



CoP Report

Period covered:

02.05.2019 – 02.02.2021



Alpha Aqua™

Statement of the company's chief executive (CEO or equivalent) expressing continued support for the Global Compact and renewing the company's ongoing commitment to the initiative and its principles.

02.02.2021

To our stakeholders:

I am pleased to confirm that Alpha Aqua A/S reaffirms its support of the Ten Principles of the United Nations Global Compact in the areas of Human Rights, Labor, Environment and Anti-Corruption.

In this annual Communication on Progress, we describe our actions to continually improve the integration of the Global Compact and its principles into our business strategy, culture, and daily operations. We also commit to sharing this information with our stakeholders using our primary channels of communication.



Sincerely yours,
Johan Herold Højgaard
CEO

HUMAN RIGHTS PRINCIPLES

ASSESSMENT, POLICY AND GOALS

Alpha Aqua's goal is to influence our employees and all our business partners respect the Universal Declaration of Human rights and environmental protection. Based on our commitment we are setting up a code of conduct to be published on our website, making our position clear for all our suppliers, employees, and partners.

IMPLEMENTATION

Alpha Aqua has taken the following measures to prevent human rights violations in its work locations:

Training of employees, awareness raising, allocation of responsibilities for the respect and support of Human Rights within Alpha Aqua: A Health, Safety, and Environment (HSE) Group – consisting of 3 employees - has just been established internally. Furthermore, they have all been through an HSE course for Alpha Aqua to proceed with the focus on mental (e.g., monitoring sick leave and well-being) and physical work environment (e.g., work injury).

MEASUREMENT OF OUTCOMES

Constant dialogue with the employees is deemed the best way of securing a good working environment and preventing stress, which the HSE Group already is initiating. The Group therefore has a responsibility of monitoring the employees' well-being and sick leave.

Finally, a system that encourages employees, clients, and partners to report back if they suspect any wrongful doing is soon to be in place. This could for example be our sites abroad - regarding our Code of Conduct (work-in-progress). Until now, we have not had any incidents.

LABOUR PRINCIPLES

ASSESSMENT, POLICY AND GOALS

Alpha Aqua supports the UNGC principles on labor standards in addition to following local laws on labor rights. Our handbook, which is a work-in-progress, covers policies concerning our employee rights and compensation and responsibilities. Labor related risks are being assessed by the HSE Group in setting up a dedicated resource that monitors and mandates environmental and safety risks. The employee handbook will be under continuing refinement incorporating the Global Compact.



IMPLEMENTATION

All employees at Alpha Aqua are now entitled to medical insurance. Furthermore, the handbook will include human resource policies and procedures supporting the labor principles. Related to this, we are working on an increased focus on diversity (gender, ethnicity, age) when it comes to our values in hiring.

MEASUREMENT OF OUTCOMES

Our plan is to include a framework and a set of defined actions and outcomes in relation to the UN Global Compact's ten principles in the employee handbook. This is to raise awareness by communicating the principles through several communication channels. Also, any violations are reviewed and held accountable to our law and policies - investigations will be made internally, with legal counsel as required. The management is updated on a regular basis. Finally, we run annual appraisals each year to identify personal development needs and training requirements implemented as quickly as possible.

ENVIRONMENTAL PRINCIPLES

ASSESSMENT, POLICY AND GOALS

Producing total solutions within onshore fish farming, Alpha Aqua A/S has developed a system that ensures that fish farming can take place on land in a recirculating aquaculture system where the water is purified and not replaced to any great extent. This has the potential to disrupt the industry, since we have solutions to the environmental challenges that fish farming can entail.



IMPLEMENTATION

Contributing to the development of more sustainable aquaculture production, making it possible to utilize the world's aquacultural resources more effectively, Alpha Aqua helps facilitate a change towards consumption of more sustainably produced protein.

Alpha Aqua uses recyclable food grade PP (polypropylene) for our Water Treatment Units as well as the tanks and production systems. The concept has been developed and designed with a strong emphasis on sustainability, fish welfare, a minimum of environmental impact and strong construction principles.

One of our many projects, is the MARES project, Mekong Aquaculture Solutions, involving Technology solutions for sustainable intensification of aquaculture in the Mekong Delta.



Under this project the device will be integrated to a holistic model of services leveraging the data available on farm among others to provide finetuned assistance to farmers. Several industry players will take part in the pilot to bring expertise and assistance to farmers on key areas, such as disease mitigation and health. Ultimately the objective is to establish a commercially viable and independent service delivery model focusing solely on improving farmers' conditions.

Alpha Aqua and Fresh Studio's strategic partnership is to prove all the benefits RAS (Recirculating Aquaculture System) can provide the Vietnamese industry, from hatchery and grow out operations, to the shrimp and fish industry.

The Mekong river is essential for aquaculture. However, the hydrological changes resulting from hydropower exploitation, irrigation, population growth, industry development and deforestation affect fish and shrimp production by modifying floodplains, movements of sediment and water

quality. Likewise, aquaculture farms are at the interface of terrestrial and aquatic environments and are per se vulnerable to climate change and associated abnormal weather events, floods, and salinity intrusion.

Recent studies conducted by Fresh Studio found, that poor water quality and erratic weather events were among the most important risks ranking higher than market risks despite of their greater frequency of appearance, and the ongoing market crisis of shrimp during this study.

It is also demonstrated that disease outbreak is one of the largest production risks described by farmers. Water composition and stability plays a key role in preserving healthy and productive farming systems. However, to maintain good conditions in their ponds most farmers do not have many options, but to frequently exchange an important amount of water directly from the river.

Because of this, farming systems are highly influenced by and vulnerable to their surrounding environment and the potential presence of pathogens, hence causing permanent stress on animals.

In this context, existing preventive measures against disease outbreaks are generally limited, expensive, or not very well suited to the local conditions. This leaves many farmers with no other options than to use chemicals and antibiotics for diseases control.

Field work by Fresh Studio among shrimp farming communities found that at least 50% of intensive farmers in Vietnam – the majority of farmers in Vietnam – use antibiotics as a preventive measure to avoid disease outbreaks. Use of antibiotics preventative is a threat to overall food safety and contributes to the worsening of the antibiotic's resistance issue, thus driving greater dependence on antibiotics.

The objectives of RAS technology in fish farming are similar to those in green houses systems in horticulture: control the ecosystem in which the crop is grown – and reduce the negative interactions with the external environment.

MEASUREMENT OF OUTCOMES

The trial period was 8 weeks and the species of reference selected was a local strain of Red Tilapia stocked at 20 g of size. Given the early stage of development of the technology, tilapia was preferred – over commercially more important species Pangasius and shrimp – for its greater robustness and the wide availability of references in literature:

RECIRCULATING AQUACULTURE SYSTEMS THE MARES PROJECT IN VIETNAM

THE NUMBER OF PRODUCTIONS FOR FARMING SEAFOOD SPECIES UNDER RECIRCULATING AQUACULTURE SYSTEMS (RAS) IS INCREASING DAILY, THOUGH MOST OF THESE EFFORTS FOCUS ON SALMON. AQUACULTURE TECHNOLOGY PROVIDES OPPORTUNITIES FOR SMALL- AND MEDIUM-SCALE FARMERS. HOWEVER, THERE'S PRESSURE FROM GLOBAL MARKET FOR TECHNOLOGICAL SOLUTIONS IN THESE REGIONS. PRODUCERS MUST CONTINUE TO ADAPT AND TRANSFORM THEIR PRODUCTION MODELS. OPENING UP OPPORTUNITIES FOR TECHNOLOGY. KEY DRIVERS FOR DEVELOPING RAS IN SOUTHEAST ASIA WILL BE PRESERVING NATURAL WATER RESOURCES AND OPTIMIZING THE EFFICIENCY OF CURRENT PRODUCTION SYSTEMS. NEVERTHELESS, MUCH MORE IS STILL REQUIRED TO ADAPT THE RAS EXISTING FOR SALMON FOR SOUTHEAST ASIAN PRODUCERS.

In light of this, Fresh Studio and Alpha Aqua have been collaborating for the past few years to help increase the importance of RAS in traditional Vietnamese production models. These companies assist producers by testing and developing suitable RAS solutions specific to local production needs, including shrimp and pangasius. To this end, they are establishing pilot units for demonstration purposes, providing training courses in the Mekong Delta.

What's more, the two companies are also working with private and public organizations to establish RAS models that are commercially viable. One of them is the MARES project, an initiative aimed at exploring opportunities for applying innovative low-tech RAS technology to small- and medium-scale farmers. MARES was developed with the support of the Dutch government, which is currently working with the Vietnamese government as a long-term partnership for the Mekong Delta Agricultural Transformation (M-D-ATF).

Fresh Studio and Alpha Aqua have conducted countless surveys at farm level to carefully map the needs and capabilities of the farmers. Based on this, a unique prototype of a pond-cleaning device was designed, built and tested. The idea is to apply this design to shrimp and pangasius ponds, but the companies have been working on the next generation of the device, released in March 2020. The designer's response has been positive, and the two companies



have received requests from both farmers and larger companies to participate in future commercial trials.

Plans for commercial trials are underway and Fresh Studio and Alpha Aqua are working on a three-year commercial pilot – essentially a follow-up of MARES – with six

existing farmers. The objective is to establish a commercially viable and independent service delivery model for supporting farmers' conditions. Participating farmers will be operating the very first version of the pond-cleaning device, which, instead of public grants and bottom-up assistance, maintains the

original level of self-reliance. Moreover, the tool is expected to significantly reduce the need for chemical treatments, which can take up to 70% of the farm area. Finally, the device will be integrated with a holistic model of services using the farm data to provide technical assistance to each farmer.

To measure the potential added value of the technology on traditional culture systems and its commercial applicability, several parameters were collected during the trial that can be categorized as follow:

- Pond conditions
- Environmental parameters
- Input use
- Fish fitness
- Prototype performances



During the trial it was observed that there was an overall increase of DO (dissolved oxygen) levels in the pond, reduction of daily hypoxic events between morning and afternoon, and lesser stratification of DO from surface to bottom. Also, the pH was found to be lower as a result of the higher density of fish, greater release of CO₂ by respiration and accumulation of organic matters at the pond bottom. Variations in pH are known to affect fish indirectly by altering other aspects of water chemistry, thus affecting fish metabolism, creating stress conditions, and favoring apparition of diseases and infections. The average temperature level was founded to be higher as a result of greater water circulation in the ponds, which allowed for higher accumulation of calories from exposure to sunlight, hence increasing thermal inertia of the ponds.

ANTI-CORRUPTION PRINCIPLES

ASSESSMENT, POLICY AND GOALS

Alpha Aqua supports the UN Convention Against Corruption and we will not operate in countries or with organizations who are corrupt. We are committed not to participate in any corruption, bribery, or extortion.

IMPLEMENTATION

At internal level we have maintained an excellent check and balance system over transactions. The records are maintained with proper registration. This information is checked and controlled by finance and administration, which ultimately reaches the CEO.

MEASUREMENT OF OUTCOMES

Alpha Aqua has not been involved in any legal cases, rulings or other events related to corruption and bribery. Our books and accounts are subjected to statutory external audit annually. These audits are used as one of the methods of identifying any suspicious payments which could be related to bribery or corrupt behavior. There has been no such incident reported in the period.