

IMPACT DIMENSION	IMPACT INDICATOR	PERFORMANCE	RATIONALE
<b>Life on Planet &amp; Natural Resources</b>			
<b>Climate Change</b>	Product Carbon Footprint (PCF)		<i>Currently being assessed</i>
<b>Biodiversity Loss</b>	Loss of biodiversity & biosphere integrity		<i>Well managed but system inherent risks</i>
<b>Deforestation</b>	Land use change due to deforestation		<i>No direct risk, indirect risk through feed production</i>
<b>Freshwater Depletion</b>	Risk for freshwater depletion		<i>Moderate direct risk, indirect risk through feed production</i>
<b>Eutrophication</b>	Discharge of nitrogen (N) and phosphorous (P)		<i>High nutrient input through feed but well-managed</i>
<b>Toxic Compounds</b>	Pollution with toxic chemicals and pesticides		<i>Strict criteria for the use of chemicals and toxic compounds</i>
<b>People &amp; Coastal Communities</b>			
<b>Human Rights</b>	Human rights & decent work conditions		<i>Low risk for human rights violations, ASC Social Criteria</i>
<b>Workers' Safety</b>	Exposure to health & safety hazards		<i>Low risk for unsafe working conditions, ASC Social Criteria</i>
<b>Community Inclusiveness</b>	Fair value chain participation by communities		<i>Corporate farm, no Fair Trade Certification</i>
<b>Animal Welfare</b>			
<b>Living Conditions</b>	Husbandry system & rearing conditions		<i>High stocking density and low habitat structure</i>
<b>Physical Stress</b>	Stress & injuries during rearing and harvesting		<i>Moderate risk for stress during rearing, low during harvesting</i>
<b>Humane Slaughter</b>	Pain & suffering during slaughter		<i>Electro stunning devices currently being implemented</i>



**BLUEYOU OCEAN IMPACT TRACKER**

**METHODOLOGY FOR ASSESSMENT AND SCORING GUIDEPOST**

**FARMED SEAFOOD**

Version 1.0 Oct 2023

Assessment Date: December 26, 2023  
 Assessor Name: Jonas Walker  
 Unit of Origin Code: A-PGS-1

Species Name: Pangasius (Pangasianodon hypophthalmus)  
 Country of Origin: Vietnam  
 Farming Area: An Giang Province, Vietnam  
 Origin Type: Aquaculture  
 Farming Method: Intensive Pond Aquaculture, ASC Certified  
 Operation Type: Corporate Farms

**LIFE ON PLANET & NATURAL RESOURCES**

Impact Dimension	Parameter for Evaluation	Assesment Indicators and Metrics	Scoring Guidepost			Score	Comments and Remarks for Assessment
			1 Negative impact / Critical performance	2 Moderate impact / Acceptable performance	3 Positive impact / Good performance		
Climate Change Impact	LCA-based carbon footprint	Carbon Footprint in Kg CO <sub>2</sub> eq. / kg final product on POS in market	High footprint (> 8.0 kg CO <sub>2</sub> eq./kg product at store)	Moderate footprint (3.0- 8.0 kg CO <sub>2</sub> eq./kg product at store)	Low footprint (< 3.0 kg CO <sub>2</sub> eq./kg product at store)	0	The Carbon Footprint of this origin is currently being assessed. We expect a low to medium carbon footprint due to the low percentage of fish oil and fish meal in the feed.
Ecosystems & Biodiversity	Biospere integrity and biodiversity loss	Biodiversity loss, ETP impact, wildlife interaction	Critical impact on habitats, wildlife and biodiversity through farming and feed inputs	Moderate impact on biodiversity and habitats through farming and feed inputs	Low impact or nature-positive food system	2	The farms are ASC certified and a thorough ecosystem impact assessment is conducted in the certification process. Further, the ASC encompasses strict ecosystem criteria which have to be met in order to be certified.
Deforestation	Land system change due to deforestation	Deforestation of land for agriculture or aquaculture	Critical deforestation happening / no restoration efforts	Risk for deforestation (feed crops) / no restoration	No deforestation risks / active restoration ongoing	2	ASC-certified farms strictly have to comply with the cut-off date of 1999 (Ramsar agreement) after which no destruction of mangroves is allowed. This criterion is assessed by a third party using remote sensing data. The risk of direct deforestation due to the farming operation after 1999 is therefore deemed to be negligible. However, no active reforestation is conducted on farm level. Within the ASC Feed Standard, indirect deforestation through feed ingredients is addressed and producers must commit to transition to deforestation-free feed ingredients until January 2025.
Freshwater Use	Depletion of freshwater	Use of freshwater and risk of depletion (feed and farming)	High consumption and critical risk for depletion	Moderate consumption / freshwater no depletion risk	No use of freshwater	2	Moderate Fresh Water use during grow-out. ASC has strict criteria on the use of freshwater. However, freshwater is used for the production of the crops used for the feed.
Eutrophication	Discharge of critical nutrients (N,P)	Risk of eutrophication in feed production and aquaculture	High risk (agriculture and aquaculture)	Moderate risk	Low / No Risk	2	Feed is used during grow-out. The ASC Standard encompasses strict criteria on water quality and effluent management and monitoring as well as setting upper limits for N and P loads for effluent waters.
Toxic Compounds	Pollution with chemicals and pesticides	Use of chemicals, pesticides, antibiotics and toxic compounds	Frequent and continuous use as part of SOP	Moderate and occasional use under GAP	No use as part of SOP	2	Inorganic fertilizer, medication and further chemical substances are allowed in the production period, however, the ASC has a stringent set of criteria which regulates the use of chemical substances and criteria which aim to minimize their use during grow out

**PEOPLE & COASTAL COMMUNITIES**

Human Rights & Work Conditions	Human rights and decent work conditions	Risk for human right abuse and critical work conditions	High risk	Moderate risk	Low risk	3	The farms are ASC certified and adhere to the social criteria encompassed in the ASC standard. The ASC set of social criteria ensures basic social compliance along the supply chain but is less thorough than specific social certifications (ex. Fair Trade USA)
Workers' Safety	Safe working conditions along supply chain	Risk for critical working conditions on farming and processing level	High risk	Moderate risk	Low risk	3	The farms are ASC certified and adhere to the social criteria in the ASC standard which also encompass safety at work. The ASC set of social criteria ensures basic social compliance along the supply chain but is less thorough than specific social certifications (ex. Fair Trade USA)
Community Inclusiveness	Fair value and participation of communities	Level of involvement of local community in farming and value chain	No / Low	Moderate	High	1	The aquaculture ponds are not managed by a community of small-scale farmers but by a few employees of the owning company. In such setups benefits generated through the farming of shrimps (other than the job creation) are usually shared to a lower degree with the local community but tend to stay within the company.

**ANIMAL WELFARE**

Living Conditions & Quality of Life	Husbandry system which respects natural behaviour	Husbandry systems, intensity level, natural environment	Inappropriate husbandry, High risk for overcrowding and prolonged stress	Species appropriate husbandry, moderate crowding	Natural environment, low densities	1	The living conditions for the pangasius in the respective aquaculture systems are deemed improvable. This is mostly due to the high stocking density and the low habitat structure in the ponds
Capture, Harvesting & Handling	Reducing stress during harvesting & handling	Risk of exposure to prolonged stress, pain and injuries	High risk for prolonged stress, pain and multiple injuries	Moderate exposure to stress and improved handling	Optimized handling to reduce stress to minimum	2	The pangasius are harvested and transported to processing plant alive with well-boats or trucks.
Stunning & Humane Slaughter	Stunning before slaughtering	Vertebrate and Decapod Crustacean are stunned prior to killing	No stunning and prolonged suffering prior to death	No stunning but moderate risk for prolonged suffering	Effective stunning in place within minimal time	2	Electro stunning devices are being implemented. Currently killing through bleeding is performed without previous stunning.