less progress on practices around discrimination and sexual harassment and grievance mechanisms used. Processors and farms noted they had introduced new mechanisms due to certification (complaint boxes) and reported that there were no cases of sexual harassment. With regard to freedom of association and collective bargaining, it was clear that the certification made no impact on what was already in place. Around forced and child labour, both farms and processors noted it was not taking place. However, this issue would require further investigation.

With regards to improved market access, both processors and farms were unanimous that the certification assisted them to access new clients and retain existing clients. However, it did not guarantee a better price for their product. Moreover, it did not assist in dealing with competition when there are increasingly more processors and plants going for certification.

There was mixed evidence on whether **auditors** have improved their way of auditing for labour and social standards. What emerged was that auditors carrying out social and labour audits tagged on to the environmental audits were not sufficiently skilled to carry those out, nor had sufficient time to carry them out.

Figure 6. Adapted Theory of Change with scoring of indicators



The above discussion raises a number of assumptions that need to be in place for BAP certification to lead to positive social change in aquaculture. These assumptions are listed in Table 17. The letters are linked to those in Figure 6.

Table 19. Theory of Change adapted assumptions

ToC diagram	**Assumptions**
Assumptions for activities to lead to outputs:	
A	All members of the community (irrespective of age, gender, ethnicity, migrant status) are able to engage in conversations with companies/farms
B	Employees are willing to build their own capacity and apply the skill / practices they have learned
C	Companies are able to afford more than one audit /different types of audit
C	Companies are able to afford correction of non-conformities
D	Auditors are able/skilled to do both social and environmental audits to the same degree of rigor
D	Social and labour standards are sufficient to identify all relevant risks for both farms and processors
E	Consumers are more motivated to purchase certified products versus non-certified
E	Market demand for certified product will remain high/constant
Assumptions for outputs to lead to intermediate outcomes:	
F	Companies address concerns of different segments of local communities
G/H	Practices are continuously monitored and implemented by companies and farms
H	Companies are able to implement changes required to comply with standards
H	Companies and farms engage in a real change in practices as a result of certification (rather than only the documents for which they are being audited) (attitude change)
H	Dedicated staff have the necessary skills set, awareness and equipment to address exiting and new risks on an ongoing basis
I	Auditors have sufficient time to audit all components of the BAP standards
I	Auditors do not have resistance from companies/farms to audit
Assumptions for intermediate outcomes to lead to long-term outcomes:	
J/K	All community members benefit in the same way (irrespective of gender, age, ethnicity, religion, migrant status) from the presence of companies/farms (employment, infrastructure development)
K/L	Employees are motivated to stay in same company/farm because of good social labour conditions and conditions in other sector do not radically improve
K/L	Stipulations in the national law provides for a level close to a living wage (i.e. legal national minimum wage covers cost of living)
K	Women and vulnerable groups have control over the income earned
K	Gender and social norms do not limit women and migrant workers from having access to the same positions in the company as men and non-migrant workers
K	The surrounding environment does not limit women and vulnerable groups from feeling safe to travel home after work.
L	Certification does not become a prerequisite for market access (no forced certification)
L	Improved attention to social and labour rights together with environmental standards improves productivity
L	Costs of compliance to multiple standards are not too high
L	Increased attention to workers wellbeing and terms of employment translates into happier and therefore more efficient/productive workers
L	Improved market access guarantees higher profitability
L	Employees want to work in aquaculture / there are not competing alternatives

6 Conclusions

In summary, we conclude that the impacts of BAP standards are context dependent, shaped by how production is embedded within local landscapes, supply chains and social systems. The scale of production and farming experience are still important determinants of success in complying with certain standards and ability to afford audits and investments. For farms, there were the largest gains around social and labour standards as processors had more experience with (other) social standards. Moreover, behaviour change of firms as well as employees is not fully achieved (yet) by certification. This may require a different type of capacity development than what is presently being implemented by firms. Practices are also not (yet) fully embedded in companies' due diligence processes that proactively monitor and remedy risks related to social and labour standards and that go beyond what is needed for a specific audit.

Certification emerged as a continuous improvement tool for seafood companies. Across the three countries, Chile was the more advanced and this could be attributed to its longer experience with standards. Indonesia had less experience as many firms were relatively new to BAP, however, the ease of compliance improved significantly over time. In all three countries, BAP (both social and labour standards and environmental standards) was appreciated by firms for supporting learning around how to improve the functioning of the company and for allowing them to improve as they go along. This indicates that certification, in combination with other schemes and processes, can contribute to achieving social change. At the same time, the level of spill-over of social and labour practices to other (non-certified) companies was perceived to be low which means that the potential impact of certification alone on an entire sector may be limited. This is compounded by the fact that those companies that decide to participate in certification schemes are those relatively 'advanced' on, and aligned with, the practices included in such schemes, which implies that employees in those firms are potentially already better off. A further potential limitation is the reach of certification schemes, i.e. the number and location of buyers that demand certified product.

Compared to other social and labour standards, there were mixed views on complexity and ease of compliance of BAP relative to other standards such as ASC and GlobalGap. On the whole, BAP was appreciated for its detailed instruction and lower level of complexity. This differed related to the length of experience with social standards. Compared to other BAP standards, the social and labour standards were perceived as easier to comply with compared to the environmental component. We found some evidence that a conducive national institutional environment with strong and supportive labour laws and reliable enforcement processes in place, makes compliance with certification standards easier. This therefore also suggests that such an environment strongly supports the social change desired.

Generally, both processors and farms were extrinsically motivated to be certified: to retain and improve market access. Processors played an important role to motivate farms to certify. With regards to improved productivity, it was clear that firms as well as employees were not always able to distinguish or attribute the changes in production to either the environmental or the social and labour standards as they were seen to be iterative and supporting each other. This suggests that an integrated package with other standards is beneficial.

Overall, BAP was noted to have made the greater impact on health and safety and decent working hours related to instituting a contract (noted by both farm/plant management and employees). Employees also noted improvements in wellbeing related to working environment in relation to tidiness and ease of working. Many appreciated having greater clarity on their rights through the contract which specified their working hours, wages and other benefits. There were mixed experiences around the clarity related to bonuses, and having to pay extra for insurance as a result of more formalized contracts.

The least advanced areas of rights were around income and freedom of association. Regarding income, it was clear that BAP was only reinforcing the implementation of minimum wage as required by national labour laws. Whilst employees expressed satisfaction with current wages, they

noted they were unable to save. With regards to freedom of association, there was limited evidence that BAP changed anything beyond what was already in place. The area with the greatest challenge of compliance with the social and labour standards that has direct consequences for employees' wellbeing were related to the adequate functioning of grievance mechanism. Whilst the management of processing plants reported that they were now using complaint boxes, employees of these firms indicated they reported to workers union representatives, where they were present. This was least advanced at farm level where farm management were the main point of contact for grievances, which could lead to a conflict of interest when the grievance relates to the direct manager.

7 Recommendations

Based on the findings, what does the study team recommend that BAP can do to further strengthen the BAP standards; improve compliance; monitoring, remediation, and promote sustainable seafood production and consumption; and ensure that BAP audits maintain high levels of credibility in the future?

On adoption and compliance:

1. To support further compliance, embark on a learning trajectory with a selection of front-runners and least compliant farms and processors to identify strategies that can be used to improve compliance on the social and labour standards, as well as the integrated package of standards.
2. This should include processes to embed more robust due diligence processes that proactively monitor and remedy risks related to social and labour standards and that go beyond what is needed for a specific audit, as well as behaviour change processes among staff to ensure that workers continue to comply.
3. Assess different models to make certification and audit fees more affordable for facilities with a lower level of production. BAP could explore playing a larger role in facilitating linkages between smaller and larger farms and between farms and plants (such as is already the case in Indonesia) to support certification.
4. To identify the business case for social compliance, embark on further research (cost/benefit analysis) with selected firms to document and provide evidence of how social/ labour/ environmental compliance leads to improved productivity.

On audits:

5. To address the different capacities of auditors, BAP could ensure that auditors assess in teams of two comprising of one environmental auditor and one social/ labour auditor.

On monitoring and evaluation:

6. Clearly define or validate the Theory of Change of the BAP social and labour standards, including the intended long-term social impacts, the medium and short-term social outcomes, with clearly defined indicators.
7. Invest in collecting, analysing and reporting more systematically on (quantitative and qualitative) data on these indicators, beyond the existing audit data. Impact assessments can only be robust, and impacts quantifiable if reliable baseline and counterfactual data is available.
8. Put in place mechanisms to monitor potential unintended effects of the social and labour standards on workers, their families and communities, and the potential social and economic effects of the other parts of the BAP standards.
9. The majority of workers in processing plants are women. The study was unable to detect any differences in variation of benefits or discrimination for different types of women based on age, ethnicity or religion. This is something that would require follow up. Similarly, the study did not dive into differences of maternity benefits and dismissals when pregnant. This would require follow up and cross checking with workers union and relevant civil society organizations.

On the social and labour standards:

10. Consult secondary literature from relevant NGOs/ civil society, and ILO, or join communities of practice around living wage. If BAP wants to make significant change to improved income, it can use this literature to assess/provide benchmarks on appropriate wages. Given the sensitivity of the issue, this should be aligned with where each country is in the debate.
11. Liaise with trade unions, civil society and NGOs to identify more effective mechanisms within and outside the working premises to report and act on grievances. This should also include attention to issues beyond the gate (not picked up in this study). Include specific attention to how these are implemented at farm level as grievance mechanisms were less advanced.

References

Alvarez, G. 2011. The impacts of private standards on producers in developing countries: Literature review series on the impacts of private standards – part II. International Trade Centre.

Bamberger, M. 2010. Reconstructing Baseline Data for Impact Evaluation and Results Measurement. In *PREM Notes Number 4*. Washington DC.: The World Bank.

Barrientos, S., C. Dolan & A. Tallontire (2003) A gendered value chain approach to codes of conduct in African horticulture. *World Development,* 31**,** 1511-1526.

Belton, B., F. Murray, J. Young, T. Telfer & D. C. Little (2010) Passing the Panda standard: A TAD off the mark? . *Ambio,* 39**,** 2-13.

Blackman, A. & J. Rivera. 2010. The Evidence Base for Environmental and Socioeconomic Impacts of "Sustainable" Certification. In *Resources for the Future*.

Bush, S. R., B. Belton, D. Hall, P. Vandergeest, F. J. Murray, S. Ponte, P. Oosterveer, M. S. Islam, A. P. Mol & M. Hatanaka (2013) Certify sustainable aquaculture? *Science,* 341**,** 1067-1068.

FAO. 2011. Technical Guidelines on Aquaculture Certification.

---. 2018. The State of World Fisheries and Aquaculture 2018: Meeting the sustainable development goals. Rome: FAO.

GAA. 2015. Global Aquaculture Alliance (GAA) Best Aquaculture Practices (BAP) Standards Initial Criteria for Certification Body Applicants Wishing to Apply for Recognition to Audit Against the GAA BAP Standards, July 2015 Version 2. Global Aquaculture Alliance.

---. 2017. Best Aquaculture Practices Standards Development, – Issue 2.1 - 28-April-2017 Global Aquaculture Alliance.

Hansen, H. & N. Trifković (2014) Food Standards are Good – For Middle-Class Farmers. *World Development,* 56**,** 226-242.

Hatanaka, M. (2010) Certification, Partnership, and Morality in an Organic Shrimp Network: Rethinking Transnational Alternative Agrifood Networks. *World Development,* 38**,** 706-716.

Hatanaka, M., C. Bain & L. Busch (2005) Third-party certification in the global agrifood system. *Food policy,* 30**,** 354-369.

Havice, E. & A. Iles (2015) Shaping the aquaculture sustainability assemblage: Revealing the rule-making behind the rules. *Geoforum,* 58.

Jespersen, K. S., I. Kelling, S. Ponte & F. Kruijssen (2014) What shapes food value chains? Lessons from aquaculture in Asia. *Food Policy,* 49**,** 228-240.

Kruijssen, F., C. L. McDougall & I. J. M. van Asseldonk (2018) Gender and aquaculture value chains: A review of key issues and implications for research. *Aquaculture,* 493**,** 328-337.

Likert, R. (1932) A Technique for the Measurement of Attitudes. *Archives of Psychology,* 140**,** 1–55.

Mayne, J. (2012) Contribution analysis: Coming of age? *Evaluation,* 18 270-280.

O'Rourke, D. (2006) Multi-stakeholder regulation: privatizing or socializing global labor standards? *World development,* 34**,** 899-918.

Oosterveer, P., B. E. Adjei, S. Vellema & M. Slingerland (2014) Global sustainability standards and food security: Exploring unintended effects of voluntary certification in palm oil. *Global Food Security,* 3**,** 220-226.

Petrokofsky, G. & S. Jennings. 2018. The effectiveness of standards in driving adoption of sustainability practices: A State of Knowledge Review. ISEAL Alliance.

Phillips, M., R. P. Subasinghe, N. Tran, L. Kassam & C. C.Y. 2016. Aquaculture Big Numbers. Rome: FAO.

Ponte, S., F. Corsin, N. Warring, K. S. Jespersen & J. Young. 2011. Review of aquaculture certification schemes. Sustaining Ethical Aquaculture Trade project.

Tlusty, M. F. (2012) Environmental improvement of seafood through certification and ecolabelling: theory and analysis. *Fish and Fisheries,* 13**,** 1-13.

Tlusty, M. F. & H. Tausig (2014) Reviewing GAA-BAP shrimp farm data to determine whether certification lessens environmental impacts. *Reviews in Aquaculture,* 5**,** 1-10.

WWF. 2007. Benchmarking Study: Certification Programmes for Aquaculture. Environmental Impacts, Social Issues and Animal Welfare.

Annexes

Table 20. Evaluation matrix

EVALUATION QUESTIONS	APPROACH	DATA COLLECTION/ ANALYSIS TOOLS & SOURCES
Compliance: ease of compliance, compliance patterns		
1. How do producers (farmers), processors and buyers view the BAP social and labour standards? Do they consider these as more/equally/less important than other elements of the standards? More/equally/less difficult to comply with? Why are these more difficult?	Stakeholders' perceptions of the standards Likert scale Quantitative analysis of audit data: % of compliance with the social standards compared to the other standards	Audit data: compliance with social/ labour standards compared to other standard areas Interviews / focus groups with producers, processors and buyers
2. Do producers/processors/buyers find any standard(s) more difficult to comply with than others? Is this corroborated by the data from audit reports? Why are these more difficult, and what might be done to assist them to get certified?	Stakeholders perceptions of the standards Likert scale Quantitative analysis of audit data: % of compliance on individual standards	Audit data: comparison of compliance across social / labour standards Interviews / focus groups with producers, processors and buyers
3. Do audit reports show any regional or local patterns in compliance/non-compliance with BAP social and labour standards? If so, which ones? Are there any changes to these patterns over time? What could be the reasons for difficulties in compliance in these particular locations?	Quantitative analysis of audit data: - % of compliance on individual standards by region - Trends in % of compliance over time Stakeholders perceptions	Audit data: comparison of compliance across locations Interviews / focus groups with producers, processors and buyers
Audits: easy of auditing and compliance		
4. How do auditors and certifying bodies (CBs) view the BAP social and labour standards? Do they consider these as more/equally/less important than other elements of the standards? More/equally/less difficult to audit?	Auditors perceptions of the standards Likert scale	Interviews with auditors and certifying bodies
5. Which challenges do they face in auditing the social and labour standards? What can BAP do to address these challenges?	Auditors perceptions of the standards	Interviews with auditors and certifying bodies
Effectiveness		

EVALUATION QUESTIONS	APPROACH	DATA COLLECTION/ ANALYSIS TOOLS & SOURCES
6. Do producers, processors and buyers think that BAP social and labour standards have made/contributed to: - them changing their practices? Which practices in particular? - changes in due diligence processes (identifying potential and actual harm-risk analysis, ceasing, preventing, mitigating harm, verify, monitor and validate progress) - their views on social and labour rights? How has this changed? - their business models? How have they changed? And why/why not? Is this different for men and women, and across other relevant social markers (e.g. age, religion, ethnicity)	Facilitated self-assessment by key stakeholders	Interviews / focus groups with producers, processors, and buyers Interviews with non-certified actors Sprockler survey Company' documents / records
7. Are there any spill-over effects of the above on non-certified actors? Is this different for men and women?	Facilitated self-assessment by non-certified stakeholders	Interviews with non-certified actors
8. Has BAP certification led to changes in the implementation of occupational health and safety systems and procedures? Is it possible to register changes in accidents and incidents (for example through higher numbers of accident free days in a month or year)? Is this different for men and women workers? What grievance mechanisms are in place or what evidence is there of remediation?	Perceptions of producers, processors, and workers Comparison of accident data before and after certification	Interviews with producers and processors Producer / processor data on accidents and other records Interviews with workers Interviews with non-certified actors
9. Have workers, their families and communities (around facilities, supplying labour to facilities) noticed: - any impact/changes at the facility being/becoming BAP certified? - any changes in labour practices and /or dealings with communities? And why/why not? Is this different for men and women?	Facilitated self-assessment by workers and communities	Interviews with workers, workers' families and communities Interviews with workers and communities from non-certified actors Sprockler survey Company' documents / records showing complaints processes

EVALUATION QUESTIONS	APPROACH	DATA COLLECTION/ ANALYSIS TOOLS & SOURCES
10. Has BAP certification had any registered impact on recruitment practices and labour retention in the facilities? For migrant workers, has BAP certification led to changes in remittances to families? Is this different for different types of men and women?	Facilitated self-assessment by producers and processors Analysis of employment records: - # of different types of positions (job type, contract type, gender) - trends over time Workers self-assessment Contrasting with non-certified actors' perceptions	Interviews with producers and processors Producer / processor employment records and other documents Interviews with workers Interviews with non-certified actors
Efficiency		
11. Have producers and processors registered any additional economic costs and/or gains from becoming BAP certified? Have these changed over time?	Stakeholders' perceptions of economic costs and benefits	Interviews with producers and processors Company' documents / records
Relevance		
12. Are the issues addressed in the standards addressing the right problems? Does compliance mean that people are indeed better off? Is this different for men and women?	Qualitative analysis of the intended changes of the social standards from desk review and consultation, compared with problem/needs analysis, described by key stakeholders	Desk review of GAA and external documents Consultation with GAA Interviews with key stakeholders
13. Are there other drivers for social change that are ignored by the BAP standards that could be included?	Comparison of developed theory of change with existing standards Perceptions of key stakeholders	Desk review Interviews with key stakeholders
Sustainability		
14. Are the practices certified sustainable? Do producers/ processors/ buyers continue to be certified after applying the first time?	Quantitative analysis of audit data: - Trends in % of compliance over time - Trends in re-application by certified actors over time (dropout rate)	Audit data: tracking of compliance and certification of producers/ processors/ buyers over time Interviews with actors that have not re-certified
Impact		
15. Are there any other positive or negative results that communities/workers/ producers/ processors/ buyers experience from BAP certification? Is this different for men and women?	Perceptions of key stakeholders	Interviews with key stakeholders Sprockler survey
Recommendations		

EVALUATION QUESTIONS	APPROACH	DATA COLLECTION/ ANALYSIS TOOLS & SOURCES
16. Based on the findings, what does the study team recommend that BAP can do to further strengthen the BAP standards; improve compliance; monitoring, remediation, and promote sustainable seafood production and consumption; and ensure that BAP audits maintain high levels of credibility in the future?	Analysis of strength, weaknesses, opportunities and threats Validation with key stakeholders at GOAL	Triangulation of data

Annex A: Social and labour standards for farms (finfish and crustaceans and salmon)

Topic	FFC	Salmon	Clauses
Property Rights and Regulatory Compliance	1.1	1.1	Current documents shall be available to prove legal land and water use by the applicant.
	1.2	1.2	Current documents shall be available to prove all business and operating licenses have been acquired.
	1.3	1.3	Current documents shall be available to prove compliance with applicable environmental regulations for construction and operation.
	-	1.4	Where applicable, current documents shall be available to prove compliance with Area Management Agreements or other local agreements to which the farm has committed. (See also Clause 2.7.)
	-	1.5	Where applicable, current documents shall be available to prove compliance with laws protecting the resources of indigenous peoples and/or independent agreements that the applicant may have made with them.
	-	1.6	Where applicable, current documents shall be available to show compliance with the farm's own industry codes of practice.
Community Relations	2.1	2.1	The applicant shall accommodate local inhabitants by not blocking traditional access routes to fishing grounds, wetland areas and other public resources.
	2.2	2.2	The applicant shall manage water usage to avoid restricting the amount of water available to other users.
	2.3	2.3	The applicant shall demonstrate interaction with the local community to avoid or resolve conflicts through meetings, committees, correspondence, service projects or other activities performed annually or more often.
	-	2.4	The applicant shall record, review and respond helpfully to requests for information received from the public, including sharing of non-proprietary farm data, and to reasonable complaints that are specific to the applicant's operation and provide details in writing of the alleged failing.
	-	2.5	Where applicable, the applicant must demonstrate dialogue with local native peoples and a process for conflict resolution with them under the laws governing their rights.
	-	2.6	The applicant shall participate in or be working toward participation in an Area Management Agreement, and shall demonstrate compliance with the terms of such an agreement or a projected timeline for establishment of an agreement.
	-	2.7	Where an AMA has not been established, applicants shall nevertheless demonstrate cooperation on matters of stocking, fallowing, fish health and biosecurity with BAP-certified farms within an area twice the regulatory minimum separation distance to an upper limit of a 5-kilometer radius. (See Sections 4 and 10.)
Wages and benefits	3.1	3.1	The applicant shall meet or exceed the minimum wage rate, benefits, required by local and national labour laws.
	3.5	3.7	The applicant shall comply with national labour laws for pay, overtime and holiday compensation for hours worked beyond the regular work day or week.
	-	3.8	Applicants that have farms in remote locations that require employees to live and work at the farm for prolonged periods shall have an adequate leave of absence policy, for example two weeks work at the farm followed by one week's leave.
	3.2	3.10	The facility shall not make deductions from wages as part of a disciplinary process.

Topic	FFC	Salmon	Clauses
	3.3	3.12	The facility shall maintain all relevant documents that verify any contracted/subcontracted workers, whether contracted through a labour service or otherwise, are paid in compliance with all local wage, hour and overtime laws.
	3.13	3.14	The facility shall maintain all relevant documents that verify piece workers (those paid a fixed “piece rate” for each unit produced or action performed regardless of time) are paid in compliance with local law, including regulations regarding equivalence to or exceeding minimum requirements for wages, hours, overtime and holiday pay.
Working hours	3.4	3.6	The applicant shall abide by the national mandated work week where applicable.
Staff facilities	3.19	3.24	If provided, employee housing shall meet local and national standards (e.g., water-tight structures, adequate space, heating/ ventilation/cooling), and shall be free of accumulated trash and garbage.
	3.20	3.25	Safe drinking water shall be readily available to employees. If meals are provided, they shall be wholesome and commensurate with local eating customs.
	3.21	3.26	Running water, toilets and hand-washing facilities shall be readily available to employees.
Protective clothing	3.26	3.32	Protective gear and equipment in good working order shall be provided for employees (e.g., eye protection for welding, gloves for shop work, boots for wet areas). Auditor to verify deployment.
Medical care	3.22	3.27	In the event of accidents or emergencies, the applicant shall provide basic medical care, including access to or communication with medical authorities. Additionally, first aid kits shall be readily available to employees, and any expired content shall be replaced.
Forced labour	3.6	3.5	All work, including overtime, must be voluntary. The facility shall not engage in any form of forced or bonded labour. This includes human trafficking, the holding of original identity papers, prohibiting workers from leaving the premises after their shift or other coercion intended to force anyone to work. Where the holding of original identity papers is required by national law, such papers must be immediately returned to employees upon request and readily available to them at all times.
	3.7	3.9	The facility shall not require the payment of deposits, deduction from wages or withholding of pay that is not part of a legal contractual agreement with the employee and/or that is not provided for or permitted by national law.
	3.12	3.11	The applicant shall only employ legally documented workers, whether nationals or migrants.
	3.8	3.17	Workers shall have the right to terminate their employment after reasonable notice.
Child labour & young workers	3.9	3.2	The applicant shall not engage in or support the use of child labour. The applicant shall comply with national child labour laws regarding minimum working age or ILO Minimum Age Convention 138, whichever is higher. ILO Minimum Age Convention 138 states the minimum age shall be 15, unless local law in developing nations is set at 14 – in accordance with developing nations exceptions under this convention.
	3.10	3.3	The employment of young workers above the minimum age but under 18 years old shall be in compliance with local laws, including required access to compulsory school attendance and any restrictions on hours and time of day.
	3.11	3.4	Young workers above the minimum age but under 18 years old shall not be subjected to hazardous work that can compromise their health and safety.
Worker health and safety	3.17	3.18	The facility shall appoint a management person responsible for ensuring worker health, safety and training.

Topic	FFC	Salmon	Clauses
	3.18	3.19	The facility shall identify and eliminate or minimize any workplace health and safety hazards by conducting a thorough risk assessment. This includes a requirement for accident investigation.
	3.23	3.28	The applicant shall provide training in general health, personal hygiene and safety (including aquatic safety and the use of boats and associated equipment), first aid and contamination risks to all employees. Safety documents must be available in a language understood by the workforce.
	-	3.29	Employees shall be appropriately licensed to drive or use equipment for which public licenses are required, and a list of such licensed employees and copies of their licenses shall be available for inspection.
	3.24	3.30	An emergency response plan shall be prepared for serious illnesses or accidents.
	3.25	3.31	Select workers shall be made familiar with details in emergency response plans and trained in the first aid of electrical shock, profuse bleeding, drowning and other possible medical emergencies.
	3.28	3.34	The applicant shall comply with laws that govern diving on aquaculture farms and develop a written dive safety plan that requires diver training and the maintenance of logs that document procedures, safety-related incidents and equipment maintenance. Limits for time under water shall be established and monitored.
	3.29	3.35	The applicant shall provide written procedures and staff training for handling diving emergencies and regularly audit records and procedures. Emergency response equipment for divers shall include oxygen for resuscitation.
	-	3.36	Subcontractors who provide services to the applicant such as diving, harvesting, environmental monitoring and system inspection and maintenance shall provide documents to prove they are legally licensed to do such work and shall be required to comply with the Applicant's relevant health and safety procedures. Records of subcontract services used shall be maintained and shall be available for inspection.
	-	3.37	Individuals who work as subcontractors more than 100 hours in any month shall receive the same safety training provided to direct-hire employees.
	3.27	3.33	Electrical pumps and aerators shall be wired according to standard safe procedures.
Hiring & terms of employment	3.14	3.13	All labour, recruiting or employment services used by the facility must be licensed to operate by the local or national government as a labour provider.
	3.15	3.15	The facility shall provide to all workers, whether hourly, salaried, piece-rate, temporary, seasonal or otherwise, prior to hire and during employment, written and understandable information regarding the terms of employment, worker rights, benefits, compensation, hours expected, details of wages for each pay period and facility policies regarding disciplinary actions, grievance procedures, authorized deductions from pay and similar labour-related issues.
	3.16	3.16	Where contracted/subcontracted or temporary workers are hired through a labour or employment service, the facility shall ensure that the labour or employment service provides the above information prior to and during hire, in appropriate languages, to ensure workers are aware of their rights and conditions of employment as described above.
Discrimination and abuse	3.30	3.22	The facility shall provide for equal opportunity with respect to recruitment, compensation, access to training, promotion, termination and retirement.
	3.31	3.23	The facility shall treat workers with respect and not engage in or permit physical, verbal or sexual abuse, bullying or harassment.
Freedom of association	3.32	3.20	Workers shall have the right to collective bargaining, or at least one employee shall be elected by the workers to represent them to management.

Topic	FFC	Salmon	Clauses
and collective bargaining	3.33	3.21	There shall be a written worker grievance process, made available to all workers, that allows for the anonymous reporting of grievances to management without fear of retaliation.

Annex B: Social and labour standards for seafood processing plants

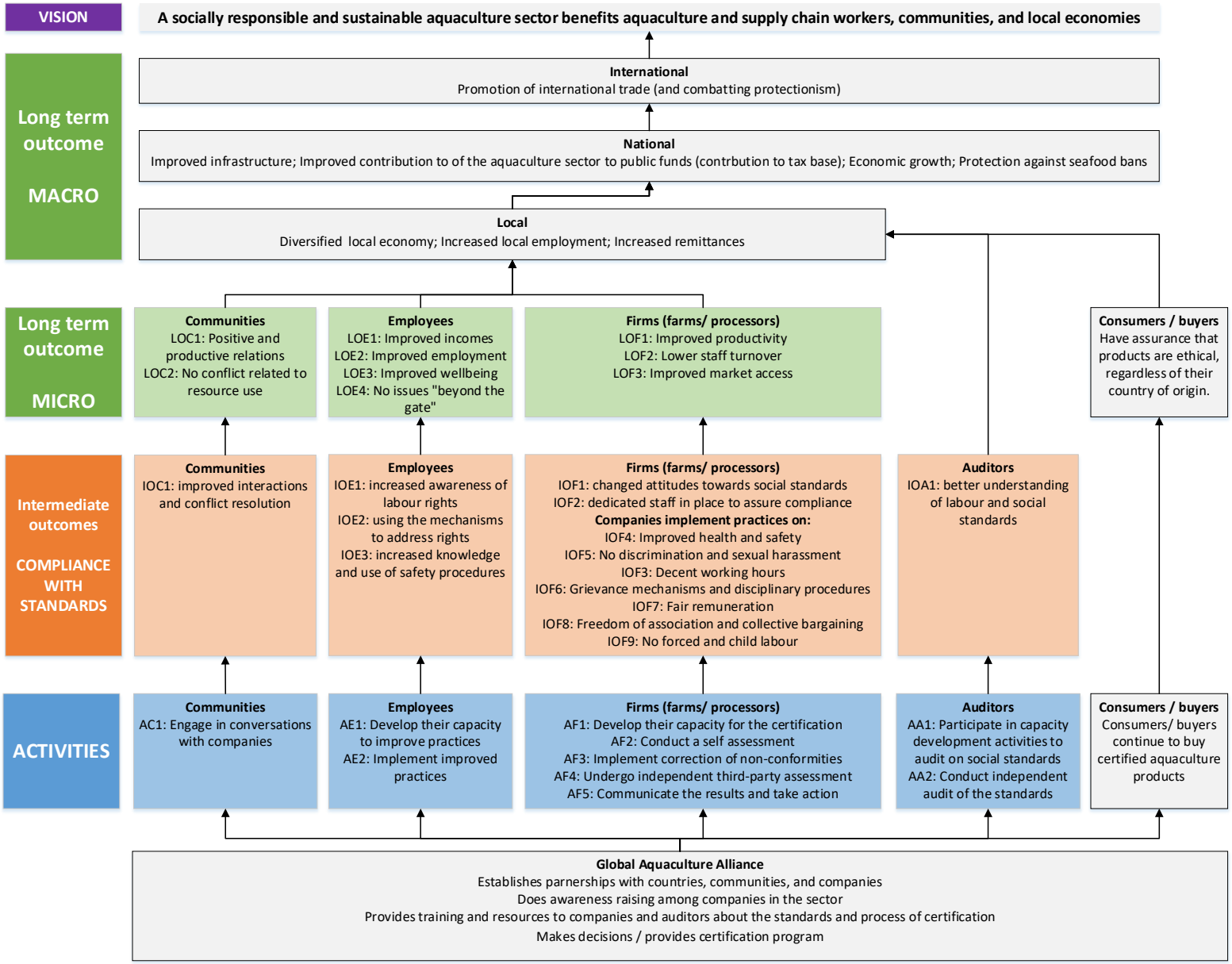
Topic	Clauses
Regulatory Management	A2-2-1.1 Applicants shall operate in compliance with this standard and all local, national, and international laws, rules and regulations. The applicant shall have in place policies and procedures pertaining to, but not limited to: worker health and safety and compliance with requirements regarding wages, benefits, hours, hiring practices, minimum age, status of workers, and good employee relations.
	1.1 The Applicant shall demonstrate that they are entitled to process and produce products at the site applied for.
	1.2.1 Documents are available to prove legal land and water use by the facility.
	1.2.2 Documents are available to prove all business and operating licenses have been acquired by the facility.
	1.2.3 Documents are available to prove compliance with applicable environmental regulations for construction and operation.
	1.2.4 Documents are available to prove that the Applicant is aware of, keeps up-to-date, and complies with, all relevant legislation of BOTH the country they operation in, and the countries they export to. This includes all food safety regulations.
Staff Facilities	3.1.1 The facility shall provide safe, healthy and clean conditions in all work, rest, dining, and, where applicable, housing areas, and shall establish and follow a clear set of procedures that ensures occupational health and safety. This includes providing access to potable water, clean toilet facilities, and, where applicable, sanitary food preparation and storage areas.
	3.1.2 If provided, employee housing shall meet local and national standards (e.g., safe, water-tight structures, adequate space, heating/ventilation/cooling, pest control, sink, and shower and toilet facilities).
	3.1.3 The Applicant shall have a sufficient number of toilets and sinks in compliance with local and national laws. These shall be readily accessible to employees and kept in good repair.
	3.1.4 The facility shall provide a safe and hygienic place for workers to change into appropriate work attire and to store personal belongings.
3.2 Personal Protective Equipment and Clothing	3.2.1 Safe, appropriate and hygienic protective gear shall be provided, free of charge, to workers commensurate with work activity.
	3.2.2 The Applicant shall list the protective equipment and clothing provided to employees (such as smocks, eye protection, gloves, insulated wear for refrigerated areas, boots for wet areas, etc.).
	3.2.3 The Applicant shall provide Contractors and Visitors with appropriate protective clothing.
3.3 Medical Care	3.3.1 The Applicant shall provide adequate medical care for employees, including access to or communication with medical authorities in case of emergencies or accidents.
	3.3.2 Applicants shall record the basic medical care provided by their facility.
	3.3.3 First aid kits shall be readily available to employees close to work and rest areas.
	3.3.4 The facility shall maintain a list of first aid items kept on hand and, where appropriate, their expiration date. Expired items shall be replaced promptly.
3.4 Training	3.4.1 The facility shall have a training program for workers and maintenance personnel that operate or work on machinery and/or other dangerous equipment. Such training shall include but is not limited to boiler operators, welders, forklift drivers and those that operate or work on cutting, peeling, sorting and other potentially dangerous machinery. Where local law requires workers to be licensed to operate or maintain such items, proof of licensing shall be maintained.

Topic	Clauses
	3.4.2 The Applicant shall have a training program to ensure workers that handle or are exposed to potentially dangerous chemicals, fuels, compounds, or other toxic substances are properly trained in their use. (See also 4.2.5).
	3.4.3 The Applicant shall maintain a training program that orients new employees in general health, safety, product quality and the prevention of product contamination. The applicant shall also provide refresher training to all employees on these subjects at least annually. (See also more specific training requirements for hygiene and GMPs/SSOPs in clauses 5.9.4 and 5.9.15).
	3.4.4 Records that verify proper training for all elements described above shall be maintained.
2 Wages and Benefits	A2-2.1 The Applicant shall ensure that workers are paid at least the legal minimum wage or the wage rate established by an employment contract or collective bargaining agreement, whichever is higher. Regular wages and compensation shall cover the workers' basic expenses and allow for some discretionary funds for use by workers and their families.
	A2-2.2 The Applicant shall provide benefits that, at minimum, are required by local or national law. (Such as paid holidays, maternity leave, health insurance, paid sick time, etc., as applicable)
	A2-2.3 The Applicant shall compensate workers for overtime hours worked beyond the nationally mandated regular work week, at a premium rate, as required by local law.
	A2-2.4 The facility shall not make deductions from wages that are unauthorized or not provided for by national law. Facilities shall not make deductions from wages as part of a disciplinary process.
	A2-2.5 The facility shall maintain all relevant documents that verify any contracted/subcontracted workers, whether through a labour employment service, recruiter, or otherwise, are paid in compliance with all local wage and overtime laws.
	A2-2.6 The facility shall maintain all relevant documents that verify piece workers (those paid a fixed "piece rate" for each unit produced or action performed regardless of time) are paid in compliance with local law, including equivalence to or exceeding minimum requirements regarding wages, overtime and holiday pay.
3 Working Hours	A2-3.1 The facility shall set working hours that comply with local or national laws, contractual agreements where applicable, or industry standards in the country, whichever affords greater welfare to the workers. However, in no case shall the regular work week (excluding overtime) exceed 48 hours.
	A2-3.2 Overtime shall not exceed 12 hours per week except as permitted by national law in a voluntary contractual agreement.
	A2-3.3 Facilities shall comply, at a minimum, with national laws regarding meal and rest breaks during work shifts.
	A2-3.4 Facilities shall maintain records that verify compliance with working hour laws and provisions, as stated in 3..1 - 3.3 above, for all workers regardless of their status (piece-rate workers, contractors/subcontractors, hourly, salary, temporary, and so on).
4 Forced, Bonded, Indentured, Trafficked and Prison Labour	A2-4.1 All work, including overtime, shall be voluntary, and shall not be under threat of any penalty or sanctions.
	A2-4.2 The facility shall not engage in any form of forced or indentured labour. This includes human trafficking, the holding of original identity papers, or other coercion intended to force anyone to work. This also includes prison labour when not used in compliance with ILO Forced Labour Convention 29.
	A2-4.3 Bonded labour is prohibited. The facility shall not require the payment of deposits, bonds or other financial guarantees that may result in debt bondage. This includes recruitment fees, fines, deductions from wages, and withholding of pay that are not part of a legal contractual agreement with the employee.
	A2-4.4 Workers shall have the right to leave the premises after their work shift. Workers shall also have the right to terminate their employment after reasonable notice.

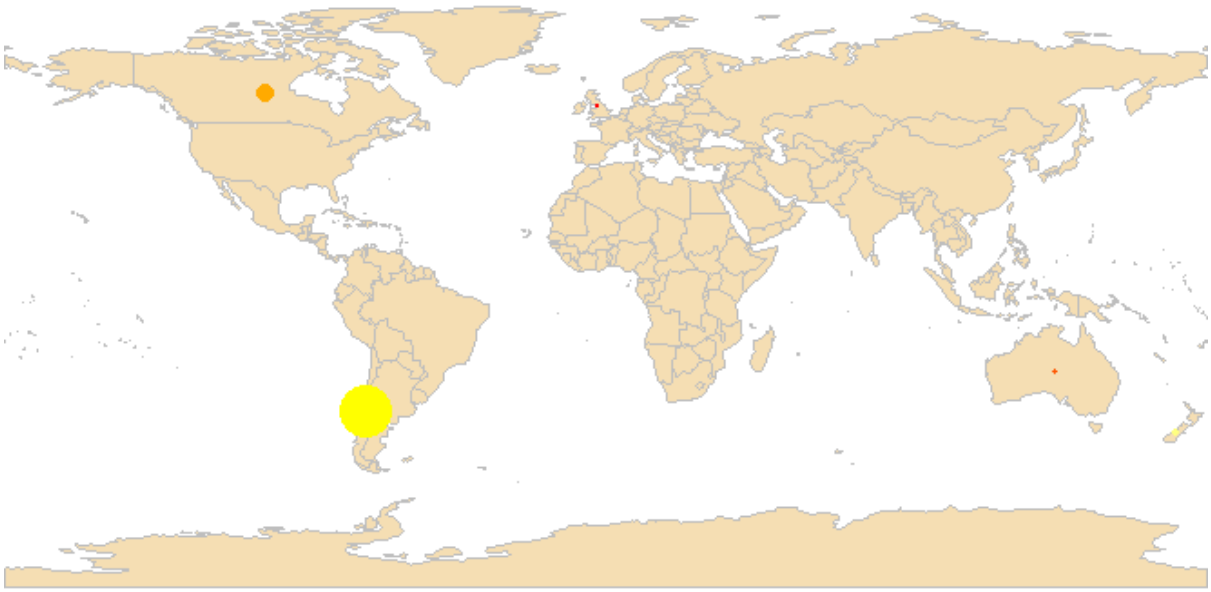
Topic	Clauses
5 Child Labour and Young Workers	A2-5.1 The applicant shall not engage in or support the use of child labour. The applicant shall comply with local child labour laws regarding minimum working age, or the age of compulsory education, or, the ILO Minimum Age Convention 138, whichever is higher. While ILO Minimum Age Convention 138 states the minimum age shall be 15, local law of minimum age of 14 may apply if it is in accordance with developing nations country exceptions under this convention.
	A2-5.2 The employment of young workers (above the minimum age but under 18 years old) shall be in compliance with local laws, including required access to compulsory education.
	A2-5.3 Young workers shall not be subjected to conditions which compromise their health, safety, or moral integrity, or which harms their physical, mental, spiritual, moral or social development. This includes restrictions on working hours and prohibiting night work and hazardous work.
6 Worker Health and Safety, Facilities and Housing	A2-6.1 Where applicable the Applicant must provide meals which are wholesome and commensurate with local eating customs.
	A2-6.2 The facility shall appoint a senior management person responsible for ensuring worker health and safety.
	A2-6.3 The facility shall identify, prevent, eliminate or minimize any workplace health and safety hazards. This includes a requirement for documenting incidents, and investigations of accidents and their cause and correction.
	A2-6.4 The facility shall ensure proper measures for fire protection and prevention in all work, rest, dining, and where applicable, housing areas. This includes but is not limited to: adequate numbers of functioning fire extinguishers; emergency exits and evacuation routes that are clearly marked, properly lit and kept clear and unlocked while employees are present; proper training and enforcement for handling of flammable liquids and chemicals; and procedures to prevent fires during such activities as welding.
	A2-6.5 Facilities shall ensure that equipment and machinery are safe through, but not limited to: properly functioning shields or guards; warning signs/pictures; emergency shut-off switches; and implementation of lock-out/tag-out procedures to prevent start-up during maintenance.
	A2-6.6 Facilities shall ensure the strength, stability and safety of buildings and equipment in work, eating and, where applicable, housing areas. This includes ensuring proper electrical safety through proper wiring, grounding of cables, and coverage of circuit boxes.
	A2-6.7 Emergency evacuation drills (in case of fire, chemical leak or similar) shall be conducted, at a minimum, annually.
	A2-6.8 An emergency response plan shall be prepared for serious illnesses or accidents.
	A2-6.9 Select workers shall be trained in the details of the emergency response plans and in first aid (to include electrical shock, profuse bleeding, drowning and other possible medical emergencies). A list of the trained workers shall be kept.
	A2-6.10 At least one of the workers described in 6.9 shall be present at the facility at all times during production.
7 Hiring and Terms of Employment	A2-7.1 Workers shall have a legal right to work in the country they are working in. Work performed and terms of employment shall be in compliance with local law or international labour standards, whichever is stricter.
	A2-7.2 The facility shall provide to all workers, prior to hire and during employment, with written and understandable information regarding the terms of employment, worker's rights, benefits, compensation, expected working hours, details of wages for each pay period each time they are paid, and facility policies regarding disciplinary actions, grievance procedures, any authorized deductions from pay, and similar. This information must be provided in the prevalent language of a majority of employees. This requirement applies to all workers regardless of status, including but not limited to: hourly, salary, and piece rate, temporary and seasonal workers.

Topic	Clauses
	A2-7.3 Where contracted/subcontracted or temporary workers are hired through a labour or employment service, the facility shall ensure that the labour or employment service they are using provides the above information prior to and during hire, in appropriate languages, to ensure workers are aware of their rights and conditions of employment as described above.
	A2-7.4 All labour, recruiting, or employment services used by the facility must be licensed to operate by the local or national government as a labour provider.
	A2-7.5 The facility shall not use contractors, subcontractors, temporary workers, homeworkers, apprentices or other non-full time employment schemes in order to avoid the payment of benefits, social security, etc. required by local law under a regular employment relationship.
8 Discrimination, Discipline, Abuse and Harassment	A2-8.1 The facility shall provide for equal opportunity with respect to recruitment, compensation, access to training, promotion, termination or retirement.
	A2-8.2 The Applicant shall not engage in or permit discrimination in all aspects of employment, including but not limited to recruitment, hiring, compensation, terms of employment, advancement, discipline, access to training, promotion, termination, or retirement on the basis of race, colour, gender, national origin/ heritage, religion, age, nationality, social or ethnic origin, maternity, sexual orientation, political opinion, disability or any other status. Terms and conditions of employment shall be based upon the ability to do the job, not on personal characteristics or beliefs.
	A2-8.3 The facility shall treat workers with dignity and respect and not engage in or permit physical, verbal or sexual abuse, bullying or harassment.
	A2-8.4 The facility shall have a written disciplinary procedure made available in the prevalent language of the majority of workers. Records shall be maintained of all disciplinary actions.
9 Freedom of Association and Collective Bargaining	A2-9.1 Facilities shall respect the rights of workers to associate, organize, and bargain collectively without prior authorization from management. Facilities shall not interfere with, restrict, or prevent such activities and shall not discriminate against or retaliate against workers exercising their right to representation in accordance with international labour standards.
	A2-9.2 Where the right to freedom of association and collective bargaining is prohibited or restricted under local law, the facility shall not prevent alternative means to facility worker representation and negotiation. (For example, the election of one or more employees by the workers to represent them to management).
	A2-9.3 The facility shall grant worker representatives access to the workplace in order to carry out their representative functions.
	A2-9.4 There shall be a written worker grievance process, made available to all workers, that allows for the anonymous reporting of grievances to management without fear of retaliation.

Annex C: Original Theory of Change inception phase



Annex D: Rate of non-compliance salmon farms, size of bubbles indicates certified volumes



Source: Analysis of BAP audit data on social and labour standards 2017-2018.